CNO Advisory Committee Meeting

Meeting Book

Wednesday, April 25, 2018

Sutter Health

2200 River Plaza Drive

Sacramento, CA

Conference Call Option:

800-882-3610 passcode: 7795222#

Meeting Book - CNO Advisory Committee Meeting

VII. INFORMATION

2:00   VIII. ADJOURNMENT
               BURNES BOLTON

IX. NEXT MEETING

Wednesday, July 25, 2018

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2018 Member Roster

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**GUIDELINES FOR THE
CALIFORNIA HOSPITAL ASSOCIATION
CNO ADVISORY COMMITTEE**

I. **NAME**

The name of this committee shall be the CNO Advisory Committee

II. **MISSION**

The mission of the CNO Advisory Committee is to advise CHA on key policy and advocacy issues specific to hospital and health system nurse executive practice.

III. **PURPOSE**

The purpose of the CNO Advisory Committee is to provide support for member hospitals and to solicit input for CHA advocacy on key issues.

The committee will provide a forum to:
1. Provide advice and expert analysis on issues of importance.
2. Cooperate with CHA on programs and activities and to support the positions and services of CHA.
3. Make recommendations related to state and federal legislation and regulations related to hospital and health system nursing and clinical services.
4. Conduct other activities approved by the CHA Board of Trustees.

IV. **COMMITTEE**

The Committee (the "Committee") shall consist of no more than 25 voting members representative of the types, location, and size of CHA institutional members.

A. MEMBERSHIP

1. Membership on the Committee shall be based upon institutional membership in CHA.
2. Committee members shall consist of various representatives from large hospital systems, public institutions, private facilities, free-standing facilities, small and rural facilities, university/teaching facilities and specialty facilities.
3. Non-hospital members will be considered ex-officio members including faculty, consumers and other members of the health professions who are beneficiaries of nursing practice and can only be appointed to the committee at the discretion of the CHA staff.
4. Committee members are appointed by CHA staff.
5. Committee members shall serve three-year terms staggered in a fair and equitable manner as determined by the nominating committee and accepted by the Committee.

1215 K Street, Suite 800, Sacramento, CA 95814 • Telephone: 916.443.7401 • Facsimile: 916.552.7596 • www.calhospital.org

Corporate Members: Hospital Council of Northern and Central California, Hospital Association of Southern California, and Hospital Association of San Diego and Imperial Counties

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Members are limited to two consecutive terms. There must be at least a one-year interval before being eligible for another term.

B. MEMBER RESPONSIBILITIES

1. Accept their appointment with an interest and willingness to serve.
2. Mark their calendars with the advance notice of meetings for the year and make every reasonable effort to keep those dates and times open for the meeting.
3. Attend every meeting possible.
4. Be prepared by reviewing any discussion material provided in advance of the meeting.
5. Contribute to the discussion and consider the subject matter for the benefit of the association as a whole, not just an individual member.
6. Respond to requests for input and feedback on business and issues before the Committee.
7. Disseminate information to committees and to member organizations as appropriate.

C. COMMITTEE MEETINGS

1. Meetings of the Committee shall be held quarterly in person. Additional conference call or web-based meetings may be scheduled as indicated.
2. To maintain continuity substitution of members is not normally allowed.
3. Three consecutive unexcused absences by a Committee member will initiate a review by the Chair and CHA staff for determination of the Committee member's continued service on the Committee.
4. Special meetings may be scheduled by the Chair, majority vote or CHA staff.

D. VOTING

1. Voting rights shall be limited to members of the Committee, and each member present shall have one vote. Voting by proxy is not acceptable.
2. All matters requiring a vote of the Committee must be passed by a majority of a quorum of the Committee members present at a duly called meeting or telephone conference call.

E. QUORUM

Except as set forth herein, a quorum shall consist of a majority of members present/participating or not less than eight.

F. MINUTES

Minutes of the Committee shall be recorded at each meeting, disseminated to the membership, and approved as disseminated or as corrected at the next meeting of the Committee.

12/19/2017   Revised

V.   **OFFICERS**

The officers of the Committee shall be the Committee Chair, Vice Chair, Immediate Past Chair and CHA staff.

The Chair shall be appointed by CHA staff for a two-year term. Should a Chair vacate his/her position prior to the end of the term, CHA staff will appoint a replacement to complete the remainder of the term.

The responsibilities of the Committee Chair are to:

1. Monitor staff in the execution of their responsibilities to the Committee.
2. Conduct meetings which assure an orderly flow of the discussion and a constructive use of the group's time.
3. Interpret the action of the Committee and speak for the Committee when necessary to report to the CHA Board of Trustees.

The responsibilities of the Committee Vice Chair are to:

1. Assist the Chair in the execution of his/her responsibilities to the Committee.
2. In the absence of the Chair, assume the role and responsibilities of the Chair.

VI.   **GENERAL PROVISIONS**

A. COMMITTEE ACTIVITIES
Committee activities, including goals and objectives, shall be developed by the Committee with approval by CHA staff. Quarterly updates and progress reports shall be completed by the Committee and CHA staff. Committee staff should communicate regularly with the Committee on the activities and priorities of the Committee. The Committee may request that staff develop a general work plan which defines the goals and objectives of the Committee for the coming year.

B. SUB-COMMITTEES
Task forces or subcommittees of the Committee may be formed at the discretion of the Committee Chair and member and CHA staff for the purpose of con ducting activities specific to a special topic or goal.

C. STAFF SUPPORT
Staff leadership shall be provided by CHA with Regional Association staff leadership provided by Hospital Council, the Hospital Association of Southern California, and the Hospital Association of San Diego and Imperial Counties. The primary office and public policy development and advocacy staff of the Committee shall be located within the CHA office.

12/19/2017   Revised

VII.   AMENDMENTS

These Guidelines may be amended by a majority vote of the members of the Committee at any regular meeting of the Committee and with approval by CHA.

VIII.   LEGAL LIMITATIONS

Any portion of these Guidelines which may be in conflict with any state or federal statutes or regulations shall be declared null and void as of the date of such determination.

Any portion of these Guidelines which are in conflict with the Bylaws and policies of CHA shall be considered null and void as of the date of the determination.

Information provided in meetings is not to be sold or misused.

IX.   CONFIDENTIALITY FOR MEMBERS

Many items discussed are confidential in nature, and confidentiality must be maintained. All Committee communications are considered privileged and confidential, except as noted.

X.   CONFLICT OF INTEREST

Any member of the Committee who shall address the Committee in other than a volunteer relationship excluding CHA staff and who shall engage with the Committee in a business activity of any nature, as a result of which such party shall profit either directly or indirectly, shall fully disclose any such financial benefit expected to CHA staff for approval prior to contracting with the Committee and shall further refrain, if a member of the Committee, from any vote in which such issue is involved.

12/19/2017   Revised

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CHPAC

CALIFORNIA HOSPITAL ASSOCIATION
Political Action Committee

QUALITY HEALTH CARE FOR CALIFORNIANS

What is CHPAC?

California Hospital Political Action Committee (CHPAC) is the political arm of the California Hospital Association. The purpose of CHPAC is to elect candidates who understand the vital role hospitals play in our state as a part of the health care system, and the positive impact hospitals have on the economy.

CHPAC receives contributions from individuals and corporate members and uses those funds to support officeholders and candidates for state and local offices.

The CHPAC Board of Directors governs the activities and funds of CHPAC. The board includes health care leaders from across the state as well as corporate partners.

Why give to CHPAC?

As it becomes increasingly difficult for companies to do business in California, it is imperative that we help to elect candidates who understand and support hospitals. It is vital for hospitals to provide quality care while also maintaining the financial stability necessary to employ a workforce of more than a half-million individuals. Additionally, California hospitals purchase vast amounts of goods and services, further fueling the economy by supporting both small and large businesses.

Individual Advocacy Levels

CHPAC Presidents' Club Platinum ($5,000)

The prestigious Presidents' Club Platinum level signifies the highest level of commitment at the individual level.

- Includes all Presidents' Club Diamond level benefits.
- A special executive dinner and reception

CHPAC Presidents' Club Diamond ($1,750)

- Free admission (with one guest) to all CHPAC events
- Invitations to legislative briefings and receptions featuring key lawmakers who are active in health care policy
- Recognition throughout the year at CHPAC events and in publications
- An elite-level CHPAC lapel pin

CHPAC Presidents' Club ($1,500)

- Free admission (with one guest) to all CHPAC events
- Invitations to legislative briefings and receptions featuring key lawmakers who are active in health care policy
- Recognition throughout the year at CHPAC events and in publications
- A specially-designed CHPAC lapel pin

CHPAC Leadership Board ($850)

- Invitations to legislative briefings and receptions featuring key lawmakers who are active in health care policy
- Recognition throughout the year at CHPAC events and in publications
- A specially-designed CHPAC lapel pin

CHPAC Golden State Club ($500)

- Recognition throughout the year at CHPAC events and in publications
- A specially-designed CHPAC lapel pin

Corporate Sponsorship Levels

Membership in the CHPAC Corporate Presidents' Club is for corporations that have a vested interest in the vitality of hospitals and are committed to working with CHPAC to help elect policy makers who understand the important role hospitals play in their communities. Vendors and businesses that supply goods and services to the state's hospitals and health systems may demonstrate their support and commitment to their clients by joining the CHPAC Corporate Presidents' Club.

Corporate Presidents' Club ($7,300)

- Free admission for three company representatives to CHPAC's Presidents' Club events. CHPAC holds a dozen events throughout the year, which are held at great venues, and provide excellent opportunities for our member companies to network with area hospital executives. Your company will receive recognition on the invitation and throughout the event.
- Recognition in publications throughout the year that reach an audience of over 400 heath care administrators and CEOs
- Members can request a personal meeting with hospital executives by submitting a form.
- Corporate profile on the CHA website, with a link to your company website

Platinum Corporate Presidents' Club ($12,000)

- Includes all Corporate Presidents' Club level benefits
- Sponsorship and premier recognition at one Presidents' Club event

CHPAC Executive Committee

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Sara Steinhoffer
Vice President, Government Relations
Sharp HealthCare, San Diego

Past Chair
Sherri Sager
Chief Government/Community Relations Officer
Lucile Packard Children's Hospital Stanford, Palo Alto

Secretary/Treasurer
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Carmela Coyle
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CHPAC NURSE AMBASSADORS' CLUB PLEDGE FORM

The prestigious CHPAC Nurse Ambassadors' Club consists of nurse leaders who want to be a constant and consistent participant regarding issues surrounding hospitals. Support the activities and causes of the CHPAC Nurse Ambassadors' Club by making a contribution at the following level:

- □ **$250** CHPAC Nurse Ambassadors' Club
  Includes specially designed lapel pin & Free admittance to most CHPAC Presidents' Club events

- □ **$100** CHPAC Nurse Supporter
  May attend one CHPAC Presidents' Club event of their choice

- □ **Other:**_____

- □ **$500** CHPAC Golden State Club
- □ **$850** CHPAC Leadership Board Challenge
- □ **$1,500** CHPAC Presidents' Club
- □ **$1,750** CHPAC Presidents' Club Diamond
- □ **$5,000** CHPAC Presidents' Club Platinum

If contributing by credit card, please provide credit card information below:

Name: _____
(Name must appear <u>exactly</u> as it is on the card and please list billing address below.)

MasterCard/VISA/American Express #: _____

Expiration Date: _____   Security Code: _____

NOTE: Contributions or gifts to CHPAC are not deductible as charitable contributions for federal or state income tax purposes. All pledges made must be paid in full by December 31st of that calendar year in which they were made.

CHPAC is required to collect the following information on all political contributions:

Name: _____   Occupation/Title: _____

Full Name of Employer: _____

Billing Address: _____

City/State/ZIP: _____

Telephone: _____   Email:_____

Name of hospital or health system to receive credit: _____

Please give recognition to my professional organization: □ ACNL □ CSHE □ Volunteers □ CHA Committee:_____

The California Hospital Association also sponsors CHPAC-FED, formed to support the election of candidates to the U.S. House of Representatives and U.S. Senate who recognize the vital role of hospitals. Under applicable law, participation in CHPAC-FED is limited to only high-level administrative, executive and managerial employees of CHA and high-level administrative, executive and managerial employees of member companies that have given CHA permission to solicit them. Any contribution received from persons who are not members of the CHPAC federal solicitable class will be transferred to the CHPAC state account. If you would like additional information about CHPAC-FED, please contact CHPAC at 916-552-7533 or chpac@calhospital.org.

Please make checks payable to: CHPAC (#790773)
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Members Present: **Linda Burnes Bolton, Margarita Baggett, Judee Berg, Tim Clark, Anita Girard, Annette Greenwood, Karen Grimley, Teri Hollingsworth, Marketa Houskova, Anna Kiger, Linda Knodel, Toby Marsh, Pat McFarland, Terry Peña, Lauren Spilsbury, Pam Wells, Judith Yates**

Members on Call: **Gloria Bancarz, Pilar De La Cruz-Reyes, Susan Herman, Jenna Fischer**

Members Absent: **Mary Bittner, Donna Brackley, Theresa Brodrick, Jennifer Castaldo, Michael Collins, Jerome Dayao, Sue Fairley, Beverly Hayden-Pugh, Joseph Morris, Connie Rowe, Katie Skelton, Sylvain Trepanier, Page West, Heather Young**

Guest: **Connie Clemmons-Brown (Page West)**

CHA Staff: **BJ Bartleson, Debby Rogers, Barb Roth**

I. **CALL TO ORDER/INTRODUCTIONS**

The committee meeting was called to order by Chair at 10:00 a.m.

II. **REVIEW OF PREVIOUS MEETING MINUTES**

The minutes of the October 3, 2017, CHO Advisory Committee conference call were reviewed.

IT WAS MOVED, SECONDED AND CARRIED:

➢ *ACTION: minutes approved.*

III. **OLD BUSINESS**

A. Value of Nursing & Nursing Diagnosis Survey Results (Berg)
Ms. Berg described the background work on the "Value of Nursing "white paper and project initiated by Health Impact, ACNL, and CHA. The work included three components: 1) a multi-disciplinary crosswalk, emphasizing the unique contribution of interdisciplinary team members, 2) a financial cost avoidance analysis, and 3) A public and provider definition on what nurses do. While team based care is essential to maximize the contribution that each team member makes, it's important to have a common knowledge on what each discipline does different from one another. Ms. Greenwood was congratulated on her contribution to the project as she headed the team and wrote the manuscript.

While implementing the work, and describing what nurses do, it was evident there was inconsistencies regarding the use nursing diagnoses between academia and practice. Health Impact deployed a survey to understand the issue. Nursing diagnoses is taught in the school setting, however, the survey indicates that it is not used regularly in the hospital setting. The Electronic Health Record (EHR) affects the use of nursing diagnoses significantly. Dr. Burnes-Bolton is working with a group to require the EHR manufacturers to include nursing diagnoses

4/6/2018

in their programs. The HealthImpact survey will be available on their website by the end of this week (January 19, 2018).

Ms. Grimley has taken a care plan in Epic and modified it to meet the needs of their hospital. Dr. Burnes Bolton suggested the committee invite representatives from the EHR manufacturers and hospital informatics officers to attend a meeting to further this discussion.

➢ *ACTION: EHR manufacturers will be invited to the next meeting to discuss nursing diagnoses and how it is utilized.*

B. **CDPH Update (Rogers)**
1. The California Department of Public Health (CDPH) Central Applications Unit (CAU) process has caused further delay in processing applications. To improve processing times, CDPH is temporarily sending applications are being sent back to the District Offices to assist in getting the applications processed more efficiently (except in LA County).

2. CHA plans to introduce a bill with the legislature which states that if CDPH does meet certain benchmarks/timeframes for the application process, then the service will be deemed to have been licensed. Although this is not likely to get signed by the governor, it will give CHA an opportunity to tell our (the hospital's) stories about how the delays are effecting them in serving patients and costing money.

3. Inquiry to the committee regarding Board of Pharmacy (BoP) waivers. Three committee members responded in the affirmative as to having a waiver. CHA is working on a checklist for pharmacies to work with CDPH, BoP and OSHPD.

➢ *ACTION: Committee members are to contact Ms. Rogers if they have a pharmacy construction waiver and they are presently awaiting for CDPH licensing approval.*

IV. **NEW BUSINESS**
A. **Clinical Displacement/Alliance (McFarland)**
Ms. McFarland reported the surveys to gather information about this issue are not complete at this time, therefore the data is not currently available. The first survey, sent by the Board of Registered Nursing (BRN), went to the deans and directors of California nursing schools and programs. The second survey is being sent to CNOs.   There is a new community college chancellor from southern California who is extremely concerned about this issue.

Committee discussion emphasized that limited capacity in acute care needs to be addressed and that preceptors/mentors in hospitals are being overworked. The number of hours that the hospitals are providing for clinicals are very large.

Ms. Berg reported that a population health focused model is being reviewed through a study funded by Kaiser Permanente.

CHA is watching to see if there is potential legislation coming to attempt to address the problem.

➢ *ACTION: CHA will report back to the committee with any updates on legislation or progress with the California Quad Council (ACNL, ANA-C, CAON, CACN)*

B. **2016 RN Survey Results (Berg)**
A significant percentage of nurses in California expect to retire in the next 5-10 years. A large

number of nurses in state of CA were educated outside the state and outside the country. However the number of California school graduates in nursing is improving, and there are enough nursing graduates to supply the needs of California.

Medical staff is sometimes opposed to hiring advanced practice nurses, so they are going to other states to get jobs.

Discussion regarding differences for hiring an advanced practice nurse vs. a nurse hospitalist.

> *ACTION: CHA will contact the California Action Coalition to see if this is a trend they are observing and their perspective.*

C. **NHSN Antibiotic Use Module (Rogers)**
CDPH has resources to electronically connect the EHR to the CDC's NHSN Antibiotic Use Module. To obtain technical assistance contact CDPH Health Care Associated Infection Program.

> *ACTION: Information only.*

D. **Nursing Community Coalition (Bartleson)**
Ms. Bartleson generated a discussion regarding the concept of a community of professional nursing organizations in California that could be used to address policy and advocacy. The federal Nursing Community Coalitions was discussed as an example used at the federal level to advocate for professional RN practice. There is discussion in various groups about the community of professional nursing in CA and the challenges we exhibit secondary to labor groups. It was determined that there is a need for a group that addresses legislation and policy but also addresses professional practice.

Discussion continued around the question of why the media goes to the nurses' union to ask questions about nursing instead of going to other nursing associations/groups. It was suggested that Health Impact could be a neutral voice for the convening, however ANA-C is the only professional nursing group with a lobbying arm to advocate formally in the legislative arena.

> *ACTION: CHA will continue to monitor opportunities to engage nursing organizations.*

E. **Dialysis Unit Staffing Ratios (Rogers)**
Ms. Rogers presented the two potential initiatives on staffing ratios in chronic dialysis clinics. There is no code section to identify chronic dialysis services, so there is not an exact definition. None of the hospitals represented at the meeting have licensed chronic dialysis services, only acute or post-surgery dialysis; or, if the patient arrives and needs dialysis as part of other services. Some hospitals contract for dialysis services for patients in need of dialysis during their hospital stay.

> *ACTION: Information only.*

F. **CHPAC (Rogers)**

> *Provide information and forms at next meeting and/or send electronically.*

V. **LEGISLATION AND REGULATORY**
   A. **Federal Regulatory Overview (Keefe Letter)**

Ms. Rogers provided a brief update on federal regulatory activity.

Discussion proceeded regarding Centers for Medicare and Medicaid Services (CMS) reimbursement for nurses. Ms. Houskova has a letter from the Director, Department of Health Policy of the American Nurses Association (ANA) which advocated for CMS to adopt nurse staffing measures.

> ➢ *ACTION: Ms. Houskova to provide copy of ANA letter. CHA will send out to the committee members.*

B. Nurse Practitioner – Full Practice Authority Legislation, California Action Coalition (Bartleson/Berg)
Ms. Bartleson deferred more discussion on NP legislation as NP usage had been discussed in the previous section on the 2016 Nursing Survey.

> ➢ *ACTION: Information only.*

C. State Legislation (Rogers)
All bills for 2018 must be turned in by third week of February. At that time an agenda for the next year will be set.

The Governor's budget has been released. CDPH proposes to assess health facilities in LA County additional fees to offset the 'higher cost of doing business in LA.'. AS CHA moves forward on this budget proposal and the CHA sponsored bill there will be talking points for hospitals to share their stories.

> ➢ *ACTION: Information only.*

D. 2017 Report on Legislation
A link to access this report is provided in the meeting book and hard copies were provided to those present at the meeting.

> ➢ *ACTION: Information only.*

VI. ROUNDTABLE DISCUSSION

A. Flu Update (Rogers)
A memo from CHA CEO Carmela Coyle providing an influenza update is being sent via email to member hospitals today, hard copies were provided to committee members during the meeting. The memo provides links to additional resources.

B. Tubing Connectors (Rogers)
Ms. Rogers shared information regarding tubing connectors and asked if hospitals can currently access supplies and have transitioned. Most committee members present at the meeting responded that they are transitioning. The tubing connector shortage is not a concern.

C. IV Shortage (Bartleson)
There was a call with AHA last week regarding the IV Minibag shortage, which is a direct result of the hurricane in Puerto Rico. The situation is getting better but still fragile. There is no expectation of a huge change immediately, but it should start improving. Production from other countries is now being permitted.

4/6/2018

A shortage of liter bags is being reported. These are manufactured in the US, but the need is increasing so supply is getting short. The BoP, FDA and American Health System Pharmacists all have information available on their websites regarding the shortages.

D. License Falsification: There has been an upswing in those who do not hold a RN license but are falsifying their license. It appears that a glitch in the online system allows this falsification to occur. Ms. McFarland is in conversation with Dr. Morris at BRN.

E. Members report that their hospitals do not require a copy of a transcript for employment. Once a student completes their 140 hours of clinical work, they can take the test for licensure without having graduating yet. However, most job descriptions have "graduate of accredited institution" identified as a prerequisite.

F. One hospital reports that a managed health plan is pushing outpatient surgeries to other facilities. This is putting a burden on patients, particularly those in rural areas, to drive farther to have procedures. Dr. Burnes Bolton reports that this is happening everywhere and warned that imaging centers are likely to be targeted next.

G. Ratios: Nursing union is pushing staff to fight back when they have to go out of ratio. Nursing staff have been told it is illegal to go over ratio and they could lose their license.

H. Security: Some hospitals report having metal detectors, specifically at the entrance to the ER. Others are just in discussion regarding this issue. Several report the confiscation of arms from patients and visitors upon arrival.

I. Cannabis: One hospital reports allowing patients/visitors to take home cannabis or staff will dispose of it (with a witness). Others reported that their hospitals are currently discussing the issue. This is also a homeless issue as many have guns for protection. They will often hide a weapon in the bushes outside the facility to retrieve upon departure.

J. Homeless: CHA is determining whether there is a need to look at something statewide for hospitals to support the work of safely discharging homeless patients. It is difficult to respect and advocate for the homeless patient and ensure a safe discharge when they prefer to go back to the street rather than a shelter or other facility. Social workers can connect them with resources, but ultimately it is the patient's choice of where they go. This also brings up the issue of legally covering the hospital should the homeless person choose to return to the streets.

Post-acute care for patients who are homeless falls between the medical model and the social model. The community needs to support the social model to help people meet their health needs in the community.

K. Violence by autistic patients: there is a lack of infrastructure, location in the hospital, to deal with an autistic patient who is violent.

L. Ms. McFarland discussed the Executive Leadership Academy. This is an opportunity to educate the next community of nurse leaders. There is a huge cost to replace a nurse leader and this program will help hospitals to develop a succession plan. The deadline for application will be May/June. Cohort size would be no larger than 20. The cost per participant, after ACNL gifting, will be about $15,000.

> *Next meeting:*
>   - o *Invite Sheree Lowe to participate addressing Behavioral Health issues – best practice.*
>   - o *Invite Gail Blanchard-Saiger to participate addressing workplace issues*

VII.   NEXT MEETING

Wednesday, April 25, 2018

VIII.   ADJOURNMENT

Having no further business, the committee adjourned at 1:53 PM

April 25, 2018

TO: Certification and Licensing Committee Members

FROM: BJ Bartleson, MS, RN, NEA-BC, Vice President, Nursing and Clinical Services

SUBJECT: Nursing Diagnosis and Use of the Electronic Health Record

SUMMARY

At the January 17, 2018, CNO Advisory Committee, the committee discussed the HealthImpact Value of Nursing Work and subsequent Nursing Diagnosis Survey Results. The survey suggested that while the nursing process and use of nursing diagnosis is taught in pre-licensure education, it is not regularly used in the hospital setting. The group debated how the use of the electronic health record affects the use of nursing diagnosis. The committee requested we invite top electronic health record vendors to attend the next meeting to discuss nursing diagnosis language and how it is utilized within the electronic health record to advance the work of nursing.

Vendors presenting:
1. Epic – Emily Barey
2. Cerner – Amye Gilio
3. Meditech – Cathy Turner

DISCUSSION
1. How does each vendor deploy the nursing process, most importantly, nursing diagnoses?
2. Are the capabilities they describe standard functions, or do they require additional resources for utilization?
3. If nursing diagnoses are being used, what classification system is incorporated?
4. What improvements are they working on in nursing diagnoses and nursing language that will advance and distinguish nursing practice within the care delivery system?
5. Are their opportunities to standardize nursing diagnostic language and nursing outcomes to visualize nursings' performance and value?
6. Are there faculty partnerships that could assist with this work?

ACTION REQUESTED

> ➢ Committee Discussion on next steps for the committee

Attachments: HealthImpact: Value of Nursing Project: Phase I
                Use of Nursing Diagnosis in California Nursing Schools and Hospitals
BJB:br

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Corporate Members: Hospital Council of Northern and Central California, Hospital Association of Southern California, and Hospital Association of San Diego and Imperial Counties

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Value of Nursing Project: Phase I

Funding Provided by:

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Prepared by:

Annette Greenwood, RN

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Contents

Glossary of Terms

Affordable Care Act

The Patient Protection and Affordable Care Act (PPACA), commonly called the Affordable Care Act (ACA) or colloquially Obamacare, is a United States federal statute signed into law by President Barack Obama on March 23, 2010. The aim of the Act is a health care law aimed at improving the health care system of the United States by widening health coverage to more Americans, as well as protecting existing health insurance policy holders.

Accountable Care Organization

An accountable care organization (ACO) is a healthcare organization characterized by a payment and care delivery model that seeks to tie provider reimbursements to quality metrics and reductions in the total cost of care for an assigned population of patients. A group of coordinated health care providers forms an ACO, which then provides care to a group of patients.

Care Delivery Model

The Affordable Care Act has been a catalyst for developing new health care delivery and payment systems that will improve outcomes, decrease cost, and restructure reimbursements.

Patient Centered Medical Homes (PCMH) and Accountable Care Organizations (ACO) are two of the new models that are being tested across the country. The Centers for Medicare and Medicaid Services (CMS) are also awarding "innovation grants" to health care organizations, academic institutions and not for profits who are testing other models of care and reimbursement.

Return on Investment

In business, the purpose of the "return on investment" (ROI) metric is to measure, per period, rates of return on money invested in an economic entity in order to decide whether or not to undertake an investment. It is also used as indicator to compare different project investments within a project portfolio.

Scope of Practice

The Scope of Practice describes the procedures, actions, and processes that a healthcare practitioner is permitted to undertake in keeping with the terms of their professional

license. The scope of practice is limited to that which the law allows for specific education and experience, and specific demonstrated competency. Each jurisdiction has laws, licensing bodies, and regulations that describe requirements for education and training, and define scope of practice.

Value Based Purchasing

Linking provider payments to improved performance by health care providers. This form of payment holds health care providers accountable for both the cost and quality of care they provide. It attempts to reduce inappropriate care and to identify and reward the best-performing providers.

Background

California was the first state to embrace the Affordable Care Act (ACA) and its coverage provisions, including the establishment of Covered California – the state's health benefit exchange. California is a national leader in the implementation of the ACA, but it has not been without challenges related to health care costs and quality improvement efforts. The cost of health care continues to grow, "National health spending reached $2.8 trillion in 2012 and is projected to increase to $5.0 trillion by 2022. The projection period (2013 to 2022) reflects a growth assumption of 6.0% per year, about two percentage points higher than recent growth rates." In the California Health Care Almanac, it was noted, based on 2012 data, "Even with the slow growth in national health spending in recent years, the US continued to spend a greater percentage of its wealth on health care more than any other industrialized nation. In 2012, the US spent an average of $8,915 per person on health care, reaching a total of $2.8 trillion." Health care spending's share of the economy in 2012 remained stable at 17.2%, while health care spending consumed 42% of federal revenues and 6% of household income. (California Health Care Foundation, 2014)

In California, approximately $280 billion was spent on health care at the start of the decade and could grow to more than $570 billion by 2020. This acceleration in the state health care expenditure growth rate will be driven by the combined impact of ACA implementation, an aging and more medically complex patient population, and delivery system transformation that supports and incentivizes care coordination among providers, interprofessional teams, and services to deliver cost-efficient, effective, high quality health care.

The population now receiving this valuable commodity of health care has a historical pattern that is episodic in nature and utilizes inappropriate resources to access care. This of course is due in part to previous lack of coverage and lack of access to care, and health care habits that will need to be addressed in order to reduce the burden of care, born by impacted emergency departments across California. In the Statistical Brief #174 it was noted that, "ED utilization reflects the greater health needs of the surrounding community and may provide the only readily available care for individuals who cannot obtain care elsewhere. Many ED visits are "resource sensitive" and potentially preventable, meaning that access to high-quality, community-based health care can prevent the need for a portion of ED visits. (Weiss, 2014)

The most versatile non-physician provider in the health care team is the registered nurse who has the knowledge, creativity and expertise to impact health care by decreasing costs, improving quality and providing greater access to health care services. The delivery of new models of care will be further driven by new roles assumed within and leading the interprofessional care teams by registered nurses. In 2012, the California Hospital Association (CHA) published a document titled *Transforming for Tomorrow* to assist hospitals and health systems to prepare for delivery system changes associated with health care reform. The following year, the California Institute for Nursing and Health Care (CINHC) published a white paper titled *The Nurse Role Exploration Project: The Affordable Care Act and New Roles for Nurses* to identify and prioritize new roles for RNs in this changing environment. These works led to generative dialog which resulted in development of a tool to assist nurse leaders across California in preparing nurses for these future roles. The RN Role Transformation Tool© predicts which new roles will be necessary for various types of hospitals, how important each role will be

given the hospital's strategic goals, as well as offering examples of how each role could be applied in practice. (California Hospital Association, 2012) (Berg J. G., 2013) (Berg J. G., October 2014)

Currently, the models of care utilized and under development are primarily physician and physician extender based models. These models limit access because they are dependent on providers that are currently in short supply. To enhance access, we propose expanded team models that include registered nurses working to the full extent of their education and training in multiple settings across the continuum. Because the registered nurse (RN) utilizes nursing diagnoses to treat a person's response to their health and illness, RN's are uniquely positioned to provide person-centric care across the continuum of acute and primary care settings. Donna E. Shalala, Ph.D., chair of the Committee on the Robert Wood Johnson Foundation Initiative on the Future of Nursing, at the Institute of Medicine (IOM) stated, "This report is really about the future of health care in our country. It points out that nurses are going to have a critical role in that future especially in producing safe, quality care and coverage for all patients in our health care system." (Committee on the Robert Wood Johnson Foundation, 2011) The report generated four key messages, two of which are important to this project, "Nurses should practice to the full extent of their education and training and Nurses should be full partners, with physicians and other health professionals, in redesigning health care in the United States." Along with the four key messages eight recommendations were made. The following recommendations are important to this work, Recommendation #1: Remove scope of practice barriers, #2 Expand opportunities for nurses to lead and diffuse collaborative improvement

efforts and #7 Prepare and enable nurses to lead change to advance health. (American Association of the Colleges of Nursing, 2015)

It is important to note that there are more than four times as many RNs in the United States as physicians. Registered Nurses deliver an extended array of health care services, including primary and preventive care by advanced, independent nurse practitioners in such clinical areas as pediatrics, family health, women's health, and gerontological care. Nursing's scope also includes care by clinical nurse specialists, certified nurse-midwives and nurse anesthetists, as well as care in cardiac, oncology, neonatal, neurological, and obstetric/gynecological nursing and other advanced clinical specialties. Nurses comprise the largest single component of hospital staff, are the primary providers of hospital based care, and deliver most of the nation's long-term care. Currently 62.2 percent of all employed Registered Nurses work in the acute care setting. (American Association of the Colleges of Nursing, 2015) As the landscape of health care and reimbursement changes to a model that embraces prevention and population health the registered nurse is well positioned to provide an integral role in improving care rendered to a new generation of insured patients.

Historically, the health care financial payment model includes nursing care bundled in the general bed charges billed for acute hospital services. Within a hospital, nursing care measured by Nursing Hours per Patient Day, and associated charges for nursing care, are generated and bundled via a room charge which includes the physical space in which care is provided and other non-physician services. The physician currently bills for services, and insurers, led by the standards set by the Centers for Medicare and Medicaid Services, have promoted this fee for service payment methodology by establishing specific physician billing

codes. However, health care reform is shifting the profitability fee for service model toward performance based reimbursement, accentuating health outcomes that matter to the patient relative to the cost. Two components exist within the equation for value, quality and cost. In other words, value equals outcomes divided by cost, or Value=Outcome/Cost. In the new performance based model, different from the volume based financial model, where nursing costs were hidden, the quantitative value of the RN will be instrumental in defining their individual impact on health care outcomes. Defining the value impact that an RN has on improving health outcomes is an important component in defining new roles in health care and developing team delivery models that include and promote the unique scope of practice and competencies of the registered nurse.

To support the case in defining the work of an RN and place a monetary value on the primary care role that an RN is uniquely suited to provide, supporting evidence is presented. Much literature has been generated showing the cost and quality effectiveness of the RN within various care settings. The following research helps to support this proposition, as shared in Nursing World, "the adequacy of nursing staffing and proportion of registered nurses is inversely related to the death rate of acute medical patients within 30 days of hospital admission (Tourangeau, et al, 2005). Increasing RN staffing could reduce costs and improve patient care by reducing unnecessary deaths and reducing days in the hospital (Stone, et al, 2007)...patients hospitalized for heart attacks, congestive heart failure and pneumonia...are more likely to receive high quality care in hospitals with higher registered nurse staffing ratios (Landon, 2006). Higher fall rates were associated with fewer nursing hours per patient day and a lower percentage of registered nurses...(Dunton, et. al., 2004)... can accurately differentiate

pressure ulcers from other ulcerous wounds in web-based photographs, reliably stage pressure ulcers, and reliably identify community versus nosocomial pressure ulcers (Hart, et al, 2006). A 10% increase in the number of patients assigned to a nurse leads to a 28% increase in adverse events such as infections, medication errors, and other injuries (Weisman, 2007). Understaffing of registered nurses in hospital intensive care units increases the risk of serious infections for patients; specifically, pneumonia (Hugonnet, et al, 2007). According to The Joint Commission (2005), "quantifying the effect that nurses and nursing interventions have on the quality of care processes, and on patient outcomes, has become increasingly important to support evidence-based staffing plans, understand the impact of nursing shortages and optimize care outcomes." (Gallagher, 2010) The Value of Nursing project continued the natural progression of the transformative work accomplished by the California Hospital Association and HealthImpact (formerly known as CINHC), by applying the RN Transformation Tool© with the new role definitions to create a business and quality case for implementation of a new model of care utilizing registered nurses as key providers. The new roles defined within the HealthImpact (CINHC) Nurse Role Exploration Project are Care Coordinator, Faculty Team Leader, Informatics Specialist, Nurse/Family Cooperative Facilitator and Primary Care Partner. Within the RN Role Transformation Tool© a transformation grid was developed helping to identify the level of importance of each new role to each of the five types of hospital destinations. Working with a group of nursing leaders from academic and practice settings across California, a clear and concise definition of the value of the RN has been developed defining key talking points to increase awareness and support change within the health care industry and the general population. Developing a clear understanding of the nursing profession related to value based

purchasing and health outcomes will bring about greater opportunity for collaboration and creativity amongst health care professionals.

Value of Nursing Project Overview

This Value of Nursing project was generated from previous work completed by HealthImpact (Formerly CINHC) and The California Hospital Association. This innovative journey has convened nursing thought leaders from both academic and practice settings from across the country including co-Leaders, BJ Bartleson, Vice President, Nursing & Clinical Services California Hospital Association and Stephanie Decker, National Nursing Policy Consultant, National Patient Care Services, Kaiser Permanente. The project has generated interest from nursing coalitions across the nation who would like to collaborate. Three focused workgroups were developed around the key components.

The first key component is the creation of a consistent definition of the value of nursing that can be shared both within healthcare and with the general population. The reason this work is important, is that without a clear understanding of the scope and capabilities of a registered nurse linked to value based outcomes, the development of creative models of care in which the registered nurse may/may not be fully utilized to enhance accessibility, will be limited. The team is working to develop key talking points, sharing the definition of value based nursing in relevant messages to targeted audiences. These messages will be adapted to the setting in which they are used to enhance relevance and application to desired outcomes.

The second key component is developing a business case for the utilization of the RN. Within this body of work, a return on investment calculator will be developed which can be used by healthcare leaders to exhibit the financial benefit gained when utilizing a registered nurse in specific roles and programs. This calculator takes into account the benefits of nursing

sensitive indicators that are not historically considered when producing financial analysis in various healthcare settings. Examples of these benefits are: reduction of hospital acquired infections, reduction of hospital re-admissions, reduction of emergency department utilization, reduction of hospital admissions, reduction in mortality rate and improvement of various health indicators such as Hemoglobin A1C, controlled blood pressure, lower cholesterol, amongst many others. A significant body of work exists that supports that appropriate RN utilization improves patient outcomes. Defining the business case will create a greater understanding amongst those in decision making positions regarding the allocation of resources; that the investment in positioning RN's in specific roles can result in lower overall costs of health and be of financial benefit.

The last key component is the development of a licensing certification competency crosswalk for the interprofessional team. Within healthcare, many professions provide various roles within the health care delivery system. Each of these professional roles carry a specific scope of practice and these roles are not always well understood or well-coordinated, particularly in terms of capability and outcome driven measures. Developing a crosswalk that can describe each professional's role in the provision of care as well as the associated costs, will help leaders decide how best to allocate resources. The crosswalk will include which profession is competent to provide specific care and services, under what circumstances and in what settings. Each type of care provider displayed within the crosswalk will indicate unique competencies, education and training. Based upon this crosswalk, team models will be recommended applicable to various levels, settings, and types of care. The crosswalk will guide and support those responsible for resource allocation to articulate the case for utilization of the

appropriate level of professional in a specific circumstance. It will highlight the effective scope and breadth of care capability of the RN, as further evidence of the scope of practice, breadth of services, and flexibility that an RN brings to the health care table.

To our knowledge there has not been a comprehensive look at these key components across the California landscape or with other states we have networked with.   Developing these three components will help educate the body of healthcare professionals about the RN scope of practice and capability to meet the goal of creatively influencing, supporting, and providing new models of care that enhance value. This project meets the call of the, Initiative on the Future of Nursing, at the Institute of Medicine (IOM) "Nurses should practice to the full extent of their education and training and Nurses should be full partners, with physicians and other health professionals, in redesigning health care in the United States." (Committee on the Robert Woods Johnson Foundation, 2011) California can lead the way in establishing the case for the effective utilization of RN's across all health care settings, including ambulatory care, community health centers, outpatient care, and primary care office settings.

Defining the Registered Nurses Role in Healthcare – Key Talking Points

The development of Key Talking Points describing the role of the Registered Nurse (RN) has been identified as an important strategy in furthering the understanding of the value that the RN has to the provision of healthcare. Professional colleagues, the press and, by extension, the public need to gain a better understanding of the scope and abilities of nurses, creating greater comprehension of the nursing profession's significant and unique contributions to health care.

In finding a way to share the definition and important messages about the RN, it was determined that creating visual messaging would be the strategy of choice. The team created a series of power points designed to communicate the value of nursing to healthcare professionals as well as the general public. Using the nursing process as a foundation, the team designed a message about the value of the RN to healthcare in terms of a public model and a professional model. In order to describe ways in which the RN can lead health care to greater levels of performance and add improved access and quality of care, messages have been developed sharing the nursing process in the context of future RN roles within health care with a focus on community health.

These powerful messages once fully developed will be used to provide all leaders with a platform to share the message explaining the value of nursing to the provision of health care. These materials would then be utilized within the context of a media campaign sharing the value of the RN using consistent language and definition so that the messaging can be clearly understood by all.

The three sets of material have been tailored to inform our colleagues within health care and the general public about the scope and role of the RN. The third power point describes the nursing process in the context of the present and future roles in community health. These examples of future roles that the RN may play in the future will help the general public and leaders within health care to creatively see the role the RN can play in future models of care.

The fully developed materials will be the basis of a public relations campaign designed to raise the profile of the nursing profession and communicate the unique value of nursing. The public will be educated not only about the unique role of nursing, but how it is an essential component for future health care delivery.

Appendix A - *Key Talking Points-Public Version*

Appendix B - *Key Talking Points-Professional Version*

Appendix C - *Key Talking Points-New Roles*

Developing a Quantitative Business Case for Nursing Care

One identified area in which nursing leadership often struggles is that of clearly articulating how nursing has impacted the financial picture. Nurses at all levels have historically been focused on the provision of quality care and patient outcomes and have neglected the development of business acumen. It is especially important now that nursing leadership learn to articulate how the utilization of an RN impacts the financial "bottom line" for an institution. The inability of health care leaders to recognize the value that the RN brings to the various care delivery or operational models, has led to the reduction in utilization of the RN due to perceived higher salary costs associated with the RN's use. The RN brings a unique set of competencies and qualifications to the ever changing world of health care and should be seen as a very important asset to health care. The RN can create better patient outcomes, provide increased access to care and improve the patient's perception of care, all of which often results in improved financial performance for the organization.

With the implementation of the Affordable Care Act (ACA), reimbursement changes have affected all organizations and will continue to change rapidly in the foreseeable future. The health care market is seeing a shift in reimbursement reducing the use of fee-for-service reimbursement models and moving towards a value based payment structure. These rapid changes are driving organizations to creatively seek ways in which they can remain financially viable, determining the best way to meet goals, either through improving the quality of care provided, reducing the cost of providing care by reducing the total spend of the organization, as well as identifying key service lines to either be expanded or reduced based on revenue

production.   Many challenges lay ahead for health care organizations and understanding under which system of payment reimbursement will occur will be crucial to helping any health care organization maintain financial viability.

Health systems determining to be responsible for the health of a defined population, such as an Accountable Care Organization (ACO), have decided to be responsible for the health care of large cohorts of patients, the cohort is assigned through contracts with payers who have the responsibility of providing coverage to large groups of covered lives. A negotiated rate is agreed upon between the payer and the health system in which coverage for each patient life is paid for annually at a fixed rate. Many payers are attempting to set rates that are similar to those of Medicare for senior populations. The health system then is responsible for providing all care for each individual covered life at a pre-determined cost. If a patient is kept healthy and uses very little medical care, the ACO may be able to earn money by spending less on care and receiving more in the annual negotiated rate for that person than expended. If a covered patient uses a large amount of care within that year and that care costs more than was negotiated, the health system will lose money. In order to maximize negotiated rates, organizations are moving as much care as possible outside of the acute care setting into ambulatory or outpatient care settings because these services are less expensive to provide. The more successful a organization is at keeping patients healthy and out of the hospital, the more likely they can operate into a positive cash position, essentially operating in "the black."

During this period of dramatic change to health care, patients and consumers of care are becoming educated regarding what to expect from health care providers, as well as how they can become responsible for their own health and subsequent cost of care.   The public has

become a better informed consumer of health care making decisions and choices about their health care policies based on their own personal values and needs. They are able to assess what level of quality that health care providers can provide and compare the costs of care across organizations and providers. Ultimately consumers are able to weigh the value, quality and cost of various health care options, basing decisions on information that is now readily available to the consumer.

As a result of the ACA, a Value Based Purchasing (VBP) model now drives all inpatient reimbursement. There are very complicated formulas associated with this reimbursement model which depend on current performance, the performance of other facilities and the organization's performance improvement as compared with previous data. VBP focuses on 4 areas of performance: Patient Outcome and Safety, Patient Experience, Process of Care and Efficiency. Each of these areas are broken down into sub-sections which identify the specific measures to be assessed. For each measure, there is a specific VBP domain weight attached that cumulatively adds up to an overall score for each healthcare organization. For the nurse leader, the main focus remains on quality itself, however it is also important to understand that these points represent the quality of the organization, which then are added up and compared to other organizations. Reimbursement is then determined based upon the organizations scores. Each organization working with their Quality and Finance Departments can determine what points have been earned and subsequently what the exact reimbursement is expected to be.

It is the nurse leader's responsibility to have an understanding of these new payment models. Nursing has a direct affect not only on the quality of care delivered to the patients in

their organizations, but to the financial health and bottom line of the organization. As a result, the nurse leader must be at the decision making table with other experts to ensure quality care and financial stewardship. This is done through ownership of the nurse sensitive indicators, Surgical Care Improvement Project measures, improving patient experience and through creativity developing new programs and new roles to enhance revenue or cost savings.

When making a change in practice or adding a new role or program, it is the nurse leader's responsibility to fully understand the goal to be achieved, as well as current limitations, available resources, costs and organizational culture. A close relationship with the Finance and Quality departments is a must in order to gain the information needed to assess current state and future outcomes. Using the formula developed in this work to understand the return on investment of any initiative requires that the organization use its own financial and quality data.

To determine the data needed, contact staff responsible for quality data to discuss the parameters and operational goals of the project to insure that you have the appropriate data for use in the formula. Share observations and the changes you are considering. It will be helpful to listen to the Quality Department staff and ask leading questions to better understand their view of the current state. Ultimately, the nurse leader should have an understanding of their quality scores and the data measured and the basic contributors to the scores. By understanding the process and the scores themselves, and by working with the Quality Department, a new goal or target for improving the measure can be set.

Collaboration with the Finance Department is also important in moving toward a successful solution. Spending time with finance staff allows the nurse leader to provide information as to how clinical needs relate to patient outcomes. It is equally important to

understand the finance perspective so as to create an understanding of potential associated consequences related to each operational decision. Ask questions regarding reimbursement based on current quality scores and ask how this might change with improved quality outcomes. Both the Finance and Quality Departments may have complicated quality/reimbursement formulas converted to simplified formats explaining how quality changes impacts overall hospital scores and thus reimbursement.

If, as a part of an improvement strategy, a position is to be added or modified, Human Resources has information regarding salaries for each associated position. The costs associated with the utilization or additions of products or equipment, can be obtained through your organization's supply chain representative.

The Return on Investment Formula

The ROI formula is divided into 4 basic factors to be addressed by the nurse leader:

1. The cost avoidance measure (or service to be added if developing new revenue)
2. The target (X) is the increase or decrease of the measure or service
3. The cost of the investment, usually the salary of the role to drive the outcome.
4. Any additional costs or savings because of the measure or service.

The formula:

ROI =   (cost avoidance measure) (X) - Cost of investment - new costs or $_+$ new savings

Formula Definitions

Cost Avoidance Measure

When determining the measure or service change and looking at organization data, review *specific* data pertaining to the change to be made and not the "averages" of the

measure. For example, if a decrease in Stage 4 HAPUs is the cost avoidance target, data regarding actual cost and numbers of Stage 4 HAPUs should be reviewed, not an average of all HAPUs.

Target

The nurse leader must establish a target regarding a decrease of measure (such as decreasing falls or CLABSI infections) or increase in service (such as an increase in visits at a clinic). When creating these targets, the nurse leader should look at what metrics need to be met to receive reimbursement.

Cost of investment

Cost of investment is determined by assessing the product to be delivered and determining the best role or roles that will achieve the intended outcome. Review of the competency crosswalk will assist in this process. Often a Registered Nurse is chosen to drive practice changes because their scope of practice allows them to work both independently and overlapping into multiple other professional fields of practice. The organization chooses the best role based on their specific circumstances, review of roles available and the determination of cost savings, care redesign or revenue enhancement to be achieved.

New Costs or New Savings

While creating change, often additional costs or saving may appear during the research and must be included in the calculations. Additional costs may be ongoing new supplies or a onetime cost such as a new computer for the department. Conversely, savings may be possible by finding less expensive tools or resources that are equally or more

effective as the ones currently being using. In each of these cases, these must each be included in the calculations to represent a full cost of the project. Do not forget to explore or add any education or orientation time.

ROI Guiding Statements, Questions and Talking Points

When a nurse leader proposes a new operational or business plan to organizational leaders they must be fully prepared to discuss and defend the financial viability and associated costs as well as conveying the potential benefit to the patient in terms of care quality and outcomes. Conveying this message can be challenging. In order to assist the nurse leader when approaching these intimidating conversations we have provided several sample guiding statements, questions and talking points that will help to direct the conversation and share the story so that everyone understands the benefit.

- "I am planning to change **X** and I believe it will achieve _____ outcome.

- It is imperative we use a role that can not only assess, but can independently react to the findings of their assessment, such a registered nurse.

- By not responding to our current issue, **X** will cost us $_____ this year through extended treatments, unnecessary admissions and extended lengths of stay which lower our quality scores.

- How do you think this will affect our overall quality score and ultimately our reimbursement?

- Through this change, I expected a financial savings/gain to be $_____."

Sharing the story is important, but using the language that others understand allows the message to be heard. In this example, the nurse leader is using language to describe the

benefits financially, through a corresponding increase in quality and stressing how the nurse is the best role to drive this change.

This is the nurse leader's opportunity to show how nursing is effective in reaching important patient outcomes. Nurses have the unique ability to provide care coordination and assist patients to navigate through a confusing healthcare system. Nurses have an extraordinary ability to assess situations of patient and family health, spiritual and social needs and direct the care to the needs of the patient and family. Nurses are the only health care professional who attend to all the social determinants of health while being trusted by consumers to act in their best interest. Nurses not only respond to physical care needs of the consumers, but also decrease or prevent adverse events through their actions. Nurses also directly affect the financial health of an organization through preventative measures such as education and wellness measures which assist in keeping the community healthy and through the continuum. All of these points can and should be part of the education with decision makers.

Leading Questions and Statements

1. I understand how reimbursement is changing after the implementation of ACA.
2. In order to impact our business positively this proposal will help to ensure optimal patient care and improve the operation and thus affects our financial outcome positively.
3. I understand how to integrate professional roles in order to create positive patient outcomes.
4. This is the business plan that I am proposing to achieve _____ outcome.
5. The metrics we will be utilizing to measure the success of the changes that we have implemented are _____ .

6. The expected financial gain will be_____.

7. Analysis of professional scope and roles have identified the various roles that could provide the service necessary for the project. The identified best professional role to assign to this project in order to create success is the Registered Nurse. The registered nurse has been identified based upon the scope, skills and competencies necessary for this particular project, the requirements are _____ and based upon our financial analysis utilizing the RN will create a positive financial benefit to the organization.

8. If we don't focus on this quality measure and do not implement the recommended changes, based on our current trends, we will negatively impact our reimbursement by _____.

9. After running the numbers, I project we may negatively impact our bottom line by _____. How do you think this will affect our quality score (Value Based Reimbursement) and ultimately our reimbursement margins?

10. Through this recommended change, we will decrease _____ (HAPU, CAUTI, CLABSI, etc.) which not only correlates to improved patient care, but saved $_____ by reducing care interventions, as well as improving our reimbursement by $_____ due to the increase in our quality score. (Compare score to previous scores)

11. By using a nurse in this project we meet the goals that are important to the organization; quality care and meeting our financial obligations.

12. Improving our quality performance will help build our reputation in the community and in being transparent, we will be able to improve our marketing opportunities.

13. The regulatory and surveying organizations look very closely at performance outcomes.

Concluding ROI Discussion

Health care now demands that executives and leaders not only focus on the quality aspects of care, but also on the impact to financial performance, in fact, they are inextricably linked. The ACA has demanded that organizations provide the highest quality care, while maintaining the lowest associated cost. This new value of finding ways to provide the highest

quality care while reducing cost creates new possibilities for nursing to create new roles and models of care that can help to attain higher levels of performance. It then becomes the nurse leader's role to be able to convey the message sharing how nursing is in fact a value and provides benefit to the organization by improving care, increasing access thus driving volume and reducing cost. To articulate the value of nursing the nurse leader must be able to understand financial terminology and operation, as well as understanding the various models of reimbursement. By improving the nurse leader's business acumen, the leader can inform those with decision making authority, helping to create a better understanding of the scope of practice of the RN.   Creating models of care in which the full scope and practice of the RN can be utilized will in turn create greater opportunities for the organization to improve its financial status, while improving the well-being of the health care consumer.

***ROI Formula*:**

RO I = (Cost Avoidance Measure) (X) - Cost of investment - New Costs or $_+$ New Savings

X = Number of targets to achieve or incidents to avoid

Cost avoidance measure -

Note: Be specific in costs based on what you are trying to change. For example, if you are trying to affect Stage 3 pressure ulcers, use data and costs specific to your organization for Stage 3 pressure ulcers only. Do not include ALL pressure ulcer numbers and costs.

Care Practice Issue	Cost Avoidance Measure
Falls	Average cost per fall
Re-admission	Average cost per admission
CLABSI	Average cost per CLABSI
CAUTI	Average cost per CAUTI

↓ LOS	Average cost for each day

Cost of investment – Salary: What role or roles will drive intended outcome?

	Falls	Readmission	Patient Experience	CLABSI	CAUTI	↓ LOS	HAPU
RN	Yes	Yes	Yes	Yes	Yes	Yes	Yes
APN	Yes	Yes	Yes	Yes	Yes	Yes	Yes
MSW	No	No	Yes	No	No	No	No
PT/OT	Yes	No	Yes	No	No	Yes	Yes

Subtract any new costs to implement cost avoidance measure such as, education, training, resources or supplies or **add** any new savings such as cheaper supplies.

***Inpatient Examples*:**

1. Hospital Acquired Pressure Ulcer (HAPU) **–** Stage 3 acquired by 28 inpatients last fiscal year. Target to decrease by 50% = 14. A new wound care registered nurse is proposed at a salary of $94,000. In addition, re-evaluation of under-pads show that choosing one new pad will save us $5,000 annually. Another new pad under consideration and equally effective would cost us an additional $10,000 annually. Last year's loss $14,240*28 = $398,720

Using new under-pad costs additional $10,000 annually

RO I **= (**$14,240 per Stage 3 care**) (14) -** $94,000 - $10,000 = ***$95,360 annual savings***.

Using new under-pad saves $5,000 annually

ROI **= (**$14,240 per Stage 3 care**) (14) -** $94,000 + $5,000 = ***$110,360 annual savings***

2. *Central Line Associated Blood Stream Infection (CLABSI)* **–** Between all units, 20 cases of CLABSI occurred last year.

For this facility:

Average reimbursement per case	$64,894
Average cost per case with a CLABSI	$91,733
Average loss per case	($26,839)

The CNO wants to add one Infection Prevention and Control position at an annual salary of $100,000.00 to reduce and stabilize CLABSI. The target is to reduce CLABSI by 75% or eliminate 15 cases per year.

ROI **= (**$26,839 loss per case of CLABSI**) (**15 cases**)** - $100,000 salary = $***302,585 annual savings***

Ambulatory Care Examples:

1. Readmission to the hospital **-** Last year the hospital ambulatory clinic was unable to follow up on 25 post pneumonia patients who had been admitted for pneumonia and each of whom experienced a less than 30-day post-discharge re-admission. Each hospital re-admission costs the hospital $13,000. The CNO has created a care coordinator position at an annual salary of $94,000 for the clinic to provide immunizations, follow up phone calls, patient education and care coordination for patients discharged with a pneumonia diagnosis. A new space in the clinic for this additional practitioner (new phone line and computer and office furniture, desk, file cabinet, desk chair and 2 guest chairs) will be needed at a cost of $25,000. The non-personnel costs are a one-time cost for the initial year only.

Last year's loss: $13,000*25 = $325,000

The new target is to reduce re-admissions for patients discharged with a pneumonia diagnosis by 80%.

ROI = ($13,000 loss per readmission) (20 cases) – $94,000 salary - $25,000 one-time overhead =

$141,000 annual savings

2. Increasing a provider – A Federally Qualified Health Center (FQHC) currently has 2 physicians and 3 Nurse Practitioners. An analysis of clinic data reveals that the clinic has noted an increase in non-urgent visits. The clinic would like to increase their ability to see urgent or same day appointments timely and increase the total number of patients seen at the clinic. The Clinic Director would like to increase the number of visits by 5 visits a day. The Director believes this can be accomplished by adding one Nurse Practitioner at an annual salary of $145,000 who will be responsible for implementing a Clinic Fast Track. This will decrease the number of non-urgent patients that must be evaluated by a physician, improving their efficiency and reducing delays in scheduled appointments. This will also help to improve the ability of the clinic to room urgent care patients timely. Unused exam rooms will be utilized to open the Fast Track and thus there is no additional equipment (exam room furnishings) costs associated with the implementation.

Reimbursement per visit -$158.85

ROI = ($158.85) ((5 visits a day*5 days a week) (50 weeks a year)) – $145,000 salary = *$53,562*

Developing an Interprofessional Competency Crosswalk

The Interprofessional Competency Crosswalk will be used by healthcare professionals and institutions as well as academic institutions and faculty, to understand the value each profession can bring to the health care team. The crosswalk can be used to assist in determining which health care professional would be best suited to fulfill roles within various care delivery models. Helping to create an understanding amongst healthcare providers of the scope and capacity of each professional will help to insure that the right professional is available to provide the appropriate level of care for the individual at the time the service is needed. Further developing the concepts associated with the provision of interprofessional care will help to promote new and creative inspiration surrounding the development of care delivery models increasing access and improving the quality of care. The crosswalk will improve the ability of health care leaders to review scope, licensure, and cost associated with the utilization of each professional. This information is key to utilizing professionals appropriately to the fullest extent that their scope and licensure will allow. Utilizing professionals, expanding access and capacity can demonstrate evidenced based outcomes at a reduced cost, while improving access to care.

The licensing and certification crosswalk for the interprofessional team will inform the larger work helping to define the value of nursing. The value of nursing work includes the creation of, educational messaging sharing the definition of the registered nurse, as well as the development of a health care return on investment calculator. Upon completion the three deliverables will help to inform the general public about the value of the registered nurse to the care delivery team in terms that are easy to understand by those not in health care. The

crosswalk will enhance the healthcare professionals understanding of the roles each provider can play on the care delivery team by creating an "at a glance" reference from which healthcare leaders can choose participants for care delivery. They will then test the financial viability of the new care delivery model utilizing the return on investment calculator to determine the viability of the business case, assessing the value associated with the proposed model of care, given the costs and savings anticipated.

How to Use the Interprofessional Competency Crosswalk

The Interprofessional Competency Crosswalk contains the following information within the body of the spreadsheet:

- ➢ Profession/Licensure Information
- ➢ Regulatory Agency Governance
- ➢ Locations of Practice
- ➢ Summary Scope and Standards of Practice
- ➢ Average Annual Salary (CA)

This is followed by an appendix with additional information for each profession. (Appendix E)

The health care leader should review the Interprofessional Competency Crosswalk when investigating the efficiency and effectiveness of new care delivery models or changes to internal operational configurations. The leader should review the overall scope and standards of the professionals associated with the operation and determine which professional can provide the services necessary to institute the care model being considered. The leader would determine if there existed more than one professional able to provide the service. If the service can only be

provided by one professional, then the leader can move forward with clarity. If there exists more than one professional with the capability under their legal scope and standards, that can provide the service, then the health care leader should review the costs associated with each profession, as well as the level of quality and flexibility that the profession can provide to the care practice that is being considered. The *Interprofessional Competency Crosswalk* should be used as a tool informing the health care leader and their decision support team in determining all available possibilities to consider when creating care delivery models/operations.

Interprofessional Competency Crosswalk

Profession/License	Regulatory Agency	Location of Practice	Summary of Scope of Practice, Standard of Practice Services Provided	Average CA Salary
Acupuncturist	Acupuncture Board of California 916.515.5200	Skip for now		
Audiologist	Speech-Language Pathology and Audiology and Hearing Aid Dispensers Board 916.263.2666	Skip for now		
Chiropractor	Board of Chiropractic Examiners 916.263.5355 866.543.1311	Skip for now		
Clinical Social Worker	Board of Behavioral Sciences 916.574.7830	Private Practice Hospital/clinical Setting Other agencies (county setting, community based settings, social services)		$66,000
Contact/Spectacle lens dispenser	Medical Board of California 800.633.2322	Skip for now		

Dental Hygienists	Dental Hygiene Committee of California 916.263.1978	Skip for now		
Dentist	Dental Board of California 877.729.7789 916.263.2300	Skip for now		
Educational Psychologist	Board of Behavioral Sciences 916.574.7830	Secondary		$89,000
Hearing Aid Dispensers	Speech-Language Pathology and Audiology and Hearing Aid Dispensers Board 916.263.2666	Skip for now		
Marriage and Family Therapists	Board of Behavioral Sciences 916.574.7830			$69,000
Licensed Midwife	Medical Board of California 800.633.2322 Board of Registered Nursing 916.322.3350	"The practice settings in which the licensed midwife practices."		$110,000
Naturopathic Doctor	Naturopathic Medicine Committee 916.928.4785	Skip for now		
Occupational Therapist	Board of Occupational Therapy 916.263.2294	Both inpatient and outpatient settings		$90,000
Ophthalmologist	Medical Board of California 800.633.2322	Skip for now		
Optician	Medical Board of California 800.633.2322	Skip for now		
Optometrist	Board of Optometry 916.575.7170 / 866.585.2666	Skip for now		
Osteopathic Physician	Osteopathic Medical Board of California 916.928.8390	Skip for now		
Pharmacist	California State Board of Pharmacy 916.574.7900	Licensed Healthcare facility, home health agency, clinic		$120,000

	California State Board of Pharmacy 916.574.7900	Must work under direct supervision of pharmacist. Therefore: Licensed Healthcare facility, home health agency, clinic	"Pharmacy technician" means an individual who assists a pharmacist in a pharmacy in the performance of his or her pharmacy related duties	$40,000
Pharmacy technician				
Physical Therapist	Physical Therapy Board of California 916.561.8200	Both inpatient and outpatient settings		$95,000
Physician	Medical Board of California 800.633.2322 916.263.2382		The practice of medicine involves diagnosis, treatment, or correction of human conditions, ailments, diseases, injuries, or infirmities whether physical or mental, by any means, methods, devices, or instruments.	$206,000
Surgeon	Medical Board of California 800.633.2322 916.263.2382			
Physician Assistant	Physician Assistant Board 916.561.8780	All areas of medicine.		$100,000
Podiatric Physician	California Board of Podiatric Medicine 916.263.2647	Skip for now		
Psychiatrist	Medical Board of California 800.633.2322	Secondary		
Psychologist	Board of Psychology 866.503.3221 916.574.7720	Secondary		
Respiratory Therapist	Respiratory Care Board of California 866.375.0386 916.999.2190	Hospital, home health, clinics		$70,000
Speech Language Pathologist	Speech-Language Pathology and Audiology and Hearing Aid Dispensers Board 916.263.2666			$88,000
Nursing Specific Professions				
CNA	California Department of Public Health		Unlicensed, trained/certified.	$33,000

LVN	Board of Vocational Nursing and Psychiatric Technicians			$14 - $24 Per Hour $26,880 - $46,080 Per Year
LPT	Board of Vocational Nursing and Psychiatric Technicians	Inpatient and outpatient settings		$15 - $27 Per Hour $30,720 - $51,840 Per Year
RN	Board of Registered Nursing	"In an organized health care system"		$74,000
NP	CA Board of Registered Nursing			$102,000
CRNA	Board of Registered Nursing	Both Private and Public Settings	California allows CRNAs to administer anesthesia without physician supervision.	$164,000 (Compared to $290,000 for anesthesiologist)
CNS				$76,000
Community Outreach Worker	Unlicenced, not regulated			Variable but approximately $35,000-$50,000
Medical Technician		I only see EMT and AEMT, no mention of Medical technician		
Clinical Lab Scientist	American Society for Clinical Pathology	Hospitals, diagnostic laboratory, doctor's office		$66,000
Medical Assistant	Not licensed, certified, or registered by the State of CA, regulated by the Medical Board of CA	Offices and clinics. MAs may not work for inpatient care in licensed general acute care hospitals.	Administer medication and assist with ambulation, transfers and ADLs.	$65,000
EMT	Local EMS agency, done by county. Not a statewide certification	During training, while at the scene of an emergency, during transport of the sick or injured, or during interfacility transfer	Basic Life Support + Optional Skills: Advanced first aid and OTC Medications, CPR, AED	$37,000
Paramedic	California Emergency Medical Services Authority		All EMT & AEMT skills and medications,	$44,000
Dietician	The Accreditation Council for Education in Nutrition and Dietetics (ACEND°)	hospitals, long-term care facilities, clinics, private practice, and other institutions.	Multidisciplinary Care, Individualizing a treatment plan, Accept and Transmit Verbal and Electronic Orders, Medical Laboratory Tests (Initiate orders when authorized by physician)	$57,000

Applying Competencies to New Roles and Care Delivery Models

With the expansion of health care coverage under the Affordable Care Act comes the challenge of creating timely and appropriate access to care. One of the recommended strategies to increase access to care has been to create new ways to expand the utilization of the Registered Nurse to the fullest capacity allowed under their scope and standards. Recently, a review of the shifting needs of health care revealed five important new roles the Registered Nurse can assume, helping to increase the quality of care and access to care. These new roles as identified in the *Nurse Role Exploration Project: The Affordable Care Act and New Nursing Roles* are: Care Coordinator, Faculty Team Leader, Informatics Specialist, Nurse/Family Cooperative Facilitator and Primary Care Partner. (Berg J. G., October 2014). (Berg J. G., 2013)

The five conditions with the highest re-admission rates are Mental Health associated conditions, Coronary Artery Disease, Diabetes Mellitus, Congestive Heart Failure and Re-occuring Asthma. Based upon the five identified new roles for the Registered Nurse and a review of literature showing that the health of the chronic disease population can be improved, the following examples of new Registered Nurse roles are shared to stimulate creative thought around new paradigms for care delivery.

Example #1: *(Mental Illness)*

One new role that can be used in the care of those with a chronic mental health condition is the role of *Care Coordination*. One example under care coordination would be the utilization of a *Care Transition Nurse*. The Care Transition Nurse meets with the client while they are still admitted to the hospital. The transition nurse works to create a relationship with the client during their hospitalization. The nurse provides contact information for the client so that they have direct contact to the nurse for advice, information, or just to talk about how

things are going. Once the client is discharged from the acute care setting the transition nurse

follows up with the client in their home within forty-eight hours. This provides the nurse with

an opportunity to evaluate the client's condition, their home circumstance and availability of

resources. The transition nurse can then insure that the client has the appropriate care and

social resources to stabilize their condition and improve health. The transition nurse operates

under standardized protocols/procedures to assess the client and implement appropriate

interventions to assist in maintaining health. This role is used in the *Transitional Care Model*, a

proven nurse-led team based approach. The American Academy of Ambulatory Care Nursing

(AAACN) (American Academy of Ambulatory Care Nursing - Editor Kitty M. Shulman, September

- October 2015) recently developed RN *competencies for care coordination and transition*

management, and an *online course* to impart these competencies, including:

- Support for self-management

- Education and engagement of patients and families

- Cross-setting communications and care transitions

- Coaching and counseling of patients and families

- Nursing process: proxy for monitoring and evaluation

- Teamwork and collaboration

- Patient-centered care planning

- Population health management

The development of this new role which is uniquely suited to the Registered Nurse is one way

in which we could create a comprehensive and holistic approach to care of the mental health

patient. A reduction in re-admissions of patients suffering from mental illness would align with federal goals of improved quality at a reduced overall cost. Working with registered nurses to improve training in care coordination and transition management will be the key to meeting the needs of those suffering from mental illness.

Example #2: *(Coronary Artery Disease)*

Several outpatient clinics are utilizing the Registered Nurse in a new way, they have established *RN-led new patient visits*. (Center for Excellence in Primary Care, August 2015) This role as a *Primary Care Partner* can help to create new avenues of access to care for those with chronic conditions, in this case Coronary Artery Disease. A Registered Nurse new visit schedule is created and a template and protocols are built into the electronic medical record. The nurse gathers a comprehensive health history, including social history, ordering pertinent laboratory work and assessing the patient's acuity. If diagnostic radiological exams are necessary, the registered nurse will contact a physician to obtain the order. The registered nurse will then determine the need to see the physician and the timing of this visit. These RN-led visits help the patient to be seen timely and to begin care regimens quickly thus reducing the severity of the condition and the need for acute care intervention. Nurse only visits at this time are reimbursed at a much lower rate than the physician visits, however the benefits of creating greater access, higher levels of patient satisfaction and reducing the care burden on the greater health care system are but a few of the benefits of this care delivery model. The Medicaid program is beginning to look for ways to incentivize this type of creative model of care delivery by providing pay for performance, recognizing organizations that are creating better outcomes while maintaining or improving the cost of care.

Example #3*: Diabetes Mellitus*

A new role for the registered nurse within health care is the role of Informatics Specialist. The Registered Nurse can have a significant impact on the quality of care delivered to the diabetic patient without ever seeing the patient. The health informatics developer-RN will work within an organization to create and design systems to support practice and care by all team members along the entire continuum, especially for mobile devices. The RN-developer will design applications that can be used by patients and family caregivers that support self-management and allow information to be quickly and accurately transmitted to providers and care coordinators.

An example of how this work assists the care of the diabetic, is when an electronic medical record is developed to include reminders for the provider of when to order a hemoglobin A1c, diabetic retinal exams, and lipid level blood testing. Not only would the application share these reminders with the provider, but it would track the compliance of the care regimen and alert the provider when visits are missed or ordered tests remain incomplete. The RN-developer can help to institute diabetic registries within organizations so that the patient is tracked across the entire organization facilitating care consistency among different providers.

Utilizing evidenced based practice, the RN-Developer is able to model the template built within the electronic medical record to insure that the identified best practice is delivered consistently to all patients in the system. These RN-developers can help to lead best practice in both ambulatory and acute care settings, engineering out of the system inconsistent care

practices and reducing "missed" opportunities by the provider to intervene earlier and create better health.

Example #4: *(Congestive Heart Failure)*

A *Registered Nurse Navigator* is one of the roles that the RN's are taking on helping to solve the issues associated with facilitating care for patients with chronic or acute conditions. This is a role categorized under the *Nurse/Family Cooperative Facilitator*. The RN Navigator supports patients and families in choosing the best approaches to meet individualized needs. They create assessment tools for outreach workers to use in identifying potential problems upon intake into the care facility. They connect with patients and families prior to the need for complex care to ensure preparation and best outcomes are achieved.

The RN Navigator will establish contact with a patient when the diagnosis of Congestive Heart Failure (CHF) is made, either in an acute care setting or in an ambulatory care setting. The RN will determine the needs of the patient, assessing the patient's current physical status as well as reviewing their circumstances including where they live, their financial situation and who is available to provide support. Based upon their findings, the navigator will help to coordinate the interventions and care necessary to move the patient towards health. They will advocate on behalf of the patient with insurers, care providers, and help to explore financial assistance if necessary. One of the most important roles the navigator plays is helping to interpret what information those within the health care system are saying to the patient. The navigator creates a level of comfort and security for the patient, helping to alleviate some of the worry that accompanies the diagnosis of CHF. In turn the ability of the patient to focus strictly

on their condition with less worry creates improved outcomes and helps the patient to maintain their health.

Example #5: *Re-occurring Asthma*

Asthma continues to maintain one of the highest hospital re-admission rates across all conditions. The ability to impact the disease is hampered by a lack of consistent access to a primary care provider due to the overall shortage across the country of providers. A new model has emerged to create increased access to care in which the registered nurse is utilized to increase availability of the provider for all patients by creating what is known as a "flip" visit. (Center for Excellence in Primary Care, August 2015) The *Primary Care Partner Roles* are roles in which the registered nurse can partner with physicians to increase the number of patients seen and improve the overall quality of the care that is provided. The *Clinic Registered Nurse* can be utilized to begin a visit evaluating and assessing the patient, once gathered the patient can either be "flipped" or seen for a short visit by the provider or the provider can in full partnership with the RN complete the visit. This type of patient visit helps to increase the number of patients that are able to be seen in one day. From a financial perspective the visit will qualify as a billable visit under Medicare guidelines.

Another way in which the clinic registered nurse can be leveraged to improve patient outcomes and increase access to care is to utilize a nurse only visit in which the RN can provide assessment, education/coaching, and prevention services. For the patient with asthma, providing access to education about the condition by a professional helps to decrease acute episodes. Management of the condition is difficult for patients that have to wait for large periods of time in between provider visits. Having an RN available to meet the patients' needs

for education, assessment and coaching can make the difference for the patient. The RN can quickly determine based upon the assessment what interventions are necessary and what level of care is necessary. Keeping the patient out of the hospital and maintaining their health is the primary focus of the clinic RN.

While reimbursement for nurse only visits lags that of visits with the physician provider, Medicare is working to create ways in which creatively delivered quality care can be incentivized. Recently, new financial incentives have emerged; for example, as of January 2015, Medicare is paying *$42.60 per month* for care management of patients with two or more chronic conditions, like heart disease and diabetes. (Center for Excellence in Primary Care, August 2015)

These are but a few examples in which the utilization of the Registered Nurse can create a positive impact on both the patient and the organization. We encourage you to creatively consider the utilization of the Registered Nurse in further development of care delivery models.

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Appendix A: Key Talking Points-Public Version

Nurses Gather Your Health Information

Listen to Your Heart and Lung Sounds

Monitor Your Blood Chemistry and Vital Signs

Assess Your Health History and Pain Levels

Nurses Identify Your Health Issues

Using Expert Knowledge

Health History

Vitals Labs

Physical Exam

Nurses Spot and Detect Your Health Issues

Nurses Set Goals to Improve Your Health

WELLNE

HEALTH

EXERCISE

NUTRITION

Wellness road

POSITIVE THINKING

REST

Life river

Nurses Develop a Plan to Improve Your Health

Nurses Implement Your Plan of Care

GOAL

Nurses Ask: Did You Get Better?

Once You are Better Nurses Work to Keep You Healthy and Out of the Hospital

RN Care Coordinator

RN Patient Data Specialist

Nurse/Family Facilitator

RN Primary Care Partner

Appendix B: Key Talking Points-Professional Version

There are 3 Million Registered Nurses

RNs Are the Largest Healthcare Profession

Nurses are at the Center of Patient Care

Professional Model

Assessment

Diagnosis

Evaluation

Nurses Diagnose and Treat Your Response to Illness and Health

Outcomes

Implement

Planning

Using Clinical Judgement

Analyze Data to Determine Actual or Potential Diagnosis

Health History

Vitals Labs

Physical Exam

The Nurse Formulates a Nursing Diagnosis

Example Nursing Diagnosis

Analyze Data to Determine Actual or Potential Diagnosis

Acute or Chronic Pain

Nurses Develop a Plan to Attain Measurable HCC Outcomes

Example Plan Outcome: HCC Pain Level Reduced from 10/10 to 0/10

PAIN INTENSITY SCALE

0 1 2 3 4 5 6 7 8 9 10

NO PAIN   MILD PAIN   DISCOMFORTING   DISTRESSING   INTENSE   WORST PAIN POSSIBLE

Nurses Implement the HCC Plan of Care

Example: Nurse Administers Pain Medication

Evaluation:
Did Your
Pain Level
Drop to
0/10?

If Not Nurses
Reassess
With a
Revised HCC
Plan of Care

Appendix C: Key Talking Points-Applied to New Roles

In the Future Nurses Will Not Only Assess and Treat Individuals They Will Assess and Treat the Family, the Community and Develop the Health Care Infrastructure with the Goal of Keeping People Healthy

Future RN Roles

Using Individual and Population Data

The Nurse Formulates a Nursing Diagnosis

Example: HCC Admitted for Heart Failure Due to Drug Abuse

Individual Nursing Diagnosis (ND):
- Denial
- Self-Care Deficit

Community Nursing Diagnosis:

Nurse Facilitator Also Develops A Population Nursing Diagnoses

Risk of low birth rate among pregnant adolescents in the downtown area related to inadequate income and use of tobacco as evidenced by insecure housing, use of the food bank, unemployment rates, and smoking rates among pregnant teens.

Nurses Identify Expected Outcomes For the HCC Individual and Community

Example Individual Outcome: HCC Ceases Drug Use Though Treatment

Example HCC Community Outcome: Partnerships for Drug Abuse Treatment

Nurse Care Coordinator Develops a Plan to Attain Measurable Outcomes

HCC Plan: Successful Drug Abuse Treatment for Individuals & Community

Treatment Reduces Drug Use and Recidivism

Drug-Free

Arrest-Free

Delaware Work Release Therapeutic Community (Crest) + Aftercare
Drug-Free and Arrest-Free 3 Years After Release (N=448)
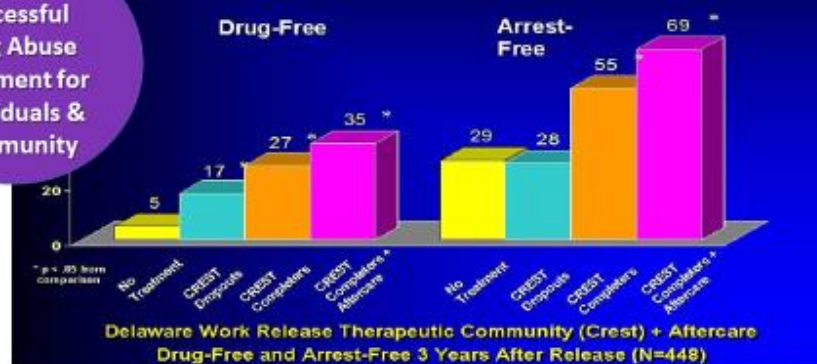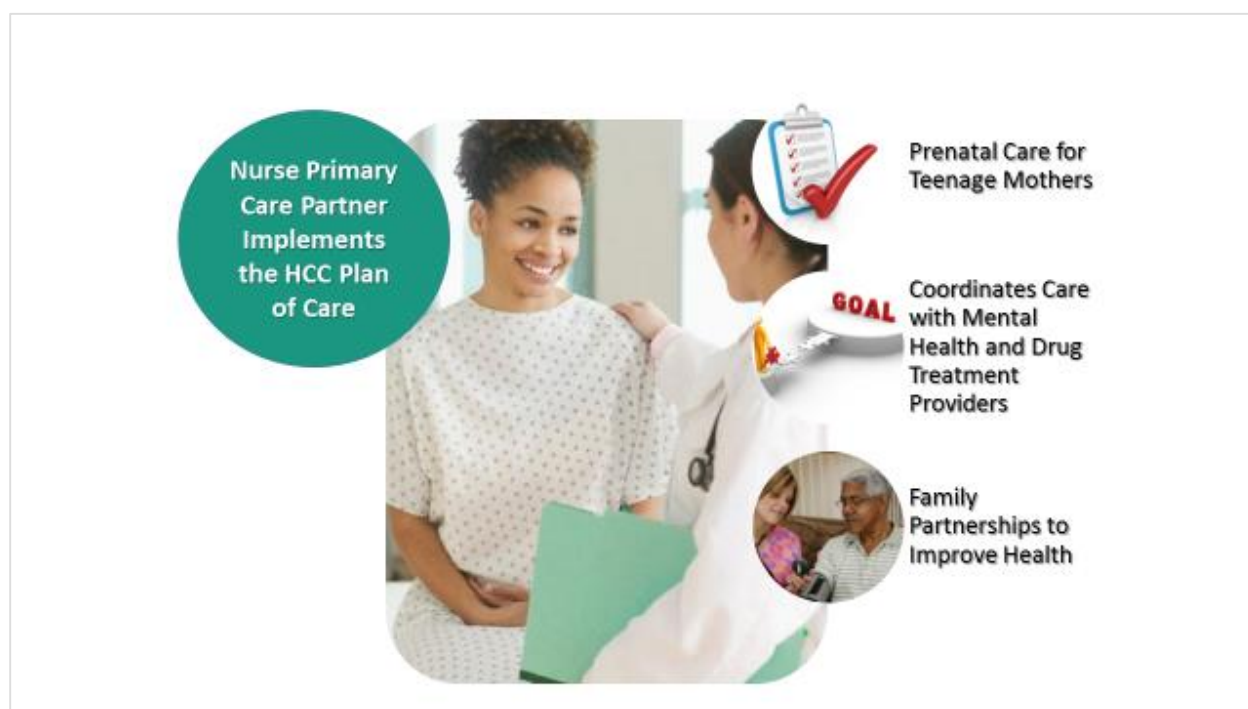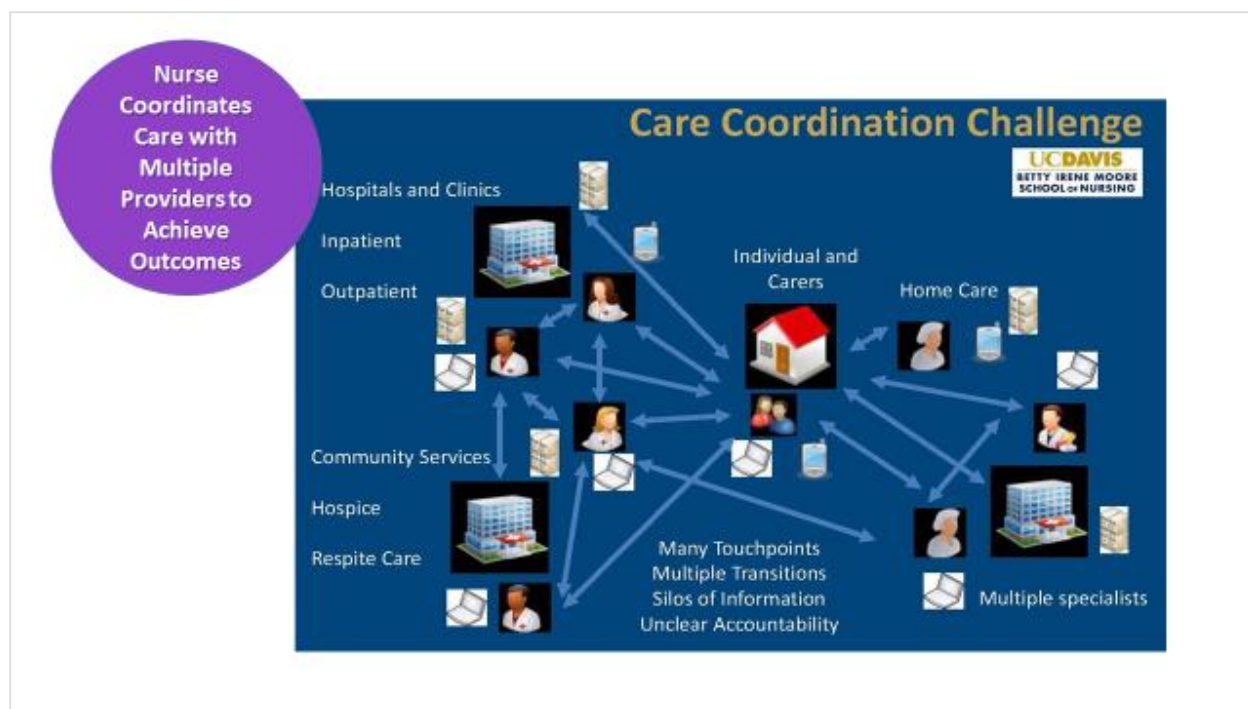
Nurse Family Cooperative Facilitator Engages Family in Treatment

Example: Nurse Facilitator Engages Family in Medication Compliance

U.S. Patients Do Not Take Medications as Prescribed

-12%   -12%   -29%

100%   88%   76%*   47%*

Rx prescribed   Rx filled   Rx taken   Rx continued

* 22% of U.S. patients take less of the medication than is prescribed

American Heart Association: Statistics you need to know. http://2016.485.450.50/CAP/section of_statistical text. Accessed July 27, 2009.
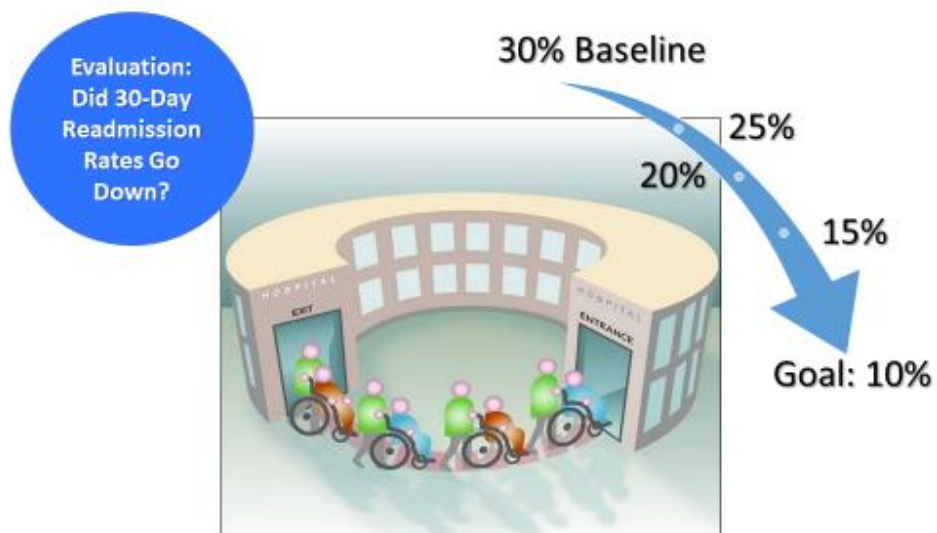
Appendix D: Graphic Presentation ROI Calculator

Value Based Outcomes and Associated Nurse Driven Measures

Estimating financial returns associated with nurse driven measures and nursing sensitive indicators depends on several factors including the quantity and quality of nursing care provided, care processes, and the effectiveness of health care systems. Many value based purchasing (VBP) outcomes are endorsed by the National Quality Forum (NQF) as nursing-sensitive. The Centers for Medicare and Medicaid (CMS) incentive-based programs target specific outcomes, many of which are directly influenced by nurse sensitive indicators (National Database of Nursing Quality Indicators - NDNQI). Analysis of program elements including processes, costs, and reimbursement provides evidence of nurse driven value based performance outcomes demonstrating a return on investment (ROI).

PROGRAM: _____ (define hospital unit, specialty service, clinic, population as applicable)

NURSING SERVICES   **PROGRAM OUTCOMES** (identify nursing sensitive indicators and forecasted savings or revenue)

Structure and   Acute, Chronic, Long Term, Preventive (as applicable to program)
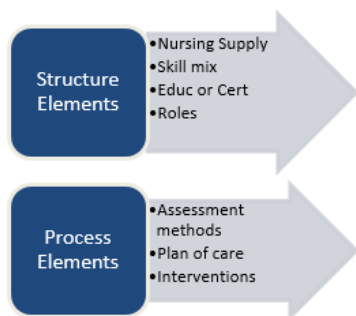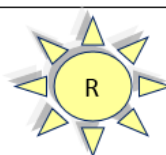
process elements

Appendix E: Interprofessional Team Members

Role: Dietician
Regulatory Body: The Accreditation Council for Education in Nutrition and Dietetics (ACEND®)
Education Requirements:
Average CA Salary: $57,000
Location of Practice: hospitals, long-term care facilities, clinics, private practice, and other institutions.
Scope of Practice: RDN Scope of Practice in California State Law, 2015 CA Business and Professions Code 2585-2586.8 Medical Nutrition Therapy Upon referral by a health care provider authorized to prescribe dietary treatments, the RDN may perform medical nutrition therapy (MNT) for individuals or groups of patients in licensed institutional facilities or in private office settings. Referral: The referral must include: • Client/patient's diagnosis • Objective of dietary treatment • Signature of the referring health care provider in a licensed health facility, the requirement for a referral is satisfied if a diet order or the above information is included in the patient's medical record. A facility's approved nutrition screening policy and procedure also suffices in place of a referral. MNT includes: • Conducting nutritional and dietary assessments • Providing nutritional and dietary counseling • Developing and recommending nutritional and dietary treatments, including therapeutic diets/

They create nutritional programs based on the health needs of patients or residents and counsel patients on how to lead a healthier lifestyle.

Role: Paramedic
Regulatory Body: California Emergency Medical Services Authority
Education Requirements: Course work, contact hours and licensure exam
Average CA Salary: $44,000
Location of Practice:
Scope of Practice: Basic Life Support + Optional Skills (such as medication administration) that vary by county
Patient Assessment, Advanced first aid and OTC Medications with LEMSA approval, Transportation of ill & injured persons, Use of adjunctive breathing aids, administration of oxygen, Automated external defibrillator, Cardiopulmonary resuscitation, Use of tourniquets and hemostatic dressings for bleeding control, Pulse oximetry, Humidifiers, Continuous positive airway pressure, Laryngoscope, Endotracheal (ET) intubation (adults, oral), Valsalva's Maneuver, Needle thoracostomy & cricothyroidotomy, Naso/orogastric tube, insertion/suction, Monitor thoracostomy tubes, Monitor/adjust potassium (< 40 mEq/L) IV lines, Utilization & monitoring of electrocardiographic devices, Administer 25 medications, BPAP (Bi-level positive airway pressure)/PEEP (Positive end-expiratory pressure)

Role: Emergency Medical Technician
Regulatory Body: California Emergency Medical Services Authority
Education Requirements: EMT Course + Contact Hours and Certification Exam
Average CA Salary: $37,000
Location of Practice: During training, while at the scene of an emergency, during transport of the sick or injured, or during interfacility transfer, a certified EMT or supervised EMT student is authorized to do any skills in scope of practice
Scope of Practice: Basic Life Support + Optional Skills (such as medication administration) that vary by county
Patient Assessment, Advanced first aid and OTC Medications with LEMSA approval, Transportation of ill & injured persons, Use of adjunctive breathing aids, administration of oxygen, Automated external defibrillator, Cardiopulmonary resuscitation, Use of tourniquets and hemostatic dressings for bleeding control, Pulse oximetry, Humidifiers, Continuous positive airway pressure.

Role: Medical Assistant
Regulatory Body: not licensed, certified, or registered by the State of California, regulated by the Medical Board of CA
Education Requirements: EMT Course + Contact Hours and Certification Exam
Average CA Salary: $65,000
Location of Practice: Offices and clinics. MAs may not work for inpatient care in licensed general acute care hospitals.
Scope of Practice: Administer medication only by intradermal, subcutaneous, or intramuscular injections (including flu and pneumonia shots); Administer medication orally, sublingually, topically, vaginally or rectally, or by providing a single dose to a patient for immediate self-administration;   Administer by inhalation if medications are patient-specific and have been or will be routinely and repetitively administered by patient; Perform venipuncture or skin puncture (including 'finger sticks") for the purposes of withdrawing blood; Perform skin tests; Measure and describe skin test reaction and make a record in the patient's chart; Perform electrocardiogram, electroencephalogram, or plethysomography (except full body) Fit prescription lenses or use any optical device in connection with ocular exercises, visual training, vision training or orthoptics according to B&P §§ 2544, 3042. Apply and remove bandages and dressings; Apply orthopedic appliances such as knee immobilizers, envelope slings, orthotics; Remove cases, splints and other external devices; Obtain impressions for orthotics, padding and custom molded shoes; Select and adjust crutches for patients; Instruct patient in proper use of crutches; Remove sutures or staples from superficial incisions or lacerations; Perform ear lavage; Collect by non-invasive techniques (including nasal smears and throat swabs), and preserve specimens (including urine, sputum, semen, stool) for testing; Assist patients in ambulation and transfers; Prepare patients for and assist MD, DPM, PA or RN in exams or procedures including positioning, draping, shaving, disinfecting treatment site, prepare patients for gait analysis testing; As authorized by MD or DPM, provide patient information and instructions; Collect and record patient data including height, weight, temperature, pulse, respiration rate and blood pressure, and basic information about presenting and previous conditions; Perform simple laboratory and screening tests customarily performed in a medical

office; Cut the nails of otherwise healthy patients;   Perform other basic technical supportive services.

Reference: http://futurehealth.ucsf.edu/LinkClick.aspx?fileticket=SfdfTM3DUfU%3d&tabid=161

Role: Clinical Lab Scientist
Regulatory Body: American Society for Clinical Pathology
Education Requirements:
Average CA Salary: $66,000
Location of Practice: Hospitals, diagnostic laboratory, doctor's office
Scope of Practice: Quality clinical laboratory testing is evidenced by: performing the correct test, on the right person, at the right time, producing accurate test results, with the best outcome, in the most cost-effective manner. This is accomplished by ensuring that appropriate clinical laboratory tests are ordered. Procuring clinical laboratory test samples in an efficient, timely manner. Producing accurate clinical laboratory test results. Correlating and interpreting clinical laboratory test data. Disseminating clinical laboratory test information to clinicians and patients in a timely manner. Evaluating the outcome of clinical laboratory testing for each individual patient and the entire healthcare system. Utilizing qualified medical laboratory personnel. Assessing, designing, evaluating and implementing new clinical laboratory test methods. Evaluating the appropriateness of existing and new clinical laboratory methods for clinical utility, cost-effectiveness and cost-benefit analysis. Developing, implementing, and reporting results of clinical laboratory research. Designing and implementing cost-effective delivery models for clinical laboratories, including their services and personnel. Developing and implementing a comprehensive Quality Management System to include: Quality control and assurance of clinical laboratory testing services; Competency assessment of personnel; Integration with other aspects of the healthcare delivery system for ensuring appropriate utilization of clinical laboratory testing services; Continuous process improvement activities to effectively utilize human resources.

Designing, implementing and evaluating academic curricula for the education of new medical laboratory professionals. Designing, implementing and evaluating academic curricula for advanced education of medical laboratory professionals. Designing, implementing and evaluating continued education activities and career growth opportunities for medical laboratory professionals. Promoting awareness and understanding of the use of the clinical laboratory.

Reference: http://www.ascls.org/position-papers/186-scope-of-practice/148-scope-of-practice)

Role: Community Health Worker
Regulatory Body: Unlicensed, Unregulated
Education Requirements: Unspecified
Average CA Salary: $35,000-50,000
Location of Practice: City and county government, Outpatient Care Centers, Offices of Physicians, General Medical and Surgical Hospitals, Other Individual and Family Services, All

Other Miscellaneous Ambulatory Health Care Services, Outpatient Mental Health and Substance Abuse Centers

Scope of Practice: Community Health Workers are frontline public health professionals who perform a variety of activities from helping individuals navigate complicated health care systems to providing informal counseling and social support. As trusted members of the communities they serve, they are in a unique position to bridge gaps between underserved populations and health or social systems.

Reference: http://www.coeccc.net/documents/CHW_Research_Brief_CA_2011.pdf)

Role: Clinical Nurse Specialist
Regulatory Body:
Education Requirements:
Average CA Salary: $76,000
Location of Practice:
Scope of Practice: Clinical nurse specialists (CNSs) are registered nurses, who have graduate level nursing preparation at the master's or doctoral level as a CNS. They are clinical experts in evidence-based nursing practice within a specialty area, treating and managing the health concerns of patients and populations. The CNS specialty may be focused on individuals, populations, settings, type of care, type of problem, or diagnostic systems subspecialty. CNSs practice autonomously and integrate knowledge of disease and medical treatments into assessment, diagnosis, and treatment of patients' illnesses. These nurses design, implement, and evaluate both patient-specific and population-based programs of care. CNSs provide leadership in advancing the practice of nursing to achieve quality and cost effective patient outcomes as well as provide leadership of multidisciplinary groups in designing and implementing innovative alternative solutions that address system problems and/or patient care issues. In many jurisdictions, CNSs as direct care providers, perform comprehensive health assessments, develop differential diagnoses, and may have prescriptive authority. Prescriptive authority allows them to provide pharmacologic and nonpharmacologic treatments and order diagnostic and laboratory tests in addressing and managing specialty health problems of patients and populations. CNSs serve as patient advocates, consultants, and researchers in various settings.

These clinicians are experts in evidence-based nursing and practice in a range of specialty areas, such as oncology, pediatrics, geriatrics, psychiatric/mental health, adult health, acute/critical care, and community health among others. In addition to direct patient care, CNSs also engage in teaching, mentoring, consulting, research, management and systems improvement. Able to adapt their practice across settings, these clinicians greatly influence outcomes by providing expert consultation to all care providers and by implementing improvements in health care delivery systems.

Role: Certified Registered Nurse Anesthesiologist
Regulatory Body: Board of Registered Nursing
Education Requirements: BSN Required as prerequisite, Master or Doctorate + Certification Exam

Average CA Salary: $164,000

Location of Practice: CRNAs practice in a variety of settings in the private and public sectors and in the U.S. military, including traditional hospital operating rooms, ambulatory surgery centers, pain clinics, and physicians' offices. They practice on a solo basis, in groups and collaboratively. Some CRNAs have independent contracting arrangements with physicians or hospitals.

Scope of Practice: 1. Performing and documenting a pre-anesthesia assessment and evaluation of the patient, including requesting consultations and diagnostic studies; selecting, obtaining, ordering and administering pre-anesthetic medications and fluids; and obtaining informed consent for anesthesia. 2. Developing and implementing an anesthetic plan. 3. Initiating the anesthetic technique that may include general, regional or local anesthesia with or without sedation. 4. Performing and managing regional anesthetic techniques including, but not limited to, subarachnoid, epidural and caudal blocks; plexus, major and peripheral nerve blocks; intravenous regional anesthesia; transtracheal, topical and local infiltration blocks; intracapsular, intercostal and ocular blocks; and use of nerve stimulator devices and ultrasound that aid in the placement of the block. 2 5. Selecting, ordering, applying and inserting appropriate non-invasive and invasive monitoring modalities for continuous evaluation of the patient's physical status. 6. Selecting, obtaining and administering anesthetics, adjuvant and accessory drugs and fluids necessary to manage the anesthetics. 7. Selecting and ordering adjuvant and accessory medications, fluids, laboratory testing and other modes of analysis to evaluate patient status and promote well-being. 8. Managing a patient's airway and pulmonary status using current practice modalities including fiberoptic intubation and mechanical support. 9. Facilitating emergence and recovery from anesthesia by selecting, obtaining, ordering and administering medications, fluids and ventilator support. 10.Discharging the patient from a post-anesthesia care area, outpatient surgery section of a facility or from an ambulatory surgery center and providing post-anesthesia follow-up evaluation and care. 11.Implementing acute and chronic pain management modalities. 12.Responding to emergency situations by providing airway management, administration of emergency fluids and drugs, and using basic or advanced cardiac life support techniques. California allows CRNAs to administer anesthesia without physician supervision.

Role: Nurse Practitioner

Regulatory Body: Board of Registered Nursing

Education Requirements: Master Degree or Doctorate + Certification Exam

Average CA Salary: $102,000

Location of Practice:

Scope of Practice: The NP does not have an additional scope of practice beyond the usual RN scope and must rely on standardized procedures for authorization to perform overlapping medical functions (CCR Section 1485). Section 2725 of the Nursing Practice Act (NPA) provides authority for nursing functions that are also essential to providing primary health care which do not require standardized procedures. Examples include physical and mental assessment, disease prevention and restorative measures, performance of skin tests and immunization techniques, and withdrawal of blood, as well as authority to initiate emergency procedures.

The nurse practitioner (NP) is a registered nurse who possesses additional preparation and skills in physical diagnosis, psycho-social assessment, and management of health-illness needs in primary health care, who has been prepared in a program that conforms to Board standards as specified in California Code of Regulations, CCR, 1484 Standards of Education. Primary Health Care Primary health care is defined as, that which occurs when a consumer makes contact with a health care provider, who assumes responsibility and accountability for the continuity of health care regardless of the presence or absence of disease CCR 1480 (b). This means that, in some cases, the NP will be the only health professional to see the patient and, in the process, will employ a combination of nursing and medical functions approved by standardized procedures.

Role: Registered Nurse
Regulatory Body: Board of Registered Nursing
Education Requirements: Bachelor of Science in Nursing or Associate Degree + Exam Passage
Average CA Salary: $76,000
Location of Practice: "In an organized healthcare setting."
Scope of Practice: Independent – services which enhance health by assessing, monitoring, detecting, diagnosing, and treating the human response. Those interventions that can be performed by nursing independently.

Interdependent – services which enhance health by assessing, monitoring, detecting, and preventing complications associated with certain health situations or treatment plans. Those services which can be shared with other professions through delegation.

The following aspects of the nursing process shall be performed only by registered nurses: 1) performance of a comprehensive assessment; 2) validation of the assessment data; 3) formulation of the nursing diagnosis for the individual client; 4) identification of goals derived from nursing diagnosis; 5) determination of the nursing plan of care, including appropriate nursing interventions derived from the nursing diagnosis; and 6) evaluation of the effectiveness of the nursing care provided. The practice of nursing within the meaning of this chapter means those functions, including basic health care, that help people cope with difficulties in daily living that are associated with their actual or potential health or illness problems or the treatment thereof, and that require a substantial amount of scientific knowledge or technical skill, including all of the following:

(1) Direct and indirect patient care services that ensure the safety, comfort, personal hygiene, and protection of patients; and the performance of disease prevention and restorative measures.

(2) Direct and indirect patient care services, including, but not limited to, the administration of medications and therapeutic agents, necessary to implement a treatment, disease prevention, or rehabilitative regimen ordered by and within the scope of licensure of a physician, dentist, podiatrist, or clinical psychologist, as defined by Section 1316.5 of the Health and Safety Code.

(3) The performance of skin tests, immunization techniques, and the withdrawal of human blood from veins and arteries.

(4) Observation of signs and symptoms of illness, reactions to treatment, general behavior, or general physical condition, and (A) determination of whether the signs, symptoms, reactions, behavior, or general appearance exhibit abnormal characteristics, and (B) implementation, based on observed abnormalities, of appropriate reporting, or referral, or standardized procedures, or changes in treatment regimen in accordance with standardized procedures, or the initiation of emergency procedures.

References: http://www.rn.ca.gov/pdfs/regulations/npr-b-03.pdf, http://nursing.uclahealth.org/workfiles/orientation/BRN-UnlicensedAssistivePersonnel.pdf

Role: Licensed Psychiatric Technician
Regulatory Body: Board of Vocational Nursing and Psychiatric Technicians
Education Requirements: Passage of Psychiatric Technician Program + Exam Passage
Average CA Salary: $
Location of Practice: State Hospitals, Day Treatment Centers, Developmental Centers, Correctional Facilities, Psychiatric Hospitals & Clinics, Psychiatric Technician Programs, Geropsychiatric Centers, Residential Care Facilities, Vocational Training Centers
Scope of Practice: An entry-level health care provider who is responsible for care of mentally disordered and developmentally disabled clients. A psychiatric technician practices under the direction of a physician, psychologist, rehabilitation therapist, social worker, registered nurse or other professional personnel. The licensee is not an independent practitioner. Activities of Daily Living.
Basic Nursing Care, Medications, Treatment Plan Development and Implementation, Individual & Group Therapy, Behavioral Management.
Reference: http://www.bvnpt.ca.gov/licensing/psychiatric_technician.shtml

Role: Licensed Vocational Nurse
Regulatory Body: Board of Vocational Nursing and Psychiatric Technicians
Education Requirements: Associate Degree + Passage of NCLEX-PN Exam. 1,530 Total Hours: Theory - *576 Hours; Clinical - 954 Hours, Pharmacology - 54 Hours
Average CA Salary: $26,000-46,000
Location of Practice: Acute Medical/Surgical Hospitals, Convalescent Hospitals (Long Term Care, Skilled Nursing), Home Care Agencies, Outpatient Clinics, Doctor's Offices, Ambulatory Surgery Centers, Dialysis Centers, Blood Banks, Psychiatric Hospitals, Correctional Facilities, Vocational Nursing Programs, Private duty patient care may be performed in any setting, including, but not limited to, acute care, long term care, or the patient's home.

Scope of Practice: The licensed vocational nurse performs services requiring technical and manual skills which include the following: (a) Uses and practices basic assessment (data collection), participates in planning, executes interventions in accordance with the care plan or

treatment plan, and contributes to evaluation of individualized interventions related to the care plan or treatment plan. (b) Provides direct patient/client care by which the licensee: (1) Performs basic nursing services as defined in subdivision (a); (2) Administers medications; (3) Applies communication skills for the purpose of patient/client care and education; and (4) Contributes to the development and implementation of a teaching plan related to self-care for the patient/client. A licensed vocational nurse when directed by a physician and surgeon may do all of the following: (a) Administer medications by hypodermic injection. (b) Withdraw blood from a patient, if prior thereto such nurse has been instructed by a physician and surgeon and has demonstrated competence to such physician and surgeon in the proper procedure to be employed when withdrawing blood, or has satisfactorily completed a prescribed course of instruction approved by the board, or has demonstrated competence to the satisfaction of the board. (c) Start and superimpose intravenous fluids if all of the following additional conditions exist: (1) The nurse has satisfactorily completed a prescribed course of instruction approved by the board or has demonstrated competence to the satisfaction of the board. (2) The procedure is performed in an organized health care system in accordance with the written standardized procedures adopted by the organized health care system as formulated by a committee which includes representatives of the medical, nursing, and administrative staffs. "Organized health care system," as used in this section, includes facilities licensed pursuant to Section 1250 of the Health and Safety Code, clinics, home health agencies, physicians' offices, and public or community health services. Standardized procedures so adopted will be reproduced in writing and made available to total medical and nursing staffs. A licensed vocational nurse, acting under the direction of a physician may perform: (1) tuberculin skin tests, coccidioidin skin tests, and histoplasmin skin tests, providing such administration is within the course of a tuberculosis control program, and (2) immunization techniques, providing such administration is upon standing orders of a supervising physician, or pursuant to written guidelines adopted by a hospital or medical group with whom the supervising physician is associated. (b) The supervising physician under whose direction the licensed vocational nurse.

Reference: http://www.bvnpt.ca.gov/pdf/vnregs.pdf, http://www.bvnpt.ca.gov/licensing/licensed_vocational_nurses.shtml

Role: Certified Nurse Assistant
Regulatory Body: California Department of Public Health
Education Requirements: High School Diploma
Average CA Salary: $33,000
Location of Practice:
Scope of Practice: Tasks which are judged by the direct care RN to not require the professional judgment of an RN may be assigned. Such assigned tasks shall meet all the following conditions: a) be considered routine care for this patient b) pose little potential hazard for the patient c) involve little or no modification from one client-care situation to another; d) be performed with a predictable outcome e) not inherently involve ongoing assessments, interpretations, or decision-making which could not be logically separated from the procedure itself.

Reference: http://nursing.uclahealth.org/workfiles/orientation/BRN-UnlicensedAssistivePersonnel.pdf

Role: Speech Language Pathologist
Regulatory Body: Speech-Language Pathology and Audiology and Hearing Aid Dispensers Board 916.263.2666
Education Requirements:
Average CA Salary: $ 88,000
Location of Practice:
Scope of Practice: The practice of speech-language pathology means all of the following: (1) The application of principles, methods, instrumental procedures, and noninstrumental procedures for measurement, testing, screening, evaluation, identification, prediction, and counseling related to the development and disorders of speech, voice, language, or swallowing. (2) The application of principles and methods for preventing, planning, directing, conducting, and supervising programs for habilitating, rehabilitating, ameliorating, managing, or modifying disorders of speech, voice, language, or swallowing in individuals or groups of individuals. (3) Conducting hearing screenings. (4) Performing suctioning in connection with the scope of practice described in paragraphs (1) and (2), after compliance with a medical facility's training protocols on suctioning procedures. (e) (1) Instrumental procedures referred to in subdivision (d) are the use of rigid and flexible endoscopes to observe the pharyngeal and laryngeal areas of the throat in order to observe, collect data, and measure the parameters of communication and swallowing as well as to guide communication and swallowing assessment and therapy.
Reference: http://www.leginfo.ca.gov/cgi-bin/displaycode?section=bpc&group=02001-03000&file=2530-2530.6

Role: Respiratory Therapist
Regulatory Body: Respiratory Care Board of California 866-375-0386, 916-999-2190
Education Requirements:
Average CA Salary: $70,000
Location of Practice:
Scope of Practice: § 3702. Practice of respiratory care; Components; "Respiratory care protocols" Respiratory care as a practice means a health care profession employed under the supervision of a medical director in the therapy, management, rehabilitation, diagnostic evaluation, and care of patients with deficiencies and abnormalities which affect the pulmonary system and associated aspects of cardiopulmonary and other systems functions, and includes all of the following: (a) Direct and indirect pulmonary care services that are safe, aseptic, preventive, and restorative to the patient.   (b) Direct and indirect respiratory care services, including but not limited to, the administration of pharmacological and diagnostic and therapeutic agents related to respiratory care procedures necessary to implement a treatment, disease prevention, pulmonary rehabilitative or diagnostic regimen prescribed by a physician and surgeon.   (c) Observation and monitoring of signs and symptoms, general behavior, general physical response to respiratory care treatment and diagnostic testing and   (1) determination of whether such signs, symptoms, reactions, behavior or general response exhibits abnormal characteristics;   (2) implementation based on observed abnormalities of

appropriate reporting or referral or respiratory care protocols, or changes in treatment regimen, pursuant to a prescription by a physician and surgeon or the initiation of emergency procedures.   (d) The diagnostic and therapeutic use of any of the following, in accordance with the prescription of a physician and surgeon: administration of medical gases, exclusive of general anesthesia; aerosols; humidification; environmental control systems and baromedical therapy; pharmacologic agents related to respiratory care procedures; mechanical or physiological ventilatory support; bronchopulmonary hygiene; cardiopulmonary resuscitation; maintenance of the natural airways; insertion without cutting tissues and maintenance of artificial airways; diagnostic and testing techniques required for implementation of respiratory care protocols; collection of specimens of blood; collection of specimens from the respiratory tract; analysis of blood gases and respiratory secretions.   (e) The transcription and implementation of the written and verbal orders of a physician and surgeon pertaining to the practice of respiratory care.

Reference: http://www.rcb.ca.gov/forms_pubs/rcp_scope_of_practice.pdf

Role: Physician Assistant
Regulatory Body: Physician Assistant Board 916.561.8780
Education Requirements:
Average CA Salary: $100,000
Location of Practice: All areas of medicine: They practice in family medicine, internal medicine, emergency medicine, pediatrics, obstetrics and gynecology, surgery, orthopedics, psychiatry as well as many other areas.
Scope of Practice: 1399.541. Medical Services Performable. Because physician assistant practice is directed by a supervising physician, and a physician assistant acts as an agent for that physician, the orders given and tasks performed by a physician assistant shall be considered the same as if they had been given and performed by the supervising physician. Unless otherwise specified in these regulations or in the delegation or protocols, these orders may be initiated without the prior patient specific order of the supervising physician. In any setting, including for example, any licensed health facility, out-patient settings, patients' residences, Physician Assistant Regulations 28 residential facilities, and hospices, as applicable, a physician assistant may, pursuant to a delegation and protocols where present: (a) Take a patient history; perform a physical examination and make an assessment and diagnosis therefrom; initiate, review and revise treatment and therapy plans including plans for those services described in Section 1399.541(b) through Section 1399.541(i) inclusive; and record and present pertinent data in a manner meaningful to the physician. (b) Order or transmit an order for x-ray, other studies, therapeutic diets, physical therapy, occupational therapy, respiratory therapy, and nursing services. (c) Order, transmit an order for, perform, or assist in the performance of laboratory procedures, screening procedures and therapeutic procedures. (d) Recognize and evaluate situations which call for immediate attention of a physician and institute, when necessary, treatment procedures essential for the life of the patient. (e) Instruct and counsel patients regarding matters pertaining to their physical and mental health. Counseling may include topics such as medications, diets, social habits, family planning, normal growth and development, aging, and understanding of and long-term management of their diseases. (f) Initiate arrangements for admissions, complete forms and charts pertinent to the patient's medical

record, and provide services to patients requiring continuing care, including patients at home. (g) Initiate and facilitate the referral of patients to the appropriate health facilities, agencies, and resources of the community. (h) Administer or provide medication to a patient, or issue or transmit drug orders orally or in writing in accordance with the provisions of subdivisions (a)-(f), inclusive, of Section 3502.1 of the Code. (i) (1) Perform surgical procedures without the personal presence of the supervising physician which are customarily performed under local anesthesia. Prior to delegating any such surgical procedures, the supervising physician shall review documentation which indicates that the physician assistant is trained to perform the surgical procedures. All other surgical procedures requiring other forms of anesthesia may be performed by a physician assistant only in the personal presence of an approved supervising physician. (2) A physician assistant may also act as first or second assistant in surgery under the supervision of an approved supervising physician.
Reference: http://www.pac.ca.gov/about_us/lawsregs/law-booklet.pdf

Role: Physician
Regulatory Body: <u>Medical Board of California</u> 800-633-2322, 916-263-2382
Education Requirements:
Average CA Salary: $206,000
Location of Practice:
Scope of Practice: The practice of medicine involves diagnosis, treatment, or correction of human conditions, ailments, diseases, injuries, or infirmities whether physical or mental, by any means, methods, devices, or instruments.

Role: Physical Therapist
Regulatory Body: Physical Therapy Board of California
Education Requirements:
Average CA Salary: $95,000
Location of Practice: hospital, private physical therapy offices, rehabilitation centers, community health centers, nursing homes, home health agencies, corporate or industrial health centers, sports facilities, research institutions, schools, pediatric centers, and colleges and universities.
Scope of Practice: Physical therapy, which is limited to the care and services provided by or under the direction and supervision of a physical therapist, includes: 1) examining (history, system review and tests and measures) individuals with impairment, functional limitation, and disability or other health-related conditions in order to determine a diagnosis, prognosis, and intervention; tests and measures may include the following: • aerobic capacity/endurance • anthropometric characteristics • arousal, attention, and cognition • assistive and adaptive devices • circulation (arterial, venous, lymphatic) • cranial and peripheral nerve integrity • environmental, home, and work (job/school/play) barriers • ergonomics and body mechanics • gait, locomotion, and balance • integumentary integrity • joint integrity and mobility • motor function (motor control and motor learning) • muscle performance (including strength, power, and endurance) • neuromotor development and sensory integration • orthotic, protective, and supportive devices • pain • posture • prosthetic requirements • range of motion (including muscle length) • reflex integrity • self-care and home management (including activities of daily

living and instrumental activities of daily living) • sensory integrity • ventilation, and respiration/gas exchange • work (job/school/play), community, leisure integration or reintegration (including instrumental activities of daily living) 2) alleviating impairment and functional limitation by designing, implementing, and modifying therapeutic interventions that include, but are not limited to: • coordination, communication and documentation • patient/client-related instruction • therapeutic exercise • functional training in self-care and home management (including activities of daily living and instrumental activities of daily living) • functional training in work (job/school/play) and community and leisure integration or reintegration activities (including instrumental activities of daily living, work hardening, and work conditioning) • manual therapy techniques (including mobilization/manipulation) • prescription, application, and, as appropriate, fabrication of devices and equipment (assistive, adaptive, orthotic, protective, supportive, and prosthetic) • airway clearance techniques • integumentary repair and protection techniques • electrotherapeutic modalities • physical agents and mechanical modalities • dry needling 3) preventing injury, impairment, functional limitation, and disability, including the promotion and maintenance of health, wellness, fitness, and quality of life in all age populations 4) engaging in consultation, education, and research.

Physical therapy means the art and science of physical or corrective rehabilitation or of physical or corrective treatment of any bodily or mental condition of any person by the use of the physical, chemical, and other properties of heat, light, water, electricity, sound, massage, and active, passive, and resistive exercise, and shall include physical therapy evaluation, treatment planning, instruction and consultative services. The practice of physical therapy includes the promotion and maintenance of physical fitness to enhance the bodily movement related health and wellness of individuals through the use of physical therapy interventions. The use of roentgen rays and radioactive materials, for diagnostic and therapeutic purposes, and the use of electricity for surgical purposes, including cauterization, are not authorized under the term "physical therapy" as used in this chapter, and a license issued pursuant to this chapter does not authorize the diagnosis of disease

Role: Pharmacy Technician
Regulatory Body: CA Board of Pharmacy
Education Requirements:
Average CA Salary: $40,000
Location of Practice: Must work under a pharmacist, wherever a pharmacist practices
Scope of Practice: (a) A pharmacy technician may perform packaging, manipulative, repetitive, or other nondiscretionary tasks, only while assisting, and while under the direct supervision and control of a pharmacist. The pharmacist shall be responsible for the duties performed under his or her supervision by a technician. (b) This section does not authorize the performance of any tasks specified in subdivision (a) by a pharmacy technician without a pharmacist on duty. (c) This section does not authorize a pharmacy technician to perform any act requiring the exercise of professional judgment by a pharmacist. (d) The board shall adopt regulations to specify tasks pursuant to subdivision (a) that a pharmacy technician may perform under the supervision of a pharmacist. Any pharmacy that employs a pharmacy technician shall do so in conformity with the regulations adopted by the board. (e) No person shall act as a pharmacy technician without first being licensed by the board as a pharmacy technician. (f) (1) A pharmacy with only one

pharmacist shall have no more than one pharmacy technician performing the tasks specified in subdivision (a). The ratio of pharmacy technicians performing the tasks specified in subdivision (a) to any additional pharmacist shall not exceed 2:1, except that this ratio shall not apply to personnel performing clerical functions pursuant to Section 4116 or 4117. This ratio is applicable to all practice settings, except for an inpatient of a licensed health facility, a patient of a licensed home health agency, as specified in paragraph (2), an inmate of a correctional facility of the Department of Corrections and Rehabilitation, and for a person receiving treatment in a facility operated by the State Department of State Hospitals, the State Department of Developmental Services, or the Department of Veterans Affairs. (2) The board may adopt regulations establishing the ratio of pharmacy technicians performing the tasks specified in subdivision (a) to pharmacists applicable to the filling of prescriptions of an inpatient of a licensed health facility and for a patient of a licensed home health agency. Any ratio established by the board pursuant to this subdivision shall allow, at a minimum, at least one pharmacy technician for a single pharmacist in a pharmacy and two pharmacy technicians for each additional pharmacist, except that this ratio shall not apply to personnel performing clerical functions pursuant to Section 4116 or 4117. (3) A pharmacist scheduled to supervise a second pharmacy technician may refuse to supervise a second pharmacy technician if the pharmacist determines, in the exercise of his or her professional judgment, that permitting the second pharmacy technician to be on duty would interfere with the effective performance of the pharmacist's responsibilities under this chapter. A 54 pharmacist assigned to supervise a second pharmacy technician shall notify the pharmacist in charge in writing of his or her determination, specifying the circumstances of concern with respect to the pharmacy or the pharmacy technician that have led to the determination, within a reasonable period, but not to exceed 24 hours, after the posting of the relevant schedule. No entity employing a pharmacist may discharge, discipline, or otherwise discriminate against any pharmacist in the terms and conditions of employment for exercising or attempting to exercise in good faith the right established pursuant to this paragraph. (g) Notwithstanding subdivisions (a) and (b), the board shall by regulation establish conditions to permit the temporary absence of a pharmacist for breaks and lunch periods pursuant to Section 512 of the Labor Code and the orders of the Industrial Welfare Commission without closing the pharmacy. During these temporary absences, a pharmacy technician may, at the discretion of the pharmacist, remain in the pharmacy but may only perform nondiscretionary tasks. The pharmacist shall be responsible for a pharmacy technician and shall review any task performed by a pharmacy technician during the pharmacist's temporary absence. Nothing in this subdivision shall be construed to authorize a pharmacist to supervise pharmacy technicians in greater ratios than those described in subdivision (f). (h) The pharmacist on duty shall be directly responsible for the conduct of a pharmacy technician supervised by that pharmacist. (i) In a health care facility licensed under subdivision (a) of Section 1250 of the Health and Safety Code, a pharmacy technician's duties may include any of the following: (1) Packaging emergency supplies for use in the health care facility and the hospital's emergency medical system or as authorized under Section 4119. (2) Sealing emergency containers for use in the health care facility. (3) Performing monthly checks of the drug supplies stored throughout the health care facility. Irregularities shall be reported within 24 hours to the pharmacist in charge and the director or chief executive officer of the health care facility in accordance with the health care facility's policies and procedures.

Role: Pharmacist
Regulatory Body: CA Board of Pharmacy
Education Requirements:
Average CA Salary: $120,000
Location of Practice:
Scope of Practice: 4051. Conduct Limited to Pharmacist; Conduct Authorized by Pharmacist (a) Except as otherwise provided in this chapter, it is unlawful for any person to manufacture, compound, furnish, sell, or dispense a dangerous drug or dangerous device, or to dispense or compound a prescription pursuant to Section 4040 of a prescriber unless he or she is a pharmacist under this chapter. (b) Notwithstanding any other law, a pharmacist may authorize the initiation of a prescription, pursuant to Section 4052.1, 4052.2, 4052.3, or 4052.6, and otherwise provide clinical advice, services, information, or patient consultation, as set forth in this chapter, if all of the following conditions are met: (1) The clinical advice, services, information, or patient consultation is provided to a health care professional or to a patient. (2) The pharmacist has access to prescription, patient profile, or other relevant medical information for purposes of patient and clinical consultation and advice. (3) Access to the information described in paragraph (2) is secure from unauthorized access and use.

Pharmacy practice is a dynamic, patient-oriented health service that applies a scientific body of knowledge to improve and promote patient health by means of appropriate drug use, drug related therapy, and communication for clinical and consultative purposes. Pharmacy practice is continually evolving to include more sophisticated and comprehensive patient care activities. (c) The Legislature further declares that pharmacists are health care providers who have the authority to provide health care services.
Reference: (http://www.pharmacy.ca.gov/laws_regs/lawbook.pdf)

Role: Occupational Therapist
Regulatory Body: Board of Occupational Therapy
Education Requirements:
Average CA Salary: $90,000
Location of Practice: • Institutional settings (inpatient; e.g., acute care, rehabilitation facilities, psychiatric hospitals, community and specialty-focused hospitals, nursing facilities, prisons), • Outpatient settings (e.g., hospitals, clinics, medical and therapy offices), • Home and community settings (e.g., residences, group homes, assisted living, schools, early intervention centers, day care centers, industry and business, hospice, sheltered workshops, transitional-living facilities, wellness and fitness centers, community mental health facilities), and • Research facilities.
Scope of Practice: A. Evaluation of factors affecting activities of daily living (ADLs), instrumental activities of daily living (IADLs), rest and sleep, education, work, play, leisure, and social participation, including 1. Client factors, including body functions (e.g., neuromuscular, sensory, visual, perceptual, cognitive) and body structures (e.g., cardiovascular, digestive, integumentary, genitourinary systems) 2. Habits, routines, roles, and rituals 3. Physical and social environments and cultural, personal, temporal, and virtual contexts and activity demands that affect performance 2 4. Performance skills, including motor, process, and social interaction

skills B. Approaches to identify and select interventions, such as 1. Establishment, remediation, or restoration of a skill or ability that has not yet developed or is impaired 2. Compensation, modification, or adaptation of activity or environment to enhance performance 3. Maintenance and enhancement of capabilities without which performance in everyday life activities would decline 4. Health promotion and wellness to enable or enhance performance in everyday life activities 5. Prevention of barriers to performance. C. Interventions and procedures to promote or enhance safety and performance in ADLs, IADLs, rest and sleep, education, work, play, leisure, and social participation, for example, 1. Occupations and activities a. Completing morning dressing and hygiene routine using adaptive devices b. Playing on a playground with children and adults c. Engaging in driver rehabilitation and community mobility program d. Managing feeding, eating, and swallowing to enable eating and feeding performance. 2. Preparatory methods and tasks a. Exercises, including tasks and methods to increase motion, strength, and endurance for occupational participation b. Assessment, design, fabrication, application, fitting, and training in assistive technology and adaptive devices c. Design and fabrication of splints and orthotic devices and training in the use of prosthetic devices d. Modification of environments (e.g., home, work, school, community) and adaptation of processes, including the application of ergonomic principles e. Application of physical agent modalities and use of a range of specific therapeutic procedures (e.g., wound care management; techniques to enhance sensory, perceptual, and cognitive processing; manual therapy techniques) to enhance performance skills f. Assessment, recommendation, and training in techniques to enhance functional mobility, including wheelchair management g. Explore and identify effective tools for regulating nervous system arousal levels in order to participate in therapy and/or in valued daily activities. 3. Education and training a. Training in self-care, self-management, home management, and community or work reintegration b. Education and training of individuals, including family members, caregivers, and others. 4. Advocacy a. Efforts directed toward promoting occupational justice and empowering clients to seek and obtain resources to fully participate in their daily life occupations. 5. Group interventions 3 a. Facilitate learning and skill acquisition through the dynamics of group or social interaction across the life span. 6. Care coordination, case management, and transition services 7. Consultative services to groups, programs, organizations, or communities.

Within their domain of practice, occupational therapists and occupational therapy assistants consider the repertoire of occupations in which the client engages, the performance skills and patterns the client uses, the contexts and environments influencing engagement, the features and demands of the activity, and the client's body functions and structures. Occupational therapists and occupational therapy assistants use their knowledge and skills to help clients conduct or resume daily life activities that support function and health throughout the life span. Participation in activities and occupations that are meaningful to the client involves emotional, psychosocial, cognitive, and physical aspects of performance. Participation in meaningful activities and occupations enhances health, well-being, and life satisfaction.
Reference: (https://www.aota.org/-/media/Corporate/Files/AboutAOTA/OfficialDocs/Position/Scope-of-Practice-edited-2014.PDF)

Role: Licensed Midwife
Regulatory Body: Medical Board of CA and the Board of Registered Nursing

Education Requirements:
Average CA Salary: $110,000
Location of Practice:
Scope of Practice: The Legislature granted the CNM an independent scope of practice. CNMs practice in collaboration and consultation with physicians as indicated. The degree of collaboration in this team approach depends upon the medical needs of the individual woman or infant and the practice setting. All complications shall be referred to a physician immediately and the CNM provides emergency care until physician assistance can be obtained. By law, nurse-midwifery care requires the supervision of a licensed physician and surgeon, but supervision does not require physical presence of the physician. CNMs are not authorized to practice medicine and surgery. For practices and procedures that overlap the practice of nurse-midwifery into medicine, standardized procedures must be developed and approved by the three entities of the CNM, physician and practice setting administration.

Episiotomies, STD treatment for pt and partner (without seeing partner), furnishing devices and drugs (including controlled substances), dispensing medications, signing birth certificates, informing patient of positive and negative aspects of blood transfusions, supervision of medical assistants, medical examination of school bus drivers.

(a) The certificate to practice nurse-midwifery authorizes the holder, under the supervision of a licensed physician and surgeon, to attend cases of normal childbirth and to provide prenatal, intrapartum, and postpartum care, including family-planning care, for the mother, and immediate care for the newborn. (b) As used in this chapter, the practice of nurse-midwifery constitutes the furthering or undertaking by any certified person, under the supervision of a licensed physician and surgeon who has current practice or training in obstetrics, to assist a woman in childbirth so long as progress meets criteria accepted as normal. All complications shall be referred to a physician immediately. The practice of nurse-midwifery does not include the assisting of childbirth by any artificial, forcible, or mechanical means, nor the performance of any version. (c) As used in this article, "supervision" shall not be construed to require the physical presence of the supervising physician. (d) A certified nurse-midwife is not authorized to practice medicine and surgery by the provisions of this chapter. (e) Any regulations promulgated by a state department that affect the scope of practice of a certified nurse-midwife shall be developed in consultation with the board.
Reference: http://www.mbc.ca.gov/Licensees/Midwives/Midwives_Practice_Act.aspx

Role: Marriage and Family Therapist
Regulatory Body: Board of Behavioral Sciences
Education Requirements:
Average CA Salary: $69,000
Location of Practice:
Scope of Practice: Section: 4980.02. PRACTICE OF MARRIAGE, FAMILY, AND CHILD COUNSELING; APPLICATION OF PRINCIPLES AND METHODS: For the purposes of this chapter, the practice of marriage and family therapy shall mean that service performed with individuals, couples, or groups wherein interpersonal relationships are examined for the purpose of

achieving more adequate, satisfying, and productive marriage and family adjustments. This practice includes relationship and premarriage counseling.

The application of marriage and family therapy principles and methods includes, but is not limited to, the use of applied psychotherapeutic techniques, to enable individuals to mature and grow within marriage and the family, the provision of explanations and interpretations of the psychosexual and psychosocial aspects of relationships, and the use, application, and integration of the coursework and training

Role: Educational Psychologist
Regulatory Body: Board of Behavioral Sciences
Education Requirements:
Average CA Salary: $89,000
Location of Practice:
Scope of Practice: Section 4989.14: Scope of Practice

The practice of educational psychology is the performance of any of the following professional functions pertaining to academic learning processes or the education system or both:

(a) Educational evaluation.

(b) Diagnosis of psychological disorders related to academic learning processes.

(c) Administration of diagnostic tests related to academic learning processes including tests of academic ability, learning patterns, achievement, motivation, and personality factors.

(d) Interpretation of diagnostic tests related to academic learning processes including tests of academic ability, learning patterns, achievement, motivation, and personality factors.

(e) Providing psychological counseling for individuals, groups, and families.

(f) Consultation with other educators and parents on issues of social development and behavioral and academic difficulties.

(g) Conducting psychoeducational assessments for the purposes of identifying special needs.

(h) Developing treatment programs and strategies to address problems of adjustment.

(i) Coordinating intervention strategies for management of individual crises.

Role: Clinical Social Worker
Regulatory Body:
Education Requirements: -Get your MSW from an accredited college or university
-Register with the BBS as an Associate Clinical Social Worker (ASW)
-Gain your supervised post-masters work experience
-Complete any required additional coursework
-Apply for LCSW Examination Eligibility

-Pass the LCSW Standard Written Examination
-Pass the LCSW Written Clinical Vignette Examination
-Get your official clinical social worker license

Average CA Salary: $66,000
Location of Practice:
Scope of Practice: Section: 4996.9. CLINICAL SOCIAL WORK AND PSYCHOTHERAPY DEFINED

The practice of clinical social work is defined as a service in which a special knowledge of social resources, human capabilities, and the part that unconscious motivation plays in determining behavior, is directed at helping people to achieve more adequate, satisfying, and productive social adjustments. The application of social work principles and methods includes, but is not restricted to, counseling and using applied psychotherapy of a nonmedical nature with individuals, families, or groups; providing information and referral services; providing or arranging for the provision of social services; explaining or interpreting the psychosocial aspects in the situations of individuals, families, or groups; helping communities to organize, to provide, or to improve social or health services; or doing research related to social work.

Psychotherapy, within the meaning of this chapter, is the use of psychosocial methods within a professional relationship, to assist the person or persons to achieve a better psychosocial adaptation, to acquire greater human realization of psychosocial potential and adaptation, to modify internal and external conditions which affect individuals, groups, or communities in respect to behavior, emotions, and thinking, in respect to their intrapersonal and interpersonal processes.

Appendix F: Acknowledgements

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USE OF NURSING DIAGNOSIS IN CALIFORNIA NURSING SCHOOLS AND HOSPITALS

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USE OF NURSING DIAGNOSIS IN CALIFORNIA NURSING SCHOOLS AND HOSPITALS

INTRODUCTION

As part of the effort to define the value of nursing, a common language continues to arise as a central issue in understanding, communicating, and carrying out nursing's unique role in identifying and treating patient response to illness. The diagnostic process and evidence-based interventions developed and subsequently implemented by a practice discipline describe its unique contribution, scope of accountability, and value. The specific responsibility registered nurses (RN) have in assessing patient response to health and illness and determining evidence-based etiology is within the realm of nursing's autonomous scope of practice, and is referred to as nursing diagnosis. It is an essential element of the nursing process and is followed by implementing specific interventions within nursing's scope of practice, providing evidence that links professional practice to health outcomes.

Conducting a comprehensive nursing assessment leading to the accurate identification of nursing diagnoses guides the development of the plan of care and specific interventions to be carried out. Assessing the patient's response to health and illness encompasses a wide range of potential problems and actual concerns to be addressed, many of which may not arise from the medical diagnosis and provider orders alone, yet can impede recovery and impact health outcomes. Further, it is critically important to communicate those problems, potential vulnerabilities and related plans of care through broadly understood language unique to nursing. The deliberate use of nursing diagnosis as an element in the nursing process elevates the invisible nature of nursing's most important work in assessing and addressing people's response to health and illness. The very use of nursing diagnosis language in care planning and communication makes visible the fundamental importance/contributions of nurses regardless of practice setting or care delivery model, and utilization of it is a key component that evidences the unique contribution and value of nursing.

The California Nursing Practice Act (Business & Professions Code, Chapter 6, Nursing Section 2725), the Standards of Competent Performance (California Code of Regulations, Title 16, Section 1443.5), and the California Code of Regulations (Title 22, Section 70215), all speak to the responsibility of RNs to formulate a nursing diagnosis for patients under their care. Yet there is wide variability between how schools teach it and how hospitals use it in practice. Providing evidence of nursing's role in diagnostic processes with subsequent development of effective plans and targeted interventions to achieve clinical outcomes was explored in this study as one approach to demonstrating nursing's largely invisible, unique contribution and value.

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STUDY METHODOLOGY

HealthImpact conducted a statewide survey in collaboration with the California Hospital Association (CHA) to explore how RN students in pre-licensure programs are taught and learn about the nursing diagnostic process, and how nurses working in hospitals utilize nursing diagnosis in practice, including written and verbal communication.

To inform the design of the questionnaire, a review of the literature was conducted to explore the prevalence, application, barriers and effectiveness of the nursing diagnostic process, and the use of nursing diagnosis terminology and various methods of documenting and communicating it. Topics reviewed addressed how nursing diagnoses may be linked to patient outcomes and the evolution and integration of interprofessional collaboration in planning care, along with potential for economic influence and impact. The importance of a common language to support professional collaboration and team effectiveness, as well as the implications for measuring nurse-driven outcomes were central themes.

Two survey questionnaires were designed, one intended for pre-licensure nursing programs ("school survey") exploring how RN students were taught and learned about nursing diagnosis, and a separate questionnaire designed for hospitals ("hospital survey") focused on how RNs in practice performed the nursing diagnostic process. While each survey instrument contained unique questions, a set of six core questions common to both surveys explored where there may be similarity or variation in perspectives and practices. Each survey included a combination of multiple choice questions, open-ended questions, and options for comments to be submitted.

SURVEY PARTICIPATION

An invitation and link to an online survey tool was disseminated by email the week of September 18th, with instructions to complete the survey within a 4-week period, by October 15th. The survey was left open an additional week to capture more responses, ultimately closing October 20th.

The school survey was disseminated to deans, directors, and/or chairs of 143 RN pre-licensure programs through California Organization of Associate Degree in Nursing COADN)-North and –South, to 91 Associate Degree in Nursing (ADN) programs, and through California Association of Colleges of Nursing (CACN), to universities with 38 BSN and 14 Masters Entry Program in Nursing Programs (MEPN). Academic leaders were requested to identify one nursing faculty expert who was most knowledgeable about how nursing diagnoses are taught to nursing students in their pre-licensure programs, and request them to complete the questionnaire on behalf of the school. Thirty (30) responses were received for a 21.1% response rate.

The hospital survey was disseminated to chief nursing officers representing 433 member hospitals in the California Hospital Association. Nursing executives were requested to identify one nurse expert who was most knowledgeable about education, monitoring, and/or evaluating how nurses utilize nursing diagnoses in their organization, and request them to complete the questionnaire on behalf of the hospital. Thirty-four (34) responses were received, for a 7.9% response rate (some respondents represented more than one hospital, with at least one respondent providing input from 21 hospitals).

· Pre-Licensure School Programs ·

Over three-fourths of the academic respondents completing the survey represented ADN schools of nursing.

A majority of schools reported providing instruction in nursing diagnoses, with 28 (93.3%) RN pre-licensure programs indicating it was a formal part of their curriculum and only 2 (6.7%) indicating it was not formally taught. The two schools that reported not teaching nursing diagnosis were a community college ADN program and a private LVN to ADN program. Comments from programs teaching nursing diagnosis indicate teaching it initially as part of the nursing process in a nursing fundamentals course, then continuing to reinforce and utilize it in other courses throughout the academic program and with direct patient care during clinical education experiences.
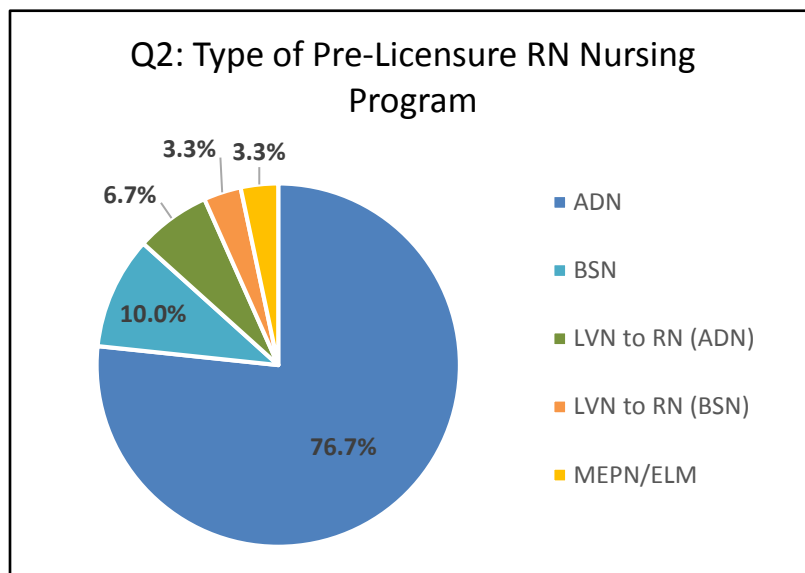
Q2: Type of Pre-Licensure RN Nursing Program

- ADN
- BSN
- LVN to RN (ADN)
- LVN to RN (BSN)
- MEPN/ELM

3.3% 3.3%
6.7%
10.0%
76.7%

Approaches to teaching students about nursing diagnosis in RN pre-licensure programs vary, as do methods to develop and communicate these. The NANDA (North American Nursing Diagnosis Association) International definitions and classification is the most common method being taught, as reported by 21 (70%) of programs. This taxonomic structure formulates nursing diagnoses through standardized statements with related factors

Q5: Approaches to Identify and Express Nursing Diagnoses

Category	Value
NANDA	70.0%
NANDA as reference, less formal	20.0%
Free-test approach	0.0%
Use expected, no specific approach	3.3%
Other	6.7%
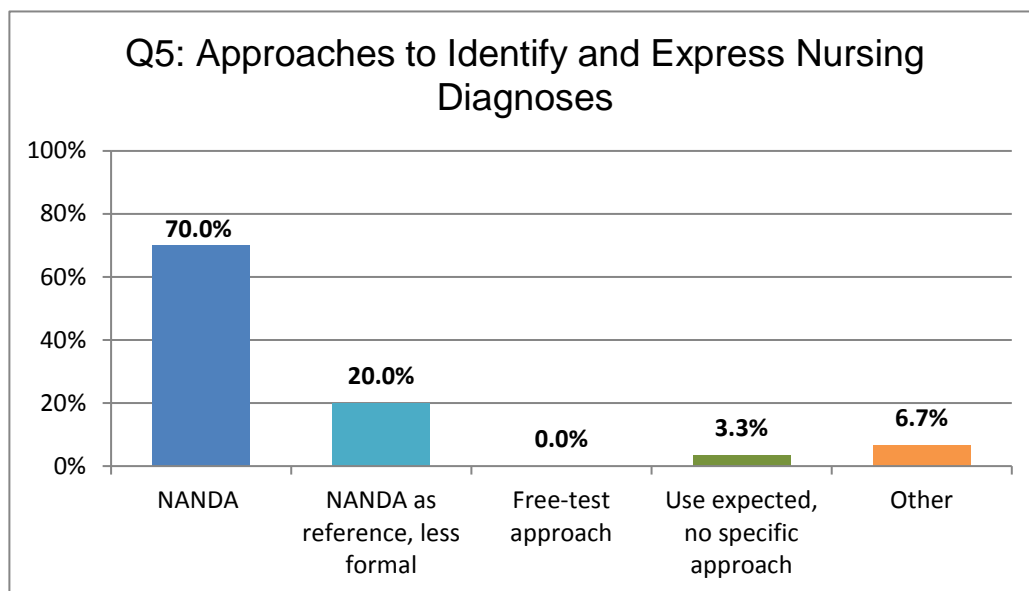
and characteristics in the form of signs and symptoms. Six nursing programs (20%) reported using NANDA lists as a reference, with less formality applied in the expectations of students when forming, writing and communicating diagnostic statements, and one program (3.3%) indicated they do not specify or utilize a standard approach. Two programs (6.7%) indicated using variations of NANDA as well as incorporating concept

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mapping throughout the curriculum. Concept maps are graphical tools for organizing and representing knowledge.

Nursing schools were asked when nursing diagnosis is first formally taught in their programs. While all programs report teaching nursing diagnosis, it is typically taught in a specific course during the first semester of the nursing program. Comments indicate students are expected to apply nursing diagnoses throughout all semesters of the program, and content can typically be found integrated in didactic courses and case studies as well as in clinical settings when caring for patients.

Q6: When are nursing diagnoses first formally taught in RN pre-licensure programs?	(N = 30)
Part of a specific course, within the first year and first semester of the nursing program	22 (73.3%)
Part of a specific course, within the first year and second semester of the nursing program	4 (13.3%)
Part of a specific course, within the first year and third semester of the nursing program	0
Taught as part of a specific course within the second year of the nursing program	0
Part of the curriculum, but not formally taught as part of a specific course	4 (13.3%)
Not part of the curriculum, nor taught as part of a specific course	0

Various teaching methods and learning activities may incorporate nursing diagnoses specifically in different courses or assignments throughout a nursing program. Nursing programs were asked to identify the extent to which identifying, and utilizing nursing diagnoses are purposefully included in teaching methods in their program. Data patterns indicates a majority of programs incorporate nursing diagnosis in several ways; most commonly it is systematically integrated throughout curriculum across the program. Comments submitted attest to the intent that students utilize and apply nursing diagnoses in complex ways, addressing priorities for individualized care to achieve patient outcomes.

> *In formulating the nursing diagnosis in patient care environments, the students consider the nursing assessment, secondary patient information, medical diagnosis and medical workup and focus. All of this is considered when developing their patient Nursing Diagnosis and plan of care.*

> *Students are taught to identify priorities of care for the patient that they are assigned to care for, and develop specific patient outcomes related to the diagnosis, incorporating what specific nursing actions they will implement to facilitate the patient achieving the outcome.*

> *We recognize that medical diagnosis is a necessary part of formulating nursing diagnosis. The medical diagnosis informs or suggests commonly identified nursing diagnoses. Our students are required to identify the pathophysiology of the disease as part of the diagnostic statement (etiology). Students may identify other diagnoses - particularly developed for patient-centered care. All students are required to have a minimum of 5 interventions unique to the patient.*

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Q7: Identify the extent to which identifying, developing, and utilizing nursing diagnoses are specifically and purposefully included in various teaching methods	Never	Occasionally or Optionally	Regularly	Always Required
Patient case studies or reviews	0%	16.7%	60.0%	23.3%
Clinical simulation	0%	40.0%	50.0%	10.0%
Integrated into curricula for selected specialty courses	6.7%	6.7%	60.0%	26.7%
Systemically integrated throughout curriculum across program	0%	6.7%	60.0%	33.3%
Course assignments to develop defined care plans	0%	3.3%	43.3%	56.7%
Utilized in course work and related assignments but not in providing direct care	13.3%	33.3%	43.3%	10.0%
Identified and developed based on direct care provided to assigned patients	0%	6.7%	33.3%	60.0%
In direct patient care-based predominantly on medical diagnoses, typical standard nursing diagnoses and interventions	13.8%	41.4%	37.9%	10.3%
In direct patient care-based on nursing assessment, patient data, including etiology, to inform specific nursing interventions	0%	3.3%	30.0%	66.7%

Developing diagnostic competencies occurs over time for RN pre-licensure students, with further expertise continuing to develop following RN licensure in practice. To determine the relevant etiology for nursing diagnoses, nursing students must accurately interpret patient responses to their health problems, which can be complex and diverse, requiring critical thinking skills. Pre-licensure nursing programs report students exhibit a range of nursing competencies considering common patients part of their curriculum and student experiences, with a majority indicating students are either at a beginner or competent level upon graduation.

Q8: Identify the level of competency nursing students typically have upon graduation and RN licensure	Novice	Beginner	Competent	Advanced
Understanding and utilizing nursing diagnoses based on medical problems observed or reported	6.7%	33.3%	53.3%	6.7%
Identifying and formulating nursing diagnoses based on individualized nursing assessments of patient response to illness	6.7%	30.0%	46.7%	16.7%
Determining the specific etiology of the nursing diagnoses from which specific nursing responsibilities and interventions follow	10.0%	30.0%	50.0%	10.0%

Reviewing and evaluating the accuracy of nursing diagnoses based on the presence of evidence-based findings which support it	10.0%	30.0%	46.7%	10.0%
Evaluating the effectiveness of nursing interventions associated with the identified nursing diagnoses	6.7%	30.0%	46.7%	16.7%

Responsibilities pre-licensure students have in utilizing nursing diagnoses and patient care plans when providing direct care to patients in clinical facilities varied by school, with an indication that clinical facilities also contribute to determining this. Levels of student responsibility most frequently reported by nursing programs were:

- 36.7% of schools report students discuss and contribute to the identification of nursing diagnoses or patient problem lists, and assist with developing interventions and plans of care without documenting these in the medical record

- 20% of schools report in addition to contributing and assisting (as above), their students also document these following collaboration with an RN or faculty

- 20% of schools indicate their students function in a more limited role, only referring to nursing diagnoses and following established patient care plans

Schools were asked to share the most significant challenges or barriers to teaching nursing diagnoses and / or for students to learn and develop competencies in the diagnostic process within their scope of nursing practice. Responses submitted in open text box format (Q10) were reviewed and synthesized, with the most frequently reported findings summarized as follows:

- Terminology ("language" or "vocabulary") is challenging to learn, not used in practice

- Working with RNs that predominantly utilize the medical model more than nursing diagnosis model inhibits application of learning and limits addressing patient response not linked with medical diagnoses

- Most health care team members focus on medical diagnoses and overlook nursing diagnoses

- Clinical facility restrictions on accessing EMR inhibit application of learning process

- Limited time to formally teach it

- Student engagement negatively impacted when nursing diagnoses and nursing focused plans of care are not visibly used in practice

- Critical thinking and decision making, "thinking like a nurse"

- Typically taught 1st semester when students lack clinical experience to relate to it

- Distinguishing medical and nursing diagnoses

- Despite trying concept maps, discussion, work sheets, care plans, and interactive sessions, this remains challenging for students

- Hospital practices pre-set and utilize a limited number and type of nursing diagnoses

- Learning differences between an actual or potential problem, identifying data (evidence) to support it

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- Limitation of (some) EMR systems to utilize, connect, and convey this

- Individualized and holistic application versus standardized application

- Variation in documentation processes and modification of practices across settings

- Faculty competency and experience in clinical practice

Schools were then asked to identify success strategies and teaching methods that best support or guide student engagement, and learning and development of diagnostic competencies within the scope of nursing practice. Responses submitted in open text box format (Q11) were reviewed and synthesized, with the most frequently reported findings summarized as follows:

- Use of case studies

- Engaging discussion among students, working in groups and post conference, support prioritization with input and ideas

- Technology enhanced nursing process experiences (simulation, You Tube)

- Utilize nursing diagnoses in theory, skills lab, and clinical to integrate and apply knowledge, establish consistent expectation and repetition across courses and learning opportunities

- Introduction to concept mapping prior to care plan development

- Experience-based learning, progressive development, varied clinical cases

- Assignments to develop and submit care plans

- Guide and coach identification of primary patient need to include problems beyond the medical diagnoses alone

- Breaking the nursing diagnoses statement apart, beginning with the medical diagnoses and also identifying common areas of concern

- Begin various approaches early, in first semester

- Simplify the language, de-emphasize formal writing and increase focus on the diagnostic process

- Compare and contrast patients with the same medical diagnoses that have different etiologies and response to illness

- Provide resources, references, examples, mentors (3rd semester students coach 1st semester students)

The introduction to the survey stated that "utilization of nursing diagnoses (specifically) is a key component that evidences the unique contribution and value of nursing." Upon completing the questionnaire, a majority of respondents (70%) either fully or somewhat agreed with that statement.

Q13: To What Extent Do Nursing Schools Agree with this Statement: Nursing Diagnosis (specifically) is a Key Component that Provides Evidence of the Unique Contribution and Value of Nursing

Fully Disagree, 3.3%

Somewhat Disagree, 13.3%

Neutral, 13.3%

Fully Agree, 30.0%

Somewhat Agree, 40.0%
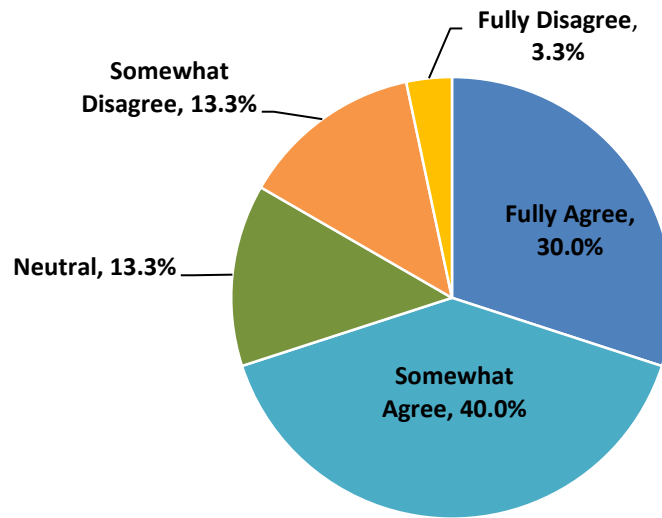
This same statement and final question were posed in both the hospital and nursing school surveys, and the distribution of responses by level of agreement or disagreement was found to be comparable. Comments received from schools provide further insight into this question, represented by these examples:

"The body of knowledge related to nursing diagnoses is not large; there is more evidence related to implementation of nursing practice and actions."

"As a practicing nurse for over 23 years, I observe that developing plans of care to meet patient specific needs remains a priority, yet plans of care are rarely fully utilized."

"Agree they are an important part of patient care, yet hospitals predominantly adopt the medical model and common patient problem language."

"Nursing process and nursing diagnoses reinforce the independent functions of the professional nurse. Basing nursing practice solely on the medical model limits scope of practice and range of patient needs to be met."

"As technology has merged some roles in healthcare, I see less distinction. Nursing has a unique role and function in healthcare, but I am not convinced it will be captured or valued through nursing diagnosis."

"The biggest barrier to nursing providing and documenting care has been the electronic health record, with nursing assessment and interventions confined to check boxes rather than descriptive notes. Valuable information is found in physician progress notes."

"The nursing process and utilizing nursing diagnoses help students in their critical thinking process, in addressing the overall needs of the patient, not just those associated with the medical diagnosis."

· Hospitals and Hospital Systems ·

Hospital respondents completing the survey included 34 acute care hospitals and hospital systems across California, representing various sizes and types of acute care hospitals. Single hospitals as well as hospitals that were part of larger health systems provided input to the survey, with one large health system that represented 21 hospitals in California responding.

Q2: Type of Hospital / Health System

- 29.4% Community hospital - 150 beds or less
- 14.7% Community hospital - between 150-250 beds
- 14.7% Community hospital - more than 250 beds
- 2.9% Academic health center (affiliated with a university)
- 5.9% Single hospital - not part of a larger health system
- 11.8% Hospital is part of a health system in California
- 8.8% Hospital is part of a multi-state health system
- 11.8% Other

The term "nursing diagnosis" used throughout the survey referred to the specific responsibility RNs may have in assessing patient response to health, determining evidence-based causes, and making decisions regarding interventions to be implemented within the scope of nursing practice. Various approaches are identified to express and communicate nursing diagnoses, while professional practice methods and hospital expectations in

Q4: Which Method(s) If Any, Has Your Organization Adopted?

- 12.1% NANDA
- 12.1% NANDA as reference, less formal
- 3.0% Free-test approach
- 36.4% Use expected, no specific approach
- 12.1% Do not expect use of nursing diagnoses
- 24.2% Other
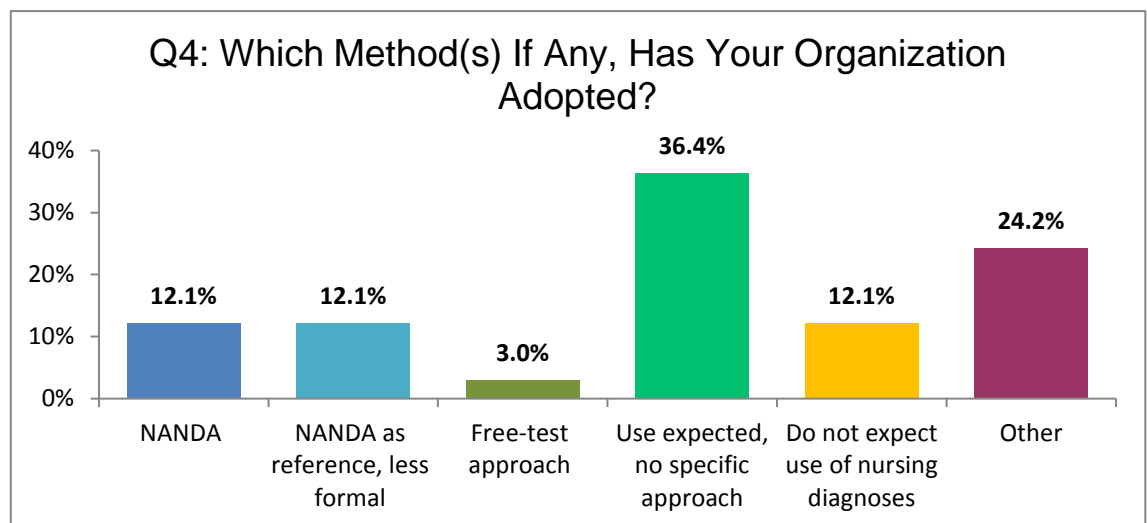
using a specific method also differ. Hospitals responding to the survey most frequently (36%) indicated that while they expect nurses to utilize nursing diagnosis, the organization had not identified a specific method or approach to be adopted.

(Q 5) Hospitals provided information about approaches used for planning and documenting patient care that typically involve electronic health records, and may include an interprofessional team approach in addition to the nursing plan or in place of it. The small sample size and variation of responses limited quantitative analysis; however, a sample of descriptive findings is summarized.

- Electronic health records provide a blended approach of medical diagnoses and evidence-based human responses aligned with nursing diagnoses to support potential or actual health problems through templates provided

- Clinical practice guidelines linked to the electronic health record, with reference to Nursing Interventions Classification (NIC) noted on some electronic health record templates

- Patient problem list is used in addition to nursing diagnoses

- Patient problem list is used instead of nursing diagnoses

- Utilize (standard) care plans based on medical diagnoses, with a reference list of common problems

- Patient plan of care does not use nursing diagnoses, and is interprofessional

- Nursing process screen within the electronic health record contains a list of potential assessment findings outside normal defined parameters; nursing selection reflects identified needs

- Utilize NANDA's Nursing Interventions Classification (NIC) and Nursing Outcomes Classification (NOC) in electronic health record workflow management software; however, terminology is not face up or evident

- Software integrates an interprofessional approach to a patient plan of care

- Electronic health record uses lists of nursing diagnoses with attached patient problem lists and interventions that the nurse selects from

(Q 6) The majority of hospitals (88.2%) reported capturing nursing data sets and interventions electronically from electronic medical records, rather than relying on manual documentation methods, with a small number (8.8%) reporting nursing data sets are only available manually. The extent to which such data is captured and accessible influences the potential of utilizing it to review nursing practice, care delivery processes and systems, and evaluate effectiveness evidenced by clinical outcomes.

The level of responsibility RNs have in identification of nursing diagnoses as part of the nursing process show a prevalence of referring to nursing diagnosis reference lists or sources, and selecting or following standard pre-planned interventions as the basis for care planning, while having the option to individualize and prioritize interventions as indicated and as the condition of the patient and needs change.

Q7: What level of responsibility do RNs typically have in identification of nursing diagnoses as part of the nursing process in your organization:	(N = 34)
Nurses refer to nursing diagnoses reference lists (or menus) and follow standard (pre-planned) interventions as the basis of decisions in planning care.	8.8%
Nurses formulate nursing diagnoses, independently self-identify nursing diagnoses, and make decisions on interventions to be implemented in establishing plans of care unique to each patient	44.1%
Nurses formulate nursing diagnoses, references, and independently self-identify nursing diagnoses, making decisions on interventions, to be implemented in establishing plans of care unique to each patient, including regularly evaluating the accuracy of the nursing diagnoses and effectiveness of the interventions in achieving health outcomes.	17.7%
RNs in this organization do not refer to or utilize nursing diagnoses	11.8%

Most hospitals agree that newly licensed RNs have beginning competence in understanding and using nursing diagnosis in practice. A minority of hospitals thought newly licensed RNs were fully competent in the application of nursing diagnoses.

Q8: Identify the typical level of competency of newly licensed RNs in their first year of practice	Novice	Beginner	Competent	Advanced
Understanding and utilizing nursing diagnoses based on medical problems observed or reported	32.3%	32.3%	25.8%	0%
Implementing or formulating nursing diagnoses based on individualized nursing assessments of patient response to illness	25.8%	48.4%	16.1%	0%
Determining the unique etiology of the nursing diagnosis from which specific nursing responsibilities and interventions follow	43.3%	33.3%	10%	3.3%
Reviewing and evaluating the accuracy of nursing diagnoses based on the presence of evidence-based findings which support	48.4%	22.6%	16.1%	3.2%

To determine accurate nursing diagnoses, nurses consider medical diagnoses, nursing assessment findings, and relevant etiology based on sources of patient information and related data to accurately interpret patient responses to their health problems. (Q 9) Over half of the hospitals responding to the survey (58.8%) report they have not reviewed, evaluated, or validated the accuracy of nursing diagnoses and associated interventions used with patients. Hospitals that do report doing so (41.2%) indicate they validate the accuracy through:

- RN shift report and handoff

- Review by charge RNs and interdisciplinary team at least weekly

- Supervision and competency validation process with new nurses' practice and review of documentation by experienced RNs

- Conduct peer reviews

- Periodic audits of a sample of active health records as part of quality monitoring and accreditation readiness determine plans reflect the current clinical presentation of the patient (report 65-80% accuracy). While electronic health record retains data sets, the care planning functionality is not ideal.

- Review of assessment, practice, and interventions for key indicators such as falls, pressure ulcers, central line infections, and ventilator associated pneumonia

- Review existing standard plans and develop new plans based on feedback from nurses, intra- and interfacility review

Hospitals were asked to share the most significant challenges or barriers for RNs in developing competencies in the diagnostic process within the scope of nursing practice. Responses submitted in open text box format (Q10) were reviewed and synthesized, with the most frequently reported findings summarized.

- Limited time, time management, and competing priorities practicing in fast-paced complex environments

- Lack of critical thinking skills and experience, limited clinical judgement

- Limited advanced practice and education resources, professional development at point of care

- Limited assessment skills and differentiating etiology sufficient to inform correct nursing diagnoses

- Variation in how students are trained and how nursing diagnosis is carried out in practice

- Lack of standardized approach to identification of patient needs

- Organizational culture

- Nurses do not utilize the diagnostic process or formulate nursing diagnoses when using standard lists and templates based on clinical practice guidelines. These may or may not have links to evidence based nursing diagnoses.

- Process guides the selection of the best fit standard plan of care

- Focus is on carrying out interventions and tasks rather than utilizing the diagnostic process

- Practice is driven largely by medical orders, established policy and procedure, and regulatory requirements. Intent to practice establishing patient goals and carrying out interventions within scope of independent function is essentially managing risk versus health.

Hospitals were asked to identify success strategies and methods that best support or guide RN engagement, and skills developing nursing diagnostic competencies within the scope of nursing practice. Responses submitted in open text box format (Q11) were reviewed and synthesized, with the most frequently reported findings summarized.

- Working within the functionality of the electronic health record templates, encourage nurses to tailor these based on assessments of patient's clinical presentation by selecting pertinent interventions (rather than simply adopting everything in the standard template)

- Care pathways

- To develop relevant diagnostic skills, nursing diagnosis language needs to be referenced when operationalizing care in interprofessional settings

- Findings from nursing assessments and diagnoses should guide and inform applicable care by various members of the interprofessional team

- Case scenarios, chart reviews, one-on-one support and education, clinical practice rounds

- Emphasize development of assessment skills as a foundation to accuracy in diagnostic processes

- Value of nursing diagnostic competencies should be recognized, supported, and acknowledged in leading to improved outcomes

- Need to imbed the diagnostic process as essential in practice and adopt within work flow processes regardless of technology or type of electronic health record system

- Ensuring RNs know their scope of practice and guiding development and understanding of the difference between medical diagnoses and nursing diagnoses

Factors that influence diagnostic competency within the scope of nursing practice include initial teaching as a nursing student, length of clinical experience, level of decision making responsibility, and frequency of studying and validating nursing diagnoses. Hospitals were asked what processes and activities their organization had adopted to support professional development in identifying or formulating nursing diagnoses.

Q12: Processes that Support Professional Development

Process	Percentage
Adopting a standard nursing diagnoses approach (such as but not limited to NANDA)	17.7%
Introduce nursing diagnoses with newly hired nurses as part of the orientation process	47.1%
Demonstrate and practice forming and utilizing nursing diagnoses with case studies	29.4%
Mentoring or guiding newly hired nurses in identifying nursing diagnoses supported by patient assessment and data findings	55.9%
Setting expectations that documentation specifically states/includes nursing diagnoses	47.1%
Monitoring nursing documentation for presence and identification of nursing diagnoses specifically	44.1%
Providing classes, workshops and engaging periodic discussions about clinical findings and evidence related to nursing diagnoses	14.7%
Conducting education, peer mentoring or case study reviews to support advancement of diagnostic capabilities	17.7%
Model cognitive processes that encourage nurses to become expert diagnosticians	5.9%
Conduct periodic reviews of patient records to validate the completeness and accuracy of nursing diagnoses	38.2%
Other	17.7%

(Q 13) One approach to measuring the quality of nursing care that contributes to patient outcomes is to link nursing diagnoses with associated interventions and evaluate patient outcomes in that context. A majority of hospital respondents (61.8%) indicated their organizations do not utilize such aggregate data documented on nursing diagnoses and nursing interventions with groups of patients to identify nursing's contribution to and impact on patient outcomes. Of the 6 (17.7%) hospitals that indicated they utilize aggregate nursing data to evaluate patient outcomes, five of these were large hospitals and part of multi-hospital systems. Explanations provide evidence of the type of aggregate data collected and analyzed, highlighting the capability that some electronic health records have in their design, and the intent in these organizations to correlate nursing care provided with patient outcomes.

- Reports, alerts and dashboards are created for monitoring patient outcomes prospectively and retrospectively using data elements selected from the electronic health record including: nursing assessments, interventions, and medications

- Aggregate data sourced from the electronic medical record can be set up to be population specific, singularly targeted data, and /or aligned with specific quality initiatives or regulatory standards. Nursing specific care integral to the hospital and unit-based patient quality and safety outcomes

- Data on nursing interventions and impact on patient outcomes are obtained

- Nursing diagnosis and patient outcomes are linked and evaluated

- Aggregate data is utilized but only pertaining to patient outcomes-driven acuity-based staffing

In the introduction to the survey, it was stated that "utilization of nursing diagnoses (specifically) is a key component that evidences the unique contribution and value of nursing." Upon completing the questionnaire, a majority of respondents (78%) either fully or somewhat agreed with that statement.
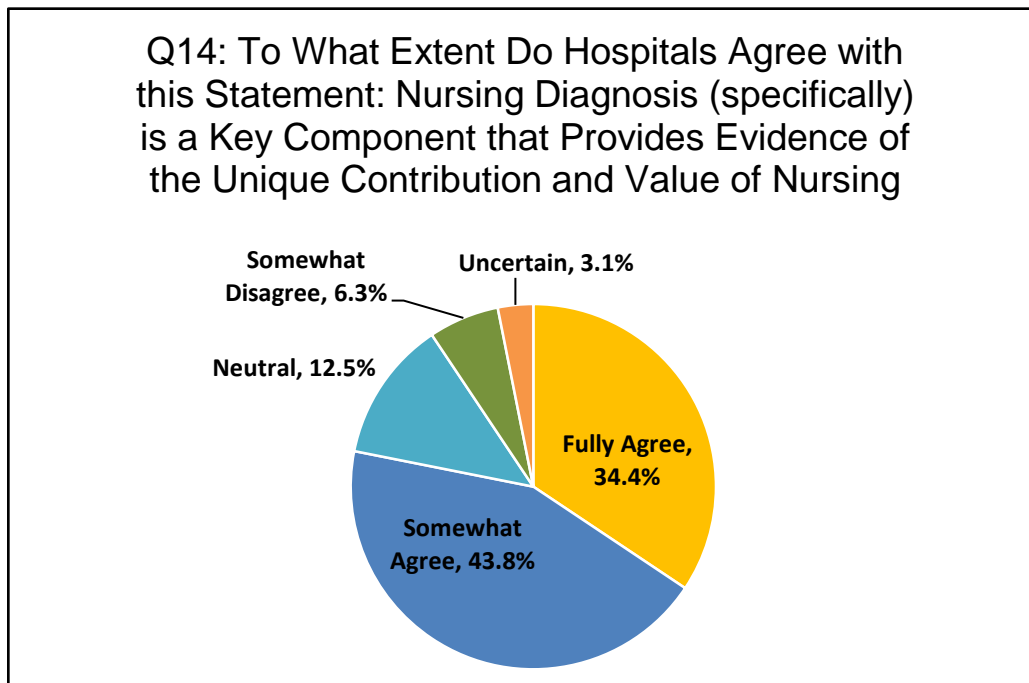
Q14: To What Extent Do Hospitals Agree with this Statement: Nursing Diagnosis (specifically) is a Key Component that Provides Evidence of the Unique Contribution and Value of Nursing

- Somewhat Disagree, 6.3%
- Uncertain, 3.1%
- Neutral, 12.5%
- Fully Agree, 34.4%
- Somewhat Agree, 43.8%

This same statement and final question were posed in both the hospital and nursing school surveys, and the distribution of responses by level of agreement or disagreement was found to be comparable. Comments received from hospitals provide further insight into this question, represented by these examples:

"Nursing diagnosis provides the clinical decision support framework for selecting and implementing individualized evidence-based interventions and outcomes resulting from the nurse assessment. It is fundamentally an important development pathway for stimulating clinical reasoning as new nurses enter the profession. Nursing diagnoses guide the humanistic and holistic care unique to our profession."

"The approach to patient care and problem identification is interprofessional."

"Proving nursing impact on health outcomes remains very difficult, and increasingly the only substantive evidence of nursing contribution is by publishing data sets to large national databases (NDNQI), and examining nursing sensitive indicators. If nursing collectively and consistently stated nursing sensitive indicator data in terms of nursing diagnostic statements, these could then be considered more salient in proving nursing impact."

"Nursing diagnosis is a necessary component of nursing science. It provides direction for interventions and evaluation of their effectiveness in the care of the patient."

"The entire nursing process, especially the independent functions, demonstrate the value of nursing."

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"Our method of documentation is based on clinical practice guidelines, which include human response selections similar to the traditional nursing diagnoses and medical diagnoses selections. These clinical practice guidelines have elements of nursing diagnoses built in. Our state nurse practice act requires nursing diagnoses as part of nursing care, so we stress the inclusion of these within our clinical practice guidelines. We approach this more from the evidence behind the clinical practice guidelines and the impact of evidence-based nursing practice. Outcomes achieved measured against health system goals and national benchmarks demonstrate the unique contribution and value of nursing in the current environment. The nursing diagnosis component of clinical practice guidelines emphasizes the contribution of nursing in our patient/family centered care model."

"There are many facets that contribute to the value of nursing. Nursing diagnosis is key and helps organize and standardize nursing interventions in planning care within the scope of nursing practice."

"If nursing diagnoses were utilized, there could be an effort to define and measure the actions and interventions which could validate the contribution of nursing on positive clinical outcomes."

"Today's nurses do not associate nursing diagnosis with the care of the patient. We are seeing nurses fall into task-oriented roles and not becoming leaders."

CONCLUSIONS

This statewide survey examined how nursing students in pre-licensure programs are taught and learn about nursing diagnoses, and how nursing diagnoses are utilized by nurses practicing in hospitals in California. This study was conducted as part of the overall work to define the value of nursing, by exploring how the nursing diagnostic process is used and its specific contribution. Findings from the surveys may not be representative of nursing programs and hospitals in California overall due to the low response rate. It is possible that those responding to the survey invitation may have a particular interest in nursing diagnosis, which could also influence the findings. With these considerations in mind, the data obtained and comments received provide insights for considering how using nursing diagnosis can support the value of nursing and may even influence how RNs themselves conceive of their overall role.

Schools of nursing providing RN pre-licensure programs report introducing nursing diagnosis early in the curriculum, typically as part of a nursing fundamentals course, and within the context of learning the overall nursing process. The majority (93.3%) of respondents indicated teaching nursing diagnosis as a formal part of the curriculum that continues to be reinforced in other courses and clinical education experiences applied throughout the academic program. While approaches to teaching students about nursing diagnosis in RN pre-licensure programs vary, the NANDA International definitions and classification is the most common evidence-based method, being taught by 70% of nursing programs reporting. Learning is typically supported through review of case studies, assignments and activities, and application when providing direct patient care. Nursing programs indicate diagnostic competencies are an essential part of the nursing process that relies on the integration of emerging knowledge and critical thinking skills developed over time. Schools report that how they teach (and students learn and use nursing diagnosis) is important to the development of diagnostic competencies needed to accurately identify evidence-based plans of care and interventions as part of the nursing process. Schools also report experiencing wide variation across affiliated clinical sites where students are scheduled in how nursing diagnoses may be utilized in practice, integrated in plans of care and captured in electronic health records.

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Hospitals responding to the survey most frequently (36%) indicated that while they expect nurses to utilize nursing diagnosis, their organization has not identified a specific method or approach to be adopted. The widespread implementation of electronic health records and their continued evolution have influenced how patient data is captured, how care and services are documented by various health professionals, and how records are utilized by the interprofessional team in coordinating and carrying out plans of care. Some electronic health records provide a blended approach of medical diagnoses and evidence-based human responses aligned with nursing diagnoses to support potential or actual health problems through templates provided as interprofessional plans of care, though most do not.

Hospitals report nursing practice trends emphasizing standardized plans and associated interventions to be carried out largely driven by medical orders, policy, and regulatory and safety concerns. Contributing factors may include low-level competency in newly licensed RNs related to nursing diagnoses, the expectations of the professional practice environment nurses work within, the short lengths of stay in which only priorities of care can be addressed, and organizational processes and systems that limit or support the effective development and efficient integration of the nursing process in care delivery. While most hospitals report lack of visible formal nursing diagnosis statements or language being used, there is evidence some have formally integrated NANDA or other sources and standards into the electronic health record programming. Further, in these instances assessment findings guide the development of problem lists (which may incorporate nursing diagnoses) and selection of specific interventions that support the autonomous nursing role leading to the determination of individualized plans of care and specific interventions. While the small survey size discourages broad conclusions, it seems there is clearly an opportunity to build on the majority opinions of survey responders from both education and practice that utilization of nursing diagnosis (specifically) is a key component that evidences the unique contribution and value of nursing. With nursing diagnosis currently more embedded in nursing education in California than in practice settings, it is incumbent on practice leaders and practitioners to determine how best to close this gap and expose the unique, but invisible, work of professional RNs.

While a majority of hospitals (88.2%) reported capturing nursing data sets and interventions electronically from electronic medical records, only 17.7% indicate using such data to evaluate nursing outcomes. There is further opportunity to strengthen the evidence linking nursing diagnostic processes with the identification and development of effective plans and targeted interventions to clinical outcomes demonstrating nursing's unique contribution and value.

April 25, 2018

TO: CNO Advisory Committee Members

FROM: BJ Bartleson, MS, RN, NEA-BC, Vice President, Nursing and Clinical Services

SUBJECT: Nursing Diagnosis Abstract Presentation NANDA International

SUMMARY
HealthImpact and CHA will be presenting, "Nursing Diagnosis & Knowledge Development: New Beginnings, (accepted abstract and paper presentation) at the annual NANDA International Conference on June 13th at Boston College, Massachusetts.

ACTION REQUESTED

> *Committee discussion for conference presentation*

DISCUSSION
  1. What are the advantages and disadvantages of using a standardized system?
  2. Are there issues the committee members wish us to address at the conference?
  3. Do your present vendors subscribe and use NANDA language?

Attachment: Abstract

BJB:br

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Corporate Members: Hospital Council of Northern and Central California, Hospital Association of Southern California, and Hospital Association of San Diego and Imperial Counties

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Nursing Diagnosis & Knowledge Development: New Beginnings

Paper Presentation Abstract Submission

Submitted to NANDA International, Inc. for June 13-15, 2018, Conference

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Introduction with Problem Statement

In 2017, California nurse leaders executed a statewide effort to define nursing's value.[1] Researchers explored ways to demonstrate the nursing profession's unique — though largely invisible — contributions. Under the California Nurse Practice Act[2], registered nurses are required to formulate a nursing diagnosis. This study analyzed registered nurses' roles in diagnostic processes, including subsequent development of effective plans and targeted interventions to achieve clinical outcomes.

Methods

Using surveys, the study explored how registered nursing students in pre-licensure programs are taught the nursing diagnosis process and how nurses utilize nursing diagnosis in practice. While each survey instrument contained unique questions, six common questions explored areas of similarity or variation in perspective and practices. Each survey included multiple choice questions, open-ended questions and space for comments.

Results and Discussion

Thirty schools and 34 hospitals responded. 93.3 percent of registered nursing pre-licensure programs indicated that nursing diagnosis was a formal curriculum component, but many reported that they do not observe registered nurses using it in practice. Of the hospitals surveyed, only 24 percent reported using NANDA-I methodology; 36 percent of hospitals indicated that, while they expect nurses to utilize nursing diagnosis, they had not adopted a specific method or approach.

Impact on the Discipline

Wide variability exists between how schools teach and how hospitals use nursing diagnosis — despite agreement that it is a key factor in describing nursing's value. Academic and professional leaders have an opportunity to improve the consistent use of nursing diagnoses to highlight nursing's value.

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[1] HealthImpact White Paper, *Use of Nursing Diagnosis in California Nursing Schools and Hospitals, Report of Statewide Survey Results*, Copyright 2018, https://healthimpact.org/wp-content/uploads/2018/02/Use-of-Nursing-Diagnosis-in-CA-Nursing-Schools-and-Hospitals_JAN-2018.pdf
[2] Business & Professions Code, Chapter 6, Nursing Section 2725, the Standards of Competent Performance (California Code of Regulations, Title 16, Section 1443.5) and the California Code of Regulations (Title 22, Section 70215)

recipients per year, which is the average between the lower-bound (10 recipients) and upper-bound (50 recipients) estimate.

Burden of Response: The Department estimates that the burden is the opportunity cost that recipients will incur to spend 15 minutes to email the appropriate grants management official(s). The Department uses the same methodology used when calculating these costs in the RIA but adjusts the hourly wage down to exclude benefit and overhead. The mean hourly wage for the administrative assistant (not adjusted for benefits and overhead) is $19.39 per hour. The annual labor cost is $0.3 million across all 30 entities (30 entities × $19.39 per hour × 0.25 hours × 2,000 applications or renewals).

The Department asks for public comment on the proposed information collection, including the particular issues below.

• Whether the proposed collection of information is necessary for the proper performance of OCR's functions and the Department's and its components' functions to enforce Federal laws on which Federal funding is conditioned, including whether the information will have practical utility.

• Feedback on the assumptions that form the basis of our cost estimates.

• The automated collection techniques or other forms of information technology that could improve the efficiency of this collection of information.

Comments regarding the collection of information proposed in this rule must refer to the proposed rule by name and docket number and must be submitted to both OMB and the Docket Management Facility where indicated under **ADDRESSES** by the date specified under **DATES**.

When it issues a final rule, the Department plans to publish in the **Federal Register** the control numbers assigned by the Office of Management and Budget (OMB). Publication of the control numbers notifies the public that OMB has approved the final rule's information collection requirements under the Paperwork Reduction Act of 1995.

List of Subjects in 45 CFR Part 88

Abortion, Adult education, Advanced directives, Assisted suicide, Authority delegations, Childbirth, Civil rights, Coercion, Colleges and universities, Community facilities, Contracts, Educational facilities, Employment, Euthanasia, Family planning, Federal-State relations, Government contracts, Government employees, Grant programs-health, Grants administration, Health care, Health facilities, Health insurance, Health professions, Hospitals, Immunization, Indian Tribes, Insurance, Insurance companies, Laboratories, Manpower training programs, Maternal and child health, Medicaid, Medical and dental schools, Medical research, Medicare, Mental health programs, Mercy killing, Moral convictions, Nondiscrimination, Nursing homes, Nursing schools, Occupational safety and health, Occupational training, Physicians, Prescription drugs, Public assistance programs, Public awareness, Public health, Religious discrimination, Religious beliefs, Religious liberties, Religious nonmedical health care institutions; Reporting and recordkeeping requirements, Rights of conscience, Scholarships and fellowships, Schools, Scientists, State and local governments, Sterilization, Students, Technical assistance, Tribal Organizations.

Proposed Rule

For the reasons set forth in the preamble, the Department of Health and Human Services proposes to revise 45 CFR part 88 to read as follows:

PART 88—ENSURING THAT THE DEPARTMENT OF HEALTH AND HUMAN SERVICES DOES NOT FUND OR ADMINISTER PROGRAMS OR ACTIVITIES THAT VIOLATE CONSCIENCE AND ASSOCIATED ANTI-DISCRIMINATION LAWS

Authority: The Weldon Amendment (*e.g.,* Consolidated Appropriations Act, 2017, Public Law 115–31, sec. 507(d); Div. H, sec. 209); the Helms Amendment (*e.g.,* Consolidated Appropriations Act, 2017, Public Law 115–31, Div. J, sec. 7018); 22 U.S.C. 7631(d); 26 U.S.C. 5000A(d)(2); 29 U.S.C. 669(a)(5); 42 U.S.C. 300a–7 (the Church Amendments), 42 U.S.C. 238n (Coats-Snowe Amendment); 18113 (Section 1553 of the Affordable Care Act), 18023(c)(2)(A)(i)–(iii), 18023(b)(1)(A), 18023(b)(4); 280g–1(d)), 290bb–36(f), 1320a–1, 1320c–11, 1395cc(f), 1395i–5, 1395w–22(j)(3)(B), 1395x(e), 1395x(y)(1), 1396a(a), 1396a(w)(3), 1396f, 1396s(c)(2)(B)(ii), 1396u–2(b)(3)(B), 1397j–1(b), 5106i(a), 14406.

§ 88.1 Purpose.

The purpose of this part is to provide for the implementation and enforcement of the Federal health care conscience and associated anti-discrimination laws. Such laws, for example, protect the rights of persons, entities, and health care entities to refuse to perform, assist in the performance of, or undergo health care services or research activities to which they may object for religious, moral, ethical, or other reasons. Such laws, for example, also protect patients from being subjected to certain health care or services over their conscientious objection. Consistent with their objective to comprehensively protect the conscience and associated anti-discrimination rights of persons, entities, and health care entities, the statutory provisions and the regulatory provisions contained in this part are to be interpreted and implemented broadly to effectuate their protective purposes.

§ 88.2 Definitions.

For the purposes of this part:

Administered by the Secretary means to be subject to the responsibility of the Secretary of the U.S. Department of Health and Human Services, as established via statute or regulation, for the administration of Federal funds available to any program or activity.

Assist in the Performance means to participate in any program or activity with an articulable connection to a procedure, health service, health program, or research activity, so long as the individual involved is a part of the workforce of a Department-funded entity. This includes but is not limited to counseling, referral, training, and other arrangements for the procedure, health service, health program, or research activity.

Department means the Department of Health and Human Services and any component thereof.

Discriminate or *Discrimination* means, as applicable and as permitted by the applicable statute:

(1) To withhold, reduce, exclude, terminate, restrict, or otherwise make unavailable or deny any grant, contract, subcontract, cooperative agreement, loan, license, certification, accreditation, employment, title, or other similar instrument, position, or status;

(2) To withhold, reduce, exclude, terminate, restrict, or otherwise make unavailable or deny any benefit or privilege;

(3) To utilize any criterion, method of administration, or site selection,

including the enactment, application, or enforcement of laws, regulations, policies, or procedures directly or through contractual or other arrangements, that tends to subject individuals or entities protected under this part to any adverse effect described in this definition, or have the effect of defeating or substantially impairing accomplishment of a health program or activity with respect to individuals, entities, or conduct protected under this part; or

(4) To otherwise engage in any activity reasonably regarded as discrimination including intimidating or retaliatory action.

Entity means a ''person'' as defined in 1 U.S.C. 1 or a State, political subdivision of any State, instrumentality of any State or political subdivision thereof, or any public agency, public institution, public organization, or other public entity in any State or political subdivision of any State.

Federal Financial Assistance includes:

(1) Grants and loans of Federal funds;

(2) The grant or loan of Federal property and interests in property;

(3) The detail of Federal personnel;

(4) The sale or lease of, and the permission to use (on other than a casual or transient basis), Federal property or any interest in such property without consideration or at a nominal consideration, or at a consideration which is reduced for the purpose of assisting the recipient or in recognition of the public interest to be served by such sale or lease to the recipient; and

(5) Any Federal agreement, arrangement, or other contract which has as one of its purposes the provision of assistance.

Health care entity includes an individual physician or other health care professional, health care personnel, a participant in a program of training in the health professions, an applicant for training or study in the health professions, a post-graduate physician training program, a hospital, a laboratory, an entity engaging in biomedical or behavioral research, a provider-sponsored organization, a health maintenance organization, a health insurance plan (including group or individual plans), a plan sponsor, issuer, or third-party administrator, or any other kind of health care organization, facility, or plan. It may also include components of State or local governments.

Health program or activity includes the provision or administration of any health-related services, health service

programs and research activities, health-related insurance coverage, health studies, or any other service related to health or wellness whether directly, through payments, grants, contracts, or other instruments, through insurance, or otherwise.

Health service program includes any plan or program that provides health benefits, whether directly, through insurance, or otherwise, and is funded, in whole or part, by the Department. It may also include components of State or local programs.

Individual means a member of the workforce of an entity or health care entity.

Instrument is the means by which Federal funds are conveyed to a recipient, and includes grants, cooperative agreements, contracts, grants under a contract, memoranda of understanding, loans, loan guarantees, stipends, and any other funding or employment instrument or contract.

OCR means the Office for Civil Rights of the Department of Health and Human Services.

Recipient means any State, political subdivision of any State, instrumentality of any State or political subdivision thereof, and any person or any public or private agency, institution, organization, or other entity in any State including any successor, assign, or transferee thereof, to whom Federal financial assistance is extended directly from the Department or a component of the Department, or who otherwise receives Federal funds directly from the Department or a component of the Department, but such term does not include any ultimate beneficiary. The term may include foreign or international organizations (such as agencies of the United Nations).

Referral or *refer for* includes the provision of any information (including but not limited to name, address, phone number, email, website, instructions, or description) by any method (including but not limited to notices, books, disclaimers, or pamphlets, online or in print), pertaining to a health care service, activity, or procedure, including related to availability, location, training, information resources, private or public funding or financing, or directions that could provide any assistance in a person obtaining, assisting, training in, funding, financing, or performing a particular health care service, activity, or procedure, where the entity or health care entity making the referral sincerely understands that particular health care service, activity, or procedure to be a purpose or possible outcome of the referral.

State includes, in addition to the several States, the District of Columbia. For those provisions related to or relying upon the Public Health Service Act, the term ''State'' includes the several States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, the Northern Mariana Islands, the U.S. Virgin Islands, American Samoa, and the Trust Territory of the Pacific Islands. For those provisions related to or relying upon the Social Security Act, such as Medicaid or the Children's Health Insurance Program, the term ''State'' follows the definition of ''State'' found at 42 U.S.C. 1301.

Sub-recipient means any State, political subdivision of any State, instrumentality of any State or political subdivision thereof, and any person or any public or private agency, institution, organization, or other entity in any State including any successor, assign, or transferee thereof, to whom Federal financial assistance is extended through a recipient or another sub-recipient, or who otherwise receives Federal funds from the Department or a component of the Department indirectly through a recipient or another sub-recipient, but such term does not include any ultimate beneficiary. The term may include foreign or international organizations (such as agencies of the United Nations).

Workforce means employees, volunteers, trainees, contractors, and other persons whose conduct, in the performance of work for an entity or health care entity, is under the direct control of such entity or health care entity, whether or not they are paid by the entity or health care entity, as well as health care providers holding privileges with the entity or health care entity.

§ 88.3 Applicable requirements and prohibitions.

(a) *The Church Amendments, 42 U.S.C. 300a–7*—(1) *Applicability.* (i) The Department is required to comply with paragraphs (a)(2)(i) through (vii) of this section and §§ 88.5 and 88.6 of this part.

(ii) Any State or local government or subdivision thereof and any other public entity are required to comply with paragraphs (a)(2)(i) through (iii) of this section.

(iii) Any entity that receives a grant, contract, loan, or loan guarantee under the Public Health Service Act [42 U.S.C. 201 *et seq.*] after June 18, 1973, is required to comply with paragraph (a)(2)(iv) of this section and §§ 88.4, 88.5, and 88.6 of this part.

(iv) Any entity that receives a grant or contract for biomedical or behavioral research under any program

administered by the Secretary of Health and Human Services after July 12, 1974, is required to comply with paragraph (a)(2)(v) of this section and §§ 88.4, 88.5, and 88.6 of this part.

(v) Any entity that carries out any part of any health service program or research activity funded in whole or in part under a program administered by the Secretary of Health and Human Services is required to comply with paragraph (a)(2)(vi) of this section and §§ 88.4, 88.5, and 88.6 of this part.

(vi) Any entity that receives, after September 29, 1979, any grant, contract, loan, loan guarantee, or interest subsidy under the Public Health Service Act, or the Developmental Disabilities Assistance and Bill of Rights Act of 2000 [42 U.S.C. 15001 *et seq.*] is required to comply with paragraph (a)(2)(vii) of this section and §§ 88.4, 88.5, and 88.6 of this part.

(2) *Requirements and prohibitions.* (i) Pursuant to 42 U.S.C. 300a–7(b)(1), entities to whom this paragraph (a)(2)(i) applies shall not require any individual who receives a grant, contract, loan, or loan guarantee under the Public Health Service Act to perform or assist in the performance of any sterilization procedure or abortion if his performance or assistance in the performance of such procedure or abortion would be contrary to his religious beliefs or moral convictions.

(ii) Pursuant to 42 U.S.C. 300a–7(b)(2)(A), entities to whom this paragraph (a)(2)(ii) applies shall not require any entity funded under the Public Health Service Act to make its facilities available for the performance of any sterilization procedure or abortion if the performance of such procedure or abortion in such facilities is prohibited by the entity on the basis of religious beliefs or moral convictions.

(iii) Pursuant to 42 U.S.C. 300a–7(b)(2)(B), entities to whom this paragraph (a)(2)(iii) applies shall not require any entity funded under the Public Health Service Act to provide personnel for the performance or assistance in the performance of any sterilization procedure or abortion if the performance or assistance in the performance of such procedure or abortion by such personnel would be contrary to the religious beliefs or moral convictions of such personnel.

(iv) Pursuant to 42 U.S.C. 300a–7(c)(1), entities to whom this paragraph (a)(2)(iv) applies shall not discriminate against any physician or other health care personnel in the employment, promotion, termination, or extension of staff or other privileges because such physician or other health care personnel performed or assisted in the

performance, or refused to perform or assist in the performance of a lawful sterilization procedure or abortion on the grounds that doing so would be contrary to his or her religious beliefs or moral convictions, or because of his or her religious beliefs or moral convictions concerning abortions or sterilization procedures themselves.

(v) Pursuant to 42 U.S.C. 300a–7(c)(2), entities to whom this paragraph (a)(2)(v) applies shall not discriminate against any physician or other health care personnel in employment, promotion, termination of employment, or extension of staff or other privileges because such physician or other health care personnel performed or assisted in the performance of any lawful health service or research activity or refused to perform or assist in the performance of such service or activity on the grounds that doing so would be contrary to his or her religious beliefs or moral convictions, or because of his or her religious beliefs or moral convictions.

(vi) Pursuant to 42 U.S.C. 300a–7(d), entities to whom this paragraph (a)(2)(vi) applies shall not require any individual to perform or assist in the performance of any part of a health service program or research activity if such performance or assistance would be contrary to the individual's religious beliefs or moral convictions.

(vii) Pursuant to 42 U.S.C. 300a–7(e), entities to whom this paragraph (a)(2)(vii) applies shall not deny admission to or otherwise discriminate against any applicant for training or study because of reluctance or willingness to counsel, suggest, recommend, assist, or in any way participate in the performance of abortions or sterilizations contrary to or consistent with the applicant's religious beliefs or moral convictions.

(b) *The Coats-Snowe Amendment (Section 245 of the Public Health Service Act), 42 U.S.C. 238n*—(1) *Applicability.* (i) The Federal government, including the Department, is required to comply with paragraphs (b)(2)(i) through (ii) of this section and §§ 88.5, and 88.6 of this part.

(ii) Any State or local government or subdivision thereof that receives Federal financial assistance, including Federal payments provided as reimbursement for carrying out health-related activities is required to comply with paragraphs (b)(2)(i) through (ii) of this section and §§ 88.4, 88.5, and 88.6 of this part.

(2) *Requirements and prohibitions.* (i) Pursuant to 42 U.S.C. 238n(a)(1), (2), and (3), entities to whom this paragraph (b)(2)(i) applies shall not subject any individual or institutional health care entity to discrimination on the basis that

the individual or institutional health care entity—

(A) Refuses to undergo training in the performance of induced abortions, to require or provide such training, to perform such abortions, or to provide referrals for such training or such abortions;

(B) Refuses to make arrangements for any of the activities specified in (b)(2)(i)(A); or

(C) Attends or attended a post-graduate physician training program, or any other program of training in the health professions, that does not or did not require attendees to perform induced abortions or require, provide, or refer for training in the performance of induced abortions, or make arrangements for the provision of such training.

(ii) Pursuant to 42 U.S.C. 238n(b), entities to whom this paragraph (b)(2)(ii) applies shall not, for the purposes of granting a legal status to a health care entity (including a license or certificate), or providing such entity with financial assistance, services or benefits, fail to deem accredited any postgraduate physician training program that would be accredited but for the accrediting agency's reliance upon an accreditation standard or standards that require an entity to perform an induced abortion or require, provide, or refer for training in the performance of induced abortions, or make arrangements for such training, regardless of whether such standard provides exceptions or exemptions.

(c) *Weldon Amendment (See, e.g., Pub. L. 115–31, Div. H, sec. 507(d))*—(1) *Applicability.* (i) The Department, while operating under an appropriations act that contains the Weldon Amendment, is required to comply with paragraph (c)(2) of this section and §§ 88.5, and 88.6 of this part;

(ii) Any State or local government that receives funds under an appropriations act for the Department that contains the Weldon Amendment is required to comply with paragraph (c)(2) of this section and §§ 88.4, 88.5, and 88.6 of this part;

(iii) Any entity that receives funds through a program administered by the Secretary or under an appropriations act for the Department that contains the Weldon Amendment is required to comply with paragraph (c)(2) of this section and §§ 88.4, 88.5, and 88.6 of this part.

(2) *Prohibition.* The entities to whom this paragraph (c)(2) applies shall not subject any institutional or individual health care entity to discrimination on the basis that the health care entity does not provide, pay for, provide coverage of, or refer for, abortion.

(d) *Medicare Advantage, Consolidated Appropriations Act of 2017, Public Law 115–31, Div. H, Tit. II, sec. 209*—(1) *Applicability.* The Department, while operating under an appropriations act that contains a provision under the Medicare Advantage program as set forth by Public Law 115–31, Div. H, Tit. II, sec. 209, is required to comply with paragraph (d)(2) of this section and §§ 88.5, and 88.6 of this part.

(2) *Prohibition.* The entities to whom this paragraph (d)(2) applies shall not deny participation in the Medicare Advantage program to an otherwise eligible entity (including a Provider Sponsored Organization) because that entity will not provide, pay for, provide coverage of, or provide referrals for abortions.

(e) *Section 1553 of the Affordable Care Act, 42 U.S.C. 18113*—(1) *Applicability.* (i) The Department is required to comply with paragraph (e)(2) of this section and §§ 88.5, and 88.6 of this part.

(ii) Any State or local government that receives Federal financial assistance under the Patient Protection and Affordable Care Act (or under any amendment made by the Act) is required to comply with paragraph (e)(2) of this section and §§ 88.4, 88.5, and 88.6 of this part.

(iii) Any health care provider that receives Federal financial assistance under the Patient Protection and Affordable Care Act (or under any amendment made by the Act) is required to comply with paragraph (e)(2) of this section and §§ 88.4, 88.5, and 88.6 of this part.

(iv) Any health plan created under the Patient Protection and Affordable Care Act (or under any amendment) is required to comply with paragraph (e)(2) of this section and §§ 88.4, 88.5, and 88.6 of this part.

(2) *Prohibition.* The entities to whom this paragraph (e)(2) applies shall not subject an individual or institutional health care entity to discrimination on the basis that the entity does not provide any health care item or service furnished for the purpose of causing, or for the purpose of assisting in causing, the death of any individual, such as by assisted suicide, euthanasia, or mercy killing; provided, that nothing in this paragraph shall be construed to apply to, or to affect, any limitation relating to:

(i) The withholding or withdrawing of medical treatment or medical care;

(ii) The withholding or withdrawing of nutrition or hydration;

(iii) Abortion; or

(iv) The use of an item, good, benefit, or service furnished for the purpose of alleviating pain or discomfort, even if

such use may increase the risk of death, so long as such item, good, benefit, or service is not also furnished for the purpose of causing, or the purpose of assisting in causing, death, for any reason.

(f) *Section 1303 of the Affordable Care Act, 42 U.S.C. 18023*—(1) *Applicability.* (i) The Department is required to comply with paragraph (f)(2)(i) of this section and §§ 88.5, and 88.6 of this part.

(ii) Qualified health plans, as defined under 42 U.S.C. 18021, offered on any Exchange created under the Affordable Care Act, are required to comply with paragraph (f)(2)(ii) of this section and §§ 88.4, 88.5, and 88.6 of this part.

(2) *Requirements and prohibitions.* (i) Pursuant to 42 U.S.C. 18023(b)(1)(A)(i), entities to whom this paragraph (f)(2)(i) applies shall not require a qualified health plan to provide coverage of abortion or abortion-related services as described in 42 U.S.C. 18023(b)(1)(B) as part of its essential health benefits for any plan year.

(ii) Pursuant to 42 U.S.C. 18023(b)(4), entities to whom this paragraph (f)(2)(ii) applies shall not discriminate against any individual health care provider or health care facility because of its unwillingness to provide, pay for, provide coverage of, or refer for abortions.

(g) *Section 1411 of the Affordable Care Act, 42 U.S.C. 18081*—(1) *Applicability.* The Department shall comply with paragraph (g)(2) of this section and §§ 88.5, and 88.6 of this part.

(2) *Requirement.* The Department shall provide a certification documenting a religious exemption from the individual responsibility requirement and penalty under the Affordable Care Act to:

(i) Any individual who is a member of a recognized religious sect or division thereof and is an adherent of established tenets or teachings of such sect or division by reason of which he is conscientiously opposed to acceptance of the benefits of any private or public insurance which, among other things, makes payments toward the cost of, or provides services for, medical care (including the benefits of any insurance system established by the Social Security Act); and

(ii) Any individual for the month for which such individual is a member of a ''health care sharing ministry,'' as defined in 26 U.S.C. 5000A(2)(B)(ii).

(h) *Counseling and referral provisions of 42 U.S.C. 1395w–22(j)(3)(B) and 1396u–2(b)(3)(B))*—(1) *Applicability.* (i) The Department is required to comply with paragraphs (h)(2)(i) through (ii) of

this section and §§ 88.5 and 88.6 of this part.

(ii) Any State agency that administers a Medicaid program is required to comply with paragraph (h)(2)(ii) of this section and §§ 88.4, 88.5, and 88.6 of this part.

(2) *Requirements and prohibitions.* (i) Pursuant to 42 U.S.C. 1395w–22(j)(3)(B), entities to whom this paragraph (h)(2)(i) applies shall not require a Medicare Advantage organization to offer a plan that provides, reimburses for, or provides coverage of, a counseling or referral service if the organization objects to the provision of such service on moral or religious grounds.

(ii) Pursuant to 42 U.S.C. 1396u–2(b)(3)(B), entities to whom this paragraph (h)(2)(ii) applies shall not require a Medicaid managed care organization to provide, reimburse for, or provide coverage of, a counseling or referral service if the organization objects to the provision of such service on moral or religious grounds.

(i) *Advance Directives, 42 U.S.C. 1395cc(f), 1396a(w)(3), and 14406*—(1) *Applicability.* (i) The Department is required to comply with paragraph (i)(2) of this section and §§ 88.5 and 88.6 of this part with respect to the Medicare and Medicaid programs.

(ii) Any State agency that administers a Medicaid program is required to comply with paragraph (i)(2) of this section and §§ 88.4, 88.5, and 88.6 of this part with respect to its Medicaid program.

(2) *Prohibitions.* The entities to whom this paragraph (i)(2) applies shall not:

(i) Construe 42 U.S.C. 1395cc(f) or 1395a(w) to require any provider or organization, or any employee of such a provider or organization, to inform or counsel any individual regarding any right to obtain an item or service furnished for the purpose of causing, or the purpose of assisting in causing, the death of the individual, such as by assisted suicide, euthanasia, or mercy killing; or to apply to or affect any requirement with respect to a portion of an advance directive that directs the purposeful causing of, or the purposeful assisting in causing, the death of any individual, such as by assisted suicide, euthanasia, or mercy killing; or

(ii) Construe 42 U.S.C. 1396a to prohibit the application of any applicable State law which allows for an objection on the basis of conscience for any health care provider or any agent of such provider which as a matter of conscience cannot implement an advance directive.

(j) *Global Health Programs, 22 U.S.C. 7631(d)*—(1) *Applicability.* (i) The Department is required to comply with

paragraph (j)(2) of this section and §§ 88.5 and 88.6 of this part.

(ii) Any entity that receives Federal financial assistance for HIV/AIDS prevention, treatment, or care to the extent administered by the Secretary under section 104A of the Foreign Assistance Act of 1961 (22 U.S.C. 2151b–2), under Chapter 83 of Title 22 of the U.S. Code or under the Tom Lantos and Henry J. Hyde United States Global Leadership Against HIV/AIDS, Tuberculosis, and Malaria Reauthorization Act of 2008, is required to comply with paragraph (j)(2) of this section and §§ 88.4, 88.5, and 88.6 of this part.

(2) *Prohibitions.* The entities to whom this paragraph (j)(2) applies shall not:

(i) To the extent administered by the Secretary under section 104A of the Foreign Assistance Act of 1961 (22 U.S.C. 2151b–2), under Chapter 83 of Title 22 of the U.S. Code, or under the Tom Lantos and Henry J. Hyde United States Global Leadership Against HIV/AIDS, Tuberculosis, and Malaria Reauthorization Act of 2008, require applicants for assistance for HIV/AIDS prevention, treatment, or care to:

(A) Endorse or utilize a multisectoral or comprehensive approach to combating HIV/AIDS; or

(B) Endorse, utilize, make a referral to, become integrated with, or otherwise participate in any program or activity to which the applicant has a religious or moral objection, as a condition of assistance.

(ii) Discriminate against applicants in the solicitation or issuance of grants, contracts, or cooperative agreements under such provisions of law for refusing to meet any requirement described in this paragraph (j)(2).

(k) *The Helms Amendment (e.g., Consolidated Appropriations Act of 2017, Public Law 115–31, Div. J, Tit. VII, sec. 7018) (codified at 22 U.S.C. 2151b(f))*—(1) *Applicability.* The Department is required to comply with paragraph (k)(2)(i) of this section and §§ 88.5 and 88.6 of this part.

(ii) Any entity that receives Federal financial assistance under Part I of the Foreign Assistance Act of 1961, as amended (22 U.S.C. 2151b–2), to the extent administered by the Secretary, is required to comply with paragraph (k)(2)(ii) of this section and §§ 88.4, 88.5, and 88.6 of this part.

(2) *Prohibitions.* (i) The entities to whom this paragraph (k)(2)(i) applies shall not:

(A) Permit Federal financial assistance identified in (k)(1)(ii) to be used in an manner that would violation provisions in paragraphs (k)(2)(ii)(A)(*1*)

through (*5*) of this section related to abortions and involuntary sterilizations.

(B) Obligate or expend Federal financial assistance to any country or organization if the President certifies that the use of these funds by any such country or organization would violate provisions in paragraphs (k)(2)(ii)(A)(*1*) through (*5*) of this section related to abortions and involuntary sterilizations.

(ii) The entities to whom this paragraph (k)(2)(ii) applies shall not:

(A) Use such Federal financial assistance identified in (k)(1)(ii) to:

(*1*) Pay for the performance of abortions as a method of family planning;

(*2*) Motivate or coerce any person to practice abortions;

(*3*) Pay for the performance of involuntary sterilization as a method of family planning;

(*4*) Coerce or provide any financial incentive to any person to undergo sterilizations;

(*5*) Pay for any biomedical research that relates in whole or in part, to methods of, or the performance of, abortions or involuntary sterilization as a means of family planning;

(B) Obligate or expend Federal financial assistance to any country or organization if the President certifies that the use of these funds by any such country or organization would violate provisions in paragraphs (k)(2)(ii)(A)(*1*) through (*5*) of this section related to abortions and involuntary sterilizations.

(l) *Newborn and Infant Hearing Loss Screening, 42 U.S.C. 280g–1(d)*—(1) *Applicability.* The Department is required to comply with paragraph (l)(2) of this section and §§ 88.5 and 88.6 of this part.

(2) *Requirement.* The Department shall not construe 42 U.S.C. 280g–1(d) to preempt or prohibit State laws that do not require screening for hearing loss of newborn infants or young children when their parents object to the screening on the grounds that it conflicts with the parents' religious beliefs.

(m) *Medical Screening, Examination, Diagnosis, Treatment, or Other Health Care or Services, 42 U.S.C. 1396f*—(1) *Applicability.* The Department is required to comply with paragraph (m)(2) of this section and §§ 88.5 and 88.6 of this part.

(2) *Requirements and prohibitions.* The Department shall not construe anything in 42 U.S.C. 1396 *et seq.* to require a State agency that administers a State Medicaid Plan to compel any person to undergo any medical screening, examination, diagnosis, or treatment or to accept any other health care or services provided under such

plan for any purpose (other than for the purpose of discovering and preventing the spread of infection or contagious disease or for the purpose of protecting environmental health), if such person objects (or, in case such person is a child, his parent or guardian objects) thereto on religious grounds.

(n) *Occupational Illness Examinations and Tests, 29 U.S.C. 669(a)(5)*—(1) *Applicability.* (i) The Department is required to comply with paragraph (n)(2) of this section and §§ 88.5 and 88.6 of this part.

(ii) Any recipient of grants or contracts under 29 U.S.C. 669, to the extent administered by the Secretary, is required to comply with paragraph (n)(2) of this section and §§ 88.4, 88.5, and 88.6 of this part.

(2) *Requirements.* With respect to occupational illness examinations and tests, the entities to whom this paragraph (n)(2) applies shall not deem any provision of 29 U.S.C. 651 *et seq.* to authorize or require medical examination, immunization, or treatment, as provided under 29 U.S.C. 669, for those who object thereto on religious grounds, except where such is necessary for the protection of the health or safety of others.

(o) *Vaccination, 42 U.S.C. 1396s(c)(2)(B)(ii)*—(1) *Applicability.* (i) The Department is required to comply with paragraph (o)(2) of this section and §§ 88.5 and 88.6 of this part.

(ii) Any State agency that administers a pediatric vaccine distribution program under 42 U.S.C. 1396s is required to comply with paragraph (o)(2) of this section and §§ 88.4, 88.5, and 88.6 of this part.

(2) *Requirement.* The entities to whom this paragraph (o)(2) applies shall comply with applicable State law, including any such law relating to any religious or other exemption.

(p) *Specific Assessment, Prevention and Treatment Services, 42 U.S.C. 290bb–36(f), 5106i*—(1) *Applicability.* (i) The Department is required to comply with paragraphs (p)(2)(i) through (iii) of this section and §§ 88.5 and 88.6 of this part.

(ii) Any State; part of any State; public organization; or private nonprofit organization, such as a school, educational institution, juvenile justice system, substance use disorder program, mental health program, foster care system, or other child and youth support organization, designated by a State to develop or direct the State-sponsored Statewide youth suicide early intervention and prevention strategy under 42 U.S.C. 290bb–36 and that receives a grant or cooperative agreement thereunder is required to

comply with paragraph (p)(2)(iii) of this section and §§ 88.4, 88.5, and 88.6 of this part.

(iii) Any Federally recognized Indian tribe or tribal organization (as defined in the Indian Self-Determination and Education Assistance Act [25 U.S.C. 5301 *et seq.*]) or an urban Indian organization (as defined in the Indian Health Care Improvement Act [25 U.S.C. 1601 *et seq.*]) that is actively involved in the development and continuation of a tribal youth suicide early intervention and prevention strategy under 42 U.S.C. 290bb–36 and that receives a grant or cooperative agreement thereunder is required to comply with paragraph (p)(2)(iii) of this section and §§ 88.4, 88.5, and 88.6 of this part.

(iv) Any entity that receives funds under 42 U.S.C. Chapter 67, Subchapters I or III is required to comply with paragraphs (p)(2)(i) and (ii) of this section and §§ 88.4, 88.5, and 88.6 of this part.

(2) *Requirements and prohibitions.* (i) Entities to whom this paragraph (p)(2)(i) applies shall not construe the receipt of funds under or anything in 42 U.S.C. Chapter 67, Subchapters I or III as establishing any Federal requirement that a parent or legal guardian provide a child any medical service or treatment against the religious beliefs of the parent or legal guardian.

(ii) Entities to whom this paragraph (p)(2)(ii) applies shall not construe the receipt of funds under or anything in 42 U.S.C. Chapter 67, Subchapters I or III as requiring a State to find, or prohibiting a State from finding, child abuse or neglect in cases in which a parent or legal guardian relies solely or partially upon spiritual means rather than medical treatment, in accordance with the religious beliefs of the parent or legal guardian.

(iii) Entities to whom this paragraph (p)(2)(iii) applies shall not require suicide assessment, early intervention, or treatment services for youth whose parents or legal guardians object based on the parents' or legal guardians' religious beliefs or moral objections.

(q) *Religious nonmedical health care, 42 U.S.C. 1320a–1, 1320c–11, 1395i–5, 1395x(e), 1395x(y)(1), 1396a(a), 1397j–1(b), and 5106i(a)(2)*—(1) *Applicability.* (i) The Department is required to comply with paragraphs (q)(2)(i), through (iii) of this section and §§ 88.5 and 88.6 of this part.

(ii) Any State agency that administers a Medicaid or CHIP program is required to comply with paragraph (q)(2)(ii) of this section and §§ 88.4, 88.5, and 88.6 of this part.

(iii) Any entity, including a State or local government or subdivision thereof, receiving Federal financial assistance from Social Services Block Grant is required to comply with paragraphs (q)(2)(i) and (iv) of this section and §§ 88.4, 88.5, and 88.6 of this part.

(iv) Any entity, including a State or local government or subdivision thereof, receiving Federal financial assistance from the Elder Justice Block Grants is required to comply with paragraph (q)(2)(iii) of this section and §§ 88.4, 88.5, and 88.6 of this part.

(2) *Requirements and prohibitions.* (i) The entities to whom this paragraph (q)(2)(i) applies shall not fail or refuse to exempt a religious nonmedical health care institution from the Medicare requirement for peer review under 42 U.S.C. 1320cc and the Medicare requirements under 42 U.S.C. 1320a–1, for evaluation by advisory boards on capability to provide comprehensive health care services.

(ii) The entities to whom this paragraph (q)(2)(ii) applies shall not fail or refuse to exempt a religious nonmedical health care institution from the Medicaid requirements to:

(A) Meet State medical standards, under 42 U.S.C. 1396a(a)(9)(A);

(B) Be evaluated under 42 U.S.C. 1396a(a)(33), on the appropriateness and quality of medical care and services;

(C) Undergo a regular program, under 42 U.S.C. 1396(a)(31), of independent professional review, including medical evaluation, of services in an intermediate care facility for persons with mental disabilities; and

(D) Establish a utilization review plan under 42 U.S.C. 1395x(k); or the Medicare, Medicaid, and Children's Health Insurance Program requirements, under 42 U.S.C. 1320a–1, for evaluation by advisory boards on capability to provide comprehensive health services.

(iii) Pursuant to 42 U.S.C. 1397j–1(b), the entities to whom this paragraph (q)(2)(iii) applies shall not interfere with or abridge an elder's right to practice his or her religion through reliance on prayer alone for healing when this choice:

(A) Is contemporaneously expressed, either orally or in writing, with respect to a specific illness or injury which the elder has at the time of the decision by an elder who is competent at the time of the decision;

(B) Is previously set forth in a living will, health care proxy, or other advance directive document that is validly executed and applied under State law; or

(C) May be unambiguously deduced from the elder's life history.

(iv) Pursuant to 42 U.S.C. 1395i–5, the entities to whom this paragraph

(q)(2)(iv) applies shall not prohibit coverage of inpatient hospital services or post-hospital extended care services furnished an individual in a religious nonmedical health care institution or home health services furnished an individual by a religious nonmedical health care institution if an individual makes an election providing that:

(A) Such individual is conscientiously opposed to acceptance of conventional or unconventional medical items and services (including any medical screening, examination, diagnosis, prognosis, treatment, or the administration of drugs); and

(B) Acceptance of such medical treatment would be inconsistent with such individual's sincere religious beliefs.

§ 88.4   Assurance and certification of compliance requirements.

(a) *In general*—(1) *Assurance.* Except for an application or recipient to which paragraph (c) of this section applies, every application for Federal financial assistance or Federal funds from the Department to which § 88.3 of this part applies shall, as a condition of the approval, renewal, or extension of any Federal financial assistance or Federal funds from the Department pursuant to the application, provide, contain, or be accompanied by an assurance that the applicant or recipient will comply with applicable Federal health care conscience and associated anti-discrimination laws and this part.

(2) *Certification.* Except for an application or recipient to which paragraph (c) of this section applies, every application for Federal financial assistance or Federal funds from the Department to which § 88.3 of this part applies, shall, as a condition of the approval, renewal, or extension of any Federal financial assistance or Federal funds from the Department pursuant to the application, provide, contain, or be accompanied by, a certification that the applicant or recipient will comply with applicable Federal health care conscience and associated anti-discrimination laws and this part.

(b) *Specific requirements*—(1) *Timing.* Applicants or recipients who are already recipients as of the effective date of this part shall submit the assurance required in paragraph (a)(1) of this section and the certification required in paragraph (a)(2) of this section as a condition of any reapplication for funds to which this part applies, through any instrument or as a condition of an amendment or modification of the instrument that extends the term of such instrument or adds additional funds to it. Submission

may be required more frequently if the applicant or recipient fails to meet a requirement of this part.

(2) *Form and manner.* Applicants or recipients shall submit the assurance required in paragraph (a)(1) of this section and the certification required in paragraph (a)(2) of this section in the form and manner that OCR, in coordination with the relevant Department component, specifies, or shall submit them in a separate writing signed by the applicant's or recipient's officer or other person authorized to bind the applicant or recipient.

(3) *Duration of obligation.* The assurance required in paragraph (a)(1) of this section and the certification required in paragraph (a)(2) of this section will obligate the recipient for the period during which the Department extends Federal financial assistance or Federal funds from the Department to a recipient.

(4) *Compliance requirement.* Submission of an assurance or certification required under this section will not relieve a recipient of the obligation to take and complete any action necessary to come into compliance with Federal health care conscience and associated anti-discrimination laws and this part prior to, or at the time of, or subsequent to, the submission of such assurance or certification.

(5) *Condition of continued receipt.* Provision of a compliant assurance and certification shall constitute a condition of continued receipt of Federal financial assistance or Federal funds from the Department and is binding upon the applicant or recipient, its successors, assigns, or transferees for the period during which such Federal financial assistance or Federal funds from the Department are provided.

(6) *Assurances in applications.* An applicant or recipient may incorporate the assurances by reference in subsequent applications to the Department or Department component if prior assurances are initially provided in the same year.

(7) *Enforcement of assurances and certifications.* The Department, Department components, and OCR shall have the right to seek enforcement of the assurances and certifications required in this section.

(8) *Remedies for failure to make assurances and certifications.* If an applicant or recipient fails or refuses to furnish an assurance or certification required under this section, OCR, in coordination with the relevant Department component, may effect compliance by any of the remedies provided in § 88.7.

(c) *Exceptions.* The following persons or entities shall not be required to comply with paragraphs (a)(1) and (2) of this section, provided that such persons or entities are not recipients of Federal financial assistance or other Federal funds from the Department through another instrument, program, or mechanism, other than those set forth in paragraphs (c)(1) through (4) of this section:

(1) A physician, as defined in 42 U.S.C. 1395x(r), physician office, or other health care practitioner participating in Part B of the Medicare program;

(2) A recipient of Federal financial assistance or other Federal funds from the Department awarded under certain grant programs currently administered by the Administration for Children and Families, the purpose of which is either solely financial assistance unrelated to health care or which is otherwise unrelated to health care provision, and which, in addition, does not involve—

(i) Medical or behavioral research;

(ii) Health care providers; or

(iii) Any significant likelihood of referral for the provision of health care;

(3) A recipient of Federal financial assistance or other Federal funds from the Department awarded under certain grant programs currently administered by the Administration on Community Living, the purpose of which is either solely financial assistance unrelated to health care or which is otherwise unrelated to health care provision, and which, in addition, does not involve—

(i) Medical or behavioral research;

(ii) Health care providers; or

(iii) Any significant likelihood of referral for the provision of health care.

(4) Indian Tribes and Tribal Organizations when contracting with the Indian Health Service under the Indian Self-Determination and Education Assistance Act.

§ 88.5   Notice requirement.

(a) *In general.* The Department and each recipient shall post the notice text located in Appendix A to this part in accordance with paragraph (b) of this section by April 26, 2018, or with respect to new recipients, within 90 days after becoming a recipient.

(b) *Specific requirements.* The notice text required in paragraph (a) of this section shall appear:

(1) On the Department's and each recipient's website(s), and

(2) In a prominent and conspicuous physical location in every Department and recipient establishment where notices to the public and notices to their workforce are customarily posted to permit ready observation. The text of

the notice shall be large enough to be easily read. The Department and each recipient shall take steps to ensure that such notices are not altered, defaced, or covered by other material.

(c) *Factors in evaluation of compliance.* In evaluating a recipient's compliance with the requirements of this part, OCR will take into account whether the recipient has provided the notice text in paragraph (a) of this section:

(1) In a personnel manual or other substantially similar document for members of the recipient's workforce;

(2) In applications for membership in the recipient's workforce or for participation in a service, benefit, or other program, including for training or study; and

(3) In a student handbook or other substantially similar document for students participating in a program of training or study, including for post-graduate interns, residents, and fellows.

(d) *Combined nondiscrimination notices.* The Department and each recipient may post the notice text provided in appendix A of this part along with the content of other notices only if it retains all of the language provided in appendix A of this part in an unaltered state.

§ 88.6   Compliance requirements.

(a) *In general.* The Department and each recipient has primary responsibility to ensure that it is in compliance with Federal health care conscience and associated anti-discrimination laws and this part, and shall take steps to eliminate any violations of the Federal health care conscience and associated anti-discrimination laws and this part. If a sub-recipient is found to have violated the Federal health care conscience and associated anti-discrimination laws, the recipient from whom the sub-recipient received funds shall be subject to the imposition of funding restrictions and other appropriate remedies available under this part.

(b) *Records and information.* The Department, each recipient, and each sub-recipient shall maintain complete and accurate records evidencing compliance with Federal health care conscience and associated anti-discrimination laws and this part, and afford OCR, upon request, reasonable access to such records and information in a timely manner to the extent OCR finds necessary to determine compliance with the Federal health care conscience and associated anti-discrimination laws and this part.

(c) *Cooperation.* The Department, each recipient, and each sub-recipient

shall cooperate with any compliance review, investigation, interview, or other part of OCR's enforcement process, which may include the production of documents, the participation in interviews, the response to data requests, and the making available of premises for inspection where relevant. Failure to cooperate may result in an OCR referral to the Department of Justice for further enforcement in Federal court or otherwise.

(d) *Reporting requirement.* If a recipient or sub-recipient is subject to an OCR compliance review, investigation, or complaint filed with OCR regarding the recipient's or sub-recipient's compliance with Federal health care conscience and associated anti-discrimination laws, the recipient or sub-recipient must inform any Departmental funding component of such review, investigation, or complaint and must, in any application for new or renewed Federal financial assistance or Departmental funding, disclose the existence of such compliance review or investigation, and must also report on such applications, or in a separate writing with such applications, the existence of any such complaints filed with OCR for five years from such complaints' filing.

(e) *Intimidating or retaliatory acts prohibited.* Neither the Department nor any recipient or sub-recipient shall intimidate, threaten, coerce, or discriminate against any person, entity, or health care entity for the purpose of interfering with any right or privilege under the Federal health care conscience and associated anti-discrimination laws or this part, or because such person, entity, or health care entity has made a complaint or participated in any manner in an investigation or review under the Federal health care conscience and associated anti-discrimination laws or this part.

§ 88.7   Enforcement authority.

(a) *In general.* OCR has been delegated the authority to enforce the Federal health care conscience and associated anti-discrimination laws, which includes the authority to:

(1) Receive and handle complaints;

(2) Initiate compliance reviews;

(3) Conduct investigations;

(4) Supervise and coordinate compliance within the Department;

(5) In coordination with the relevant component or components of the Department, make enforcement referrals to the Department of Justice; and

(6) In coordination with the relevant component or components of the Department, take other appropriate remedial action as the Director of OCR deems necessary and as allowed by law to overcome the effects of violations of Federal health care conscience and associated anti-discrimination laws and this part.

(b) *Complaints.* Any entity, health care entity, or any person, individually, as a member of a class, on behalf of others, or on behalf of an entity, may file a complaint with OCR alleging any potential violation of Federal health care conscience and associated anti-discrimination laws or this part. OCR shall coordinate handling of complaints with the relevant Department component. The complaint filer is not required to be the person, entity, or health care entity whose rights under the Federal health care conscience and associated anti-discrimination laws or this part have been potentially violated.

(c) *Periodic compliance reviews.* OCR may from time to time conduct compliance reviews or use other similar procedures as necessary to permit OCR to investigate and review the practices of the Department, Department components, recipients, and sub-recipients to determine whether they are complying with Federal health care conscience and associated anti-discrimination laws and this part. OCR may conduct these reviews in the absence of a complaint.

(d) *Investigations.* OCR shall make a prompt investigation, whenever a compliance review, report, complaint, or any other information found by OCR indicates a threatened, potential, or actual failure to comply with Federal health care conscience and associated anti-discrimination laws or this part. The investigation should include, where appropriate, a review of the pertinent practices, policies, communications, documents, compliance history, the circumstances under which the possible noncompliance occurred, and other factors relevant to determining whether the Department, Department component, recipient, or sub-recipient has failed to comply. OCR shall use fact-finding methods including, but not limited to, site visits, interviews with complainants, the Department component, recipients, sub-recipients, or third-parties, and written data or discovery requests. OCR may seek the assistance of any State agency.

(e) *Destruction of evidence.* Consistent with § 88.6(b) and (c), a Department component, recipient, or sub-recipient that knowingly or recklessly destroys evidence potentially relevant to an OCR investigation or compliance review that is ongoing or reasonably anticipated shall be in violation of this part.

(f) *Failure to respond.* Absent good cause, a party's failure to respond to a request for information or a data or document request within 45 days of OCR's request, shall constitute a violation of this part.

(g) *Related administrative or judicial proceeding.* Consistent with other applicable Federal laws, testimony and other evidence obtained in an investigation or compliance review conducted under this part may be used by the Department for, and offered into evidence in, any administrative or judicial proceeding related to this part.

(h) *Supervision and coordination.* If as a result of an investigation, compliance review, or other enforcement activity, OCR determines that a Department component appears to be in noncompliance with its responsibilities under Federal health care conscience and associated anti-discrimination laws or this part, OCR will undertake appropriate action with the component to assure compliance. In the event that OCR and the Department component are unable to agree on a resolution of any particular matter, the matter shall be submitted to the Secretary for resolution. OCR may from time to time delegate to officials of the Department responsibilities in connection with the effectuation of Federal health care conscience and associated anti-discrimination laws and this part, including the achievement of effective coordination and maximum uniformity within the Department.

(i) *Referral to the Department of Justice.* If as a result of an investigation, compliance review, or other enforcement activity, OCR determines that a recipient or sub-recipient is not in compliance with the Federal health care conscience and associated anti-discrimination laws or this part, OCR may, in coordination with the relevant Department component make referrals to the Department of Justice for further enforcement in Federal court or otherwise.

(j) *Resolution of matters.* (1) If an investigation or compliance review reveals that no action is warranted, OCR will so inform the subject of the complaint or review and complainant, if any, in writing.

(2) If an investigation or compliance review indicates a failure to comply with Federal health care conscience and associated anti-discrimination laws or this part, OCR will so inform the relevant parties and the matter will be resolved by informal means whenever possible. Attempts to resolve matters informally shall not preclude OCR from simultaneously pursuing any action described in § 88.7(j)(3).

(3) If there appears to be a failure or threatened failure to comply with Federal health care conscience and associated anti-discrimination laws or this part, compliance with these laws and this part may be effected by the following actions, taken in coordination with the relevant Department component:

(i) Temporarily withholding cash payments, in whole or in part, pending correction of the deficiency;

(ii) Denying use of Federal financial assistance or other Federal funds from the Department, including any applicable matching credit, in whole or in part;

(iii) Wholly or partly suspending award activities;

(iv) Terminating Federal financial assistance or other Federal funds from the Department, in whole or in part;

(v) Withholding new Federal financial assistance or other Federal funds from the Department, in whole or in part, administered by or through the Secretary for which an application or approval is required, including renewal or continuation of existing programs or activities or authorization of new activities;

(vi) Referring the matter to the Attorney General for proceedings to enforce any rights of the United States, or obligations of the recipient or sub-recipient, created by Federal law; and

(vii) Taking any other remedies that may be legally available.

§ 88.8   Relationship to other laws.

Nothing in this part shall be construed to preempt any Federal, State, or local law that is equally or more protective of religious freedom and moral convictions. Nothing in this part shall be construed to narrow the meaning or application of any State or Federal law protecting free exercise of religious beliefs or moral convictions.

§ 88.9   Rule of construction.

This part shall be construed in favor of a broad protection of free exercise of religious beliefs and moral convictions, to the maximum extent permitted by the terms of the Federal health care conscience and associated antidiscrimination statutes implemented by the Constitution.

§ 88.10   Severability.

Any provision of this part held to be invalid or unenforceable either by its terms or as applied to any person, entity, or circumstance shall be construed so as to continue to give the maximum effect to the provision permitted by law, unless such holding shall be one of utter invalidity or unenforceability, in which event such provision shall be severable from this part, which shall remain in full force and effect to the maximum extent permitted by law. A severed provision shall not affect the remainder of this part or the application of the provision to other persons or entities not similarly situated or to other, dissimilar circumstances.

Appendix A to Part 88—Notice Concerning Federal Health Care Conscience and Associated Anti-Discrimination Protections

[Name of recipient, the Department, or Department component] complies with Federal health care conscience and associated anti-discrimination laws and does not exclude, treat adversely, coerce, or otherwise discriminate against persons or entities on the basis of their religious beliefs or moral convictions. You have the right to decline to participate in, refer for, undergo, or pay for certain health care-related treatments, research, or services (such as abortion or assisted suicide, among others) which violate your conscience, religious beliefs, or moral convictions under Federal law.

If you believe that [Name of recipient, the Department, or Department component] has failed to accommodate your conscientious, religious, or moral objection, or has unlawfully discriminated against you on those grounds, you can file a conscience and religious freedom complaint with the U.S. Department of Health and Human Services, Office for Civil Rights, electronically through the Office for Civil Rights Complaint Portal, available at *https://ocrportal.hhs.gov/ocr/portal/lobby.jsf* or by mail or phone at: U.S. Department of Health and Human Services, 200 Independence Avenue SW, Room 509F, HHH Building, Washington, DC 20201, 1–800–368–1019, 800–537–7697 (TDD). Complaint forms and more information about Federal health care conscience and associated anti-discrimination laws are available at *http://www.hhs.gov/conscience.*

Dated: January 18, 2018.

Eric D. Hargan,

Acting Secretary, Department of Health and Human Services.

[FR Doc. 2018–01226 Filed 1–19–18; 11:15 am]

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KEY STATE ISSUES

CHA Sponsors

AB 2112 (Santiago, D-Los Angeles) would require the Department of Health Care Services to apply for federal grant funds to develop a statewide community-based behavioral health crisis response plan.

AB 2190 (Reyes, D-Grand Terrace), as amended April 16, would allow specified hospitals to request an extension of the hospital seismic mandate. While 90 percent of California hospitals have achieved seismic compliance for 2020, some hospitals with SPC-1 buildings need more time due to construction, financial or other delays. For hospitals retrofitting or replacing, the deadline would be extended to July 1, 2022. For those rebuilding, the deadline would be extended to January 1, 2025. The bill also includes benchmarks and penalties to ensure the hospitals stay on track.

CHA-cosponsored AB 1795 (Gipson, D-Carson) would allow specially trained paramedics to transport patients who meet specific criteria to a locally designated behavioral health treatment facility or sobering center.

AB 2798 (Maienschien, R-San Diego) would establish time frames for the California Department of Public Health (CDPH) to process hospital applications for new or modified services. If CDPH does not meet its time frames for processing applications to expand services, the services will be deemed licensed for 18 months, allowing CDPH to complete its review. AB 2798 would also require CDPH to fully automate the application process, develop an assistance unit to help hospitals with the process and publish performance metrics.

- Read more

Administrative Regulations

AB 1225: (Patterson, R-Fresno) Support
IN SENATE HEALTH COMMITTEE.

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Would require the California Department of Public Health to annually brief the Legislature on its efforts to update Title 22 regulations and would repeal the regulation requiring hospitals to publicly post their program flexibility documents.

Clinical Laboratory Services

AB 251: (Bonta, D-Alameda) Oppose
ON SENATE INACTIVE FILE.

Would establish a medical loss ratio for chronic dialysis clinics that would require the clinics to spend at least 85 percent of their revenue on patient care. Clinics not meeting the ratio would be required to issue rebates to non-government payers in an amount sufficient to meet the minimum spending of 85 percent.

AB 2281: (Irwin, D-Thousand Oaks) Support
PASSED ASSEMBLY APPROPRIATIONS COMMITTEE APRIL 18.

Would allow medical laboratory technicians to perform certain laboratory testing procedures — including blood smear reviews, microscopic urinalysis and moderately complex blood typing — that are currently permissible under federal law.

County Health Care Programs

AB 1250: (Jones-Sawyer, D-Los Angeles) Oppose
REFERRED TO SENATE RULES COMMITTEE.

Would establish specific standards for counties contracting for services, including health care services. The county would be required to demonstrate that the proposed contract would result in cost savings to the county and show that the contract does not displace county workers. The hospital would be required to submit an enormous amount of paperwork to the county, including monthly reports showing the names of employees and subcontractors who provided services under the contract and their hourly rates, which would be made public.

Emergency Services

AB 263: (Rodriguez, D-Pomona) Follow, Hot
IN SENATE RULES COMMITTEE

Would require the Emergency Medical Services Authority to post a report on its website about violent incidents involving on-duty emergency medical services providers. The bill would also

establish new meal and rest period rules for employees of emergency medical services providers who are required to remain on call during those periods.

AB 1795: (Gipson, D-Carson) Cosponsor

PASSED ASSEMBLY HEALTH COMMITTEE APRIL 17. TO BE HEARD IN ASSEMBLY APPROPRIATIONS COMMITTEE.

Would authorize a local emergency medical services agency to allow specially trained paramedics to transport patients who meet specific criteria to a locally designated behavioral health treatment facility or sobering center, allowing for more direct access to appropriate care and increasing efficiency for local emergency response systems.

- Talking Points

Employment

AB 2069: (Bonta, D-Alameda) Oppose

TO BE HEARD IN ASSEMBLY LABOR AND EMPLOYMENT COMMITTEE APRIL 25.

Would prohibit an employer from discriminating against an applicant or employee for using medical marijuana, but would not prohibit an employer from disciplining an employee for reporting to work under the influence or using medical marijuana at the worksite. The discrimination prohibition would not apply if employing the person would result in loss of a monetary or licensing benefit under federal law.

SB 1286: (Pan, D-Sacramento) Follow, Hot

IN SENATE BUSINESS, PROFESSIONS AND ECONOMIC DEVELOPMENT COMMITTEE

Would increase, from one to four, the number of pharmacy technicians a pharmacist may supervise.

SB 1442: (Newman, D-Fullerton) Follow, Hot

PASSED SENATE BUSINESS, PROFESSIONS AND EXONOMIC DEVELOPMENT APRIL 16. TO BE HEARD IN SENATE APPROPRIATIONS COMMITTEE.

Would prohibit a pharmacy from requiring a pharmacist employee to work unless assisted at all times by another employee.

Health Facility Licensing

AB 2798: (Maienschein, R-San Diego) Sponsor

PASSED ASSEMBLY HEALTH COMMITTEE APRIL 17. TO BE HEARD IN ASSEMBLY APPROPRIATIONS COMMITTEE.

Would establish time frames for the California Department of Public Health (CDPH) to process hospital applications for new or modified services. If CDPH does not meet its time frames to process applications to expand services, the services will be deemed licensed for 18 months, allowing CDPH to complete its review. AB 2798 would also require CDPH to fully automate the application process, develop an assistance unit to help hospitals with the process and publish performance metrics.

- AB 2798 Letter

AB 2874: (Thurmond, D-Richmond)Oppose
PASSED ASSEMBLY HEALTH COMMITTEE APRIL 17. TO BE HEARD IN ASSEMBLY JUDICIARY COMMITTEE APRIL 24.

Would require hospitals to notify the attorney general at least 180 days in advance of closing a facility or reducing or eliminating services, and obtain the attorney general's written consent.

SB 1288: (Leyva, D-Chino)Oppose
PASSED SENATE HEALTH COMMITTEE APRIL 18. TO BE HEARD IN SENATE APPROPRIATIONS COMMITTEE.

Would establish a separate penalty structure for citations issued by the California Department of Public Health for violation of nurse-to-patient ratio regulations. Penalties for the first and second violations would range from $2,500 to $25,000, the third violation's penalty would be $75,000, the fourth violation's penalty would range from $75,000 to $100,000 and all subsequent violations would be assessed $125,000.

SB 1373: (Stone, R-Temecula)Oppose
TO BE HEARD IN SENATE HEALTH COMMITTEE APRIL 25.

Would require general acute care hospitals to have one pharmacist for every 100 licensed beds, pro-rated for more than 100 beds. Hospitals with fewer than 100 beds would be required to have at least one part-time pharmacist.

- SB 1373 Letter

Homeless Patients

SB 1152: (Hernandez, D-Azusa)Oppose, unless amended
PASSED SENATE HEALTH COMMITTEE APRIL 18. TO BE HEARD IN SENATE APPROPRIATIONS COMMITTEE.

Would require hospitals to implement a specified homeless patient discharge planning policy that includes obtaining written acceptance from homeless shelters before discharging patients to them,

ensuring the patient is wearing weather-appropriate clothing, releasing homeless patients only during daytime hours and providing appropriate medications. Hospitals would be required to develop a written plan for coordinating services and referrals for homeless patients with the county behavioral health agency, health care and social services agencies in the region, health care providers and nonprofit social services providers.

- SB 1152 Letter

Labor

AB 1603: (Ridley-Thomas, D-Los Angeles) Oppose
ON SENATE INACTIVE FILLE.

Would expand the definition of "public employee" to include any person jointly employed by a public agency and any other employer at: a clinic or hospital operated for the purpose of medical education, as described in Section 2401(a) of the Business and Professions Code; a nonprofit community clinic, such as a primary care clinic or charitable clinic, as described in Section 1204(a) of the Health and Safety Code; or a county hospital. Would authorize a labor union representing employees at the public entity to include the jointly employed individuals in the bargaining unit without the consent of the public agency or joint employer.

SB 349: (Lara, D-Bell Gardens) Oppose
ON ASSEMBLY INACTIVE FILE.

Would establish staffing ratios in dialysis clinics for nurses, technicians and social workers. Would require the California Department of Public Health to issue regulations establishing a minimum transition time between patients by Jan. 1, 2020. In the absence of regulations, the minimum transition time would be 45 minutes.

Managed Health Care

AB 3087: (Kalra, D-San Jose) Oppose
TO BE HEARD IN ASSEMBLY HEALTH COMMITTEE APRIL 24.

Would establish a new state commission to set reimbursement rates for health plans, hospitals, physicians, physician groups and other health care providers based on a multiplier of Medicare rates.

- Talking Points
- AB 3087 Letter
- Read more

SB 538: (Monning, D-Carmel) Oppose
IN ASSEMBLY HEALTH COMMITTEE.

Would prohibit certain contract provisions between hospitals and payers, including prohibiting hospitals from requiring multiple facilities in their system to be included in a contract.

SB 562: (Lara, D-Bell Gardens / Atkins, D-San Diego) Follow, Hot
IN ASSEMBLY RULES COMMITTEE.

Would establish the Californians for a Healthy California Act, a comprehensive universal single-payer health care coverage program and health care cost control system. The bill would cover all medical care for residents who would be required to purchase insurance, eliminate co-pays and deductibles, and allow Californians to choose their doctors. A nine-member board, appointed by the Governor and Legislature, would oversee the health system. This bill does not include a funding mechanism.

Medical Records

SB 244: (Lara, D-Los Angeles) Neutral, as amended
ON ASSEMBLY INACTIVE FILE.

Intended to ensure that public agencies — including county and district hospitals — do not use personal information in a manner that might harm undocumented immigrants. This bill would establish a blanket prohibition on using or disclosing personal information for any reason except to care for the patient or as required by law. However, the bill would allow public hospitals to continue to use and disclose patient information in accordance with health information privacy laws.

Medical Staff

AB 893: (E. Garcia, D-Coachella) Follow, Hot
IN SENATE HEALTH COMMITTEE.

Would authorize local public health agencies and others to send to the Office of Statewide Health Planning and Development data on the number of graduate medical slots necessary to meet current and future physician needs in Imperial County and other underserved counties. The bill is unrelated to physician employment by a hospital.

AB 1790: (Salas, D-Bakersfield) Oppose unless amended
TO BE HEARD IN ASSEMBLY BUSINESS AND PROFESSIONS COMMITTEE APRIL 17.

Would require all hospitals and licensed clinics, by January 1, 2020, to develop, adopt and implement policies and procedures to prevent, diagnose and treat Coccidioidomycosis infections,

commonly known as Valley Fever. Providers would also be required to include training for staff who provide direct patient care.

SB 790: (McGuire, D-Healdsburg) Neutral
ON ASSEMBLY INACTIVE FILE.

Would prohibit a manufacturer of a drug or device intended to be used with a drug or biologic from providing anything of value to hospitals or other health care providers, with limited exceptions. Would also prohibit manufacturers and their representatives from providing a fee or other economic benefit to health care providers to participate in research, with limited exceptions. Exceptions include sponsorship of significant educational seminars, bona fide clinical trials and support to free clinics.

Mental Health

AB 1136: (Eggman, D-Stockton) Oppose
IN SENATE HEALTH COMMITTEE.

Would require the California Department of Public Health to apply for a grant to develop a real-time database showing available beds in inpatient psychiatric facilities, crisis stabilization units, residential community mental health facilities and residential substance use disorder treatment facilities. This bill exempts state hospitals.

AB 2018: (Maienschein, R-San Diego) Support
TO BE HEARD IN ASSEMBLY APPROPRIATIONS COMMITTEE APRIL 25.

Would require the Office of Statewide Health Planning and Development to expand the loan forgiveness and scholarships in its five-year education and training program in return for a commitment to employment in California's public mental health system. It would also require the Health Professions Education Foundation to develop guidelines for early loan repayment for psychiatric trainees who have committed to practice in county mental health plans or county mental health plan contracted services, and who are enrolled in specialized community psychiatry training tracks or fellowships.

AB 2112: (Santiago, D-Los Angeles) Sponsor
TO BE HEARD IN ASSEMBLY APPROPRIATIONS COMMITTEE APRIL 25.

Would require the Department of Health Care Services to apply for federal grant funds made available in the 21st Century Cures Act to develop a statewide community-based behavioral health

crisis response plan. This bill was developed at the direction of the CHA/National Alliance on Mental Illness Leading the Way Coalition.

SB 237: (Hertzberg, D-Van Nuys) Follow, Hot
IN ASSEMBLY TRANSPORTATION COMMITTEE.

Would modify the process of arresting individuals by allowing law enforcement, in lieu of processing them through the county jail and going before a magistrate, to transport the individual to a hospital or other care setting for mental health evaluation and treatment for cooccurring substance use disorder treatment.

SB 1113: (Monning, D-Carmel) Support
TO BE HEARD IN SENATE APPROPRIATIONS COMMITTEE APRIL 23.

Would direct the Mental Health Services Oversight and Accountability Commission to establish a framework and voluntary standards for addressing mental health issues in the workplace.

SB 1363: (Moorlach, R-Costa Mesa) Support
PASSED SENATE APPROPRIATIONS COMMITTEE APRIL 16. TO BE HEARD ON SENATE FLOOR.

Would create the National Alliance on Mental Illness, California Voluntary Tax Contribution Fund and allow taxpayers to designate on their Form 540 an exact dollar to be donated to the fund.

Nursing

AB 2759: (Santiago, D-Los Angeles) Oppose
IN ASSEMBLY HEALTH COMMITTEE AND ASSEMBLY BUSINESS AND PROFESSIONS COMMITTEE.

Would prohibit clinics and health facilities that receive public funds from excluding students from clinical placement if they are part of an approved public community college associate degree in nursing program. The bill would also prohibit hospitals from considering the fact that an individual holds a Bachelor of Science degree in nursing (rather than an associate degree) when making hiring, compensation and other employment decisions.

Public Health

AB 2846: (Gipson, D-Carspn) Follow, Hot
PASSED ASSEMBLY HEALTH COMMITTEE APRIL 17. TO BE HEARD IN ASSEMBLY APPROPRIATIONS COMMITTEE.

Would appropriate $10 million to cover hospital costs for undocumented immigrants who are candidates for an organ transplant and have no insurance or government-provided health care benefit. The bill does not fund post-transplant care or medications.

SB 43: (Hill, D-San Mateo) Oppose, unless amended
IN ASSEMBLY HEALTH COMMITTEE.

Would require hospitals and clinical labs, beginning July 1, 2018, to conduct and submit to the California Department of Public Health an annual antibiogram (a summary of all the antibiotic resistant infections in the previous year). Hospitals are currently creating antibiograms as part of their antibiotic stewardship programs. The department would be required to publish an annual report on the occurrence of antibiotic resistant infections and deaths, based on available data. The report would analyze the data by facility type, type of resistant infection and geography; facility names would not be included.

Seismic

AB 2190: (Reyes, D-Grand Terrace) Sponsor
TO BE HEARD IN ASSEMBLY HEALTH COMMITTEE APRIL 24.

Would allow specified hospitals to request an extension of the hospital seismic mandate. While 90 percent of California hospitals have achieved seismic compliance for 2020, some hospitals with SPC-1 buildings need more time due to construction, financial or other delays. For hospitals retrofitting or replacing, the deadline would be extended to July 1, 2022. For those rebuilding, the deadline would be extended to January 1, 2025. AB2190 also includes benchmarks and penalties to ensure the hospitals stay on track.

Skilled-Nursing Facilities

AB 1335: (Kalra, D-San Jose) Follow, Hot
IN SENATE HEALTH COMMITTEE.

Would redefine, with respect to class AA violations in skilled-nursing facilities, the causal connection that must exist between the violation and the death of a resident. It would also create a new subcategory of class A violations for situations not meeting the requirements of a class AA violation but where a resident death has occurred.

SB 481: (Pan, D-Sacramento) Sponsor
REFERRED TO ASSEMBLY JUDICIARY COMMITTEE.

Sponsored by CHA, this bill would address deficiencies identified in CANHR v. Chapman. Specifically, it would strengthen the current process for notifying skilled-nursing facility residents who lack capacity and have no legal representative of recommended medical interventions requiring informed consent.

Tax Issues

ACA 22: (McCarty, D-Sacramento / Ting, D-San Francisco) Oppose
IN ASSEMBLY RULES COMMITTEE

Proposes a constitutional amendment that would impose a surcharge of 10 percent on the net income over $1 million for all corporations. Further, the proposal would allow the Legislature to increase or decrease the surcharge with a two-thirds vote of each house. Revenues from the surcharge would be allocated to public schools and for purposes determined by the Legislature to provide fiscal benefits to lower- and middle-income Californians. The provisions would be effective for taxable years beginning on or after Jan. 1, 2018.

SB 1398: (Skinner, D-Berkeley) Oppose
IN SENATE GOVERNANCE AND FINANCE COMMITTEE

Would raise tax rates for some publicly held corporations from 8.84 percent to 13 percent based on the corporation's compensation ratio (the amount of compensation to the highest paid employee divided by the amount equal to the median compensation of all employees).

Women & Children

AB 1801: (Nazarian, D-North Hollywood) Oppose unless amended
PASSED ASSEMBLY HEALTH COMMITTEE APRIL 17. TO BE HEARD IN ASSEMBLY APPROPRIATIONS COMMITTEE.

Would require hospitals with perinatal services to test every newborn for cytomegalovirus (CMV) within 21 days of birth and provide parents with information on congenital CMV.

April 25, 2018

TO: CNO Advisory Committee Members

FROM: Gail Blanchard-Saiger, Vice-President & Counsel, Labor & Employment

SUBJECT: Workplace Violence Prevention

SUMMARY

Cal/OSHA Healthcare Workplace Violence Prevention regulations were finalized in 2016, after two years of the regulatory process. The regulations went into effect on April 1, 2017; however the majority of the requirements had a delayed compliance date of April 1, 2018. Now that the regulations are fully in force, CHA staff will lead a discussion as to how hospitals are implementing the regulations, will review member resources, provide an update on the Cal/OSHA reporting component as well as share recent information regarding investigations and compliance.

ACTION REQUESTED

➢ *Committee discussion*

Attachments: Information from CHA Website
               Workplace Violence Reporting Algorithm
               PowerPoint Presentation slides

GBS:br

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**CALIFORNIA
HOSPITAL
ASSOCIATION**

Leadership in Health Policy and Advocacy

Workplace Violence Prevention

California hospitals take very seriously the duty to provide a safe and healthy environment for patients, staff and visitors. As a result of SB 1299(2014), Cal/OSHA has adopted comprehensive healthcare workplace violence prevention regulations. Those regulations require hospitals and other specified health care employers to adopt a workplace violence prevention plan that includes risk assessments, reporting and recording obligations, training and other components. This is in addition to other statutory obligations such as Health and Safety Code 1257.7, which requires hospitals to have a safety and security plan. As the issue of health care workplace violence is complex, it is recommended that hospitals have a multi-disciplinary team working to reduce violent incidents.

Resources

Forms, Policies, Checklists & Tools

The materials posted on this web page are intended to provide helpful information. CHA has not reviewed the materials for accuracy and does not endorse them. These materials are not meant to be used, nor should they be used, as a substitute for legal advice. CHA advises that you consult your attorney prior to adopting or implementing any policy or procedure.

Forms

- Workplace Violence Incident Case Number Assignment Form
- Violent Incident Log
- Hospital Guard Review Form
- Investigation of Workplace Violence Incidents

Policies

- Workplace Violence Prevention Policy
- Disruptive Behavior Policy

Tools

- CHA Emergency Department Toolkit
- Incivility, Bullying and Workplace Violence Prevention Tools, American Nurses Association

- Workplace Violence Toolkit, Emergency Nurses Association
- Healthcare Workplace Violence Hazards eTool, OSHA
- Healthcare Facility Workplace Violence Risk Assessment Tool, American Society for Healthcare Risk Management
- Disruptive Behavior Algorithm
- Workplace Violence Prevention Toolkit, Washington State Hospital Association
- Toolkit for Mitigating Violence in the Workplace
- Healthcare Facility Workplace Violence Risk Assessment Tool
- Tool for Evaluating Risk for Violence Among Patients with Mental Illness
- Workplace Violence Prevention Toolkit, Minnesota Hospital Association

Training

- Safe-at-Work Program, Johns Hopkins
- Documentation of Workplace Violence Prevention Training
- Workplace Violence Prevention Training for Nurses

Reporting

- Workplace Violence Incident Reporting Algorithm
- Sample Violent Incident Reporting Form (Internal)

Resources

- Evaluation of Safety and Security Programs to Reduce Violence in Health Care Settings, NIOSH
- Workplace Violence in Healthcare Settings: Risk Factors and Protective Strategies, Gillespie, G.L., et al.
- Preventing Violence in the Healthcare Setting, The Joint Commission
- Behaviors that Undermine a Culture of Safety, The Joint Commission
- Workplace Violence Resources, Emergency Nurses Association
- Violence in Healthcare Facilities, ECRI Institute
- Workplace Violence Prevention Resources, Washington State Dept of Labor & Industries
- Guide to Preventing Health Care Workplace Violence, OR-OSHA
- Enforcement Procedures for Investigating Workplace Violence Incidents, OSHA
- How to Prevent Violence on the Job for Home Health Workers, NIOSH
- Workplace Violence Prevention Program, US Department of Labor
- Workplace Violence Prevention in Healthcare Facilities, Washington State Dept of Labor & Industries

- Workplace Violence Prevention Topic Collection, ASPR
- Preventing Violence in Healthcare Gap Analysis, Minnesota Hospital Association

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FOR MEMBERS

Cal/OSHA Releases Workplace Violence Prevention FAQs, Annual Report

Save the date for CHA's annual Hospital Employee Safety and Workers' Compensation Seminar, April 4 and 10

JANUARY 30, 2018 | Gail Blanchard-Saiger

Last week, the California Division of Occupational Safety and Health (Cal/OSHA) released frequently asked questions that address some questions raised as health care employers continue to prepare for full implementation of the health care workplace violence prevention regulations beginning April 1. As discussed in previous articles, while some requirements went into effect on April 1, 2017, the majority of the regulations' requirements take effect April 1, 2018.

The frequently asked questions include information on the regulations' scope, as well as recording and reporting obligations. CHA has engaged Jeff Tanenbaum, partner at Nixon Peabody, to provide a white paper that includes several issues that not addressed in the FAQs. The white paper should be ready for distribution prior to April 1.

CHA Provides Update on OSHA Injury and Illness Electronic Reporting Requirement

OCTOBER 4, 2017 | Gail Blanchard-Saiger

The federal Occupational Safety and Health Administration (Fed/OSHA) electronic injury and illness reporting requirement originally required most employers to submit OSHA forms 300, 300A and 301 electronically beginning July 1. California has its own safety and health program, but the federal rules apply differently, which is causing confusion among employers. Cal/OSHA has drafted a proposed rulemaking package revising Title 8 sections 14300.35, 14300.36 and 14300.41, which is currently under review and not yet available on the agency's website. Reportedly, the regulations will require California employers to use the federal portal; Cal/OSHA will not create a state-specific portal.

Workplace Violence Reporting Algorithm

Start »»

Did the incident involve:

1. Use of physical force against an employee by a patient or a person accompanying a patient that resulted in, or had a high likelihood of resulting in, injury requiring more than first aid or psychological trauma or stress? §3342(g)(1)(A), or

2. Use of firearm or other dangerous weapon? §3342(g)(1)(B)

No　　　　　　　　　　　　　　**Yes**

Cal/OSHA reporting not required but the incident must be included on the violent incident log § 3342(d)

Did incident result in:
- Fatality, or
- Hospitalization over 24 hours for other than observation, or
- Loss of limb, or
- Serious degree of permanent disfigurement? §3342(g)(2)(A)

No　　　　　　　　　**Yes**

Did incident result in:
- Use of firearm/dangerous weapon, or
- Threat to safety/health/welfare where death or serious harm could result. § 3342(g)(2)

No　　　　　　　　　**Yes**

Report to Cal/OSHA within 72 hours

Report to Cal/OSHA within 24 hours　← **AND** —　**Per §342: Report to District Office of Division of Occupational Safety & Health within 8 Hours**

For purposes of the regulation, "Workplace Violence" is defined as:

- The threat or use of physical force against an employee that results in, or has a high likelihood of resulting in, injury, psychological trauma or stress, regardless of whether the employee sustains an injury; or
- An incident involving the threat or use of a firearm or other dangerous weapon, including the use of common objects as weapons, regardless of whether the employee sustains in an injury.
- The term "Workplace Violence" shall not include lawful acts of self-defense or defense of others. § 3342(b)
- Note, however, that the definition of reportable incidents of workplace violence is narrower. § 3342(g)(1)

UPDATED: 4-20-18

Workplace Violent Incident Online Reporting System
Results for 07/01/17 – 09/30/17

- Facilities that have submitted one or more reports – 252
- Total number of incidents – 2,054
- Number of incidents by license category:

License Category	Number Incidents	Percent
General Acute Care Hospital	1892	92%
Acute Psychiatric Hospital	162	8%
Total Incidents	2054	100%

- proportions of General Acute Care Hospital (GACH) and Acute Psychiatric Hospital (APH) facilities submitting a report:

Category	# facilities	# registered	# submitted report	# submitted report/# facilities	# submitted report/ # registered
GACH	449	434	230	51%	53%
APH	33	32	22	67%	69%

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Workplace Violent Incident Online Reporting System
Preliminary Results for 07/01/17 – 03/15/18

- Facilities that have submitted one or more reports – 320

- Total number of incidents – 5,675 (this number excludes duplicate reports, reports submitted in error, and reports that have been replaced by a revised report)

<u>Notes:</u>

✓ These summaries do not include incidents at Department of State Hospital (DSH) facilities;

✓ These reports contain self-reported data, therefore there's likely inconsistency in reporting between facilities, because hospitals have to report incidents in which:

  ✓ there is an injury (which has a clear definition for reporting purposes), or

  ✓ there is a high likelihood of injury regardless of whether an employee sustains an injury (each hospital's assessment of "high likelihood of injury" could be very different).

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Hospital Inspections

Fifty-four inspections conducted:

- By Enforcement Offices – Regions 1 - 4
- To investigate Complaints, Serious Injuries/Illness, Fatalities
- Between April 1, 2017 to March 13, 2018
- Of establishments having NAICS codes 622110 to 622310

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Workplace Violence Violations

8 CCR § 3342:

- 3342 (d) Violent incident log: 0 violations cited

- 3342 (h) Recordkeeping: 0 violations cited

- 3342 (g) Reporting requirements for hospitals: 2 violations cited

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Hospital Inspections - Other Violations cited

	Section Cited	Number of Violations Cited
3203	Injury and Illness Prevention Program	5
342	Failure to Report Serious Injury or Fatality	4
5193	Bloodborne Pathogens	4
3362	Sanitation	3
5120	Safe Patient Handling	3
3314	Lockout/Tagout	2
5217	Formaldehyde	2
5199	Aerosol Transmissible Diseases	2
2340	Electrical	2
		21

Hospital Inspections – Other Violations cited

Section Cited		Number of Violations Cited
5194	Hazard Communication	1
3384	Hand Protection	1
3210	Guardrails	1
1712	Impalement Protection	1
5155	Permissible Exposure Limits	1
3364	Sanitary Facilities	1
3365	Toilets	1
3385	Foot Protection	1
14300.29	300 Log	1
		22

April 25, 2018

TO: CNO Advisory Committee Members

FROM: Kim Tomasi, RN, MSN, CEO, Association of California Nurse Leaders (ACNL)
              BJ Bartleson, MS, RN, NEA-BC, Vice President, Nursing and Clinical Services

SUBJECT: Clinical Displacement/Alliance /Capacity Forecasting

SUMMARY

Since our last meeting, SEIU sponsored AB 2759- (Santiago) a bill that would have prioritized associate degree, public pre-licensure training slots, and associate degree hiring over bachelorette prepared students/RN's. CHA testified at the March BRN meeting that this would inappropriately dictate how hospitals and health clinics provide training and future employment needs. Luckily, the author pulled the bill before it went to committee.

The Quad-Council, ACNL, CACN, COADN, ANA-C, resubmitted a letter on April 2, 2018, to the BRN from all organizations. The letter called for support for collaboration between nursing programs and clinical agencies, review academic progression in nursing program (APIN) work and successful models from other states to foster innovative pathways, incentivize national accreditation for all nursing programs, and support nursing program enrollment management.

The Quad-Council, CHA, HealthImpact, and the BRN continue to discuss next steps for a proactive approach to clinical capacity forecasting and management. The BRN is submitting a California Nursing School Clinical Placement Survey to understand student capacity, clinical placements, and school expansion matters. A draft of the survey is attached. While schools are surveyed every two years, there is not enough current detailed information to adequately identify student capacity, clinical placement, and school expansion.

CHA has been discussing a potential clinical capacity forecasting model with Dr.Morris and Joanne Spetz. Joanne and UCSF performed the UCSF Central Valley Workforce RN Forecasts 2018 Report for the central valley sponsored by the University of California Office of the President. This model, along with clinical capacity and migration data could be developed to support an overall objective forecasting model that is regionally sensitive to local issues.

ACTION REQUESTED

  ➢ *Committee discussion to determine next steps*

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DISCUSSION
1. What are your concerns regarding legislative and or additional labor activity prioritizing ADN prelicensure clinical sites and employment opportunities?
2. Should our focus be on additional academic progression programs, and increasing alternate clinical and training opportunities (simulation) ?
3. Should we seek funding to develop a forecasting model to understand the landscape and guide decision making on enrollment needs, clinical capacity and placement?

Attachments: The San Joaquin Valley Registered Nurse Workforce: Forecasted Supply and Demand, 2016-2030
Joint Letter to the BRN dated March 30, 2018
BRN Clinical Education Placement Healthcare Agencies Survey
BRN Clinical Education Placement Academia Survey

BJB:br

Healthforce Center at UCSF

The San Joaquin Valley Registered Nurse Workforce: Forecasted Supply and Demand, 2016-2030

by Joanne Spetz, Janet Coffman, Timothy Bates
Healthforce Center at UCSF

March 26, 2018

Abstract / Overview

This report presents supply and demand forecasts for the Registered Nurse (RN) workforce in the San Joaquin Valley from 2017 through 2030. These new forecasts are based on data from the 2016 California Board of Registered Nursing (BRN) Survey of Registered Nurses, the 2015-2016 BRN Annual Schools Report, data extracted from the BRN license records, and other state and national data sources. The forecasts suggest that the total number of RNs in the San Joaquin Valley will decline between 2017 and 2030 in all but the most optimistic scenarios, and RN FTEs will decline in all scenarios. At the same time, demand for RNs is projected to grow more than 35%, leaving the San Joaquin Valley with a large projected shortage of RNs.

Contact: Joanne Spetz, 415-502-4443, joanne.spetz@ucsf.edu

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Contents

Chapter 1 – Introduction

Concerns about shortages of RNs have been raised across much of of California. The Fall 2016 Survey of Nurse Employers found that many Chief Nursing Officers are experiencing difficulty recruiting RNs for specialized positions and that more than 90% of hospitals reported demand for RNs was greater than the available supply (Chu, Bates, & Spetz, 2017). Statewide hospital vacancy rates have been rising since 2013, reaching 5.9% in 2016. There also has been growth in the share of newly-graduated RNs reporting they are employed within 12 months of licensure, increasing from 59% in 2013 to 81% in 2017 (HealthImpact, 2018). At the same time, the implementation of the most significant components of the Affordable Care Act (ACA) – an expansion of Medi-Cal and the implementation of the Covered California health insurance exchange – reduced the share of nonelderly Californians without health insurance from 16.2% in 2011 (Charles, 2015) to 8.1% in 2015 (Cohen et al., 2016). Growing numbers of insured people results in greater demand for health care services.

This report presents supply and demand forecasts for the Registered Nurse (RN) workforce in the San Joaquin Valley region of California from 2017 through 2030. The San Joaquin Valley is defined as encompassing the following counties: Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare. The forecasting model has the same structure as the model used to generate statewide forecasts for California (Spetz, 2017). The supply forecasts are based on data from the 2016 California Board of Registered Nursing (BRN) Survey of Registered Nurses, the 2015-2016 BRN Annual Schools Report, data extracted from the BRN license records, and other state and national data sources. The supply forecast is compared with several benchmarks of demand for RNs, including national numbers of RNs per 100,000 population, estimates of future hospital utilization in California, and forecasts published by the California Employment Development Department (EDD, 2016).

Chapter 2 – Methods

Registered Nurse Supply

The supply forecasting method used for this report is commonly called a "stock-and-flow" model. The number of clinicians (in this case RNs) licensed and living in the San Joaquin Valley is the "stock" of clinicians. These are clinicians who could potentially provide health care services. Inflows of clinicians are added to the stock of clinicians, and the outflows of clinicians are subtracted from the stock. The estimated labor supply of clinicians is based on the stock of clinicians potentially available to work and how much they choose to work in primary care. This number is expressed as full-time equivalent (FTE) employment in order to account for differences in the work commitments of clinicians employed full-time and part-time. Figure 1 illustrates this model.

Figure 1: A Model of the Supply of Clinicians
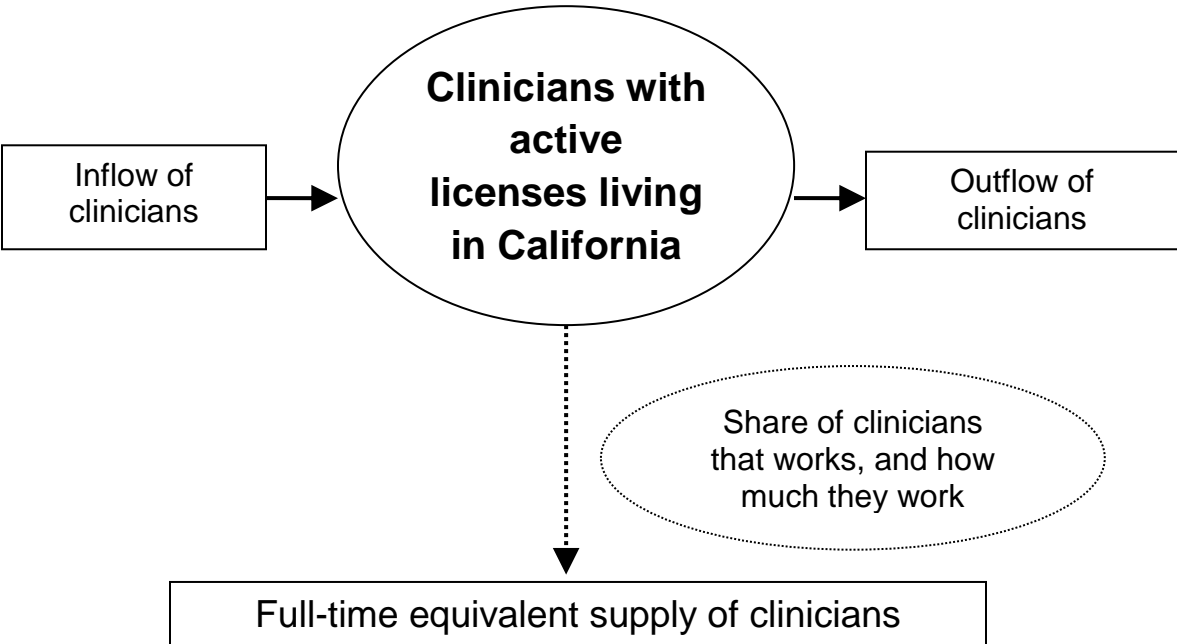
The inflow of clinicians includes clinicians whose first California licenses are issued to addresses in the Central Valley and already-licensed clinicians who relocate from other regions to the San Joaquin Valley. The outflow is determined by migration out of the San Joaquin Valley (to another region, state or country) and individuals who allow their licenses to lapse so they leave the clinician workforce. Lapsed licenses can occur due to retirement, desire to pursue another occupation, death, or any other reason.

As inflows, outflows, and employment decisions change over time, so does the clinician workforce. At first glance, it seems clear that the workforce will grow over time as long as the inflow of clinicians is greater than the outflow. However, such a comparison between total inflow and outflow does not take into account changes in employment as clinicians age. Because the age distributions of the existing stock of clinicians and each inflow and outflow component affect the overall supply, the model incorporates age (described below) to capture its impact on the supply forecasts.

The San Joaquin Valley RN supply forecasts rely on the same age categories as used for the California Board of Registered Nursing's statewide forecasts of RN supply and demand (Spetz, 2017): under 30 years, 30-34 years, 35-39 years, 40-44 years, 45-49 years, 50-54 years, 55-59 years, 60-64 years, 65-69 years, 70-74 years, 75-79 years, and 80 years and older. We assume that every year 20% of RNs in each age group move to the next age group until they reach the oldest age group. We developed multiple forecasts of RN supply to reflect uncertainty about key variables such as the number of future graduates and employment rates.

Variables Used in RN Supply Forecasts

Table 1 summarizes the sources of data for each variable used to generate the RN supply forecasts.

Table 1: Sources of Data for Registered Nurse Supply Forecasts

Component of model	Variable	Source
Stock	Number of RNs residing in the San Joaquin Valley	California Board of Registered Nursing (BRN)
Inflows	New RN graduates from San Joaquin Valley programs	California BRN Annual Schools Report
	Graduates of non-California RN programs who get their first license and live in the San Joaquin Valley	California BRN
	RNs moving to the San Joaquin Valley from other regions of California or states	California BRN
	RNs converting from inactive or delinquent license to active license	California BRN
Outflows	RNs in the San Joaquin Valley moving to other regions of California or states	California BRN
	Lapsed/inactive licenses	California BRN
Employment Decisions	Percent of licensed physicians in primary care fields providing patient care	California BRN 2016 Survey of Registered Nurses
	Average hours worked per week	California BRN 2016 Survey of Registered Nurses

The initial stock of RNs in the starting year, 2017, is the number of licensed RNs residing in the San Joaquin Valley in 2017. These data were obtained from the California Board of Registered Nursing (BRN).

There are several sources of inflows of RNs to the San Joaquin Valley, the largest of which is new graduates from region's RN education programs. We used the Board of Registered Nursing Annual Schools Report to obtain data on numbers of RN graduates and their age distribution (Blash & Spetz, 2017). In the 2015-2016 academic year there were 1,097 graduates from the region's education programs (Blash & Spetz, 2017).

Growth in RN new student enrollments leads to growth in the number of graduates in future years. Associate Degree (AD) programs typically last two years, and the RN coursework in Baccalaureate of Science Nursing Degree (BSN) programs requires 2 to 3 years. The forecasts assume that enrollments will result in graduates two years in the future. To predict the number of future RN graduates, we compared annual new student enrollments over the period 2010-2011 through 2015-2016 with the number of graduates two years later. On average, each new student enrollment during this period resulted in 0.851 graduates two years later. This rate was used to estimate the number of graduates beyond the 2017-2018 academic year by applying it to projected new student enrollments for 2018-2019 and 2019-2020, which were provided by the region's RN education programs in the

BRN Annual School Survey. The baseline forecasts assume that nursing student enrollments will be stable after the 2019-2020 academic year. To test the impact of changes in RN education capacity, we also developed a "low" forecast in which RN graduations decrease 1% per year after 2019-2020, and a "high" forecast in which RN graduations increase 1%. Actual and predicted number of graduates from 2012-2013 through 2019-2020 are presented in Table 1. Note that there has been a declining trend in RN enrollments and graduates in the San Joaquin Valley.

Table 2: Actual and Predicted Number of Graduates Based on New Student Enrollments

Academic year	Actual/forecasted new student enrollments	Actual/forecasted number of graduates
2010-2011	1,411*	1,383*
2011-2012	1,663*	1,336*
2012-2013	1,515*	1,467*
2013-2014	1,398*	1,402*
2014-2015	1,283*	1,112*
2015-2016	1,276*	1,097*
2016-2017	1,099	1,092
2017-2018	1,122	1,086
2018-2019		936
2019-2020		955

* Actual number of student enrollments and graduates based on Annual Schools Report.
Note: Forecasts of student enrollments are provided by RN programs in the Annual Schools Survey. The forecasted number of graduates is 80.8% of enrollments two years prior. Source: Blash, L, Spetz, J., 2017. 2015-2016 Annual School Report: Data Summary and Historical Trend Analysis. Sacramento, CA: California Board of Registered Nursing.

Each year, some graduates of nursing programs in other states and countries obtain their first RN license in California and move to the San Joaquin Valley. According to the BRN, in 2016, 26 out-of-state U.S. graduates and 49 international graduates obtained their first license from California and reported an address in the San Joaquin Valley. We assumed the age distribution of U.S. graduates was the same as for San Joaquin Valley graduates. The age distribution for international graduates was obtained from the BRN.

RNs who are already licensed are another source of inflow to the San Joaquin Valley. These RNs include both RNs who move from other regions of California and those who move to California from other states. The inter-region movement of RNs for each age group was calculated by comparing the 2014 and 2016 BRN license files, and the number of RNs moving into the San Joaquin Valley from other regions of California was divided by two to estimate an annual number. The inter-state movement of RNs into the San Joaquin Valley was measured as the number of RNs in each age group who, in 2016, requested endorsement of an out-of-state license to California and who also had permanent addresses in the San Joaquin Valley. The numbers of RNs moving into the San Joaquin Valley were added together and then divided by the total number of licensed RNs residing in the San Joaquin Valley in 2017 to create a rate of movement into the region for each age group.

Each year, some RNs whose licenses are inactive or lapsed choose to reactivate their licenses. Using data obtained from the BRN, we determined that in 2016 there were 85 RNs with a San Joaquin Valley address who changed license status from inactive to active, and 422 RNs who changed from lapsed to active. The rate of reactivation was computed by dividing the number of RNs who reactivated their licenses by the total number of actively licensed RNs, for each age group.

There are two types of outflows of RNs from the San Joaquin Valley. RNs can move to another region of California or another state, or they can allow their license to become inactive or lapse. To measure inter-region

movements, we compared 2014 and 2016 BRN license files to identify the rate of RNs moving from the San Joaquin Valley to another region within California or another state, by age group.

Estimates of the rate at which actively-licensed RNs allow their licenses to lapse, by age group, were computed from California BRN license records. These estimates are very important to the model because they measure the loss of nurses due to relocation, change in employment plans, retirement, and death. The model does not distinguish among these reasons for allowing a license to lapse.

Registered Nurse Demand

We developed forecasts of the demand for RNs using the same methods used by the BRN for statewide RN forecasts. We began by estimating the number of RNs that would be required each year to maintain the current San Joaquin Valley RN-to-population ratio of 622 FTEs per 100,000, assuming the region's population grows as projected by the California Department of Finance (2013). Note that the statewide ratio of RN FTEs per 100,000 was 702 in 2016. Some policy advocates have argued that the ideal employment level of RNs is the national 25th percentile (916 FTE RNs per 100,000) or even the national average (1,038 FTE RNs per 100,000). Thus, we also calculated the numbers of RNs that would be required to attain each of these benchmarks.

We employed a second approach to forecasting demand for RNs using current hospital utilization and staffing patterns to estimate future demand. First, the 2015 total number of patient discharges from short-term acute-care hospitals in the San Joaquin Valley was obtained from the California Office of Statewide Health Planning and Development (OSHPD) Hospital Annual Inpatient Discharge Data (OSHPD, 2016) and organized into ten-year age groups (OSHPD, 2016). These data were then multiplied by the average length of stay for each age group as reported in the 2014 Hospital National Inpatient Statistics (AHRQ, 2014), to estimate the total number of patient days per age group. Next, the number of patient days per age group was divided by the total population (by age group) in the region. This provided the number of patient days per population, per age group. These rates of patient days were then applied to the projected population estimates to obtain a forecast of total patient days by age category. We then used OSHPD's Hospital Annual Financial Data (OSHPD, 2016) to calculate the average number of RN hours per patient day, which was then multiplied by the forecast of total number of patient days to produce a demand forecast for hospital-based RN hours. To equate the forecasted number of RN hours to FTE jobs, RN hours were divided by 1,768 (average annual productive hours per FTE). Finally, the OSHPD and BRN data indicate that 51.2% of jobs were in the types of hospitals included in the OSHPD data and thus the total number of RNs employed in all health care settings is 1.95 times the number of hospital-employed RNs. The hospital-based projections of future RN demand were thus multiplied by 1.95 to project total RN demand.

The California Employment Development Department (EDD) projects that there will be 26,810 registered nurse jobs in the San Joaquin Valley by 2024 (California Employment Development Department, 2016). The EDD projection does not distinguish between full-time and part-time jobs. To estimate the FTE employment implied by the EDD projection, applied an adjustment factor which was calculated by dividing the average number of hours worked per week by California RNs in 2016 (36.24) by 40, which is the number of hours per week typically used to denote full-time employment (Spetz, Chu, and Jura 2017). The EDD estimate of 26,810 RN jobs was multiplied by the adjustment factor (0.906) to produce an FTE projection of 24,290 in 2024.

Chapter 3 – Results

Registered Nurse Supply Forecasts

Projected supply of RNs is presented in Figure 2 for the baseline, low, and high scenarios. The baseline scenario assumes no change in the number of graduates from RN programs in the San Joaquin Valley, the low scenario assumes that RN graduations will decline 1% per year after 2019-2020, while the high scenario assumes 1% growth per year in RN graduations. In all three scenarios, there is little forecasted growth in the supply of RNs in the region between 2017 and 2030.

Figure 2: Forecasts of the Number of Registered Nurses in the San Joaquin Valley, 2017-2030
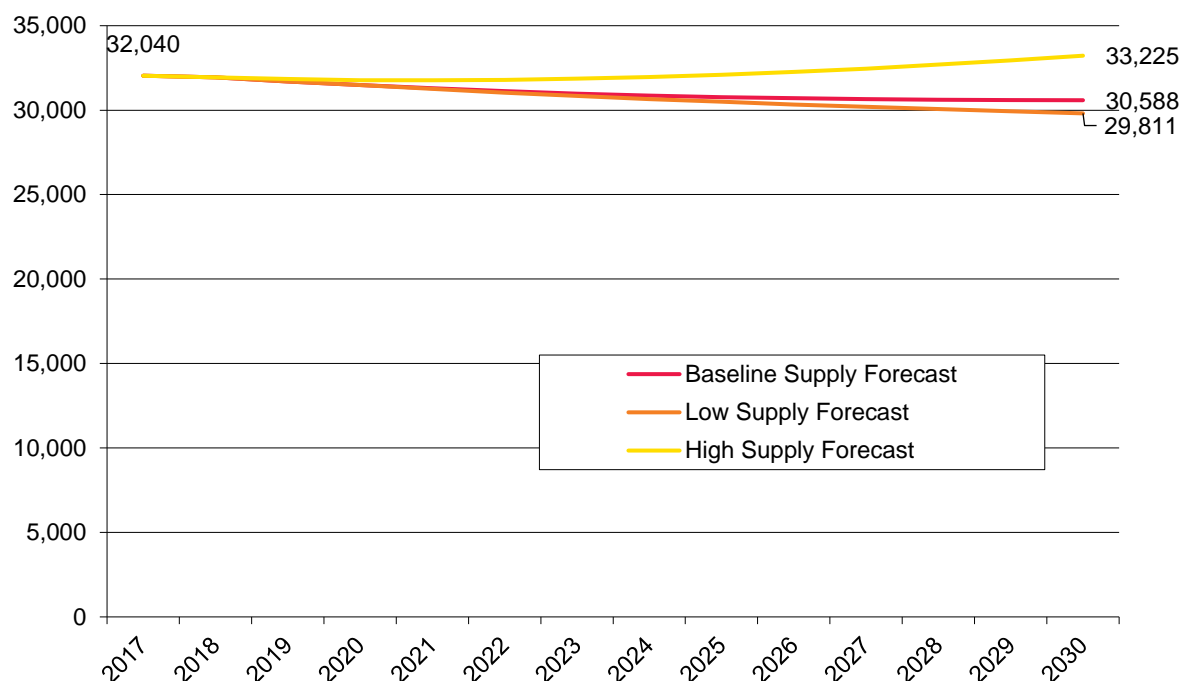
Because the forecasted number of RNs with active licenses does not account for the variation in hours worked by RNs and the fact that some RNs with active licenses do not work in nursing, data from the 2016 BRN Survey of RNs were used to generate estimates of the current employment rate for RNs, by age group (Spetz, Chu, & Jura 2017). Employment rates by age groups have varied since 2008. During the last economic recession, younger RNs were employed at lower rates and older RNs were employed at higher rates. Replicating the method used in the BRN's statewide forecast of RN supply, we considered three scenarios for future employment rates by age group. The "low" scenario is based on the lowest employment rate for each age group over the five most recent biennial BRN Surveys. The "high" scenario is the highest employment rate for each age group of these five rates. The baseline scenario is the average of the low and high rates. The age-specific employment rates for each of these baseline, low, and high scenarios was multiplied by the projected numbers of licensed RNs (Figure 2) to calculate the projected number of employed RNs. To calculate full-time equivalent employment, these numbers need to be adjusted by the average number of hours worked each week. The 2016 BRN Survey of RNs was also used to generate estimates of hours worked per week in all nursing jobs for each age group (Spetz, Chu, & Jura, 2017), which were divided by 40 to calculate the average full-time equivalent employment (FTE) for each age group. Figure 3 presents forecasts of the full-time equivalent supply of RNs in the San Joaquin Valley, which ranges from 22,988 to 25,922 RNs.

Figure 3: Forecasted Full-time Equivalent Supply of RNs in the San Joaquin Valley

25,922
24,755
22,988

Legend:
— Baseline Supply Forecast
— Low Supply Forecast
— High Supply Forecast
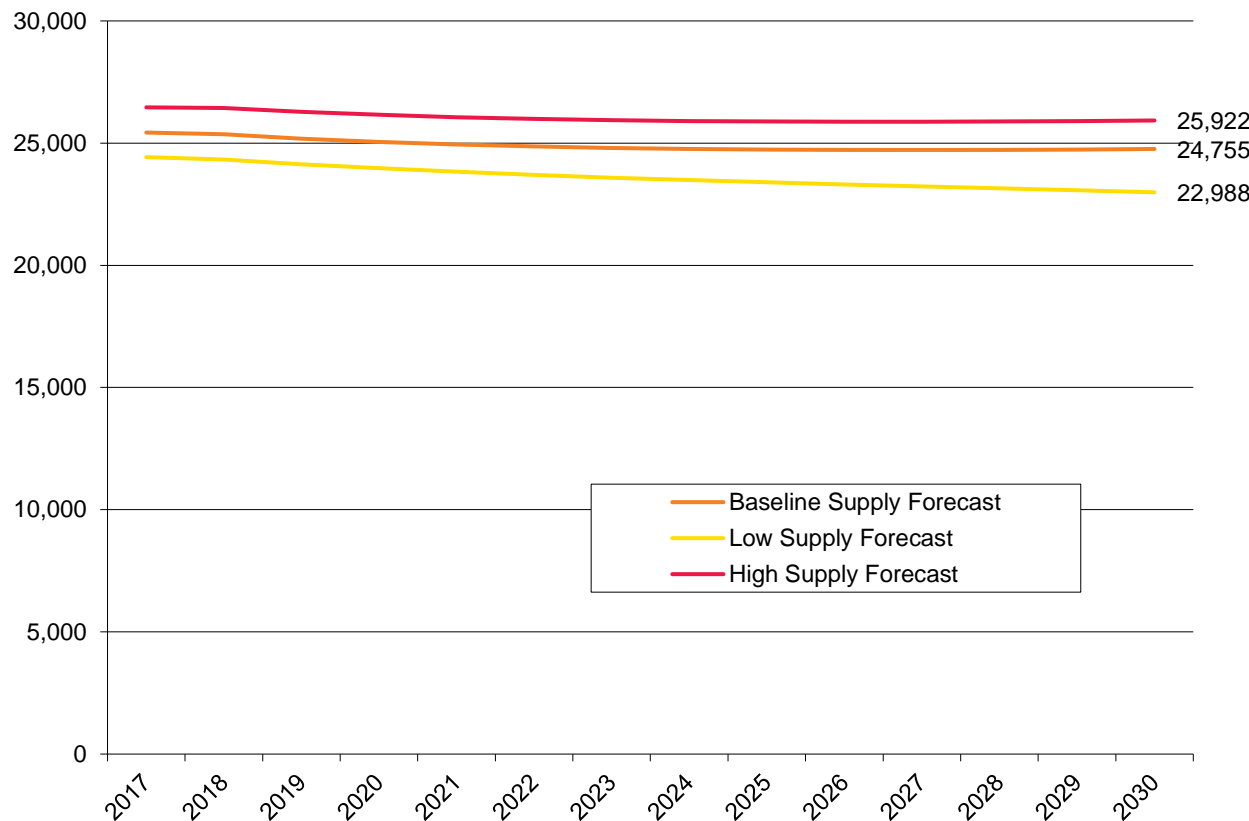
Registered Nurse Demand Forecasts

Figure 4 compares five alternative FTE RN demand forecasts. The San Joaquin Valley would need 32,113 FTE RNs in 2030 to maintain the current ratio of 622 FTE RNs per 100,000. If current hospital utilization rates are used as a measure of demand, the region would need more than 35,000 FTE RNs (12% more). Attaining the national average of FTE RNs per population would require 51,868 FTE RNs by 2030. Note that the EDD projection of demand for 2024, which is lower than the other forecasts, is likely an underestimate because is doubtful that fewer than the current ratio of FTE RNs per population will be required to meet future health care needs in the region.

Figure 4: Forecasted Full-time Equivalent Demand for RNs in the San Joaquin Valley
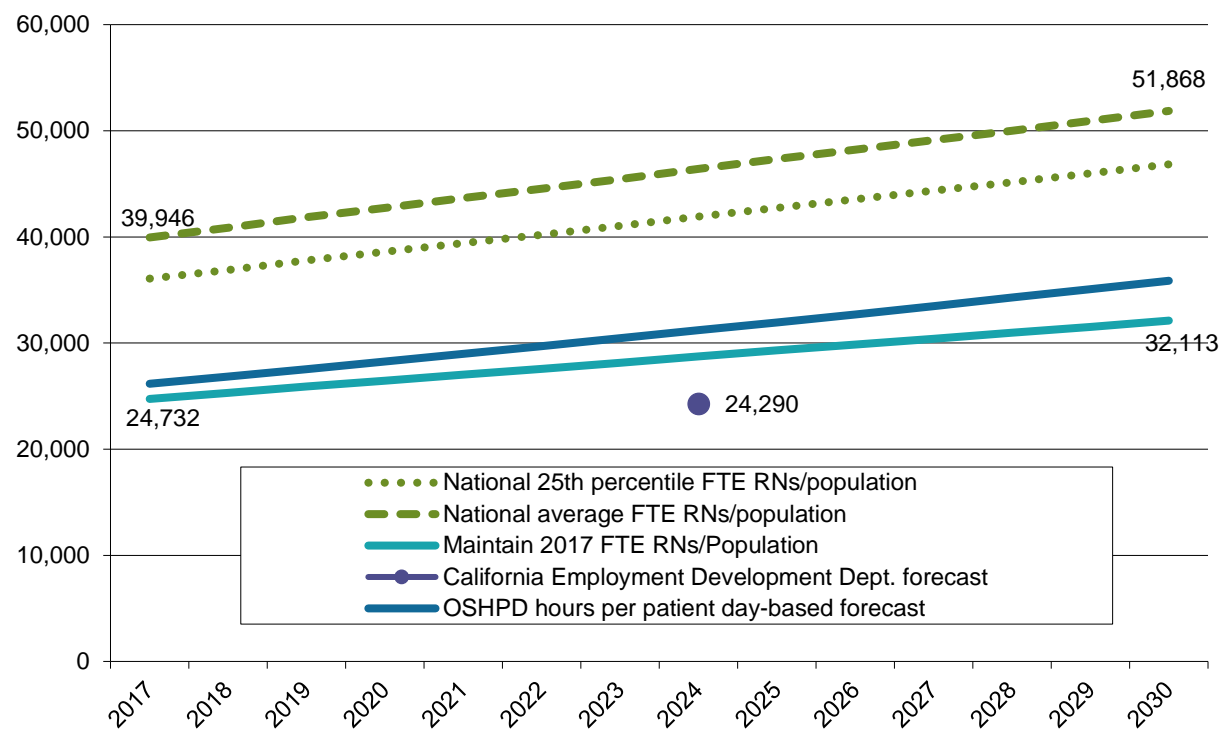
Comparing Supply and Demand for Registered Nurses

Figure 5 compares the San Joaquin Valley FTE RN supply and demand forecasts. The demand forecast based on maintaining the region's current ratio of FTE RNs per capita resulted in the smallest estimate of total FTE RNs. Still, this total is approximately 30 percent larger than the number of FTE RNs forecast under the baseline supply scenario. Maintaining the current number of FTE RNs per population would require 32,113 RNs in 2030, whereas the baseline supply scenario forecasts that the San Joaquin Valley will have only 24,755 FTE RNs in 2030. The high supply forecast (25,922 FTE RNs in 2030) would still result in the region having 6,191 fewer FTE RNs than the number needed to maintain the current FTE RN per population ratio. if the estimate of FTE RN demand derived from the hospital utilization model is used, the high supply scenario results in 9,944 too few FTE RNs in the San Joaquin Valley to meet demand in 2030.

Figure 5: Registered Nurse Supply and Demand Forecasts for the San Joaquin Valley
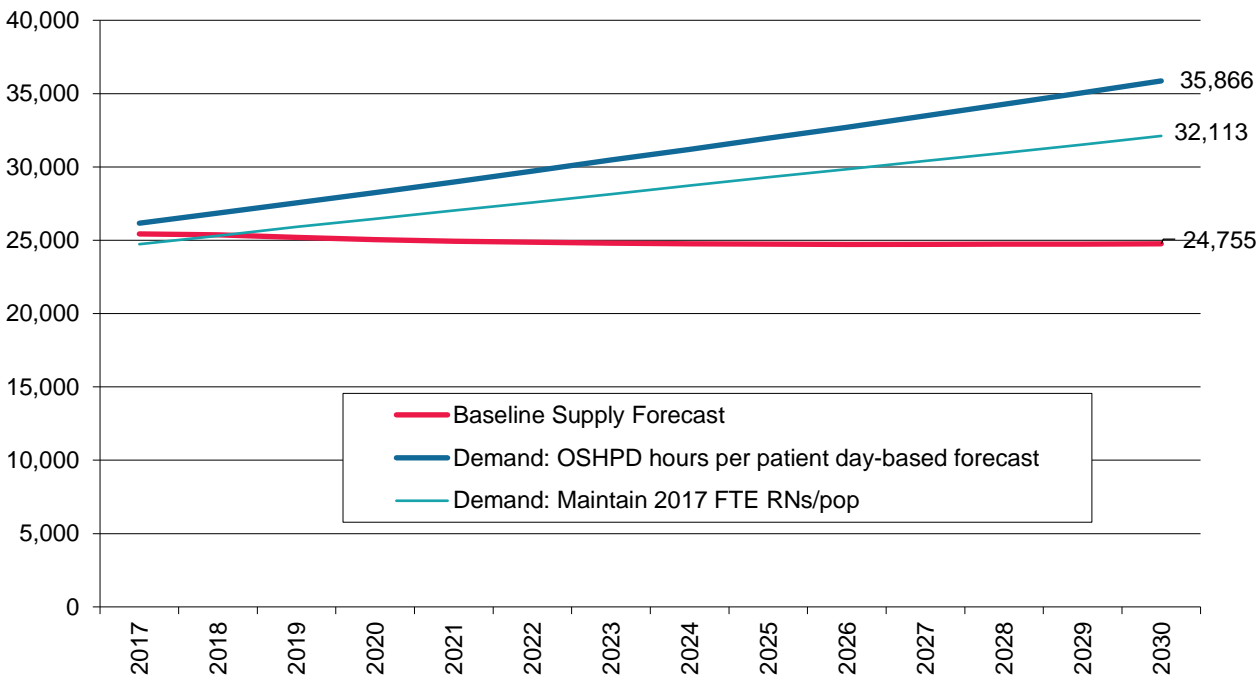
Chapter 4 – Conclusion and Policy Implications

Available data indicate that the supply of RNs is unlikely to be sufficient to meet future demand in the San Joaquin Valley. In all but the most optimistic scenarios, the data suggest that the total number of licensed RNs will decline between 2017 and 2030 and the number of FTE RNs is expected to decline in all scenarios. In contrast, demand for RNs is forecasted to grow more than 35%, leaving the San Joaquin Valley with a large projected shortage of RNs. This result is consistent with data from the Fall 2016 Survey of Nurse Employers, which reported that many Chief Nursing Officers were experiencing difficulty recruiting RNs in the San Joaquin Valley (Chu, Bates, & Spetz, 2017). There has been a decline in new enrollments in RN education programs in the San Joaquin Valley since the 2011-2012 academic year, which is an important contributing factor to the projected shortage of RNs. Even in the scenario in which the number of new RN graduates in the region is assumed to remain stable there is projected to be a large shortfall of RNs in the San Joaquin Valley.

Limitations

The forecasts presented in this report have several important limitations. First, changes in insurance coverage that could result from repeal or significant retraction of the Affordable Care Act would likely reduce demand for all health care services. Conversely, continued diffusion of value-based health insurance payment models such as expansion of accountable care organizations would likely increase demand for health care services in ways not easily predicted. In addition, the forecasts focus solely on the numbers of RNs needed and do not account for possible changes in the nature of care delivery or skills required to deliver care in the future. Regardless of the fate of the ACA, value-based payment models, or the nature of health care delivery, previous research suggests that demand for RNs will increase due to population growth and a rising share of the population that is elderly (Spetz, et al., 2014; Oberlin, et al., 2015).

Policy Implications

A large body of research demonstrates that patient outcomes are impacted by the level of nurse staffing in hospitals and other care facilities (Kane & Shamliyan, 2007; Institute of Medicine, 2011; Penoyer, 2010); periods of nursing shortage can have deleterious impacts on patients and the population. In addition, shortages drive up the cost of health care resulting from increased RN wages (Spetz and Given, 2003). For these reasons, it is essential that the policy actions be taken to address the likely shortage of RNs in the San Joaquin Valley.

The shortage projected for the San Joaquin Valley stands in contrast to statewide forecasts, which indicate that RN supply and demand are well-balanced in California as a whole. There are large differences in the number of RNs per capita across regions of the state, with counties in the San Joaquin Valley having among the lowest ratios. The San Joaquin Valley also has less RN education capacity compared with larger urban areas of California, and the region has a high rate of projected demand due to rapid population growth.

Although nursing is viewed as a highly mobile profession, research has found that more than half of RNs work within 40 miles of where they attended high school (Kovner, Corcoran, & Brewer, 2011). Thus, the primary policy solution for large projected RN shortages in the San Joaquin Valley is to increase the number of graduates from education programs in the region (Spetz & Dyer, 2005). This requires financial investment as well as the identification of qualified faculty. Many RN education programs in California report challenges recruiting faculty, and a large share of faculty is anticipated to retire over the next decade (Blash & Spetz, 2017). Education institutions will need to focus on faculty recruitment and retention, in order to maintain and grow their education programs.

Expanding RN education programs takes time, and in the interim regional employers will need to work with education institutions outside the San Joaquin Valley to recruit nurses to live and work in the region. They also will need to redouble their efforts to retain RNs currently working in the region, as well as to retain RNs nearing retirement age. Employers can also play a key role in supporting education expansion by offering clinical placements to nursing schools, offering scholarships and loan repayment for RN students and graduates, and providing grants to nursing schools.

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March 30, 2018

Dr. Joseph Morris
California Board of Registered Nursing
PO Box 944210
Sacramento, CA 94244-2100

Dear Dr. Morris,

On behalf of the Association of California Nurse Leaders (ACNL), the American Nurses Association of California (ANA/C), the California Association of Colleges of Nursing (CACN), and the California Organization for Associate Degree Nursing Program Directors (COADN) Boards of Directors and our memberships, we are writing to express our concerns related to the clinical displacement issue that has been widely discussed by the BRN and has affected both associate and baccalaureate degree nursing program education in California. We stand collectively committed to uniting professional nursing education and practice in California, versus splitting and dividing our voice, as this issue has significant impact on education and practice, and ultimately the health of Californians.

Support for collaboration between nursing programs and clinical agencies.
ACNL, ANA-C, CACN, and COADN are in support of a collaborative approach to clinical placements for all California nursing students. This type of approach would allow us to address clinical placements from a position of solidarity, versus one of division. We support the clinical agency's right to build clinical alliances with schools of nursing to meet the needs of their patient population, hospital staffing needs, and organizational goals, while also supporting the tenants of successful clinical consortium agreements in place throughout California. We promote the development of innovative educational pathways that will foster diversity and quality in California's future nursing workforce. We support the need for a collaborative versus legislative approach for problem solving, when possible. As clinical placements are a problem that requires that all partners (school deans and directors, hospital chief nursing officers, and BRN representatives) to work together for the best solution for California, we support inclusion of all stakeholders in considering solutions to this issue.

Consider findings from the Academic Progression in Nursing Program (APIN) work and successful models from other states in fostering innovative educational pathways.
Our organizations work from a national perspective using evidence from multiple sectors. APIN and other nationwide data suggest that structured educational alliances between ADN and BSN programs offer the best approaches to educational progression for nurses, and that these alliances can facilitate clinical relationships that best serve ADN students. As current alliances have not been successful in quickly and systematically moving ADN graduates into obtaining BSN degrees on a large scale, we promote Concurrent Enrollment Program (CEP) models that have been successfully implemented in many other

states such as Arizona, Florida, Oregon, and Washington as a potential solution to increasing the number of BSN graduates in California, resolving clinical agencies concerns about having BSN students in their agencies, minimizing clinical displacement, and ensuring the education of diverse, socio-economically disadvantaged, and first-in-college nursing students. Finally, we suggest that schools engaged in such collaboratives, collect program outcome data (e.g. time to degree for both ADN and BSN degree programs) to validate and showcase effective and efficient pathways of student progression from ADN to BSN programs with timely degree completion.

Incentivize national accreditation for all nursing programs.
We recognize the need for a professional nursing workforce that can coordinate and lead healthcare teams across the continuum of care. To achieve this outcome, we encourage the BRN to consider ways to "incentivize" ADN programs to becoming nationally accredited. Accreditation is a nationally recognized method for validating the rigor and quality of nursing programs and many of the ADN programs in California meet accreditation standards. There are fiscal and organizational barriers that should be addressed to facilitate nursing programs in California obtaining national nursing accreditation. We encourage the BRN to consider methods such as timing BRN site visits to coincide with national accreditation visits (up to 10 years apart) and accepting a single self-study that addresses both BRN and national criteria as possible ways to encourage ADN programs to obtain this objective. These strategies are also successfully used in other states, without decreasing quality outcomes of nursing graduates.

Support nursing program enrollment management.
As noted by Dr. Joanne Spetz at the February 2017 BRN meeting, California nursing programs are currently producing the correct number of nurses that are needed for California over the next several years. There remains, however, nursing shortages in underserved areas of the state and there is a clear need to support academic progression through CEP models. While we support the BRN prohibiting the rapid growth of existing, new, and out-of-state programs, we do encourage planned and approved enrollment growth in underserved geographic areas where more nurses are needed. We recognize that expansion of clinical experiences in non-acute, community-based, and ambulatory settings, as well as innovative educational modalities, can provide valuable alternatives to acute care clinical experiences for many nursing programs. We unanimously support collaborative efforts to quickly move ADN graduates into becoming BSN graduates in various seamless, non-repetitive, timely, and cost-effective ways.

We recognize the tremendous work and efforts of the BRN in supporting nursing practice and education in the state of California. We are at a critical point where nurse educators and clinical agencies need to unite to seek innovative approaches for the education of our future RN workforce. ACNL, CACN, and COADN are committed to working with the BRN, professional nursing, and healthcare facilities to address this issue to ensure that our nurses are well prepared to care for Californians across the continuum of care.

Respectfully submitted,

Association of California Nurse Leaders (ACNL)

American Nurses Association of California

California Association of Colleges of Nursing (CACN)

California Organization for Associate Degree Nursing Program Directors (COADN) - North
2

California Organization for Associate Degree Nursing Program Directors (COADN) - South

3

Welcome to the Survey

Over the last few months, the California Board of Registered Nursing (BRN) have heard from California Schools of Registered Nursing (i.e. pre-licensure Associate Degree (ADN) and Bachelor of Science in Nursing (BSN) that there has been a decrease in the number of acute care and non-acute clinical sites available to pre-licensure students for clinical education rotations. The BRN has received calls from pre-licensure programs related to changes in clinical affiliation agreements and/or options for scheduling RN students that result in decreased access to clinical sites.

In November 2017, the BRN distributed a survey to all California pre-licensure RN programs to determine the extent of clinical education displacement. A revised BRN survey will be distributed so that all pre-licensure programs can provide a response. However, in addition to the School of Nursing Annual Survey, information provided by the facilities is important to ensure complete understanding the scope of the issue.

The clinical displacement matter has been brought before the BRN over the past several years. Our goal is to turn what appears to be an emerging problem into an opportunity by informing needs and trends and considering ideas and available options in providing alternate clinical education experiences for our future RN colleagues.   The following survey has been designed to capture data from Healthcare Agency Chief Nursing Officers and Directors of Nursing on their organizations capacity and intent to provide clinical education experiences for pre-licensure RN students that may increase, decrease, or modify access, or remain unchanged going forward.   You may want to consult with or ask your Director of Education or the individual responsible for clinical placements on your facility to assist you in completing this survey.

This information will allow the BRN to better understand the breadth and depth of this issue. The data collected will be provided to the BRN Workforce Advisory Committee (NEWAC) to assist in identifying displacement trends, experiences, and options. The survey is anonymous, individual results are not identified, and only aggregate data will be reported. You will have the opportunity to add comments at intervals and at the end of the survey. This survey pertains ONLY to **pre-licensure RN** programs regarding clinical education of students enrolled in them. Please provide information regarding your agency affiliation with pre-licensure RN programs including ADN, BSN, and entry-level masters programs.

For the purposes of this survey, "displacement" is defined as your pre-licensure nursing education program students being replaced at a clinical facility previously used by your pre-licensure nursing education program, whether for a shift, unit, entire placement, or facility allowing fewer students and/or preceptorships, without being offered a feasible alternative.

Background Information

1. Type of facility (select all that may apply):

Acute Care Healthcare Agency
Long term care (Post-acute)
Sub-Acute Care
Other inpatient (describe)
Clinic/ambulatory
Other (describe)

2. What type of prelicensure nursing program does your healthcare agency accept? Check all that apply.

ADN
BSN
ELM

3. What is the position title of the individual in your healthcare agency who is the designated individual to approve clinical placements?

4. Is your healthcare agency Magnet designated?

Yes
No. If no, is your healthcare agency currently pursuing a Magnet status?

5. Was there a change is the process to approve clinical placements for pre-licensure nursing programs? Please explain.

Yes
No

6. Has there been attempts towards diversifying the types of pre-licensure nursing education programs your healthcare agency partners with? Please explain, for example ADN, BSN, Private, Public, etc.

Yes
No

7. Between July 1, 2016 and June 30, 2017, how many students enrolled in pre-licensure nursing programs did you orient to your agency?

Choices: unknown, n/a, 100-200, 201-300, 301-400, 401-500, 501+

8. Identify the county where your healthcare agency (agencies) is located:

01 - ALAMEDA	20 - MADERA	40 - SAN LUIS OBISPO
02 - ALPINE	21 - MARIN	41 - SAN MATEO
03 - AMADOR	22 - MARIPOSA	42 - SANTA BARBARA
04 - BUTTE	23 - MENDOCINO	43 - SANTA CLARA
05 - CALAVERAS	24 - MERCED	44 - SANTA CRUZ
06 - COLUSA	25 - MODOC	45 - SHASTA
07 - CONTRA COSTA	26 - MONO	46 - SIERRA
08 - DEL NORTE	27 - MONTEREY	47 - SISKIYOU
09 - EL DORADO	28 – NAPA	48 - SOLANO
10 - FRESNO	29 - NEVADA 30 - ORANGE	49 - SONOMA
11 - GLENN	31 - PLACER	50 - STANISLAUS
12 - HUMBOLDT	32 - PLUMAS	51 - SUTTER
13 - IMPERIAL	33 - RIVERSIDE	52 - TEHAMA
14 - INYO	34 - SACRAMENTO	53 - TRINITY
15 - KERN	35 - SAN BENITO	54 - TULARE
16 - KINGS	36 - SAN BERNARDINO	55 - TUOLUMNE
17 - LAKE	37 - SAN DIEGO	56 - VENTURA
18 - LASSEN	38 - SAN FRANCISCO	57 - YOLO
19 - LOS ANGELES	39 - SAN JOAQUIN	58 - YUBA

9. Number of licensed acute care beds:

<150

151-250

251-350

351-450

451-550

551-650

>650

10. Patient volume indicators (as applicable, indicate N/A when not applicable to your agency):

Medical/Surgical (ADC):

Telemetry (ADC):

Critical Care (ADC):

Obstetrics (average # deliveries/day):

NICU (ADC):

Pediatrics (ADC):

Mental Health/Psychiatry (ADC):

ED (average # visits/day):

Long Term Care/Post-Acute Care (ADC):

Sub-Acute Care (ADC):

Ambulatory Care/Clinic(s) (average # visits/day):

Other (describe setting and volume):

11. Number of units/areas that provide each type of care (indicate "0" as applicable rather than leaving any blank):

Medical/Surgical/Telemetry:
Obstetrics (count total # units/areas including L&D, Post-Partum, Newborn Nursery combined):
Pediatrics:
Psych/Mental Health
Geriatrics:
Critical Care/ICU:
NICU (either Level 2 and/or 3 combined):
ED:
Long Term Care/Post-Acute Care:
Sub-Acute Care:
Ambulatory Care/Clinic(s):
Other (describe):

12. Does your agency have a clinical affiliation agreement with one or more RN schools to provide clinical education to pre-licensure programs?

Yes (skips to question #7)
No (skips to question #8)

Clinical Affiliation Agreement

13. How many clinical affiliation agreements with RN schools for pre-licensure programs are in place?

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
>20

14. Our healthcare agency does not provide clinical education site(s) for pre-licensure RN students. Is it an option to consider doing so? (please comment)

(skips to end of survey)

Student Clinical Education Experience

15. Number of units/areas that currently provide pre-licensure RN student clinical education experiences (place a number after each, indicating "0" units or departments rather than leaving any blank):

Medical/Surgical/Telemetry:
Obstetrics (count total # units/areas including L&D, Post-Partum, Newborn Nursery combined):
Pediatrics:
Psych/Mental Health
Geriatrics:
Critical Care/ICU:
NICU (either Level 2 and/or 3 combined):
ED:
Long Term Care/Post-Acute Care:
Sub-Acute Care:
Ambulatory Care/Clinic(s):
Other (describe):

16. Number of RN pre-licensure programs by type of program currently affiliated with your agency (indicate # of each type of RN program, or enter "0" when none):

ADN:
LVN to RN:
BSN:
Entry-level Masters:
Total number of Pre-Licensure RN programs:

17. Changes implemented by your agency in the number of RN pre-licensure clinical placements scheduled over the past two academic years (fall 2015 – summer 2017):

Increased the number of RN clinical placements
Decreased the number of RN clinical placements (some schools, programs, cohort groups or preceptorships were displaced compared with prior historical placements)
No change in the number of RN clinical placements

18. Changes being made now by your agency in the number of RN pre-licensure clinical placements in this current academic year? (fall 2017-summer 2018)

Increased the number of RN clinical placements
Decreased the number of RN clinical placements (some schools, programs, cohort groups or preceptorships were displaced compared with prior historical placements)
No change in the number of RN clinical placements

19. Changes anticipated to be made by your agency in the number of RN pre-licensure clinical placements in the next academic year? (fall 2018-summer 2019)

Increased the number of RN clinical placements

Decreased the number of RN clinical placements (some schools, programs, cohort groups or preceptorships were displaced compared with prior historical placements)

No change in the number of RN clinical placements

20. If your agency has decreased the number of clinical placements, or the type of RN pre-licensure programs to be scheduled, or anticipates doing so going forward in the next 1-2 years, that may result in displacement of one or more currently affiliated pre-licensure RN programs, please indicate contributing factors or rationale for these changes (select any that may apply)

Decrease in patient census or volume of care

Closure or consolidation of units within the agency

Clinical RN staff workload, fatigue or other internal practice issues

Need to distribute fewer students per unit/area and/or utilize more units/areas per student cohort group due to increased complexity of care

Need to distribute fewer students per unit/area and/or utilize more units/areas per student cohort group due to clinical staff workload/pace

Need to distribute fewer students per unit/area and/or utilize more units/areas per student cohort group due to limited/variable level of clinical staff experience, number of newly licensed/newly hired RNs, or staff vacancies

Accepting more students from one or more existing nursing program(s) historically affiliated with Healthcare Agency (growth in selected existing program(s) impacting placement capacity for other affiliated schools)

Adopting (new) affiliation agreement(s) from nursing programs not historically affiliated with agency (selected expansion may impact existing affiliations)

Administrative decision to shift or redistribute available clinical educational opportunities from one or more ADN program(s) to one or more BSN or Entry-level Masters programs consistent with hiring needs/practices/Magnet designation or decision to recruit/hire RNs with a minimum of a BSN required.

Other (please comment)

Not applicable – agency has not decreased the number of clinical placements or types of affiliated programs nor anticipates doing so in the near future.

21. For healthcare agencies that have reduced the number of RN pre-licensure clinical placements, or changed the mix/types of affiliated RN programs resulting in displacement of one or more nursing program(s) without alternative placements provided within your agency, what type of program(s) were displaced? Consider the prior 2 year period. (answer all that apply, entering the number of programs impacted)

ADN:
LVN to RN:
BSN:
Entry-level Masters:
Not applicable, agency has accommodated changes in clinical placements within the agency providing acceptable alternatives to schools without displacement of schools to other Healthcare Agencies

22. For Healthcare Agencies that have increased the number or type of RN pre-licensure clinical placements provided to affiliated programs, what type of program(s) were involved? (select those that apply, enter the number of new programs added in the last 2 years)

ADN:
LVN to RN:
BSN:
Entry-level Masters:

23. What specialties are in greatest demand for clinical education placement in your healthcare agency, presenting limitations for you to accommodate the number of pre-licensure RN placement requests needed?

Medical/Surgical/Telemetry
Obstetrics (count total # units/areas including L&D, Post-Partum, Newborn Nursery combined)
Pediatrics
Psych/Mental Health
Geriatrics
Critical Care/ICU
Community Health
NICU (either Level 2 and/or 3 combined)
ED
Long Term Care/Post-Acute Care
Sub-Acute Care
Ambulatory Care/Clinic(s)
Other (describe)

24. What clinical specialties/types of units in your agency have some opportunity for further clinical placements (expansion) on selected days or hours/shifts that could provide additional pre-licensure RN clinical education capacity? (select any that may apply)

Medical/Surgical/Telemetry
Obstetrics (count total # units/areas including L&D, Post-Partum, Newborn Nursery combined)
Pediatrics
Psych/Mental Health
Geriatrics
Critical Care/ICU
Community Health
NICU (either Level 2 and/or 3 combined)
ED
Long Term Care/Post-Acute Care
Sub-Acute Care
Ambulatory Care/Clinic(s)
Other (describe)
None, no options for expansion

25. Changes anticipated to be made by your agency in the number of RN pre-licensure clinical placements in the next academic year? (fall 2018-summer 2019)

Potential increase in the number of RN clinical placements
Potential decrease in the number of RN clinical placements (some schools, programs, cohort groups, or preceptorships may be displaced compared with current placements)
No change expected in the number of RN clinical placements

Consortium or Organized Group

26. Are there academic practice consortiums or other organized groups in your area involved in addressing clinical placements between schools and clinical facilities?

> Yes
> No
> Do not know

27. Does your healthcare agency participate in an academic practice consortium or organized group?

> Yes
> No
> Do not know

28. How does a healthcare agency become a member of the consortium or participate in the organized group in your area?

> Complete an application/paperwork
> Pay a fee
> Meet certain requirements (please explain or comment)
> By invitation (please explain or comment)
> I do not know
> Other, please describe requirements, invitation or other methods:

29. For those that are members of a consortium or participate in an organized group working together on clinical placements, are you satisfied with the clinical placement process?

> Not at all satisfied
> Somewhat dissatisfied
> Somewhat satisfied
> Very satisfied
> Not known/not applicable/do not participate

30. For those that are members of a consortium or participate in an organized group working together on clinical placements, describe what you are satisfied with about the consortium or group (healthcare agencies that are not members of a consortium or do not participate in an organized group respond n/a):

31. For those that are members of a consortium or participate in an organized group working together on clinical placements, describe what you would like to see changed or improved about the consortium or group (healthcare agencies that are not members of a consortium or do not participate in an organized group should respond n/a):

32. Please provide any other information that would help inform this clinical placement/displacement issue, or ideas and solutions that may should be considered moving forward. Comments are optional, however encouraged and valued.

Thank You

Thank you for participating in this survey.

The California Board of Registered Nursing appreciates your valuable input.

If you have any questions about this survey, please contact Susan Engle at Susan.Engle@dca.ca.gov

Welcome to the Survey

The California Board of Registered Nursing (BRN) is asking you to complete this revised survey to collect data regarding the clinical displacement experiences of **BRN approved pre-licensure nursing education programs**. It is hoped that the collection of specific data on clinical displacement will assist in gaining a better understanding of what is occurring across the state in regard to this issue.

For the purposes of this survey, "displacement" is defined as your pre-licensure nursing education program students being replaced at a clinical facility previously used by your pre-licensure nursing education program, whether for a shift, unit, entire placement, or facility allowing fewer students and/or preceptorships, without being offered a feasible alternative.

The data collected will be provided to the BRN Nursing Education and Workforce Advisory Committee (NEWAC) to assist in identifying solutions. The survey is anonymous. You will have the opportunity to add comments at the end of the survey.

Thank you for taking the time to participate in this important survey. The BRN appreciates your sharing your experiences with us in an ongoing effort to work together on critical nursing education issues.

Background Information

If a question or sub-question does not apply to your program(s), please select "n/a".

1. What type(s) of pre-licensure program(s) does your school offer? (Check all that apply)

ADN
BSN
ELM

2. Program Campuses

	Does your program have multiple campuses?	If yes, how many?
ADN	n/a, Yes, No	choices 1-10
BSN	n/a, Yes, No	choices 1-10
ELM	n/a, Yes, No	choices 1-10

3. Were there changes in the number of clinical placements requested for academic year 2016-2017 from the previous academic year (2015-2016) for your pre-licensure nursing education program?

	Change
ADN	n/a, increase, decrease
BSN	n/a, increase, decrease
ELM	n/a, increase, decrease

4. As of today, what is the total number of students enrolled in the entire program?

	Total Number of Students
ADN	choices
BSN	choices
ELM	choices

Choices: n/a, *<25, 26-50, 51-75, 76-100, 101-125, 126-150, 151-175, 176-200, 201-225, 226-250, 251-275, 276-300, 301-325,* and *326-350.*

5. What is the total number of students approved to be admitted into your first concurrent theory with clinical nursing course?

Total Number of Students

ADN	choices
BSN	choices
ELM	choices

Choices: n/a, *<25, 26-50, 51-75, 76-100, 101-125, 126-150, 151-175, 176-200, 201-225, 226-250, 251-275, 276-300, 301-325*, and *326-350.*

6. Has your nursing program received grant funding that required the program to increase the number of students enrolled in your program?

	Received Grant Funding?	If yes, how many?
ADN	n/a, Yes, No	choices
BSN	n/a, Yes, No	choices
ELM	n/a, Yes, No	choices

Choices: n/a, *<25, 26-50, 51-75, 76-100, 101-125, 126-150, 151-175, 176-200, 201-225, 226-250, 251-275, 276-300, 301-325* and *326-350.*

Clinical Displacements

The following question sets are in reference to the clinical displacement (i.e. unit, shift, entire placement, or facility allowing fewer students and/or preceptorships) that you experienced in the last academic year (August 1, 2016 - July 1, 2017). Please choose the best answer that applies to each number of applicable displacements.

If a question or sub-question does not apply to your program(s), please select "n/a".

7. Has your pre-licensure nursing program experienced any displacement (i.e. unit, shift, entire placement, or facility allowing fewer students and/or preceptorships) from any clinical facility in the last academic year (2016-2017), without being offered an alternate solution?

Displacement without Alternate Solution

ADN	Yes/No
BSN	Yes/No
ELM	Yes/No

8. Identify the county (counties) where the displacement occurred

n/a	MADERA	SAN LUIS OBISPO
ALAMEDA	MARIN	SAN MATEO
ALPINE	MARIPOSA	SANTA BARBARA
AMADOR	MENDOCINO	SANTA CLARA
BUTTE	MERCED	SANTA CRUZ
CALAVERAS	MODOC	SHASTA
COLUSA	MONO	SIERRA
CONTRA COSTA	MONTEREY	SISKIYOU
DEL NORTE	NAPA	SOLANO
EL DORADO	NEVADA	SONOMA
FRESNO	ORANGE	STANISLAUS
GLENN	PLACER	SUTTER
HUMBOLDT	PLUMAS	TEHAMA
IMPERIAL	RIVERSIDE	TRINITY
INYO	SACRAMENTO	TULARE
KERN	SAN BENITO	TUOLUMNE
KINGS	SAN BERNARDINO	VENTURA
LAKE	SAN DIEGO	YOLO
LASSEN	SAN FRANCISCO	YUBA
LOS ANGELES	SAN JOAQUIN	

9. How many times in the last academic year (August 1, 2016 - July 1, 2017). has your pre-licensure nursing program experienced displacement from any existing clinical facility (i.e. unit, shift, entire placement, or facility allowing fewer students and/or preceptorships), without being offered an alternate solution?

<div align="center">Number of Times</div>

ADN	n/a, one, two, three, four, five and more
BSN	n/a, one, two, three, four, five and more
ELM	n/a, one, two, three, four, five and more

10. Identify the top 3 reasons for clinical displacement. Please use bottom scroll bar to access #1 through #3 drop-down menus. If not applicable, please skip question.**:**

	#1	#2	#3
	(highest displ.)		*(lowest displ.)*
ADN	choices	choices	choices
BSN	choices	choices	choices
ELM	choices	choices	choices

Choices:

n/a

Decrease in patient census or volume of care

Closure or consolidation of units within the organization

Clinical RN staff workload, fatigue or other internal practice issues

Need to distribute fewer students per unit/area and/or utilize more units/areas per student cohort group due to increased complexity of care

Need to distribute fewer students per unit/area and/or utilize more units/areas per student cohort group due to clinical staff workload/pace

Need to distribute fewer students per unit/area and/or utilize more units/areas per student cohort group due to limited/variable level of clinical staff experience, number of newly licensed/newly hired RNs, or staff vacancies

Accepting more students from one or more existing nursing program(s) historically affiliated with hospital (growth in selected existing program(s) impacting placement capacity for other affiliated schools)

Adopting (new) affiliation agreement(s) from nursing programs not historically affiliated with hospital (selected expansion may impact existing affiliations)

Administrative decision to shift or redistribute available clinical educational opportunities from one or more ADN program(s) to one or more BSN or Entry-level Masters programs consistent with hiring needs/practices/Magnet designation or decision to recruit/hire RNs with a minimum of a BSN required.

Other

11. What type of clinical facility were you displaced from? (select all that may apply)

	Acute care…	Post-acute	Sub-acute…	Other inpatient…	Clinical/ambulatory
ADN					
BSN					
ELM					

Choices: n/a, Acute care hospital, Long term care (post-acute), Sub-acute care, Other inpatient (describe), Clinical/ambulatory, and Other (describe)

12. Rank the top five areas where displacement has occurred. Please use bottom scroll bar to access #1 through #5 drop-down menus.

	#1 (highest)	#2	#3	#4	#5 (lowest)
ADN	choices	choices	choices	choices	choices
BSN	choices	choices	choices	choices	choices
ELM	choices	choices	choices	choices	choices

Choices: n/a, *Medical/ surgical/telemetry, Obstetrics (including post-partum and newborn nursery), Pediatrics, Psych/mental health, Geriatrics, Critical care/ intensive care unit (ICU), Community health, NICU, ED, Long-term care/post-acute care, Sub-acute care, Ambulatory care/clinic*, and *Other (describe)*.

13. How many students were displaced?

	Number of Students
ADN	choices
BSN	choices
ELM	choices

Choices: n/a, *1-5, 6-10, 11-20, 21-30, 31-40, 41-50, 51-75, 76-100, and More than 100.*

14. Rank the top three ways you covered the displacement?

	#1	#2	#3
ADN	choices	choices	choices
BSN	choices	choices	choices
ELM	choices	choices	choices

Choices: n/a, *Replaced with the same clinical facility (i.e. changed a shift day/time), Replaced with another clinical facility being used by the program, Replaced with a new clinical facility not previously used by the program, Reduction of students accepted in the program, Covered in Clinical Simulation/Skills Lab/Classroom, and Other, please explain in comment box.*

15. Identify the impact of the displacement to your student(s):

	Impact
ADN	choices
BSN	choices
ELM	choices

Choices:

n/a

No impact (i.e. displacement occurred prior to faculty beginning)

Little/minor impact (i.e. faculty had to change time slightly or change site location)

Moderate impact (i.e. faculty had to make minor schedule change or travel somewhat further for placement)

Significant impact (i.e. faculty had to travel significantly farther and/or make significant change to schedule)

16. Identify the impact of the displacement to your faculty scheduling/teaching assignments:

	Impact
ADN	choices
BSN	choices
ELM	choices

Choices:

n/a

No impact (i.e. displacement occurred prior to faculty beginning)

Little/minor impact (i.e. faculty had to change time slightly or change site location)

Moderate impact (i.e. faculty had to make minor schedule change or travel somewhat further for placement)

Significant impact (i.e. faculty had to travel significantly farther and/or make significant change to schedule)

17. How many clinical facilities <u>does </u>your program use?

	Number of Facilities
ADN	choices
BSN	choices
ELM	choices

Choices: n/a, *1-5, 6-10, 11-20, 21-30, 31-40, 41-50, 51-75, 76-100, and More than 100.*

18. Does your program place students in clinical facilities outside of the county were your program's main campus is located?

Placement Outside County

ADN	n/a, Yes, No
BSN	n/a, Yes, No
ELM	n/a, Yes, No

19. For your program, are there any other clinical placements that can be offered. If so, what areas? Please use bottom scroll bar to access #1 through #5 drop-down menus.

	#1	#2	#3
ADN	choices	choices	choices
BSN	choices	choices	choices
ELM	choices	choices	choices

Choices: n/a, *Medical, surgical/telemetry, Obstetrics (including post-partum and newborn nursery), Pediatrics, Psych/mental health, Geriatrics, Critical care/ intensive care unit (ICU), Community health, NICU, ED, Long-term care/post-acute care, Sub-acute care, Ambulatory care/clinic, other, and none no options for expansion.*

Consortium or Organized Groups

The following questions are regarding a consortium or organized group in your area used to match clinical facility placements with students in the pre-licensure educational programs.

If a question or sub-question does not apply to your program(s), please select "n/a".

20. Are there any consortiums or other organized groups in your area to match or maintain clinical placements between pre-licensure educational programs and clinical facilities?

	Consortium in Area	If yes, how many?
ADN	n/a, Yes, No	choices
BSN	n/a, Yes, No	choices
ELM	n/a, Yes, No	choices

Choices: n/a, *1,2,3,4,5,6,7,8,9, and 10.*

21. Is your pre-licensure program a member of this consortium or organized group?

	Member of Consortium?	If yes, name:	If not, why not?
ADN	Yes/No	choices	choices
BSN	Yes/No	choices	choices
ELM	Yes/No	choices	choices

Choices: n/a, fees, difficult to use, lack of knowledge, and historical placements not approved

Choices:
- n/a
- Centralized Clinical Placement System (CCPS) Bay area
- Centralized Clinical Placement System (CCPS) Los Angeles
- Centralized Clinical Placement System (CCPS) Bakersfield
- Computerized Clinical Placement System San Joaquin Valley counties (Merced, Madera, Fresno, Kings and Tulare)
- Health Community Forum Greater Sacramento
- Inland Empire Clinical Placement Consortium for Nursing
- Inland Empire Healthcare Education Consortium

- Orange County/Long Beach Consortium
- myClinicalExchange
- San Diego Nursing and Allied Health Education Consortium

22. How does a pre-licensure education program become a member of the consortium or organized group?

	ADN	BSN	ELM

Complete an Application/paperwork

     n/a

     Pay a fee

     Meet certain requirements (please explain in comment box)

     By invitation (please explain in comment box)

     I do not know

     Other (please explain in comment box)

23. Are you satisfied with the clinical placement process of the consortium or group?

Satisfaction

ADN	choices
BSN	choices
ELM	choices

Choices: n/a, *Very satisfied, Somewhat satisfied, Somewhat dissatisfied, and Not at all satisfied*

24. Please describe what you are satisfied with about the consortium or group:

ADN:
BSN:
ELM:

25. Please describe what you would like to see changed or improved about the consortium or group:

ADN:
BSN:
ELM:

Comments

26. What other information would you want the Nursing Education and Workforce Advisory Committee (NEWAC) to consider?

Thank You

Thank you for participating in this survey.
The California Board of Registered Nursing appreciates your valuable input.

If you have any questions about this survey, please contact Susan Engle at
Susan.Engle@dca.ca.gov

April 25, 2018

TO: CNO Advisory Committee Members

FROM: BJ Bartleson, MS, RN, NEA-BC, Vice President, Nursing and Clinical Services

SUBJECT: CNO Survey Questionnaire

SUMMARY
Per request of committee members, a survey was sent to CNO Committee members to understand
priorities within their organization in general, as viewed by their CEO/Board, and as identified by the
CNO. Results are attached.

DISCUSSION
  1. After reviewing the grid, are there areas that stand out?
  2. Is there overlap, and if so where?
  3. What next steps does the group propose?

ACTION REQUESTED

  ➢ *Committee to decide next steps*

Attachment: Meeting Priorities spreadsheet
                Top Insights from the 2017 System Chief Nurse Executive Roundtable

BJB:br

1215 K Street, Suite 800, Sacramento, CA 95814 · *Telephone:* 916.443.7401 · *Facsimile:* 916.552.7596 · www.calhospital.org
Corporate Members: Hospital Council of Northern and Central California, Hospital Association of Southern California, and Hospital Association of San Diego and Imperial Counties

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What are the three issues your organization is facing?			Which issues have been prioritized by your CEO/Board?			What are your top three issues?		
1	2	3	1	2	3	1	2	3
Pending integration with CHI	EHR optimization	cost efficiency / reduction	pending integration	reduction of costed - improved EBITA	patient experience / quality	patient experience / engagement	employee engagement	nursing leadership development
Decreasing expenses	Improving quality outcomes/rankings	capacity/patient flow/decreasing LOS	Decreasing expenses	Improving quality outcomes/rankings	capacity/patient flow/decreasing LOS	Decreasing expenses	Improving quality outcomes/rankings	capacity/patient flow/decreasing LOS
Increasing volume of covered lives in a risk model	limited funding and changes in funding models for public hospitals	recruitment and retention of experienced specialty RNs	Volume expansion through expansion of our community footprint			Leadership development at all levels of the organization and bedside	flexible work hours and work life balance for staff RNs	recruitment and retention of top talent at the bedside and at nursing director levels
						Preparing for the future nurse shortage	Involvement or lack thereof by millennials getting involved in hospital councils	need for nurses having a greater voice at the executive table
Succession development	CNO retirement/replacement needs	strategies around opioid utilization				Hospitals are pricing themselves out of the market		
Lack of providers	Outsourcing of services to outpatient centers	construction demands due to regulatory mandates	obtaining the services of a general surgeon	financing construction costs associated with continually changing regulations	maintaining patient safety and satisfaction	maintaining adequate, quality staffing	managing employee issues in a time where there is emphasis on personal interests and aggressive behaviors	keeping up with a constant barrage of new quality-related regulations, data collection and reporting with minimal staff and an antiquated EHR system
The following are in no particular bucket:	Mental Health Resources	Homeless / homeless bill proposal	Proposed bill to lower commercial payments to 120% of Medicare	Opioid Use				
Increasing financial pressure, declining reimbursements and resources	Merger - changing locus of control	Physician strategy - competition, purchase	financial - action Oi benchmarking, McKinsey work	quality - decreasing harm	patient experience / quality	decreasing harm, safety, quality	efficiency / productivity	flow and caregivers engagement

What are the three issues your organization is facing?			Which issues have been prioritized by your CEO/Board?			What are your top three issues?		
1	2	3	1	2	3	1	2	3
Financial pressures We are being increasingly squeezed financially. Not only by the government payors but also in the private sector. Insurance contracts are not keeping up with the costs of providing care. The increasing costs of supplies and medications (which can go up 600% within months). The costs of physicians keep increasing, now there are hospitalists, OB hospitalists, and on call (insert name of specialty here) physicians.	**Regulatory changes -** There has been increasing amounts of regulations from multiple agencies. It sometimes feels like I just have to decide which regulation to violate. In the ED alone, I have staffing ratios, building fire codes and EMTALA. During the peak of the flu season, ambulance crews said they were told by the county EMS to leave the patients on cots/empty stretchers within 20 minutes. (Staff hid empty beds/stretchers, they are so resourceful)	**Contracting –** contracting is becoming more intense. The plans are increasingly not keeping up to the costs of care. Everyone wants an increase: supply vendors, contract physicians and staff.	**Maintain the budget** – hard to do when you are being asked to provide more with less resources. It is a challenge to keep supply costs down (with costs rising), decrease overtime (not enough specialty nurses) and cuts to support staff and processes ("live on Medicare").	**Physician alignment –** there has been a great deal of conflict between physicians, medical groups and the hospital. Physicians are becoming burned out and whenever anything is asked of them it appears to be "a push from Administration". Instead of new regulatory expectation. There are more people vying for the same dollar.	**Expanding services –** To stay relevant we have to improve and expand services. We just purchased two new surgical robots. We are expanding the ED and adding 4 more surgical suites.	**Staffing** – There is a shortage of experienced nurses in specialty areas. In our facility, we are short nurses in ED, ICU, OR and Home Health. We provide a great deal of mentoring and education of new grads (6 months to 1 year). After finishing training or at 2 years, the millennials will leave to go to jobs in union organizations for more money. These other organizations do not provide new grad training but instead offer substantially more money since the employee is now an experienced staff member. We hear that the ex-employee does not enjoy their new work environment but they stay for the money. Use of overtime or registry staff is expensive and breaks the budget.	**Behavioral Health patients** – Homeless and Behavioral health patients have become a huge burden. There are people who use the system to get a home and financial resources from hospitals. The Homeless clog the ED when the weather is bad. I have had people say to our Social Worker when we have set them up in a motel "What about money for food? The last hospital gave me money also." The BH patients have been increasing and there is nowhere to send them (especially children). We actually have a locked adult unit but for those patients who do not meet 5150 criteria there is no place that will treat the patient unless they have insurance. We have had children waiting for placement for 8-10 days. The county does not have the resources to provide outpatient care. Plus, the BH patients increase the <u>violence that staff</u> are subjected to. Their families, too, are verbally abusive to staff and physicians. Both of these populations create patient flow bottlenecks and severely hamper our ability to care for medical patients. Our throughput measures are negatively impacted.	**Maintaining Joy in Management** – It is hard to have stability when you do not have stable middle management. Staff do not want to work 5 days per week. The millennials want "work life balance". In nursing, the span of control to too much. I am having difficulty helping us maintain joy in our work. Financial pressures are a burden.
	The CDPH Centralized Application unit prevented breaking ground on the ED for six months. (Domino process) - We were not able to move the departments we were vacating to remodel into ED space into their new space because the new space was not licensed yet. So the new space stayed empty and construction was delayed.							
Short staffed	lack of engagement	effective communication	engagement	vision of nursing	representation	engagement	vision of nursing	representation

What are the three issues your organization is facing?			Which issues have been prioritized by your CEO/Board?			What are your top three issues?		
1	2	3	1	2	3	1	2	3
Payer mix changes (increased MediCal) decreased commercial	Increased union activity surrounding "at all times" nursing ratio provision	Improving overall quality and the high reliability journey	Quality	Patient experience	financial performance	Improving the level of professionalism within nursing	Improving clinical quality	Improving the patient experience

Top Insights from the 2017 System Chief Nurse Executive Roundtables

Brief Introduction to the Roundtables

On June 8, 2017 and July 20, 2017, system chief nurse executives convened at Advisory Board's offices in Washington, DC for the Nursing Executive Center's annual System Chief Nurse Executive Roundtables. The goal for the annual Roundtables is twofold: to offer a forum for system chief nurse executives to discuss some of the most pressing issues in health care and to identify the specific role system nurse executives should play in overcoming those challenges.

The agenda included three areas of focus:

▶ **Health System Strategy in the Post-ACA Era:** Key lessons learned from the Affordable Care Act (ACA), no-regrets strategies for providers regardless of policy changes, and the impact of shifting patient demographics and clinical needs on the future of health systems' business models.

▶ **Embedding Care Standards into Workflow System-Wide:** How to create care standards that improve quality, reduce costs, and make care at the bedside easier—not harder—to deliver.

▶ **Getting Multimillion Dollar Health Care IT Systems to Advance Clinical Strategy and Practice:** How to advance organizational goals with IT and maximize the value of the EHR without relying on customization.

This document highlights eight insights from the Roundtables. The insights are drawn from system chief nurse executive attendees and Advisory Board content. The Nursing Executive Center would like to extend a special thanks to the system chief nurse executives who participated in these full-day working sessions, all of whom are listed on the following page.

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System CNE Roundtable Insights, 2017

1   Widespread celebration of coverage expansion overlooks the rising challenge of uncompensated care.

2   Health systems should push for the expansion of APRNs' scope of practice in acute care settings.

3   Inflexible reimbursement policies are preventing virtual technology from revolutionizing health care.

4   Health care executives striving to reduce labor costs should first consider exponential growth of administrative staff.

5   Most health systems must reduce unwarranted care variation to maintain positive margins.

6   Achieving a culture of high reliability care is the final step in minimizing care variation enterprise-wide, not the first one.

7   Think horizontally as well as vertically when prioritizing which care processes to standardize.

8   New care standards should make care delivery easier, not harder.

Widespread celebration of coverage expansion overlooks the rising challenge of uncompensated care.

The rate of uninsured adults reached a historic low in mid-2016: under 9% nationally. Twenty-two million Americans now have some type of health insurance coverage they didn't have previously.

But when consumers have the option to choose their health plan, most opt for the plans with the lowest premiums—which also have high deductibles and high copays. Nearly 90% of exchange shoppers selected a high-deductible silver or bronze plan—which carry approximately $3,000 and $5,000 deductibles respectively. And individual consumers often go out of their way to preserve low premiums. Of the consumers with individual plans in 2015 who re-enrolled in 2016, 43% changed plans. On average, they chose plans with $42 a month lower premiums.

These high-deductible plans contribute to the challenge of uncompensated care. Many Americans struggle to pay even modest out-of-pocket medical expenses. A recent study by the Federal Reserve Board found that 47% of respondents couldn't pay a $400 bill without selling an asset or borrowing the money.

This changing dynamic places a huge burden on providers. Historically, most health systems have focused their uncompensated care strategy on the uninsured. But now, leaders will need to more closely consider the impact of "underinsured" patients as well.

Exchange Enrollment, by Metal Tier
2015

Nearly **90%** of exchange enrollees are in bronze or silver plans
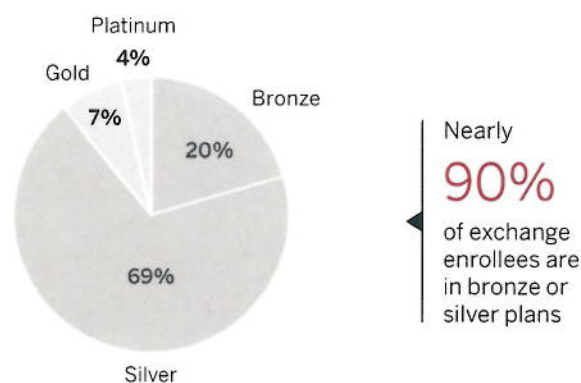
Average Deductible for Exchange-Sold Health Plans
2014–2016
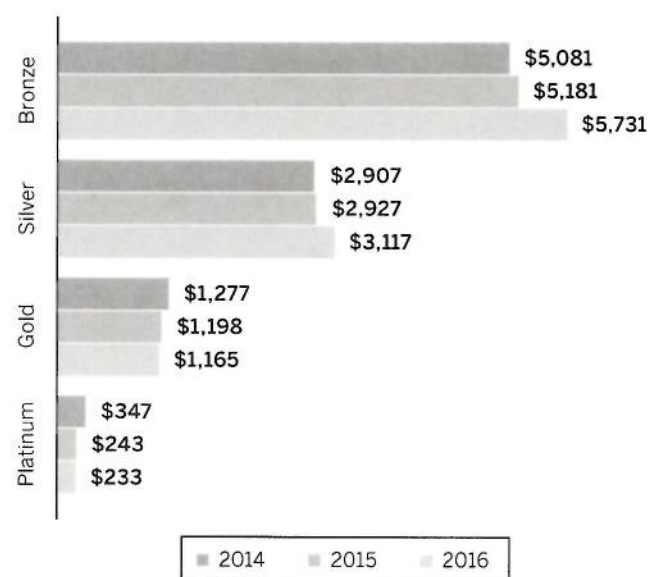
	2014	2015	2016
Bronze	$5,081	$5,181	$5,731
Silver	$2,907	$2,927	$3,117
Gold	$1,277	$1,198	$1,165
Platinum	$347	$243	$233

Health systems should push for the expansion of APRNs' scope of practice in acute care settings.

Health care organizations in nearly all markets are striving to expand patient access and improve care affordability. But most are under-leveraging a key role that can help advance these aims: the Advanced Practice Registered Nurse (APRN).

Despite efforts to reduce unnecessary utilization, hospital admissions are still on the rise, and patients today are older, sicker, and more complex. This can place a heavy burden on inpatient care providers. A recent survey published in the Journal of the American Medical Association found that a significant proportion of hospitalists believe that their typical inpatient census regularly exceeds safe levels.

Nurse practitioners (NPs) are APRN providers who could alleviate this challenge. Progressive organizations are exploring possibilities for autonomous NP inpatient care. For example, some have started to use NPs as primary hospitalist staff.

Ministry Health Care in Wisconsin faced an acute shortage of PCPs, with only four physicians available to provide both ambulatory and inpatient care. In response, Ministry Medical Group's physicians worked with Eagle River Memorial Hospital leadership to staff the facility full time with two NP hospitalists. These NPs are responsible for admitting, discharging, and managing all patients.

Inpatient Admissions in Community Hospitals

In Millions
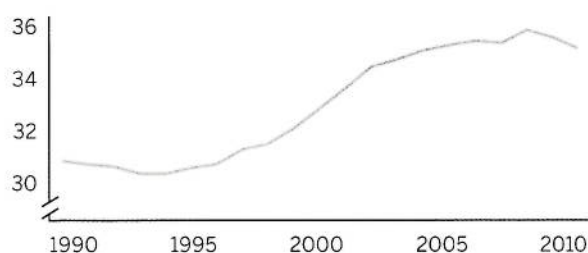
Forecasted Annual Inpatient Volume Growth[1]

2009–2019

Inpatient Discharges	8.1%
	8.5%

Without Health Reform   With Health Reform

---
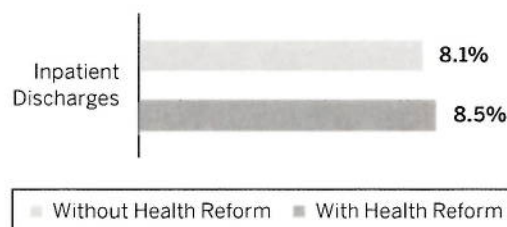
1) Advisory Board forecast.

When designing this new staffing model, Ministry faced a common barrier: Wisconsin state laws do not grant admitting privileges to NPs. Ministry's response serves as a reminder that health care organizations are not powerless in such situations. The medical group successfully pursued a waiver from state restrictions. To obtain the waiver, Ministry developed a six-month training program

for NPs, created virtual access to hospitalists at a sister facility, and ensured that NPs used care protocols standardized by hospitalists.

By using NPs as hospitalists (rather than for individual elements of patient care), leaders alleviate pressure on the organization, better leverage the skills and capabilities of NPs, and enable physicians to prioritize most complex patients.

From Overworked PCPs...

- Four PCPs seeing both ambulatory and hospital patients
- Physicians working long hours, frustrated with lack of work-life balance

...to Independent APs

- Two nurse practitioners admit, manage, discharge majority of patients; send complex patients to sister facility
- Practice under collaborative agreement with hospitalist director at sister facility
- Available days, weekends; PCPs take night call

Inflexible reimbursement policies are preventing virtual technology from revolutionizing health care.

Health care leaders' interest in telehealth has exploded in the last several years, prompted by payment reform, consumerism, and developments in technology. But relatively few health systems can follow through with sizeable investment because so many virtual care services are not reimbursable.

Virtual care technology offers a host of potential benefits to both providers and patients. It can help providers prevent unnecessary ED visits, enable more effective management of chronic conditions, improve the safety of care transitions, enhance patient communication, and improve accessibility of specialists. It can enable patients to access timely care without leaving their homes and avoid long wait times in an office. As the graphic below shows, the majority of patients are ready and willing to use virtual care services.

Despite these benefits, health care leaders are hesitant to invest in virtual care. The largest obstacle is the lack of reimbursement for services. Medicare reimburses for only a small subset of rural consult-based telehealth, Medicaid coverage varies by state, and many private insurers remain hesitant to reimburse providers for most telehealth models. Policy issues, such as distance requirements and licensure limitations, are another major barrier.

Health care leaders should become familiar with the legal and regulatory requirements around telemedicine for the state(s) in which they operate, and work with industry groups to advocate for state- and federal-level legislation. These types of reforms, along with shifts in payer understanding, could lead to better reimbursement models in the future.

National Survey of Health Care Consumers

77%
would consider seeing
a provider virtually

19%
already have seen a
provider virtually

Health care executives striving to reduce labor costs should first consider exponential growth of administrative staff.

Many health care executives are under intense pressure to control costs. And some organizations have made real progress by reducing premium labor, improving care team efficiency, removing supply waste, etc. With much of the "low-hanging fruit" now gone, further cost reduction is a challenge. However, one slice of the labor budget—administrative costs—deserves special attention due to its explosive growth in recent decades.

Over the past 45 years, there has been a massive increase in the number of administrative staff in the health care industry; the growth of the clinical workforce pales in comparison. As the industry has become more complex and more highly regulated, health care organizations have created new positions to ensure they could capture their earned revenue. For example, in response to managed care in the 1990s, hospitals needed to hire scores of staff who could support medical billing, coding, claims processing, and other revenue cycle management services.

To manage labor costs, leaders need to think differently about opportunities for cost savings and expand their lens beyond the clinical workforce.

Growth of Physicians and Administrators[1]

1970–2013
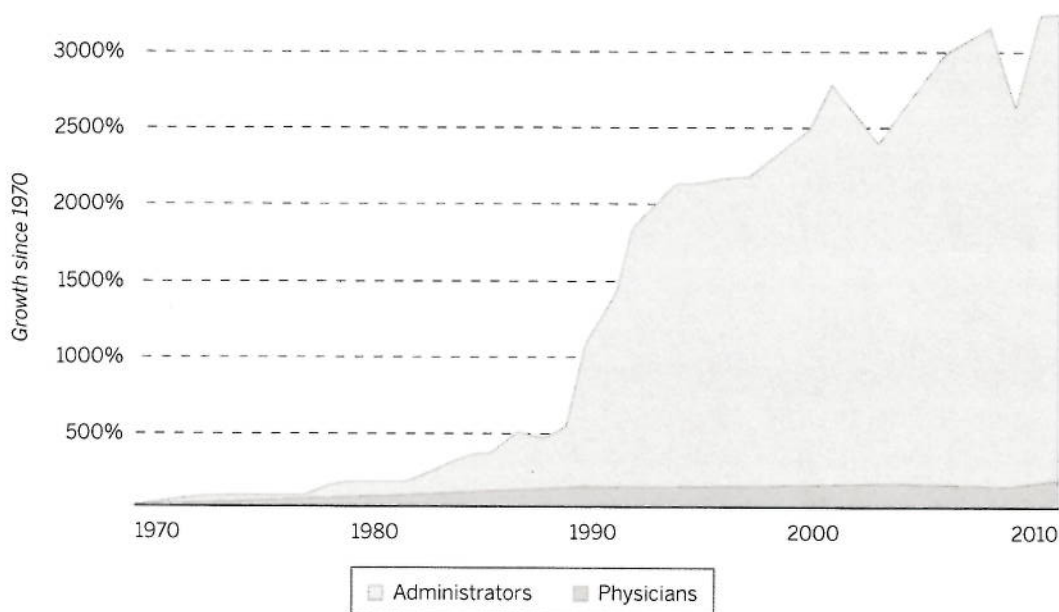
1) Spans three occupational categories: management, non-financial administrative support, and financial administrative support.

Most health systems must reduce unwarranted care variation to maintain positive margins.

According to the CBO, sixty percent of hospitals will have negative margins by 2025 unless they significantly increase productivity or decrease costs. As a result, nurse executives are being asked to cut tens of millions from their budgets.

To find these savings, most executives must complement ongoing efforts to increase labor productivity with a much bigger cost-saving opportunity: reducing unwarranted care variation. CFOs now estimate that there are twice as many cost savings opportunities in care variation reduction (CVR) as in labor or supply costs.

CFO's faith in the potential cost savings of CVR is well founded. For example, Advisory Board analysis of joint replacement length of stay for every facility in the Draper Health System, a pseudonym for an 11-hospital health system, found they would eliminate 1,168 avoidable days if all facilities matched the system's 75th percentile length of stay. With an estimated savings of $500 per day, this equates to a total annual savings of $584,000 from minimizing variation in just two procedures.

Draper Health System's Variation in Knee Replacement LOS by Facility

Facility	A	B	C	D	E	F	G	H	I	J	K
Cases	444	202	221	151	229	124	17	260	516	22	31
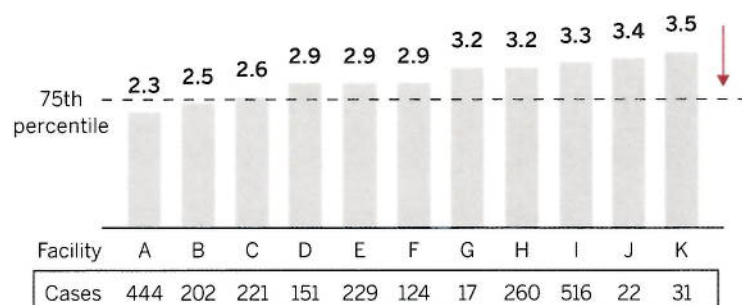
Draper Health System's Variation in Hip Replacement LOS by Facility

Facility	A	B	E	F	D	H	C	I
Cases	331	133	176	70	84	185	56	153
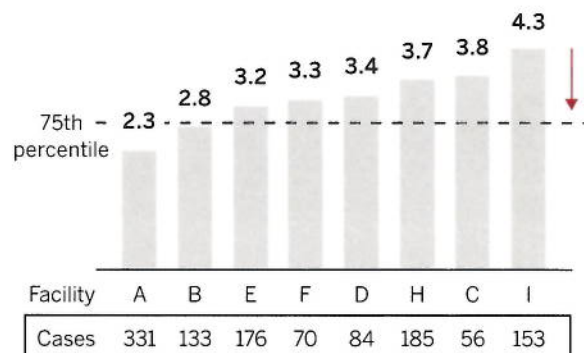
CFOs' Estimated Breakdown of Cost Savings Opportunities

n=45
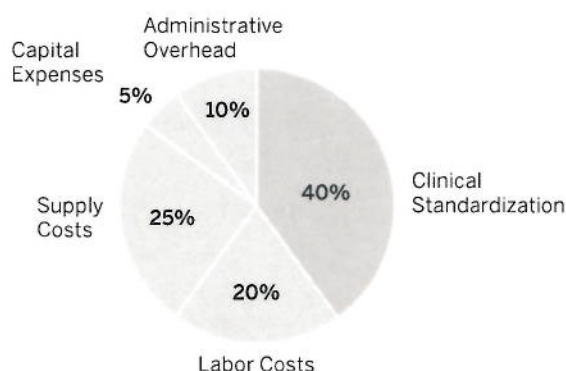
Capital Expenses 5%
Administrative Overhead 10%
Clinical Standardization 40%
Labor Costs 20%
Supply Costs 25%

Achieving a culture of high reliability care is the final step in minimizing care variation enterprise-wide, not the first one.

Building a culture of high reliability care is a laudable aim. There is no better way to ensure every patient receives the known standard of care, every time, and in every setting, than making the development of and adherence to common care pathways the cultural norm for your health system. Nonetheless, efforts to build a high reliability culture should focus first on more concrete and operational issues.

As suggested by the pyramid below, there are a number of operational prerequisites to securing a return on more aspirational efforts to reduce care variation across large, complicated health systems. For example, your system's clinical analytics must be credible among clinicians and sufficient to prioritize myriad opportunities. Likewise, clinicians must feel vested in driving the health system's larger strategic aims and think past consensus to adherence when developing care standards.

Once such foundational elements are in place, your organization should invest in all four elements necessary to spin what Advisory Board calls the CVR flywheel: Prioritize, Design, Embed, and Measure. In particular, organizations struggling to drive system-wide adherence to a multitude of standards should be wary of zeroing in too narrowly on the "embed" phase of this virtuous cycle because all four phases are key to overcoming this challenge. For example, leading organizations are working to limit the number of new standards they are developing at any one time (to what their design, IT, and educational teams can realistically support) and to design standards that are easier to follow by incorporating existing workflows.

To be clear, building a high reliability culture is a worthy aim from the outset. Most organizations, however, need to make more progress in "walking the walk" before "talking the talk."

Framework for Minimizing Care Variation at Scale
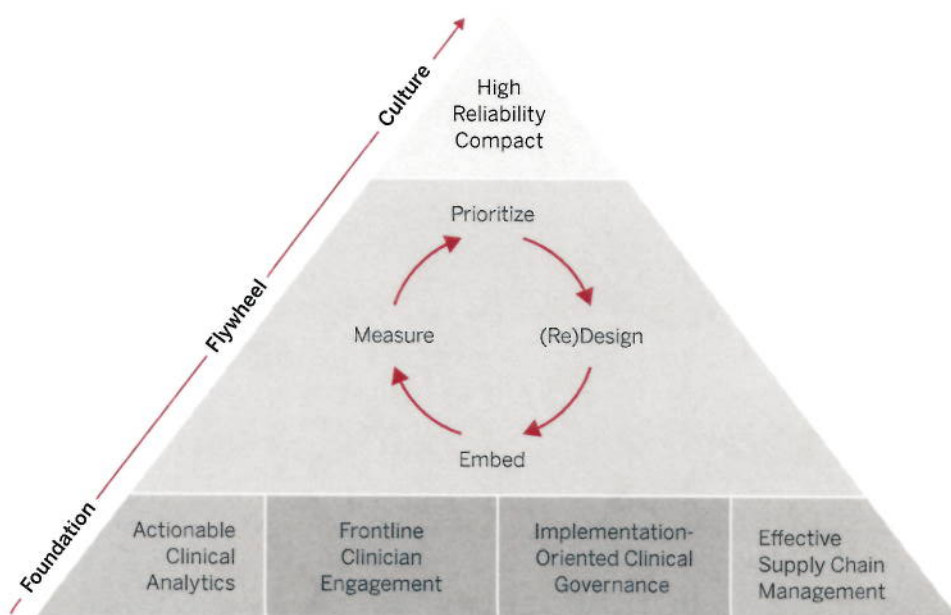
Think horizontally as well as vertically when prioritizing which care processes to standardize.

Many organizations are striving to better leverage data in order to prioritize which care processes to standardize. They increasingly start by isolating a subset of DRGs with significant patient volumes where outsized differences in cost per case suggest a high degree of care variation. They then charge a clinical consensus group with determining which processes within the DRG account for a disproportionate share of the variation and what should be standardized organization-wide.

This "vertical" approach to prioritization should be complemented by "horizontal" analysis—looking across targeted DRGs or clinical pathways for common foundational care processes that have not been standardized system-wide.

Absent this complementary analysis, organizations may overlook the aggregate impact of variation in more routine care processes. For example, Foley catheter removal didn't rise to the top of the list for system-wide standardization at one organization applying stringent prioritization criteria until they added this second perspective.

Additionally, standardizing foundational care processes eases implementation of the complex clinical pathways that build upon them and minimizes physician bottlenecks in developing new standards. More specifically, nurses and other clinicians should be empowered to develop most foundational care processes with minimal physician involvement.

Importance of Foundational Care Processes by Clinical Pathway

Care Processes	Clinical Pathways			
	CABG	Hip Joint Replacement	Septic Shock	Severe Pneumonia
Antibiotic Stewardship	↑	↑	↑↑↑	↑↑↑
Discharge Planning	↑↑	↑↑	↑↑	↑
Foley Catheter Removal	↑↑	↑↑	↑↑	
Ventilator Protocol	↑	↑	↑↑↑	↑↑↑
DVT Prophylaxis	↑	↑↑	↑	↑↑
Blood Utilization Criteria		↑	↑	
Vital Sign Capture			↑↑	

New care standards should make care delivery easier, not harder.

Most organizations respond to poor adherence to care standards by doubling down on their implementation efforts. For instance, leaders might retrain staff, send another email about a new order set, un-blind performance data, or hire an additional educator.

But the root cause of poor adherence is often poor standard design. Frontline staff often have trouble embedding new care standards into practice because they involve extra care steps, require additional documentation, or call for using equipment that is unfamiliar or not easily accessible. Such oversights can make new standards difficult, and sometimes impossible, for clinicians to follow consistently.

Instead of force-fitting standards into workflow, leaders should invest in designing new care standards that mesh with—or even improve—frontline workflow. The goal should be to create standards that integrate seamlessly into frontline workflow and make care easier, rather than harder, to provide.

Dual Perspective Key to Standardizing a New Sepsis Protocol

	Standard Creation	Diagnosis	Consultation	Treatment	Follow-Up
Clinical Requirements	**What** steps need to be taken?	Draw serum lactate levels for every SIRS[1] positive patient	Draw two blood cultures after antibiotics are administered	Administer antibiotic within three hours of SIRS positive	Adjust antibiotic based on blood culture results
Compliance Realities	**How** can we ensure steps take place?	Do all units have adequate lactate tubes and request forms available?	Can the lab meet a 48-hour turnaround time with existing capacity?	Are physicians alerted to SIRS[1] positive result in real time?	Is an antibiotic cheat sheet available in EHR[2] for physicians to reference?

1) Systemic inflammatory response syndrome.

2) Electronic health record.

"We put so much effort into creating the standard—we reviewed evidence, sought input, came to consensus—and it still failed. We realized we didn't fail because we didn't have a standard, **we failed because we didn't have a functional standard that could actually be adopted**."

System CMO,
Large Health System in Northeast

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Sources

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Page 10: Physician Executive Council interviews and analysis.

Page 12: Physician Executive Council interviews and analysis.

Pages 4–9 and 11: Advisory Board interviews and analysis.

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April 25, 2018

TO: CNO Advisory Committee Members

FROM: BJ Bartleson, MS, RN, NEA-BC, Vice President, Nursing and Clinical Services
             Kim Tomasi, RN, MSN, CEO, Association of California Nurse Leaders (ACNL)
             Marketa Houskova, RN, MAIA, BA, Executive Director, American Nurses Association –
             California (ANA-C)

SUBJECT: Nursing Community

SUMMARY
ACNL and ANA- C have agreed to formally meet at ACNL's June Board meeting for a discussion on potential advocacy work with multiple nursing organizations. The Nursing Community Coalition has been a successful national advocacy model bringing 58 nursing organizations together for important federal legislative activity such as Title VIII Nursing Workforce Reauthorization Act, Home Health Care Improvement Act, and the Addiction Treatment Access Improvement Act.

DISCUSSION
1. How do we advance the professional role of nursing in California ?
2. How do we improve advocacy activity to advance health care needs of Californians?

ACTION REQUESTED

➢ *Please comment on how you would like to see ANA-C and ACNL move forward in June.*

Attachments: Nursing Community Coalition
              California Nursing Community Spreadsheet
              Latest Strategy that Would Reverse Access to Care

BJB:br

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Corporate Members: Hospital Council of Northern and Central California, Hospital Association of Southern California, and Hospital Association of San Diego and Imperial Counties

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About Us

NURSING COMMUNITY COALITION

58 MEMBER ORGANIZATIONS

ESTABLISHED IN **2009**

For over a decade, the Nursing Community Coalition has been a partnership of national professional nursing associations that builds consensus and advocates on a wide spectrum of healthcare issues. Collectively, the Nursing Community is comprised of 58 national nursing organizations that represent the cross section of education, practice, research, and regulation within the profession. With over four million licensed registered nurses, advanced practice registered nurses, and nursing students, the profession embodies the drive and passion to continually improve care for patients, families, and communities across the continuum.

The Nursing Community Coalition supports the following core principles:

- A robust and diverse nursing workforce is essential to the health of all Americans.

- Nurses are an integral part of the healthcare team, are involved in every aspect of care delivery, and are committed to the patient, their families, the community, and the nation.

- The contributions made by the practice and science of nursing are critical to the delivery of high quality, life-saving, preventive, and palliative health care across all care settings, geographic areas, and social determinants of health.

- The services RNs and APRNs provide are linked directly to the availability, cost, and quality of healthcare services.

- Affordable, accessible, high-quality health care and improved health outcomes depend upon a model of care that is patient-centered and comprehensive. This can only be achieved through the full complement of expertise gained from broad-based, inter-professional partnerships of physicians, nurses and other health professionals.

- Nursing's involvement is essential to the development of new healthcare information technology infrastructure. Nursing data are key to identifying patient outcomes and required improvements in the delivery of patient care.

Since the Start of the 115th Congress

22 LETTERS WRITTEN TO CONGRESS • **4** CONGRESSIONAL EVENTS • **13** LETTERS WRITTEN TO THE ADMINISTRATION

To review the efforts of the Nursing Community Coalition, visit: http://www.thenursingcommunity.org.

Major Policy and Legislative Highlights

SINCE JANUARY 2017

The Nursing Community Coalition has supported the following pieces of legislation during the 115th Congress:

- H.R. 959, S. 1109: Title VIII Nursing Workforce Reauthorization Act of 2017
- S. 445, H.R. 1825: Home Health Care Planning Improvement Act of 2017
- H.R. 3692: Addiction Treatment Access Improvement Act of 2017

The Nursing Community Coalition has submitted testimony to committees on the following issues during the 115th Congress:

- House Appropriations Subcommittee on Labor, Health and Human Services, Education, and Related Agencies to request $244 million for the Title VIII Nursing Workforce Development Programs and $160 million for the National Institute of Nursing Research for FY 2018.
- Senate Appropriations Subcommittee on Labor, Health and Human Services, Education, and Related Agencies to request $244 million for the Title VIII Nursing Workforce Development Programs and $160 million for the National Institute of Nursing Research for FY 2018.

The Nursing Community Coalition has submitted comments on the following issues since the beginning of the 115th Congress:

- U.S. Department of Veterans Affairs' final rule published on December 14, 2016 (Federal Register Document Number 2016-12338, RIN 2900-AP44) regarding Advanced Practice Registered Nurses' (APRNs) clinical practice within the Veteran's Health Administration.
- U.S. Department of Health and Human Services' Draft Strategic Plan for FY 2018 to FY 2022.
- U.S. Department of Veterans Affairs' proposed rule published on October 2, 2017 that would expand telehealth services within the Veteran's Health Administration.

The Nursing Community Coalition has distributed four statements on health reform during the 115th Congress.

- January 19, 2017: Letter to Congressional Leadership on Health Reform
- January 27, 2017: Letter to Congressional Leadership Outlining Health Priorities
- February 15, 2017: Letter to HHS Secretary Tom Price on Health Reform
- June 22, 2017: Statement to Senators to Commit to America's Health

The Nursing Community Coalition has hosted events on the following topics:

- *Transforming Health and Health Care: Nursing Workforce* hosted on May 9, 2017 featured nursing experts who shared insights on how the profession is meeting the healthcare needs of the nation and preparing for future demand.
- *Transforming Health and Health Care: Nursing Research* hosted on May 11, 2017 featured nursing experts who discussed the contributions of nursing science as it relates to care across the continuum.
- *Future of Nursing: Campaign for Action* cohosted with the Robert Wood Johnson Foundation and the AARP Foundation on September 20, 2017 featured experts working to implement recommendations from the Institute of Medicine report on the future of nursing.
- *The Opioids Crisis: Nursing Practices that Save Lives* hosted on December 7, 2017 featured nursing experts who shared insights and offered solutions to the opioids epidemic facing the country.

National Organization	California Chapters
American Academy of Ambulatory Care Nursing	No California Chapters found
American Academy of Nursing	No California Chapters found
American Association of Colleges of Nursing	No California Chapters found
American Association of Critical-Care Nurses	Chapters in: Fremont, Fresno, Loma Linda, LA, Napa, Oxnard, Rancho Mirage, Sacramento, Salinas, San Diego, San Francisco, San Jose, Santa Barbara, Tustin, Vallejo, Van Nuys, Whittier
American Association of Heart Failure Nurses	No California Chapters found
American Association of Neuroscience Nurses	No California Chapters found
American Association of Nurse Anesthetists	No California Chapters found
American Association of Nurse Practitioners	No California Chapters found
American College of Nurse-Midwives	California Nurse-Midwives Association; website: california.midwife.org
American Nephrology Nurses Association	Chapters: SoCal United (Redlands), Sacramento Valley (Rancho Cordova), Chumash (Agoura Hills), San Joaquin Valley (Friant), Los Angeles (Playa Del Rey), San Francisco Bay Area (Redwood City), Nephros South (Poway)
American Nurses Association	ANA/California: www.anacalifornia.org
American Nursing Informatics Association	Chapters: San Diego (community.ania.org/sandiego/home), SoCal (community.ania.org/socal/home)
American Organization of Nurse Executives	Affiliate: Region 9 - ACNL
American Pediatric Surgical Nurses Association	No California Chapters found
American Society for Pain Management Nursing	Southern California: Huntington Beach: aspmnsocal.nursingnetwork.com; Northern California: San Jose: norcalaspmn.org
American Society of PeriAnesthesia Nurses	CA liaison: Ernestine Nunes (PANAC) enunesca@aol.com
Association of Community Health Nursing Educators	No California Chapters found
Association of Nurses in AIDS Care	Chapters: Greater LA; Golden Gate
Association of Pediatric Hematology/Oncology Nurses	Chapters: San Francisco Bay Area: baphon.org ; Southern California: scaphon.org
Association of peri-Operative Registered Nurses	No California Chapters found
Association of Public Health Nurses	Region 9: AZ, CA, HI, NV - Pamela Dudley, RN - San Luis Obispo County Public Health Department
Association of Veterans Affairs Nurse Anesthetists	No California Chapters found
Association of Women's Health, Obstetric and Neonatal Nurses	CA Section: AWHONN California: Beth Stephens-Hennessy, Section Chair
Dermatology Nurses' Association	Chapter: San Francisco/N. California #004 (melissapcooper@comcast.net)
emergency Nurses Association	State Council: EMAIL: ksvandusen@cox.net WEB: http://www.californiaena.org
Friends of the National Institute of Nursing Research	Member of Board of directors is in CA but no location in CA that I could find
Gerontological Advanced Practice Nurses Association	CALIFORNIA (Northern)-deborah.baker@ncmahealth.com CALIFORNIA (Southern)-palomajasmine@msn.com
Hospice and Palliative Nurses Association	California: Deborah Greenspan- please email us at hpna@hpna.org, with "State Ambassador" in the title line and the name of the person you want to contact.
International Association of Forensic Nurses	IAFN Southern California Chapter-CA USA-Chapter #4-acarney@csusm.edu
International Society of Psychiatric-Mental health Nurses	No California Chapters found

National Organization	California Chapters
National Association of Clinical Nurse Specialists	No California Chapters found
National Association of Neonatal Nurse Practitioners	No California Chapters found
National Association of Neonatal Nurses	Central California (CCANN) Coastal California (CoCANN) Inland Counties (ICANN) Northern California (NCANN) Southern California (SCANN)
National Association of Nurse Practitioners in Women's Health	could not really pull up this site
National Association of Pediatric Nurse Practitioners	**LA:** http://www.lanapnap.org/home **Orange County**: https://ocnapnap.enpnetwork.com/ **San Diego: http://community.napnap.org/CASANDIEGO/home/**
National Black Nurses Association	CA Fresno Central Valley Black Nurses Association (150) CA Oakland Bay Area Black Nurses Association (2) CA Los Angeles Council of Black Nurses, Los Angeles (1) CA Riverside Inland Empire BNA (58) CA San Diego San Diego Black Nurses Association (3)
national Council of State Boards of Nursing	rn.ca.gov/
National Forum of State Nursing Workforce Centers	https://healthimpact.org/
National League for Nursing	Associate Members and Member Schools
National Nurse-led Care Consortium	No California Chapters found
National Organization of Nurse Practitioner Faculties	No California Chapters found
Nurses Organization of Veterans Affairs	120 VA Central California HCS (CA)-140 San Francisco VAMC (CA):Judith Rosen 128 VA Northern California HCS (CA):Need Contact- 129 VA Palo Alto HCS (CA): Carol Valdon 30 VA Greater Los Angels HCS (CA): Heidi Bolling Natlie Meyers 138 VA San Diego HCS (CA):-Carmen Concepcion - 124 VA Loma Linda HCS (CA): Need Contact 126 VA Long Beach HCS (CA): Larry Lemos
Oncology Nursing Society	http://sierranevada.vc.ons.org/
Organization for Associate Degree Nursing	No California Chapters found
Pediatric Endocrinology Nursing Society	Community Area is locked and no listing on webpage
Society of Pediatric Nurses	LA Chapter; Pmueller@chla.usc.edu; Sacramento Chapter ahmarin@UCDAVIS.EDU; Inland Empire THitchcock@llu.edu; Orange County drea.correia@gmail.com
American Assisted Living Nurses Association (AALNA)	No California Chapters found
American Association of Occupational Health Nurses (AAOHN)	CA State Chapter- wrobbins@sonnet.ucla.edu
American Psychiatric Nurses Association (APNA)	CA Chapter- https://www.apna.org/i4a/pages/index.cfm?pageID=3444
Association of California Nurse Leaders (ACNL)	Multiple CA Chapters: http://www.acnl.org/chapters
Association of Rehabilitation Nurses (ARN)	LA Chapter http://laocarn.org/
National Organization of Nurses with Disabilities (NOND)	website under construction
PeriAnesthesia Nurses Association of California (PANAC)	https://panac.nursingnetwork.com/
SEIU Nurse Alliance of California	http://www.nursealllianceca.org/

National Organization	California Chapters
Society of Gastroenterology Nurses and Associates, Inc. (SGNA)	Northern and Southern Chapters
United Nurses Associations of California/Union of Health Care Professio	http://www.unacuhcp.org/
Wound Ostomy & Continence Nurses Society/Pacific Coast Region	Has peer groups not chapters

**Nursing Community Coalition Responds to the American Medical Association's
Latest Strategy that Would Reverse Access to Care**

November 29, 2017–The Nursing Community Coalition (NCC) is disappointed by the American Medical Association's (AMA) recent call for action that has the potential to impede access to care by qualified providers and complicates aspects of an interprofessional, team-based approach. Specifically, at AMA's recent House of Delegates Interim meeting, the association adopted an amended resolution to create a national strategy to obstruct state and national policies that would allow "non-physician" providers, including Advanced Practice Registered Nurses (APRNs), from practicing to the full extent of their education, clinical training, and certification. The coalition firmly believes in the value added to the patient, family, and community through the delivery of care from all providers practicing to the top of their licensure.

The Institute of Medicine (currently the National Academy of Medicine) calls for the removal of barriers that prevent APRNs from full practice authority in its pinnacle report *Future of Nursing: Leading Change, Advancing Health*.[1] This has served as the platform for widespread efforts to examine scope of practice policies for nearly eight years by stakeholders both within and outside of professional nursing. Additionally, the Federal Trade Commission has urged states to review laws and regulations that stifle competition in the healthcare sector, as these impose unnecessary and burdensome restrictions on APRN practice, which can negatively affect patients.[2]

The Nursing Community Coalition firmly believes we must work together to put patients first.

American Academy of Ambulatory Care Nursing
American Academy of Nursing
American Association of Colleges of Nursing
American Association of Critical-Care Nurses
American Association of Heart Failure Nurses
American Association of Neuroscience Nurses
American Association of Nurse Anesthetists
American Association of Nurse Practitioners
American College of Nurse-Midwives
American Nephrology Nurses Association
American Nurses Association

For any inquiries, please contact Dr. Suzanne Miyamoto, Executive Director of the Nursing Community Coalition at smiyamoto@aacnnursing.org.

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[1] Institute of Medicine. (2010). Future of Nursing: Leading Change, Advancing Health. Retrieved from: http://www.nationalacademies.org/hmd/Reports/2010/The-Future-of-Nursing-Leading-Change-Advancing-Health.aspx.
[2] Federal Trade Commission. (2014). Policy Perspectives: Competition and the Regulation of Advanced Practice Nurses. Retrieved from: http://www.aacnnursing.org/Portals/42/Policy/PDF/APRN-Policy-Paper.pdf.

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American Nursing Informatics Association
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American Pediatric Surgical Nurses Association
American Psychiatric Nurses Association
American Society for Pain Management Nursing
American Society of PeriAnesthesia Nurses
Association of Community Health Nursing Educators
Association of Nurses in AIDS Care
Association of Pediatric Hematology/Oncology Nurses
Association of periOperative Registered Nurses
Association of Public Health Nurses
Association of Veterans Affairs Nurse Anesthetists
Association of Women's Health, Obstetric and Neonatal Nurses
Dermatology Nurses' Association
Emergency Nurses Association
Friends of the National Institute of Nursing Research
Gerontological Advanced Practice Nurses Association
Hospice and Palliative Nurses Association
International Association of Forensic Nurses
International Society of Psychiatric-Mental Health Nurses
National Association of Clinical Nurse Specialists
National Association of Neonatal Nurse Practitioners
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National Association of Nurse Practitioners in Women's Health
National Association of Pediatric Nurse Practitioners
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National Forum of State Nursing Workforce Centers
National League for Nursing
National Nurse-Led Care Consortium
National Organization of Nurse Practitioner Faculties
Nurses Organization of Veterans Affairs
Oncology Nursing Society
Organization for Associate Degree Nursing
Pediatric Endocrinology Nursing Society
Society of Pediatric Nurses

NEWS

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Go to News Listing

Algorithm illustrates nursing, medical scopes of practice

March 15 2018 | **Publication:** eNews Update

Researchers at the University of Illinois at Chicago (UIC) have developed an algorithm that can quantify and compare the patient care provided by nurses and doctors. Their findings were published in the International Journal of Medical Informatics. The researchers analyzed the electronic health records of 58 randomly selected heart failure patients and examined their care over the course of eight years. The algorithm identified key biomedical terms used by doctors and nurses in the records and found just 26 percent of records had an overlap of terms. Co-author Karen Dunn Lopez, PhD, assistant professor in the UIC College of Nursing, said the findings illustrate how nurses and doctors focus on different aspects of patient care. "This is the first evidence of its kind that illustrates how the scope of nursing practice runs parallel to, but independent of, 'doctor's orders,'" she said. (UIC news release, 3/7/18)

Operations/Membership	**Executive Office**
American Organization of Nurse Executives	American Organization of Nurse Executives
155 N. Wacker Drive. Suite 400, Chicago, IL 60606	800 10th Street, NW, Two City Center, Suite 400,
Phone: 312-422-2800	Fax: 312-422-4503	Email:	Washington, DC
aone@aha.org	Phone: 202-626-2240	Fax: 202-638-5499

Algorithm Shows Differences Between Nurse, Doctor Care

First quantitative data on divergent scopes of practice

Newswise — A multidisciplinary team of researchers at the University of Illinois at Chicago has published the first quantitative study on the divergent scopes of practice for nurses and doctors. The study uniquely leveraged computer science technology to compare individual-level patient care provided by nurses and doctors using information routinely documented in the electronic health record.

The researchers analyzed the electronic health records of 58 randomly selected patients who had a medical diagnosis of heart failure and sought care at a single academic medical center over the course of eight years. Each health record included a physician discharge summary, and nursing plans of care were created for the study using the information found in the discharge report.

A computer algorithm developed at UIC was used to identify the key biomedical terms used in each summary and to link synonyms or related terms via a graph traversal — a network representation that shows the integrated relationships of language and health terminology.

The researchers found that only 26 percent of patient records showed an overlap in terms. On average, only four terms between the professions were related to the same concept. Physicians typically used about 27 terms and nurses about 18 terms.

"We've created a more unified picture of health care professionals' perspectives on their patients," said corresponding author Andrew Boyd, assistant professor of biomedical and health information sciences in the UIC College of Applied Health Sciences. "Previous studies on this topic have been limited by their reliance on qualitative, observation-based data collection or costly survey methods — ours is the first to objectively measure the scope of practice when nurses and doctors care for the same patients."

Co-author Karen Dunn Lopez, assistant professor in the UIC College of Nursing, says the findings help to illustrate how nurses and doctors focus on different aspects of patient care. The findings also show that synergy between the two groups is needed to achieve the best possible patient outcomes, she says.

"Patients who are hospitalized need hands-on nursing care in addition to the treatments ordered by a physician," Lopez said. "This is the first evidence of its kind that illustrates how the scope of nursing practice runs parallel to, but independent of, 'doctor's orders.'"

Some of the common terms for doctors were highly technical, including "decreased translucency" and "radiographic examination abnormal," where nursing terms were more likely to focus on symptoms and responses to illness, such as "acute onset of pain." While the researchers did not expect the language across professions to be identical, they were surprised to see such significant differences emerge based on documentation review alone.

"The collaboration between nurses and doctors is unique in a modern setting in which multiple nurses work with multiple doctors over the course of the numerous shift changes," Boyd said.

"Because providers are changing, the dynamics of collaboration are also changing — this underscores the importance of the electronic health record as perhaps the single most important communication tool used to coordinate care across disciplines in hospitals today," Boyd said. "As the algorithm used in the study can be universally applied to any health record, it has incredible potential for identifying gaps in care and even improving quality and quality reporting."

For example, Boyd says, hospital metrics typically focus on physician care, not nursing care. "This study offers foundational evidence that quality reporting may be more reflective of care and patients' experiences if it expands to equally include nursing care documentation," Boyd said.

Lopez agrees and views the findings as proof that there is a need for detailed nursing documentation.

"Without documentation from nurses, health records only show part of the whole," Lopez said. "I hope this study is viewed as a first step in identifying how the combination of nursing care and medical care work together to improve patient outcomes."

The findings are published in the International Journal of Medical Informatics.

Barbara Di Eugenio, professor of computer science in the UIC College of Engineering, led the development of the algorithm. Additional co-authors on the study are Camillo Lugaresi, Tamara Macieira, Vanessa Sousa, Sabita Acharya, Abhinaya Balasubramanian, Khawllah Roussi and Michel Burton from UIC; Yves Lussier and Jianrong Li from the University of Arizona; and Gail Keenan from the University of Florida.

This study relied on data from the MedLEE study, which was funded in part by the National Library of Medicine (R01LM008635). The HANDS software discussed in the study is owned and distributed by HealthTeam IQ, of which Keenan is president and chief executive officer.

From: Judee Berg <judee@healthimpact.org>
Sent: Friday, April 20, 2018 11:11 AM
To: Burnes Bolton, Linda, Dr.PH, RN, FAAN <linda.burnesbolton@cshs.org>; BJ Bartleson
<BJbartleson@calhospital.org>
Subject: RE: Urgent request

Dear Linda,

I've attached the most recent supply/demand forecast from Joanne Spetz. (I've also attached a very
recent regional report for the Central Valley where there is predicted to be a severe shortage regardless
of assumptions - the Central Valley is the only regional report she has done.) If you go to pages 29-31
you'll get the basic analysis. California is historically one of the lowest states in the country in terms of #
of RNs/population (809/100,000), so when Joanne looks at demand she is projecting it based on
continuing the present ratio reaching the 25th percentile FTE RNs/population, or reaching the national
average FTE RNs/population She also notes that the national projections are different than the BRN's
report because while they use similar methodology, they use different data sources. I've also attached a
Buerhaus article that speaks to the national supply projections with regions broken out separately. The
Pacific region has some of the lowest growth in RN FTE per capita. Keep in mind all these projections
make significant assumptions about numbers of graduations from nursing schools, in and out state
migration remaining stable, age of RNs, retirement rates remaining stable, demand for RNs remaining
stable, etc. There is a whole section in the front of the report that details assumptions used in creating
the report. That being said, I have heard Joanne Spetz tell the BRN that California's supply of RNS is
currently "in balance" with demand. The exception to that statement is the Central Valley. The
BRN/Spetz forecast report indicates that in 2017, CA was about 5,000 RN FTEs short, and by 2034 the
best (defined as the mid-point between high and low projections) supply forecast indicates we will have
a small surplus of RNs, while the low supply forecast shows we will have a shortage of over 100,000 RNs.
The difference between these two forecasts is related to the assumptions incorporated into the model
and is explained in the Executive Summary.

Distribution of the supply of RNs in the state may also be an issue with more RN graduates coming out
of the Bay Area than Southern California per capita. I've also attached the Newly Licensed RN
Employment Survey that shows employment rates for these newly licensed RNS coming from CA schools
of nursing, which shows pretty high employment rates across the state. The biggest shortage of all,
however, is for experienced RNs in the specialty areas of peri-operative, critical care, emergency
department, labor & delivery, and NICU. I've attached the HASC data on this with the documentation
starting on page 34.

I hope this information is helpful, Linda. I'll give you call as soon as I get this off to you. Judee

Judith G. Berg, MS, RN, FACHE
Chief Executive Officer
HealthImpact, (formerly the
California Institute for Nursing & Health Care)

Immediate Past-president
National Forum of State Nursing Workforce Centers

UCSF
University of California
San Francisco

Forecasts of the Registered Nurse Workforce in California

Prepared for the California Board of Registered Nursing

by

Joanne Spetz, PhD

June 4, 2017

UCSF
University of California
San Francisco

Forecasts of the Registered Nurse Workforce in California

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Forecasts of the Registered Nurse Workforce in California

Executive Summary

This report presents supply and demand forecasts for the Registered Nurse (RN) workforce in California from 2017 through 2035. These new forecasts are based on data from the 2016 California Board of Registered Nursing (BRN) Survey of Registered Nurses, the 2015-2016 BRN Annual Schools Report, data extracted from the BRN license records, and other state and national data sources. The 2017 forecasts indicate that supply of and demand for RNs are fairly well-balanced over the next 10 years if current enrollment and state-to-state migration patterns are stable.

The forecasts of RN supply take into account the aging of the RN workforce, new graduates (including those from out-of-state and international nursing programs), interstate flows of RNs, and changes in license status. These new forecasts of supply incorporate new data for these factors.

The demand forecasts are based on national numbers of RNs per 100,000 population. An alternate forecast of demand was developed that estimates future hospital utilization in California and current data on RN employment in hospitals. The forecasts are compared with other published forecasts including those from the U.S. Bureau of Health Workforce and California Employment Development Department. Together, the demand estimates provide a range of possible scenarios for the future.

The Executive Summary Exhibit indicates that whether California experiences a shortage of RNs in the future depends on the measure of demand selected for comparison with supply as well as whether supply variables change. The forecasting model produces a range of supply forecasts; the "Best Supply Forecast" is based on the midpoint of most of the parameters in the model; the Exhibit presents both the "Best" and "Low" forecasts. In the figure, the supply forecasts are compared with two different estimates of demand: (1) the 2015 national 25th percentile of full-time equivalent RNs per population; and (2) a forecast of demand based on current hospital utilization by age group. In 2017, the statewide RN labor supply is slightly lower than the utilization-based forecast and 17 percent lower than the national 25th percentile of full-time equivalent (FTE) RNs per capita. Overall, California's RN supply is forecasted to reach the national 25th percentile by 2034 if the number of RN graduates remains stable and state-to-state migration patterns do not change substantially; it will remain close to the utilization-based demand forecast

throughout this period. However, if supply variables shift so that the low forecast prevails, California could face a severe shortage of RNs.

Policymakers should be cautioned that the 2017 BRN forecasts represent an 18-year period and are not intended to reflect rapidly changing economic and labor market conditions. The forecasts also do not measure variations across regions of California; it is possible that some regions of the state will experience shortages even while others have a surplus of RNs. Finally, the factors that affect RN supply and demand are unlikely to remain static. The most important possible changes include: (1) the number of graduates from RN education programs; (2) inter-state migration; and (3) employment rates of older RNs. California leaders should observe closely retirement patterns that are opening positions for which clinical experience is desired. It will be important for employers to invest in training newly-graduated RNs to fill these positions. Finally, the availability of faculty should be monitored to ensure that there are sufficient numbers of qualified faculty to educate the needed number of graduates from the RN education programs.

Executive Summary Exhibit: Projected full-time equivalent supply of and demand for RNs, 2017-2035
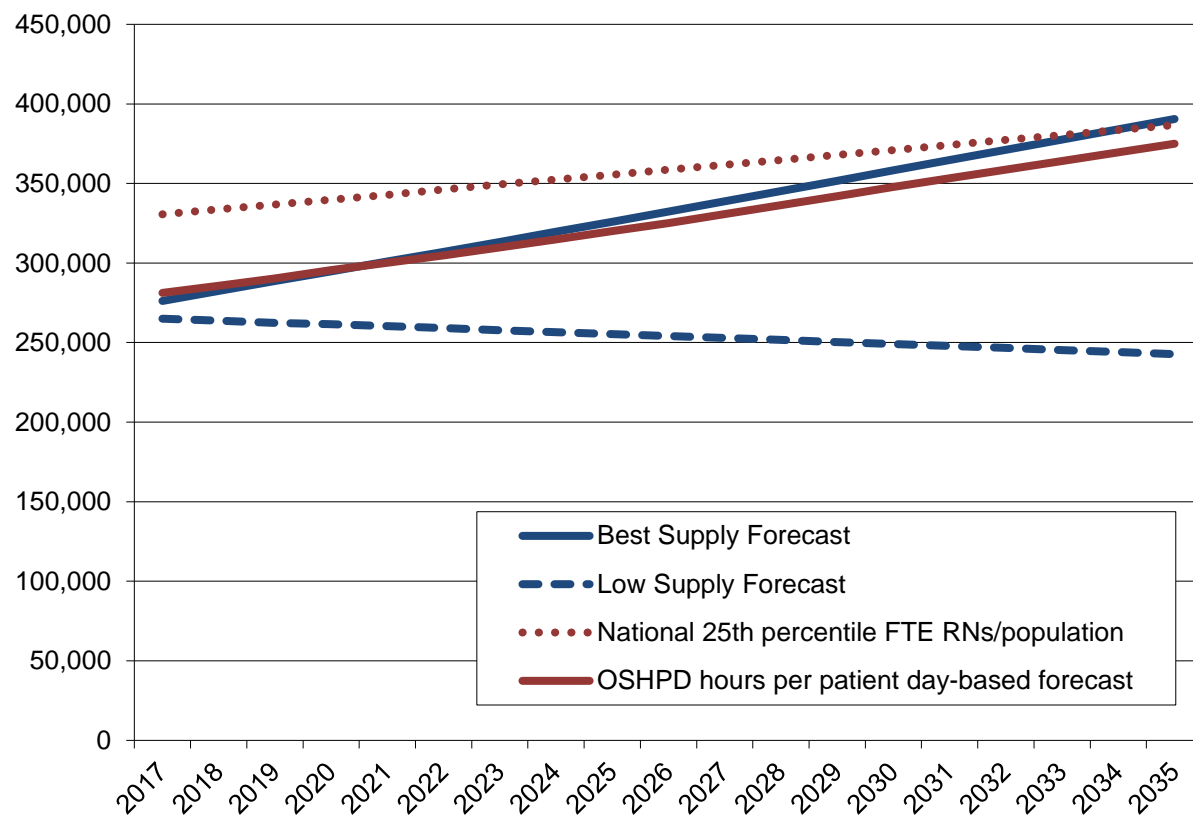
Forecasts of the Registered Nurse Workforce in California

The labor market for registered nurses (RNs) has been characterized by cycles of shortage and surplus since World War II. The most recent period of shortage began in the late 1990s (Buerhaus 1998), and persisted through 2007. After 2008, survey data indicated that California's long-standing RN shortage ended, at least temporarily (Bates, Keane, & Spetz 2011). This change in the labor market was attributed to several trends. First, nursing school enrollments expanded substantially in California, more than doubling between 2001 and 2010 (Waneka, Keane, & Spetz 2012). This expansion of RN supply would have alleviated the shortage in many regions on its own. The economic recession that started in late 2007 further mitigated the shortage by increasing the workforce participation of RNs who otherwise might have retired or reduced their hours of work. It has been estimated that nearly all the hospital employment increase in the past decade can be attributed to growth in RN supply during economic recessions (Buerhaus & Auerbach 2011). The recession also reportedly dampened demand for newly-graduated nurses. In late 2010, a survey of Chief Nursing Officers found that there were fewer than 6,500 full-time equivalent vacant positions for RNs statewide (Bates, Keane, & Spetz 2011) while the 2010 BRN Survey of Registered Nurses indicated that nearly 7,700 RNs were seeking employment (Spetz, Keane, & Herrera 2011).

More recent data suggest the labor market may be shifting again. The Fall 2016 Survey of Nurse Employers found that many Chief Nursing Officers are experiencing difficulty recruiting RNs for specialized positions and that more than 90 percent of hospitals reported demand for RNs being greater than the available supply (Chu, Bates, & Spetz 2017). Hospital vacancy rates have been rising since 2013, reaching 5.9 percent in 2016. There also has been growth in the share of newly-graduated RNs reporting they are employed within 12 months of licensure, rising from 59 percent in 2013 to 84 percent in 2016 (HealthImpact 2017). These data are consistent with the expectation that the economic recovery would lead nurses who had delayed retirement, re-entered the labor force, or increased their hours of work due to the economic recession to retire or reduce their employment as the economy recovers (Buerhaus & Auerbach 2011).

At the same time, the implementation of the most significant components of the Affordable Care Act (ACA) – an expansion of Medi-Cal and the implementation of the Covered California health insurance exchange to facilitate insurance enrollment – reduced the share of nonelderly Californians without health insurance from 16.2 percent in 2011 (Charles 2015) to 8.1 percent in 2015 (Cohen et al. 2016). Growing numbers of insured people will demand greater health care services,

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although the types of services needed are likely to change. In addition, the ACA established programs to encourage improved care management in order to deliver health care more efficiently and effectively (Spetz 2014). These changes have increased demand for RNs.

This report updates forecasts of RN supply and demand in California, which were first developed for the California Board of Registered Nursing (BRN) in 2005 and subsequently updated every two years (Spetz & Dyer 2005; Spetz 2007; Spetz 2009; Spetz 2011; Spetz 2013; Spetz 2015). New data from the 2016 BRN Survey of Registered Nurses (Spetz, Chu, & Jura 2017), the 2015-2016 BRN Annual Schools Report (Blash & Spetz 2017), and BRN license records were used to update the model of RN supply. The supply forecast is compared with several benchmarks of demand, including national numbers of RNs per 100,000 population, estimates of future hospital utilization in California, and forecasts published by the U.S. Bureau of Health Workforce and California Employment Development Department (BHW 2014; EDD 2016).

The Supply of RNs

As of April 6, 2017, there were 415,798 RNs with current, active licenses in California, of whom 353,051 resided in California. For the purposes of these forecasts, the California-resident population is defined as the supply of nurses; the role of nurses who travel to work in California from other states is discussed later in the report.

The RN workforce constantly changes with the entrance of newly graduated nurses, migration of nurses from other states and countries, retirements, temporary departures from nursing work, and fluctuations in the number of hours that nurses choose to work. These factors can be grouped into three categories:

- Inflows of nurses: Additions to the number of RNs in California
    - Graduates from California nursing programs
    - Graduates of nursing programs in other states who obtain their first RN license in California
    - Internationally-educated nurses who immigrate to California and obtain their RN license
    - Interstate migration of RNs to California
    - Changes from inactive to active license status
    - Changes from delinquent to active license status

- Outflows of nurses: The departure of RNs from the California population
  - Migration out of California (to another state or country)
  - Movements from active to inactive or lapsed license status
- Labor force participation factors: Decisions to work, and how much to work
  - Share of RNs with active licenses and California residence that work in nursing
  - Average number of hours worked per week by RNs working in nursing

The inflows are added to the number of RNs living in California with active licenses, which is called the "stock" of nurses available to work, and the outflows are subtracted from the stock. Estimates of the labor supply of RNs are derived from the stock of RNs potentially available to work and how much they choose to work in nursing. This number is expressed as full-time equivalent (FTE) employment in order to account for differences in the work commitments of those employed full-time and part-time. Exhibit 1 illustrates this model of the supply of RNs in California, commonly called a "stock-and-flow model."

Figure 1. A model of the supply of RNs
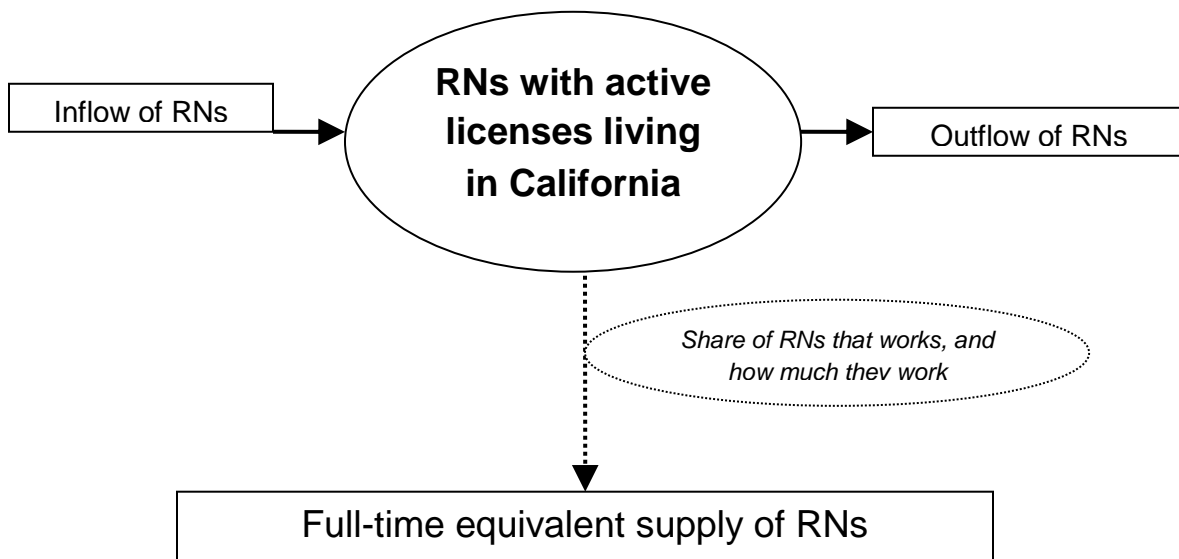
Method of Calculating RN Supply

As inflows, outflows, and employment decisions change over time, so does the RN workforce. At first glance, it seems clear that as long as the inflow of RNs is greater than the outflow, the RN workforce will grow over time. However, such a comparison between total inflow and outflow does not take into account the aging of the RN workforce. The age distributions of the stock of RNs and each inflow and outflow component affect supply. Thus, the model "ages" each age cohort to capture the impact of age on the supply forecast.

In the supply model, the number of RNs with active licenses who reside in California is divided into 13 age categories: under 25, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75-79, and 80 and older. One-fifth of RNs in each age category moves into the next (older) age category in the subsequent year, until they reach the oldest age category.[1] The inflow estimates are added to each age group of RNs and the outflow estimates are subtracted from each age group of RNs. The result is a forecast of the new stock of RNs for the next year. Finally, employment rates and hours worked per week in nursing are applied to the estimated stock of RNs in each age group to obtain estimated FTE supply. This calculation is iterated through 2035 to obtain yearly forecasts of California's RN supply.

For some factors in the supply model, differing estimates are available, with no indication of which estimate is most reliable. For other factors, there is uncertainty as to whether current data are applicable to what might happen in the future. For example, in 2010 and 2012, a greater share of nurses over age 60 was employed as compared with prior years. This increase was likely the result of older nurses delaying retirement due to declines in the value of their retirement savings (Buerhaus & Auerbach 2011). More recent data indicate that employment of nurses in this age group has returned to lower pre-recession levels (Spetz et al. in press). However, it also is possible that "baby boomer" nurses have different intentions regarding retirement than did previous generations, and higher rates of employment in older age groups will reemerge. For variables with such uncertainty, a range of estimates is offered representing the highest and lowest values. In the final models, the "best estimate" for each parameter is the average of the low and high estimates, unless otherwise noted.

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[1] All but one age group spans 5 years, so if nurses are evenly distributed across those five years, 20% - or 1 in 5 – would move to the next age group each year. The youngest age group spans 7 years, but there were few RNs under 20 years old in 2017; thus, the 20% assumption seems reasonable for this group as well.

Estimates of Supply Model Factors

Stock of RNs in 2017

Data describing the number of RNs with active licenses on April 6, 2017, were obtained from the BRN. At that time, 353,051 RNs had active licenses and a California address. The 62,747 RNs with addresses outside California were not included in the stock of RNs because California's border regions are generally rural and thus few nurses commute regularly from out of state. Some nurses might intermittently come to California as traveling nurses, thus supplanting the state's supply; this is discussed in more detail below.

The number of RNs with active licenses and California addresses was divided into 13 age groups. Three RNs who resided in California did not have age data recorded in the licensing file and are excluded from the analysis; the models are thus based on 353,048 RNs. The same age groups are used throughout the model. Table 1 compares the 2017 and 2015 data. The total number of licensed RNs living in California grew by 12,263 (3.6%) between 2015 and 2017, which is nearly the same as the 3.8% rate of growth between 2013 and 2015.

Table 1. Counts of actively-licensed RNs living in California, by age group, April 6, 2017, and April 9, 2015

	April 6, 2017		April 9, 2015	
Age Group	Count	% of Total	Count	% of Total
Under 25	4,424	1.25%	4,178	1.23%
25-29	28,319	8.02%	27,363	8.03%
30-34	42,917	12.16%	38,173	11.20%
35-39	40,382	11.44%	36,880	10.82%
40-44	42,122	11.93%	43,292	12.70%
45-49	41,270	11.69%	36,080	10.59%
50-54	34,918	9.89%	36,750	10.78%
55-59	39,496	11.19%	43,848	12.87%
60-64	41,187	11.67%	39,071	11.46%
65-69	23,582	6.68%	21,453	6.30%
70-74	9,605	2.72%	9,044	2.65%
75-79	3,495	0.99%	3,373	0.99%
80+	1,331	0.38%	1,280	0.38%
Total	353,048	100.00%	340,785	100.00%

Source: California Board of Registered Nursing license records, April 2017.

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Graduates from California nursing programs

According to the 2015-2016 BRN Annual Schools Report, there were 11,191 new graduates from California nursing programs in the 2015-2016 academic year (Blash & Spetz 2017). Table 2 presents the numbers of enrollments and graduates from the past ten Annual Schools Reports. Growth in RN new student enrollments leads to growth in graduates in future years. Associate Degree (AD) programs are designed so that students can complete the nursing component of the degree in two years. In most Baccalaureate of Science Nursing Degree (BSN) programs, students are formally enrolled in nursing major courses during the last 2.5 to 3 years of the pre-licensure BSN degree program, unless the program is an accelerated BSN program. Thus, student enrollment changes translate to changes in the number of graduates two to three years in the future.

To predict the number of future graduates, actual new student enrollments for each year of the Annual Schools Report were compared with the number of graduates two years later. From 2010-2011 through 2015-2016, graduates averaged 80.8 percent of the number of student enrollments two years prior (a small decrease from the 81.9 percent "productivity rate" used in the 2015 forecasts). This is the rate used to estimate the number of future graduates; thus, the forecasted number of graduates in 2017-2018 is 80.8 percent of the known student enrollments from 2015-2016.

Table 2. New student enrollments and number of graduates from RN education programs, 2006-2007 through 2015-2016

Survey year	Number of new student enrollments	Growth in new student enrollments	Number of graduates	Growth in graduates
2006-2007	12,709	14.2%	8,317	10.5%
2007-2008	12,961	2.0%	9,580	15.2%
2008-2009	13,988	7.9%	10,570	10.3%
2009-2010	14,228	1.7%	11,512	8.9%
2010-2011	13,939	-2.0%	10,666	-7.4%
2011-2012	13,677	-1.9%	10,814	1.4%
2012-2013	13,181	-3.6%	11,292	4.4%
2013-2014	13,226	0.3%	11,291	-0.01%
2014-2015	13,318	0.7%	11,119	-1.5%
2015-2016	13,152	-1.2%	11,191	0.6%

Source: Blash, L, Spetz, J. 2017. 2015-2016 Annual School Report: Data Summary and Historical Trend Analysis. Sacramento, CA: California Board of Registered Nursing.

Forecasting the number of graduates beyond the 2017-2018 academic year is difficult because total new student enrollments after 2015-2016 are not yet known. As part of the BRN Annual School Survey, schools are asked to estimate future new student enrollment. For example, in the 2015-2016 survey, schools were asked to report expected student enrollment totals for the 2016-2017 and 2017-2018 academic years. Schools estimated that 2016-2017 new student enrollments would be 13,862 (5.4% higher than the previous year), and that 2017-2018 new student enrollments would be 14,219. These estimates were multiplied by 80.8 percent to obtain the forecasted number of graduates for 2018-2019 and 2019-2020. The forecasts assume that nursing student enrollments will be stable after the 2019-2020 academic year. In the forecasting model, the low estimate of growth in RN education after 2017-2018 is -1%, the high estimate is 1%, and the best estimate is 0%. Actual and predicted number of graduates from 2012-2013 through 2019-2020 are presented in Table 3.

Table 3. Predicted number of graduates based on new student enrollments

Academic year	Actual/forecasted new student enrollments	Actual/forecasted number of graduates
2012-2013	13,181*	11,292*
2013-2014	13,226*	11,291*
2014-2015	13,318*	11,119*
2015-2016	13,152*	11,191*
2016-2017	13,862	10,761
2017-2018	14,219	10,627
2018-2019		11,200
2019-2020		11,489

* Actual number of student enrollments and graduates based on Annual Schools Report. Note: Forecasts of student enrollments are provided by RN programs in the Annual Schools Survey. The forecasted number of graduates is 80.8 percent of enrollments two years prior. Source: Blash, L, Spetz, J. 2017. 2015-2016 Annual School Report: Data Summary and Historical Trend Analysis. Sacramento, CA: California Board of Registered Nursing.

Graduates from nursing programs in other states who obtain their first license in California

Each year, some graduates of nursing programs in other states obtain their first RN license in California. According to the BRN, in 2016, 493 out-of-state graduates obtained their first license from California; this is the high estimate of out-of-state graduates who move to California. BRN records also indicate that 429 of these nurses are living in California; this is the low estimate. The best estimate for the

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inflow of new licensees from other states is the average of the high and low estimates: 461 nurses. This estimate is higher than that from the 2015 forecasts, which was 291.

Immigration of internationally-educated nurses

In 2016, the BRN reported that 703 internationally-educated nurses passed the National Council Licensure Examination for RNs (NCLEX-RN) and received initial licensure as an RN in California, 503 of whom also had a California residence; the remainder lived in other states or countries. In the supply model, we use the total number of 2016 international graduates receiving initial licensure in California as the high estimate of the number of immigrants; we use the number that lives in California as the low estimate. The best estimate is the average of the high and low estimates: 603 internationally-educated RNs immigrate to California each year. This number is similar to the 2015 estimate of 209. However, these figures are much lower than the prior decade when the number of first licenses issued to internationally-educated nurses ranged between 1,145 and 4,107 annually. The lower numbers in recent years are consistent with other reports that international recruitment of nurses slowed significantly after 2008 (Chu, Bates, & Spetz 2017).

Age distributions of new graduates

Inflows of new graduates are added to the stock of RNs by age group. The BRN Annual Schools Report uses an uneven set of age groups for new California graduates: 18-25, 26-30, and then ten-year age groups for graduates over age 30. To create consistent groups of graduates in the forecasting model, we allocated the graduates into five-year groups. Table 4 shows how new graduates from California nursing programs were distributed by age group. RN graduates from nursing programs in other states seeking initial licensure as an RN in California are assumed to have the same age distribution as California graduates.

BRN records of internationally-educated nurses who receive initial U.S. licensure in California include the birth years of these nurses. The age distribution of internationally-educated RNs who lived in California and obtained licenses in 2016 is presented in the last column of Table 4; these data are used to forecast the age distribution for all internationally-educated RNs receiving first licenses in California.

Table 4. Estimated age distribution of new graduates from California RN programs

Age group	Graduates of US RN programs	Internationally-educated graduates
18-25*	28.3%	8.2%
26-29*	30.7%	35.6%
30-34	16.0%	27.2%
35-39	12.5%	13.7%
40-44	5.9%	6.8%
45-49	4.3%	4.4%
50-54	1.5%	2.4%
55-59	0.8%	1.0%
60-64	0.3%	0.6%
65+	0.0%	0.2%

* The age groups for internationally-educated RNs are "Under 25" and 25-29.
Sources: Blash, L, Spetz, J. 2017. 2015-2016 Annual School Report: Data Summary and Historical Trend Analysis. Sacramento, CA: California Board of Registered Nursing; California BRN licensing records, 2016.

Interstate migration of RNs to California

Estimates of interstate migration to California were developed in two ways. The low estimate of interstate migration was computed from BRN records of nurses requesting license endorsement from another state into California. Table 5 presents the number of RNs requesting endorsement to California in 2016 who have permanent addresses in California, and the number requesting endorsement with permanent addresses anywhere. The rate of movement into California is based on the ratio of the number who requested endorsement in 2016 divided by the total number of licensed RNs residing in California in 2017 (from BRN licensing records). The low forecast estimate was the rate of endorsement requests only for those with California addresses, and the high estimate was the rate for all endorsement requests regardless of California residence. The best estimate is the average of the high and low estimates. Prior research found that 49 percent of RNs requesting endorsement to California intended to live and work in the state (Waneka, Spetz, & Chan 2008). That statistic was reported during a period when California had a deep shortage of RNs and many RNs obtained California licenses to work as travelers. Thus, it is likely that more than half of those requesting endorsement will move to California.

Table 5. Requests for license endorsement into California, 2016

Age Category	Residing in California		Residing anywhere		**Best Estimate**
	Number requesting endorsement	Endorsements as a percentage of RNs living in California	Number requesting endorsement	Endorsements as a percentage of RNs living in California	
Under 25	228	5.2%	613	13.9%	9.5%
25-29	875	3.1%	4,222	14.9%	9.0%
30-34	712	1.7%	2,932	6.8%	4.2%
35-39	440	1.1%	1,726	4.3%	2.7%
40-44	272	0.7%	1,381	3.3%	2.0%
45-49	203	0.5%	1,218	3.0%	1.7%
50-54	150	0.4%	932	2.7%	1.5%
55-59	121	0.3%	730	1.8%	1.1%
60-64	82	0.2%	503	1.2%	0.7%
Over 64	35	0.1%	124	0.5%	0.3%

Sources: California Board of Registered Nursing license records, 2016 & 2017

Movements from inactive to active license status

We obtained data from the BRN, by age category, on the number of RNs with California addresses changing from inactive to active license status for 2016. The total has ranged from a low of 189 nurses in 2002-2003 to a high of 932 nurses in 2016. The 2016 data are used to estimate the number and age distribution of RNs changing from inactive to active license status (Table 6).

Table 6. Number and age distribution of RNs changing status from inactive to active license status, 2016

Age Category	Number	Percent	Age Category	Number	Percent
<30	29	3.1%	55-59	100	10.7%
30-34	102	10.9%	60-64	109	11.7%
35-39	102	10.9%	65-69	117	12.6%
40-44	88	9.4%	70-74	57	6.1%
45-49	103	11.1%	75+	34	3.6%
50-54	91	9.8%	Total	932	100.0%

Source: California Board of Registered Nursing license records, 2016.

Movements from lapsed to active license status

The BRN provided data on the number and age distribution of RNs whose licenses were lapsed and later were reactivated. In 2016, 5,489 RNs living in California reactivated their licenses. The rate of reactivation was computed by dividing the number of RNs reactivating their licenses in each age group by the total number of actively licensed RNs in the age group. These data are presented in Table 7. Note that the number reactivating in 2013-2014 was only 392; the rate increased substantially over the past 2 years.

Table 7. Number and rate of RNs reactivating lapsed licenses, 2016

Age Category	Number	Percent	Age Category	Number	Percent
<30	101	0.3%	55-59	681	1.7%
30-34	310	0.7%	60-64	858	2.1%
35-39	360	0.9%	65-69	779	3.3%
40-44	383	0.9%	70-74	492	5.1%
45-49	564	1.4%	75+	363	7.5%
50-54	598	1.7%	Total	5,489	100.0%

Source: California Board of Registered Nursing license records, 2016.

Migration out of California (to another state or country)

Data were obtained from BRN records on applications for outgoing endorsements in 2016, by age group. Some of these people requesting outgoing endorsement had in-state addresses at the time of the request, and others had out-of-state addresses. Both of these numbers were divided by the numbers of RNs in each age group in 2017 to obtain estimates of the rate of migration out of California. Table 8 presents the rates used in the model. The best estimate is the average of the two estimated out-migration rates.

Movements from active to inactive or lapsed license status

Estimates of the rate at which actively-licensed RNs allow their licenses to lapse were computed from California BRN license records and the NSSRN. These estimates are very important to the model because they measure the loss of nurses due to relocation, change in employment plans, retirement, and death. The model does not distinguish among these reasons for allowing a license to lapse.

Table 8. Estimated annual rates of RNs migrating out of California

Age Category	BRN estimate: CA addresses	BRN estimate: all addresses	Best estimate 2017	Best estimate 2015
Under 25	1.7%	2.4%	2.0%	3.7%
25-29	2.2%	4.6%	3.4%	3.8%
30-34	1.9%	4.2%	3.1%	3.5%
35-39	1.6%	3.5%	2.6%	2.8%
40-44	1.1%	2.7%	1.9%	2.0%
45-49	1.1%	2.6%	1.9%	1.8%
50-54	1.1%	2.7%	1.9%	1.7%
55-59	0.9%	2.3%	1.6%	1.4%
60-64	0.7%	1.9%	1.3%	1.2%
65-69	0.5%	1.5%	1.0%	1.1%
70-74	0.3%	0.9%	0.6%	0.6%
75-79	0.2%	0.5%	0.4%	0.2%
80+	0.0%	0.0%	0.0%	0.0%

Source: California Board of Registered Nursing license records, 2016.

The BRN provided data on the number of RNs with California addresses who changed their license status to inactive or allowed their license to lapse in 2016. These data were provided in age groups up through "80 and older"; we assumed this rate applies to all age groups over 75 years. Estimates of the rate at which nurses leave the pool of actively licensed RNs were calculated as the number of RNs with a non-active license divided by the number of current active RNs. Table 9 presents the rates used in the supply model.

Supply Forecasts of California's RN workforce

To create a forecast of the total number of RNs with active licenses in California, the model assumes that one-fifth of RNs in each age category moves into the next age category every year after 2017. In this manner, the workforce is "aged." For the age group 80 years and older, 20% of those 75 to 79 years older in the previous year enter, and people leave this age group (and other) based on the estimated outflows described above. For each age category, the basic formula is:

> Forecasted Supply of CA RNs next year =
>   Current supply of RNs in current year
>   + Estimated total inflows – Estimated total outflows.

Table 9. Estimated annual rates of RNs changing from active to inactive or lapsed license status, by age category

Age Category	BRN Data (Best Estimate) 2017	Best Estimate 2015
<30	0.0%	1.0%
30-34	0.9%	1.7%
35-39	1.5%	1.6%
40-44	1.4%	1.2%
45-49	1.2%	1.6%
50-54	1.3%	1.6%
55-59	1.5%	2.1%
60-64	1.8%	3.9%
65-69	3.4%	10.0%
70-74	9.7%	15.8%
75-79	17.6%	23.3%
80+	25.9%	23.3%

Sources: California Board of Registered Nursing license records, 2016.

This formula is used to produce a forecast of the total active RN population residing in California through 2035. We estimate that California will have 500,434 active resident RNs by 2035, as shown in Figure 2. This is 5.6% larger compared to the 2015 forecast of 474,059 RNs by 2035. This difference is largely due to increases in the numbers of RNs reactivating their licenses and lower rates of nurses migrating out of California; small adjustments in estimated numbers of license reactivations and rates of inter-state migration change the forecasts significantly.

As noted above, there was a range of plausible estimates for several of the inflow and outflow parameters in the model. Different sources of data provided different estimates of migration to California, migration from California, changes from active to inactive license status, and the projected number of new nursing graduates. Figure 2 presents the range of supply estimates that result when the highest and lowest possible supply forecasts are calculated. The rapid growth of the RN workforce in the high forecast is largely driven by a high rate of migration to California from other states, and the slow growth in the low forecast results from a low rate of migration to California from other states. These alternate forecasts are useful to provide a sense of the range of possible supply outcomes that could occur as a result of changes in any of the variables identified above.

UCSF
University of California
San Francisco

Figure 2. Forecasted number of RNs with active licenses residing in California, 2017-2035
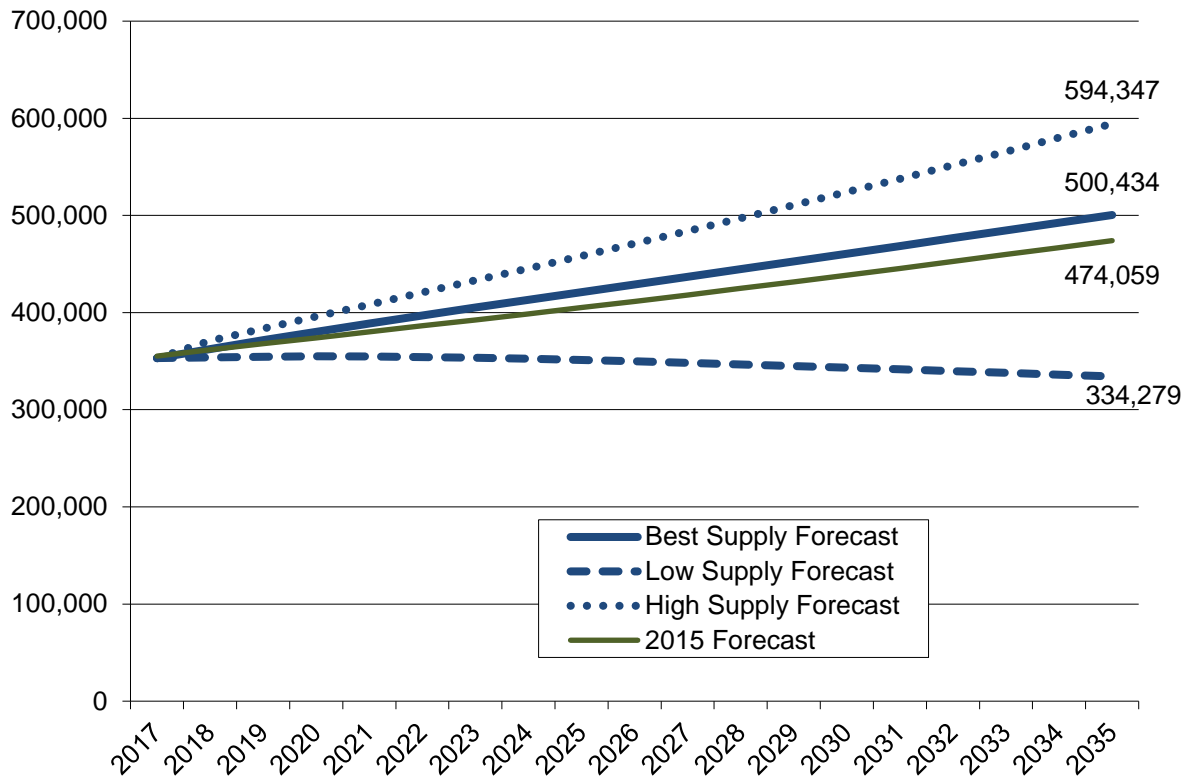
The forecasted number of RNs with active licenses does not account for the variation in hours worked by RNs and the fact that some RNs with active licenses do not work in nursing. Data from the 2016 BRN Survey of RNs were used to estimate the proportion of RNs living in California with active licenses that are employed in nursing, by age category (Spetz, Chu, & Jura 2017). The estimated employment rates range from a high of 97.4% for RNs 25 years and younger to a low of 10% for RNs 80 years and older. Employment rates by age groups have varied since 2008, likely due to the economic recession that began in late 2007. During the recession, younger nurses were employed at lower rates, and older nurses were employed at higher rates. The low estimate of the employment rate for each age group is the lowest of five most recent employment rates measured in biennial BRN Surveys. The high estimate is the highest of these five rates. The best estimate is the average of the low and high rates and is presented in Table 10.

Table 10. Employment rates for RNs residing in California, 2016, and average rates used in forecasts

Age Category	Share Employed, 2016	Low Estimate	High Estimate	Best Estimate
Under 25	97.4%	89.6%	100.0%	94.8%
25-29	93.4%	93.4%	97.4%	95.4%
30-34	92.3%	92.1%	95.5%	93.8%
35-39	93.5%	92.3%	95.2%	93.8%
40-44	95.6%	89.7%	95.6%	92.6%
45-49	94.7%	92.1%	94.7%	93.4%
50-54	91.1%	89.8%	91.1%	90.4%
55-59	89.3%	85.3%	89.3%	87.3%
60-64	76.9%	75.5%	78.5%	77.0%
65-69	53.3%	53.3%	65.2%	59.2%
70-74	46.2%	40.5%	46.2%	43.3%
75-79	25.9%	25.9%	36.0%	31.0%
80+	10.0%	10.0%	24.2%	17.1%

Source: Spetz, J, Chu, L, Jura, M. 2017. 2016 Survey of Registered Nurses. Sacramento, CA: California Board of Registered Nursing.

In the supply model, the 2016 BRN Survey of RNs was used to estimate the average usual hours worked per week in all nursing jobs for each age category by active RNs who resided in California and were employed in nursing (Spetz, Chu, & Jura 2017). This is to account for variation in hours worked by RNs. These estimated hours per week are divided by 40 to obtain the average full-time equivalent employment (FTE) for each age category. The data used for this calculation are presented in Table 11. As with the estimates of the employment rate, the high estimate is the highest of the number of hours worked in the past five surveys and the low estimate is the lowest of these five. The best estimate is the average of the high and low estimates.

Figure 3 presents projected high, low, and best estimates of FTE supply based on the best estimates of the future count of RNs. The 2017 forecast is slightly higher than that of 2015, reflecting the increase in the forecasted total number of RNs discussed above. In the chart, these forecasts are compared with the FTE supply forecasted published by the U.S. Bureau of Health Workforce (BHW 2014). The BHW forecast is notably higher than the forecasts developed in the model described here.

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Table 11. Average hours worked per week by RNs residing in California, 2016, and average hours used in forecasts

Age Category	Hours Worked per Week, 2016	Low Estimate	High Estimate	Best Estimate
Under 25	37.8	37.8	47.1	42.4
25-29	37.0	35.8	37.0	36.4
30-34	37.3	35.8	37.3	36.5
35-39	35.3	35.3	36.2	35.8
40-44	36.6	36.4	37.0	36.7
45-49	38.1	36.7	38.1	37.4
50-54	38.0	36.9	38.0	37.5
55-59	38.1	36.6	38.1	37.4
60-64	35.4	35.3	35.5	35.4
65-69	33.6	32.0	33.6	32.8
70-74	25.4	24.0	26.0	25.0
75-79	26.4	18.8	26.4	22.6
80+	22.8	22.8	31.1	26.9

Source: Spetz, J, Chu, L, Jura, M. 2017. 2016 Survey of Registered Nurses. Sacramento, CA: California Board of Registered Nursing.

The supply forecasts and California Department of Finance (2013) projections of total population in the state can be used to calculate the number of employed RNs per 100,000 people in the population for the years 2017 through 2035 (Figure 4). We compared these projections to the number of employed RNs per 100,000 population in 2015, as computed from the American Community Survey (U.S. Bureau of the Census, 2016). In 2015, there was an average of 1,038 employed RNs per 100,000 U.S. residents, which is an increase from 936 per 100,000 in 2013. The 25th percentile across all states was 916 employed RNs per 100,000 residents. By 2035, California's ratio is expected to approach the national 25th percentile.

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Figure 3.   Forecasted full-time equivalent supply of RNs, 2017-2035
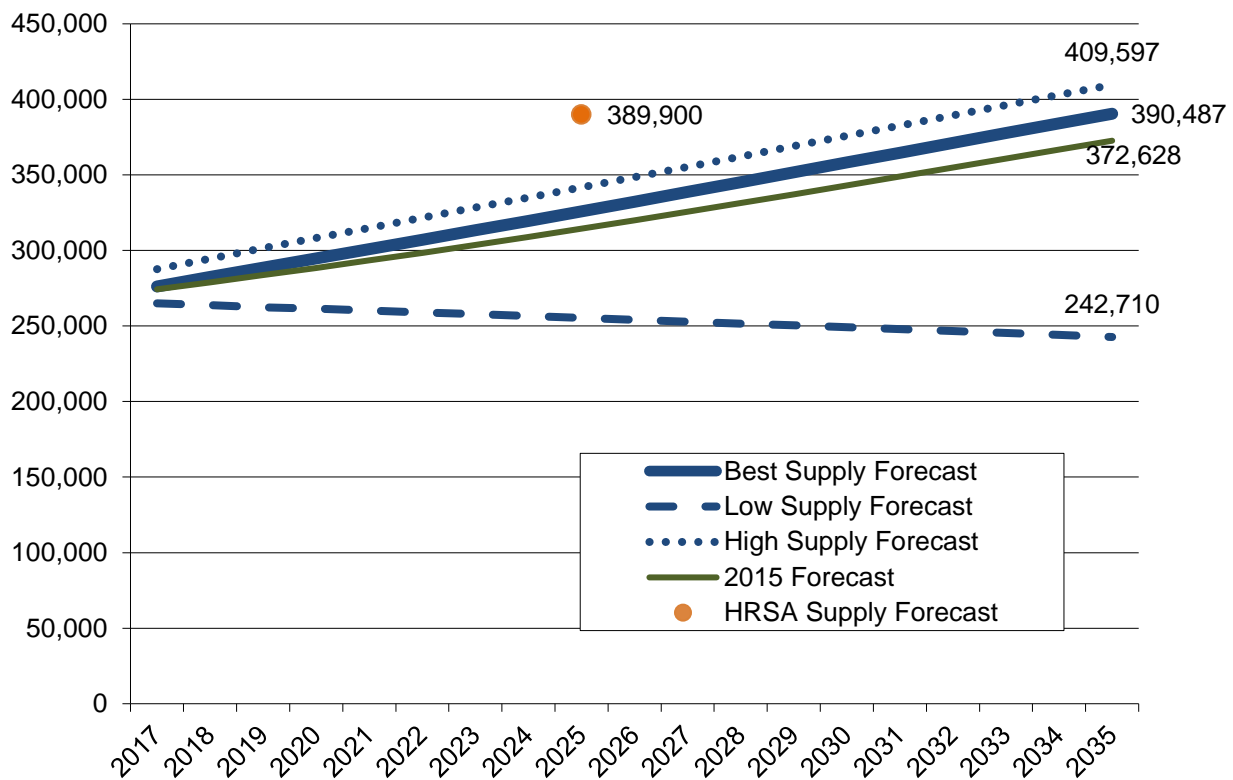
Figure 4.   Forecasted number of employed RNs per 100,000 population, 2017-2035
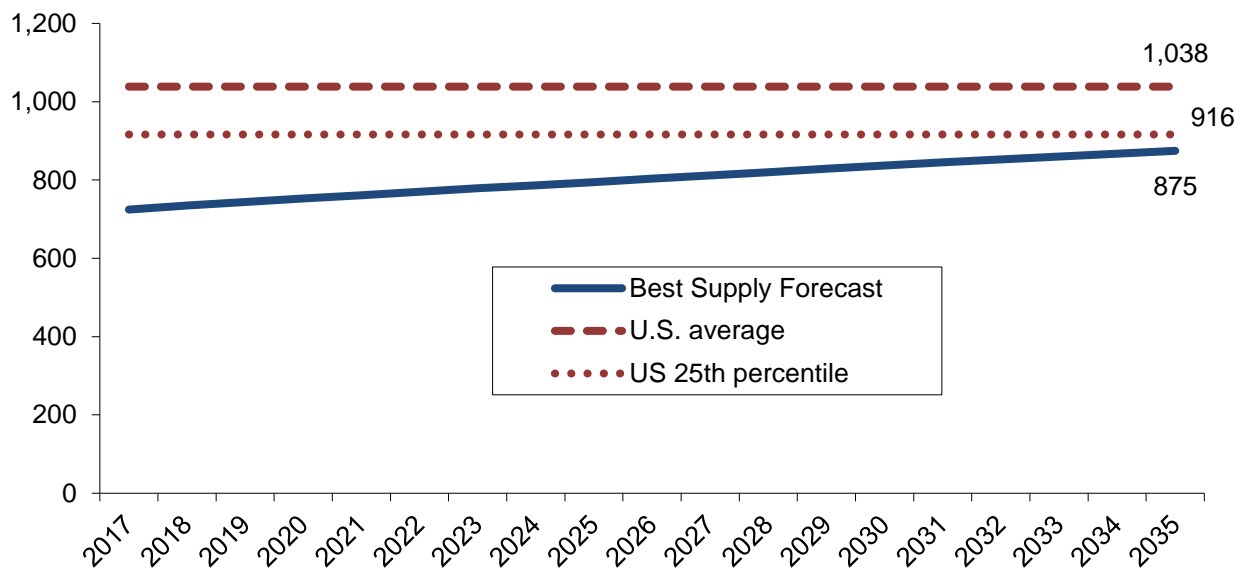
The Demand for RNs

The demand for RNs can be measured and forecasted in many ways, reflecting disparate notions of what demand is or should be. Many policymakers and health planners consider population needs as the primary factor that should dictate the need for health care workers. For example, the World Health Organization has established a goal of countries needing a minimum of 2.28 health care professionals per 1,000 population in order to achieve the goal of 80 percent of deliveries being attended by a skilled birth attendant (WHO 2006). Similarly, policymakers could target a stable number of nurses per capita, a level developed by an expert panel, or a goal based on comparisons with other U.S. states.

It is important to recognize, however, that population need is not the same thing as economic demand. Nurses and other health professionals are not free, and the cost of employing them must be weighed against other uses of resources. A nurse employer might want to hire more nurses but may not have sufficient income from its patient care services to afford more nurses. An employer might have resources that could be used to hire more nurses, but might think that investment in an electronic medical record will produce more value to patients. The demand for nurses is essentially derived from economic forces, which may not be aligned with population needs.

For this report, several different measures of demand (or need) are considered in order to develop a range of plausible estimates of future demand for RNs. The approaches used are:

- Fixed benchmarks based on current RN-to-population ratios in California
- Fixed benchmarks based on U.S. RN-to-population ratios
- Demand forecasts based on 2015 hospital patient days, employment in hospitals, and future population growth and aging
- An employment forecast for 2024 published by the California Employment Development Department (EDD 2016)
- A demand forecast for 2025 published by the U.S. Bureau of Health Workforce (BHW 2014)

These approaches are informed by surveys of RN employers conducted from fall 2010 through 2014 and by other recent analyses of the effect of health insurance expansion in California.

Forecasts based on RNs per capita

One frequently-used benchmark of the need for RNs is the number of employed RNs per 100,000 population (California Institute for Nursing and Health Care,

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2006). For decades, California has had one of the lowest ratios of employed RNs-per-100,000 population in the United States. Table 12 presents 2015 ratios of working RNs per 100,000 population for the states with the 10 lowest and 10 highest ratios, based on data from the American Community Survey (U.S. Bureau of the Census, 2016). California had the 5th lowest ratio. Many policy advocates have supported efforts to move California's full-time equivalent employment of RNs toward the current 25th percentile nationwide (916 RNs per 100,000) or even the national average (1,038 RNs per 100,000). These benchmarks were compared with the current and forecasted population of California (California Department of Finance, 2013) to project need for RNs to remain at current RN-to-population ratios in order to reach the 25th percentile ratio and to attain the national average ratio.

Table 12. Working RNs per 100,000, 2015

State with the lowest ratios	RNs per 100,000	States with the highest ratios	RNs per 100,000
Wyoming	584	Ohio	1,226
Nevada	678	South Dakota	1,275
Utah	771	Mississippi	1,288
New Mexico	774	Wisconsin	1,294
California	809	Massachusetts	1,295
Alaska	836	West Virginia	1,306
Oklahoma	840	Delaware	1,324
Texas	854	Minnesota	1,350
Arizona	856	Maine	1,463
Washington	877	New Hampshire	1,640

Source: U.S. Bureau of the Census. 2016. American Community Survey, Summary File, 2015. Washington DC: U.S. Bureau of the Census. Note: States with small sample sizes have greater margin of error in the estimated RN-to-population ratio.

Forecasts based on hospital staffing of RNs per patient day

The main shortcoming of targeting a fixed number of RNs per population is that the target is arbitrarily defined. The current number of nurses per capita may not be a large enough number to deliver health care needs, and if there is a shortage of nurses, the number may not be as large as economic demand. Likewise, a target number based on a national average or other source might not reflect the unique population and health care system of California. An additional shortcoming is that

fixed nurse-to-population ratios do not account for increases in the demand for health care services associated with population aging.

A second approach to forecasting demand for RNs uses current hospital utilization and staffing patterns to estimate future demand. First, the 2015 total number of hospital patient discharges, per ten-year age group, at short-term acute-care hospitals was obtained (California OSHPD 2016).[2] In order to estimate the total number of patient days per age group, these data were then multiplied by the average length of stay per age group, as reported from the 2014 Hospital National Inpatient Statistics (AHRQ 2014).

To calculate the rate of hospital utilization per age group, the total number of patient days per age group was divided by the estimated population of each age group. Age-specific population estimates and forecasts were gathered from the California Department of Finance (2013). Dividing patient days by population provides the number of patient days per population, per age group. These rates of patient days were then applied to the population projections to get projections of total patient days by age category.

To produce forecasts of hospital demand for RNs, RN hours per patient day were calculated using OSHPD's Hospital Annual Financial Data (Office of Statewide Health Planning and Development, 2016). In 2015, a total of 225,000,204 productive RN hours were reported. The number of RN hours per discharge was calculated by dividing these hours by the number of patient days in 2015, resulting in 12.51 productive RN hours per patient day. Multiplying the number of productive RN hours per patient day by the forecasts of the total number of patient days produces a forecast of hospital-based RN hours needed in the future. To equate these estimates to FTE jobs, RN hours are divided by 1,768 (average annual productive hours per FTE).

The calculations described above provide demand forecasts for only one type of care setting (hospitals), and only for a subset of hospitals (long-term hospitals and federal hospitals are not included in the calculations based on OSHPD data). The OSHPD data estimate that there were 127,263 FTE hospital positions in 2015. Calculations based on the 2016 BRN Survey of Registered Nurses find that total FTE employment was 272,522 (Spetz et al., 2015). Together, these figures indicate that 46.7 percent of jobs were in the types of hospitals included in the OSHPD data. The hospital-based projections of future RN demand were thus augmented to maintain this 46.7 percent ratio in future years. The projections indicate there will be a need for 175,096 FTE RNs in hospitals and 374,954 FTE RNs statewide in 2035. Projected

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[2] The age groups are under 1, 1-9, 10-19, 20-29, 30-39, 40-49, 50-59, 60-69, 70-79, and 80 and older.

RN FTEs in hospitals are 4.3 percent larger and projected statewide RN FTEs are 2.7 percent larger than the forecasts developed in 2015 (167,930 and 365,214 respectively), reflecting increases in hospital utilization and higher RN hours per patient day reported by OSHPD in 2015 as compared with 2014.

Employment Development Department forecasts

The most recent projection by the EDD indicates that there will be 300,300 registered nurse jobs in California by 2024 (California Employment Development Department, 2016). The EDD projection does not distinguish between full-time and part-time jobs. To estimate the FTE employment implied by the EDD projection, we use the adjustment of 0.906, which is the average number of hours worked per week by California RNs in 2016 (36.24), divided by 40 (Spetz, Chu, and Jura 2017). The FTE projection for 2024 is thus 272,072, which is slightly higher than the EDD's projection of 271,378 jobs in 2022.

Bureau of Health Workforce forecasts

The U.S. Bureau of Health Workforce developed forecasts of supply and demand for RNs nationally and for states (BHW 2014). These forecasts are based on a multi-step model that first projects demand for different types of health services and then projects demand for health care workers based on estimated service demand. They project that supply in California in 2025 will be 389,900 FTE RNs, and demand will be 393,600 FTE RNs.

Comparing the demand forecasts

Figure 5 compares alternative demand forecasts of full-time equivalent RNs. The forecasts estimate that the FTE demand for RNs in 2017 ranged from 272,522 to 366,133. Demand in 2035 is forecasted to be between 318,740 and 428,227. These lower figures are not likely to accurately represent total future demand because they do not account for additional demand caused by future population growth and aging. The EDD forecast for 2024 is lower than that produced by maintaining the current RN-to-population ratio. The BHW forecast for 2025 is slightly higher than the projection based on attaining the national average RN-to-population ratio.

Figure 5. **Forecasted full-time equivalent demand for RNs, 2017-2035.**
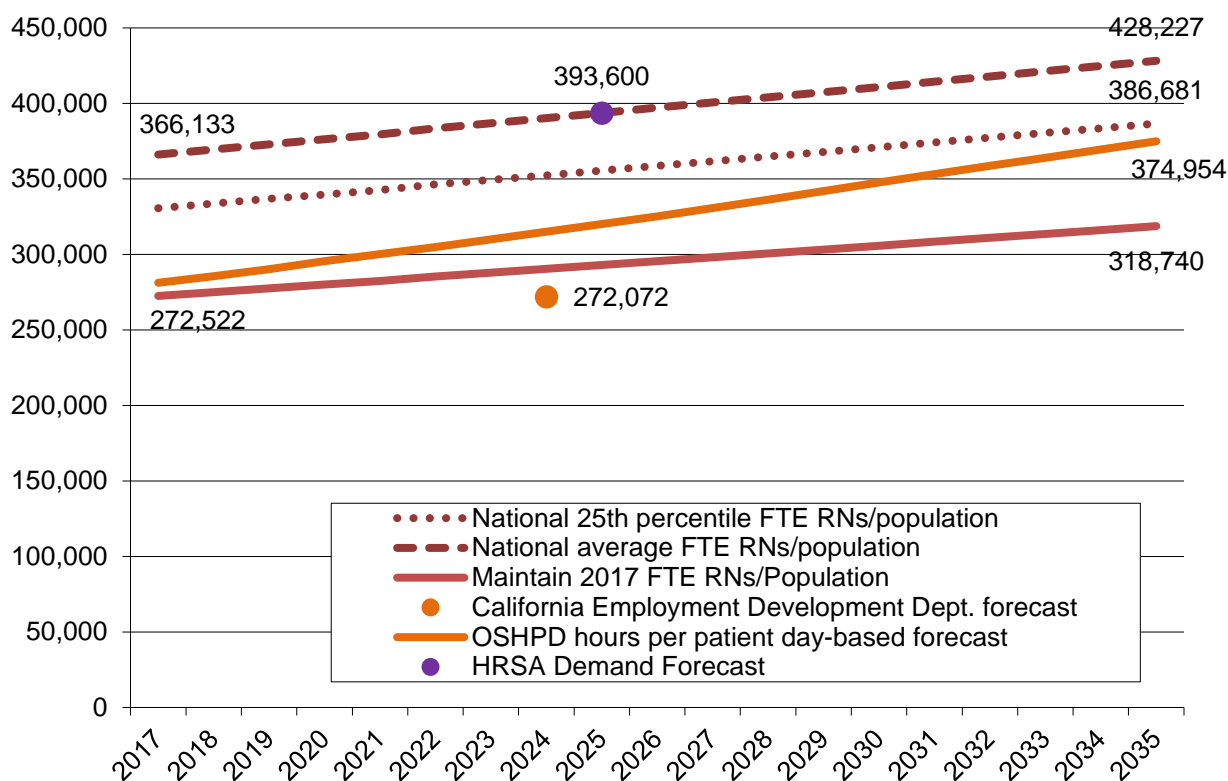
Comparing Supply and Demand for RNs

Through most of the 2000s, there was a widespread perception that California faced a significant long-term shortage of RNs, and forecasts published by the BRN in 2005 and 2007 were consistent with this perception. However, after the number of RN graduations more than doubled in California in the 2000s, the forecasts published in 2011 indicated that California had closed the gap between RN supply and demand. The rapid onset of the economic recession that began in December 2007 led to concerns that RN supply was exceeding demand, although in the long-term another RN shortage could emerge. The 2015 forecasts indeed suggested there may have been a small surplus of RNs, but that RN supply and demand would be well-balanced through 2035.

Figure 6 presents the new 2017 best supply forecast and low supply forecast, along with three alternate demand forecasts based on: (1) striving to reach the national 25th percentile, (2) attaining the national average, and (3) forecasted growth in hospital patient days. All forecasts are for full-time equivalent employment. The best supply estimate is that in 2017, there were 276,161 FTE RNs available to work, and the patient days-based demand estimate is 281,232 FTE positions to be

filled. This suggests a small shortage of RNs in 2017. This is consistent with employer survey data that California employers perceive an overall shortage of experienced RNs and a surplus of recently-graduated RNs (Chu, Bates, & Spetz, 2017).

Figure 6. Forecasted full-time equivalent supply of and demand for RNs, 2017-2035.
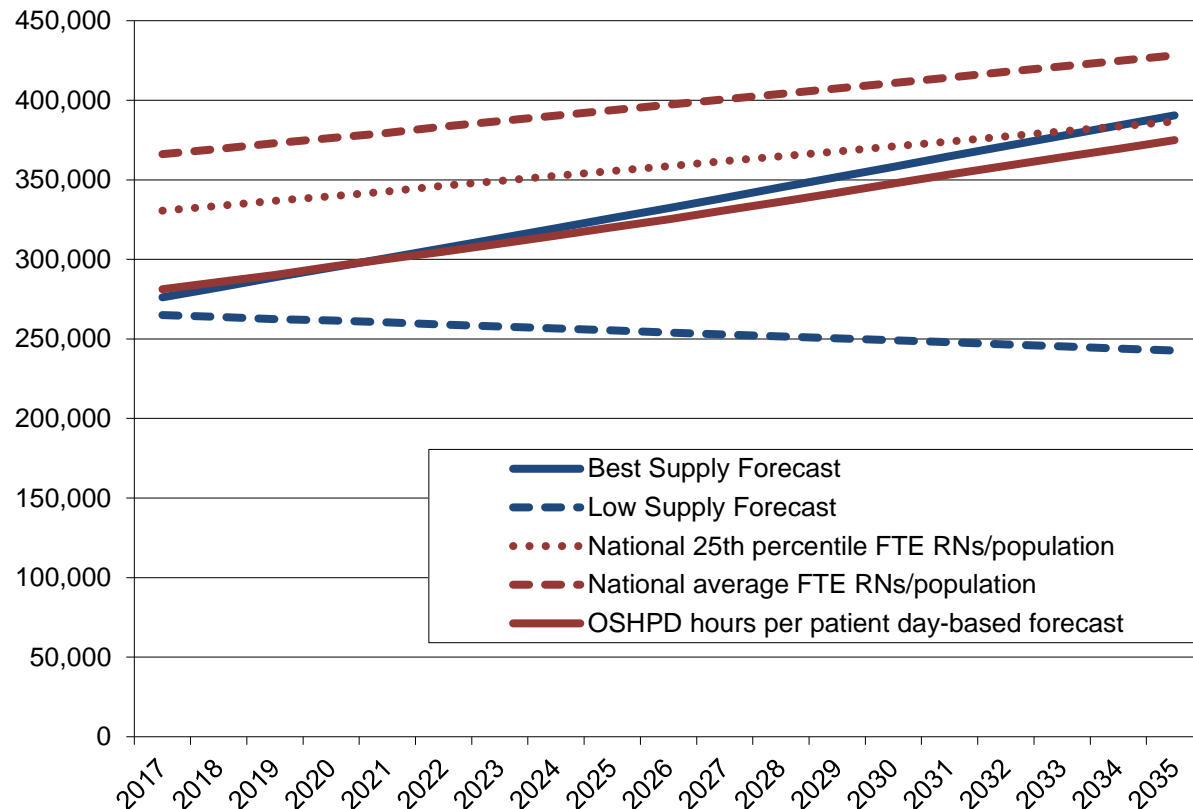
In the long-term, the best supply forecast predicts that nurse supply will rise more rapidly than California's population as a whole, and RN supply will reach the national 25th percentile of FTE RNs per 100,000 by 2034. The demand forecast based on hospital utilization is nearly perfectly aligned with projected supply. However, there is uncertainty regarding what future demand for RNs will be. The California EDD forecasts demand in 2024 to be 272,072 FTEs, which is lower than forecasted supply of 319,588.

In contrast, the U.S. BHW forecasts demand in 2025 to be 393,600, which is much higher than the BRN model's demand forecast. Note that the BHW's supply forecast is 389,900 and thus the BHW model projects California to have a small shortage in 2025. The national model relies upon a national data source, the American Community Survey; it has less detailed information than the BRN Survey of

Registered Nurses, which may account for some of the difference between the BRN and national projections.

The low projection of supply indicates that it is possible that California will enter another period of RN shortage that could persist for decades. Which scenario prevails will depend on a number of factors:

- Whether the number of RN graduates is sustained at the current level or declines
- Whether inter-state migration leads to fewer nurses entering California than leaving
- Whether older RNs work at higher rates than in the past
- Whether expanded health insurance coverage continues, supporting higher demand for primary care services
- How organizations utilize RNs to meet population health goals and leverage value-based health insurance payment

Educational and public policies at the state and federal level will play roles in determining whether California's RN workforce stays in balance or tips toward shortage.

Comparison of the 2017 Forecasts with Previous Forecasts

The forecasts presented here use a similar methodology to that used in prior BRN forecasts. The magnitude of the projected shortage changed dramatically over time. In 2005, California had a substantial shortage of RNs, ranging between 6,872 and 21,161 RN FTEs. This shortage grew by 2007, reaching at least 10,294 RN FTEs. However, due to growth in the number of new RN student enrollments, the 2007 forecasts predicted that the shortage would be reduced over time and that California would surpass the national average of RN FTEs per 100,000 population (825) by 2022. The 2009 forecasts were similar to those of 2007.

The 2011 forecasts indicated that supply would rise more rapidly than had been previously estimated, in part due to continued growth in new student enrollments in RN education programs and in part due to greater employment of nurses during the economic recession. The forecasts suggested that it was possible that a surplus of RNs would emerge in the late 2020s. However, the 2015 forecasts did not project a future surplus of RNs, largely due to the flattening of student enrollments in RN education programs. Supply was anticipated to grow at a rate roughly equivalent to demand growth. The 2017 forecasts are similar to those from 2015, with supply and demand in close alignment and a surplus unlikely to emerge.

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The year in which California might reach the national 25th percentile or national average of RNs-per-population has moved later in each forecast. This is in part because the number of RNs-per-population has risen nationwide from 825 in 2007 to 1,038 in 2015. Thus, one should not interpret the later year of attainment of these benchmarks as a sign that California's RN workforce is not growing adequately.

Policy Implications

Periods of nursing shortage generate significant challenges because patient outcomes are impacted by the level of nurse staffing in hospitals and other care facilities (Kane & Shamliyan, 2007; Institute of Medicine, 2011; Penoyer, 2010). In addition, shortages drive up the cost of health care as wages rise (Spetz and Given, 2003). Thus, it is essential that these forecasts of RN supply and demand guide policies to prevent RN shortages.

The 2005 forecast report advised that "The only plausible solution to the RN shortage, based on our preliminary analyses, appears to be continued efforts to increase the numbers of graduates from California nursing programs." This recommendation was acted upon by state leaders. Significant increases in state funding for nursing programs, increased funding for equipment, use of updated instructional technologies, and other educational investments had a favorable impact on addressing the RN shortage in California. Between the academic years 2004-2005 and 2009-2010, the number of nursing graduates increased 72 percent, exceeding 11,500 new RN graduates in 2009-2010 (Waneka, Keane, & Spetz 2012). The total number of graduates has stabilized since then, ranging from 10,666 and 11,292 since 2010-2011. The number of graduates is projected to remain above 10,000 per year through 2019-2020, thus leading to a stable workforce. If future numbers of student enrollments and graduates decline, a shortage could re-emerge.

Changes in the demand for RNs also could lead to a future shortage or surplus. If emerging care delivery models, such as accountable care organizations and patient-centered medical homes, lead to greater use of RNs in care management roles, demand for RNs could rise above the projections presented in this report. A recent report (Oberlin et al. 2015) found that if health care organizations increase employment of RNs by 10 percent to serve in care management roles, overall demand would increase by about 22,000 jobs in California (which may include some part-time jobs). This would be a relatively small change in demand, which would likely emerge slowly enough over time that nursing education programs could respond by increasing student enrollment.

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Policymakers should be cautioned that the 2017 BRN forecasts represent the state as a whole and do not reflect the fact that one region of California may experience a shortage while another may face a surplus of RNs. Both statewide and regionally, the most important changes that could lead to shortages include: (1) the number of graduates from RN education programs; (2) inter-state migration; and (3) employment rates of older RNs. These factors and any other potential influences on California's nursing shortage, such as the limited pool of faculty, limited availability of clinical education placements, and faculty salaries that are not competitive with clinical practice positions, should be monitored continuously.

California leaders should track the employment paths of recent nursing graduates as they develop specialized skills to fill the roles of experienced nurses who will retire in the near future. Moreover, they should watch new student enrollments in nursing programs, as well as monitor local labor market conditions, which could warrant local action. California will need to maintain the present number of nursing graduates in order to meet long-term health care needs.

Acronyms

ACA – Affordable Care Act of 2010

AD – Associate Degree

BHW – Bureau of Health Workforce, Health Resources and Services Administration, U.S. Department of Health and Human Services

BRN – California Board of Registered Nursing

BSN – Bachelors (or Baccalaureate) of Science in Nursing

EDD – California Employment Development Department

FTE – Full-time Equivalent

NCLEX-RN – National Council Licensure Examination – Registered Nurses (NCLEX is a registered trademark and/or servicemark of the National Council of State Boards of Nursing, Inc.)

NSSRN – National Sample Survey of Registered Nurses (last conducted in 2008)

OSHPD – California Office of Statewide Health Planning and Development

RN – Registered Nurse

UCSF – University of California San Francisco

WHO – World Health Organization

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2017

Health Care Workforce Survey Report 4th Quarter

Data Effective October 01 - December 31, 2017

HOSPITAL ASSOCIATION OF SOUTHERN CALIFORNIA®

CALIFORNIA HOSPITAL ASSOCIATION

Hospital Council of Northern & Central California

HOSPITAL ASSOCIATION of San Diego & Imperial Counties

FUTURESENSE

UCSF University of California San Francisco

Introduction

California (Statewide)

Northern California

Southern California

San Diego

Introduction

Thank you for participating in the **Health Care Workforce Survey**. This survey is a joint effort of the Hospital Association of Southern California (on behalf of all hospital associations in California), the University of California San Francisco, FutureSense LLC, Centers of Excellence for Labor Market Information, Health Workforce Initiative and CA Institute for Nursing & Healthcare. The resulting report is designed to help you to make stronger, more strategic workforce decisions in your hospital. In addition, the data will assist us as we advocate for health care education spending, project long-term supply-and-demand trends across the state, and support local policymakers in their workforce development planning.

Survey Report Date
The report reflects activity during the 4th Quarter of 2017 (October, November, December)

4th Quarter 2017
With a response rate of **55% (216 out of 395 invited health care facilities),** the survey may be considered representative of the entire sample. Any analysis of the data should be viewed as a reflection of general trends rather than rely on exact numbers since the data represents a slightly different sample of organizations each quarter.

2017 Year-End Highlights

2017 Annual Totals

	Turnover Rate	Hire Rate	Average Vacancy Rate
CA Statewide (All positions)	10.3%	12.5%	5.1%
CA Statewide Registered Nurse	11.2%	16.2%	6.2%
No. CA (All positions)	9.1%	10.6%	3.7%
No. CA Registered Nurse	8.6%	13.2%	4.0%
So. CA (All positions)	10.9%	13.5%	5.4%
So. CA Registered Nurse	13.4%	18.0%	6.9%
San Diego, CA (All positions)	11.8%	15.9%	8.3%
San Diego, CA Registered Nurse	12.3%	21.9%	10.7%

2017 California Statewide All Employees Charts

California All Employee Turnover %
Q4 2013 - Q4 2017
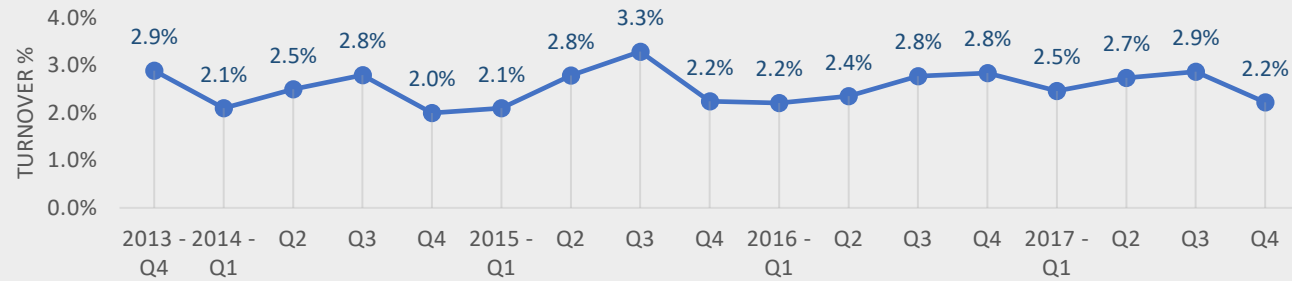
California All Employees Hire %
Q4 2013 - Q4 2017
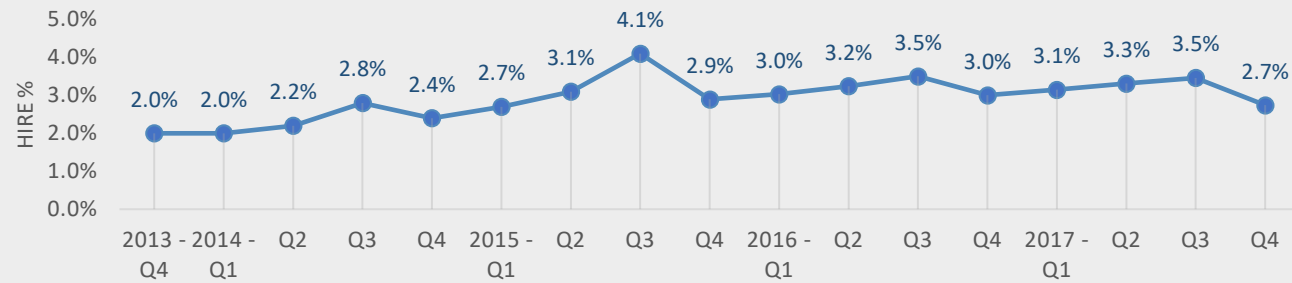
California All Employee Vacancy %
Q4 2013 - Q4 2017

2017 Quarter 4 Health Care Workforce Data Report ©
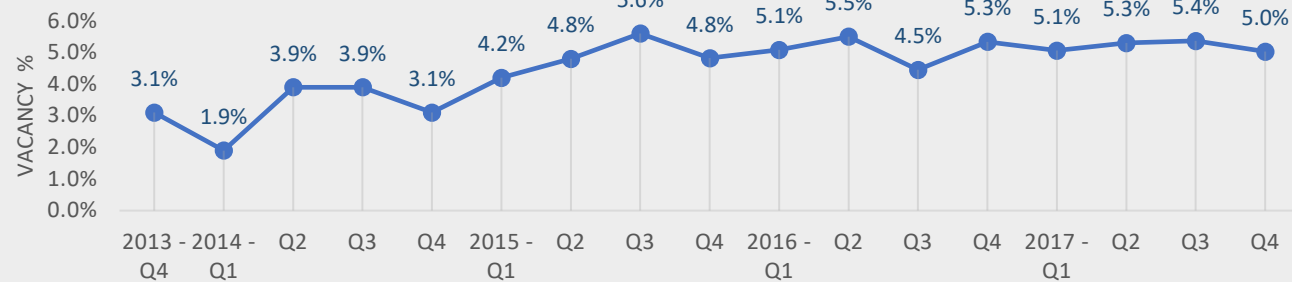
2017 California Statewide Registered Nurses Charts

California RN (Staff, Other, New Grad) Turnover %
Q4 2013 - Q4 2017
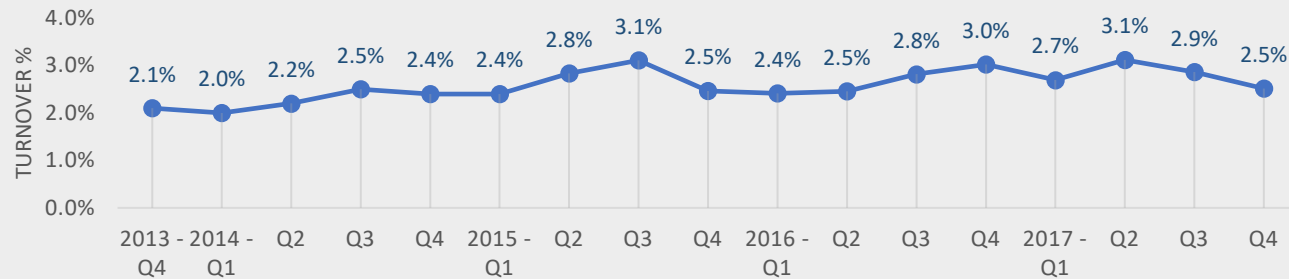
California RN (Staff, Other, New Grad) Hire %
Q4 2013 - Q4 2017
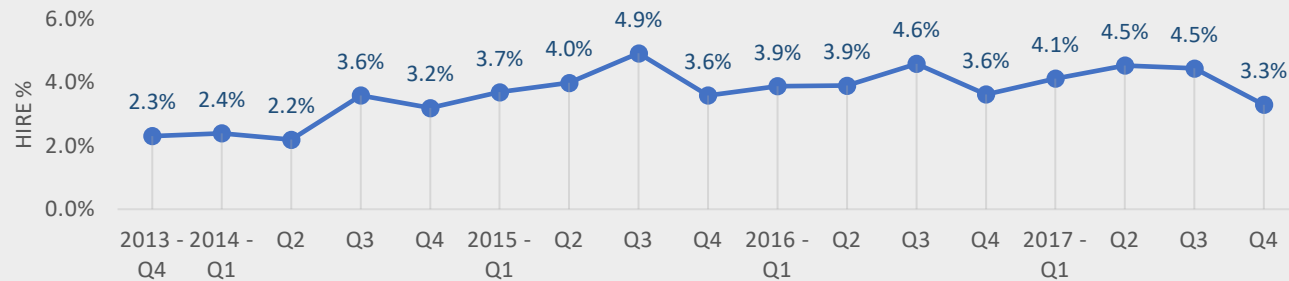
California RN(Staff, Other, New Grad) Vacancy %
Q4 2013 - Q4 2017
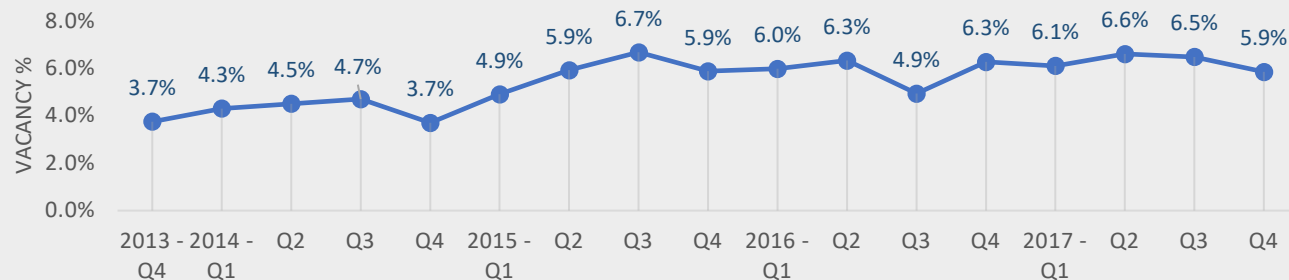
About the Participating Organizations

Type of Organization	Count	As a % of Participants
Ambulatory surgery center	2	1%
Children's hospital	7	4%
General acute-care	0	0%
General acute-care hospital/medical center	156	89%
Heart hospital	0	0%
Long-term care	0	0%
Orthopedic hospital	0	0%
Psychiatric hospital	5	3%
Rehabilitation hospital	0	0%
Other type of organization	5	3%
Total	**175**	**100%**

Types of Department(s)*	Count	As a % of Participants
Acute-care/critical care services (inpatient)	175	28%
Ambulatory diagnostic/laboratory services	86	14%
Ambulatory medical clinics	94	15%
Ambulatory surgery services	44	7%
Behavioral health services center	60	9%
Chemical dependency center	34	5%
Dialysis	6	1%
Home health services	19	3%
Long-term care/skilled nursing facility	42	7%
Observation care	41	6%
Rehabilitation center	27	4%
Other	6	1%
Total	**634**	**100%**

Participants may select multiple answers

Geographic Breakouts

Northern:

Area	Counties Included
Area 1 - Northern Sierra/Redwood	Butte, Colusa, Plumas, Siskiyou, Humboldt, Glenn, Plumas, Lassen, Shasta, Tehama, Modoc, Del Norte, Trinity, and Sierra
Area 2 - North Coast	Napa, Lake, Mendocino, and Sonoma
Area 3 - East Bay	Alameda, Solano, and Contra Costa
Area 4 - West Bay	San Francisco, San Mateo, and Marin
Area 5 - South Bay	Santa Clara, Monterey, Santa Cruz, and San Benito
Area 6 - Central California	Kings, Kern, Fresno, Madera, Tulare, Mono, Merced, Inyo, and San Luis Obispo
Area 7 - Sacramento/Sierra	Sacramento, Placer, El Dorado, San Joaquin, Stanislaus, Sutter, Calaveras, El Dorado, Yuba, Tuolumne, Amador, Yolo, and Nevada

Southern:

Area	Counties Included
So Cal Coast	Los Angeles County
LA Harbor	Los Angeles County
Inland Empire	San Bernardino, Riverside
LA Central	Los Angeles County
LA Northwestern	Los Angeles County
Orange County	Orange County
San Gabriel Valley	Los Angeles County
Santa Barbara	Santa Barbara County
Ventura	Ventura County

San Diego:

Area	Counties Included
San Diego	San Diego, Imperial

California
(Statewide Results)

California - *Statewide*

Qtr	# Facilities	All Employees							Registered Nurses (Staff, Other, New Grad)						
		Headcount	# Separations	% Turnover	# Hires	% Hire	# Vacancies	% Vacancies	RNs Headcount	# Separations	% Turnover	# Hires	% Hire	# Vacancies	% Vacancies
2015															
1	223	314,580	6,478	2.1%	8,508	2.7%	13,663	4.2%	91,907	2,169	2.4%	3,442	3.7%	4,769	4.9%
2	233	323,792	9,035	2.8%	10,100	3.1%	16,261	4.8%	95,417	2,702	2.8%	3,811	4.0%	6,006	5.9%
3	189	228,700	7,533	3.3%	9,471	4.1%	13,621	5.6%	77,933	2,424	3.1%	3,844	4.9%	5,575	6.7%
4	227	303,052	6,816	2.2%	8,765	2.9%	15,342	4.8%	90,883	2,238	2.5%	3,268	3.6%	5,671	5.9%
2016															
1	219	316,904	7,007	2.2%	9,602	3.0%	16,973	5.1%	89,234	2,154	2.4%	3,470	3.9%	5,678	6.0%
2	229	322,871	7,602	2.4%	10,473	3.2%	18,799	5.5%	104,452	2,565	2.5%	4,083	3.9%	7,054	6.3%
3	232	324,033	9,004	2.8%	11,271	3.5%	15,097	4.5%	104,752	2,951	2.8%	4,780	4.6%	5,437	4.9%
4	223	337,865	9,608	2.8%	10,139	3.0%	19,053	5.3%	103,180	3,117	3.0%	3,743	3.6%	6,902	6.3%
2017															
1	219	334,929	8,263	2.5%	10,542	3.1%	17,845	5.1%	101,978	2,747	2.7%	4,215	4.1%	6,626	6.1%
2	228	348,543	9,552	2.7%	11,543	3.3%	19,496	5.3%	103,920	3,241	3.1%	4,721	4.5%	7,343	6.6%
3	234	354,185	10,221	2.9%	11,976	3.4%	19,619	5.2%	102,013	2,924	2.9%	4,431	4.3%	6,894	6.3%
4	216	333,959	7,423	2.2%	9,151	2.7%	17,668	5.0%	100,908	2,539	2.5%	3,336	3.3%	6,271	5.9%

Turnover, Accession, and Vacancy Rates (Specific Positions)

California - *Statewide*

Qtr	Year	# Facilities	Position	Headcount	# Separations	% Turnover	# Vacancies	% Vacancies	# Hires	% Hire
4	2017	216	All Employees	333,959	7,423	2.2%	17,668	5.0%	9,151	2.7%
NURSING POSITIONS										
4	2017	212	Registered Nurse - Staff (Not New Graduates) Direct Care	68,192	1,589	2.3%	4,014	5.6%	2,018	3.0%
4	2017	109	RN - Peri-Operative (OR)	3,838	61	1.6%	174	4.3%	86	2.2%
4	2017	109	RN - Critical Care	7,171	260	3.6%	441	5.8%	254	3.5%
4	2017	109	RN - Emergency Department	4,896	176	3.6%	326	6.2%	198	4.0%
4	2017	77	RN - Labor and Delivery	3,282	76	2.3%	160	4.6%	93	2.8%
4	2017	53	RN - NICU	2,552	51	2.0%	104	3.9%	67	2.6%
4	2017	96	RN - Case Manager	1,802	67	3.7%	152	7.8%	49	2.7%
4	2017	90	RN - Other	7,342	185	2.5%	559	7.1%	243	3.3%
4	2017	148	RN - New Graduates (less than 6 months experience)	1,833	74	4.0%	341	15.7%	328	17.9%
4	2017	152	Certified Nursing Assistant	9,461	275	2.9%	531	5.3%	370	3.9%
4	2017	9	Certified Registered Nurse Anesthetist (CRNA)	90	2	2.2%	10	10.0%	7	7.8%
4	2017	92	Clinical Nurse Specialist (CNS)	545	17	3.1%	264	32.6%	5	0.9%
4	2017	51	Home Health Aide	271	3	1.1%	6	2.2%	3	1.1%
4	2017	178	Licensed Vocational Nurse (LVN)	4,010	137	3.4%	288	6.7%	142	3.5%
4	2017	9	Nurse Midwives (NM)	16	0	0.0%	5	23.8%	1	6.3%
4	2017	110	Nurse Practitioner (NP)	1,816	43	2.4%	183	9.2%	72	4.0%
4	2017	106	Physician Assistant	786	15	1.9%	111	12.4%	45	5.7%
4	2017	87	Unlicensed Nursing Aide/Assistant	5,373	150	2.8%	263	4.7%	169	3.1%
ALLIED HEALTH										
4	2017	114	Coder	830	21	2.5%	45	5.1%	17	2.0%
4	2017	198	Clinical Laboratory Scientist	4,359	77	1.8%	217	4.7%	112	2.6%
4	2017	142	CT Technologist	1,136	17	1.5%	42	3.6%	15	1.3%
4	2017	30	CVIR Technologist	154	2	1.3%	11	6.7%	7	4.5%
4	2017	97	Medical Assistant	2,639	62	2.3%	121	4.4%	135	5.1%
4	2017	77	Medical Laboratory Technician	861	18	2.1%	48	5.3%	16	1.9%
4	2017	140	MRI Technologist	652	10	1.5%	35	5.1%	13	2.0%
4	2017	47	Occupational Therapy Assistant	139	1	0.7%	9	6.1%	2	1.4%
4	2017	191	Pharmacist	3,224	49	1.5%	118	3.5%	65	2.0%
4	2017	175	Physical Therapist	2,428	35	1.4%	120	4.7%	66	2.7%
4	2017	192	Radiological Technologist	3,240	65	2.0%	118	3.5%	63	1.9%
4	2017	190	Respiratory Therapist	5,235	74	1.4%	105	2.0%	64	1.2%
4	2017	141	Social Worker (LCSW)	1,506	36	2.4%	96	6.0%	43	2.9%
4	2017	180	Ultrasound Technician	1,375	22	1.6%	48	3.4%	22	1.6%

<u>Turnover by Type - (Specific Position)</u>

California - *Statewide*

Qtr	Year	# Facilities	Position	Headcount	# Total Separations	% Total Separations	# VolSeps	% VolSeps	# InvSeps	% InvSeps	# Layoffs	% Layoffs
4	2017	216	All Employees	333,959	7,423	2.2%	5,990	1.8%	1,267	0.4%	166	0.0%
NURSING POSITIONS												
4	2017	212	Registered Nurse - Staff (Not New Graduates) Direct Care	68,192	1,589	2.3%	1,417	2.1%	171	0.3%	1	0.0%
4	2017	109	RN - Peri-Operative (OR)	3,838	61	1.6%	56	1.5%	5	0.1%	0	0.0%
4	2017	109	RN - Critical Care	7,171	260	3.6%	237	3.3%	22	0.3%	1	0.0%
4	2017	109	RN - Emergency Department	4,896	176	3.6%	154	3.1%	22	0.4%	0	0.0%
4	2017	77	RN - Labor and Delivery	3,282	76	2.3%	72	2.2%	4	0.1%	0	0.0%
4	2017	53	RN - NICU	2,552	51	2.0%	48	1.9%	3	0.1%	0	0.0%
4	2017	96	RN - Case Manager	1,802	67	3.7%	59	3.3%	7	0.4%	1	0.1%
4	2017	90	RN - Other	7,342	185	2.5%	174	2.4%	6	0.1%	5	0.1%
4	2017	148	RN - New Graduates (less than 6 months experience)	1,833	74	4.0%	63	3.4%	11	0.6%	0	0.0%
4	2017	152	Certified Nursing Assistant	9,461	275	2.9%	201	2.1%	73	0.8%	1	0.0%
4	2017	9	Certified Registered Nurse Anesthetist (CRNA)	90	2	2.2%	2	2.2%	0	0.0%	0	0.0%
4	2017	92	Clinical Nurse Specialist (CNS)	545	17	3.1%	14	2.6%	2	0.4%	1	0.2%
4	2017	51	Home Health Aide	271	3	1.1%	2	0.7%	1	0.4%	0	0.0%
4	2017	178	Licensed Vocational Nurse (LVN)	4,010	137	3.4%	117	2.9%	14	0.3%	6	0.1%
4	2017	9	Nurse Midwives (NM)	16	0	0.0%	0	0.0%	0	0.0%	0	0.0%
4	2017	110	Nurse Practitioner (NP)	1,816	43	2.4%	38	2.1%	4	0.2%	1	0.1%
4	2017	106	Physician Assistant	786	15	1.9%	12	1.5%	3	0.4%	0	0.0%
4	2017	87	Unlicensed Nursing Aide/Assistant	5,373	150	2.8%	113	2.1%	37	0.7%	0	0.0%
ALLIED HEALTH												
4	2017	114	Coder	830	21	2.5%	18	2.2%	2	0.2%	1	0.1%
4	2017	198	Clinical Laboratory Scientist	4,359	77	1.8%	64	1.5%	11	0.3%	2	0.0%
4	2017	142	CT Technologist	1,136	17	1.5%	11	1.0%	6	0.5%	0	0.0%
4	2017	30	CVIR Technologist	154	2	1.3%	2	1.3%	0	0.0%	0	0.0%
4	2017	97	Medical Assistant	2,639	62	2.3%	50	1.9%	12	0.5%	0	0.0%
4	2017	77	Medical Laboratory Technician	861	18	2.1%	10	1.2%	8	0.9%	0	0.0%
4	2017	140	MRI Technologist	652	10	1.5%	9	1.4%	1	0.2%	0	0.0%
4	2017	47	Occupational Therapy Assistant	139	1	0.7%	1	0.7%	0	0.0%	0	0.0%
4	2017	191	Pharmacist	3,224	49	1.5%	34	1.1%	2	0.1%	13	0.4%
4	2017	175	Physical Therapist	2,428	35	1.4%	32	1.3%	3	0.1%	0	0.0%
4	2017	192	Radiological Technologist	3,240	65	2.0%	37	1.1%	28	0.9%	0	0.0%
4	2017	190	Respiratory Therapist	5,235	74	1.4%	61	1.2%	13	0.2%	0	0.0%
4	2017	141	Social Worker (LCSW)	1,506	36	2.4%	33	2.2%	3	0.2%	0	0.0%
4	2017	180	Ultrasound Technician	1,375	22	1.6%	16	1.2%	6	0.4%	0	0.0%

Per Diem Turnover - (Specific Positions)

California - *Statewide*

Qtr	Year	# Facilities	Position	Headcount Total Per Diem	# Separations	% Turnover
4	2017	216	All Employees	48,831	2,674	**5.5%**
NURSING POSITIONS						
4	2017	212	Registered Nurse - Staff (Not New Graduates) Direct Care	7,924	504	**6.4%**
4	2017	109	RN - Peri-Operative (OR)	613	47	**7.7%**
4	2017	109	RN - Critical Care	844	80	**9.5%**
4	2017	109	RN - Emergency Department	1,041	92	**8.8%**
4	2017	77	RN - Labor and Delivery	514	33	**6.4%**
4	2017	53	RN - NICU	379	24	**6.3%**
4	2017	96	RN - Case Manager	313	30	**9.6%**
4	2017	90	RN - Other	863	43	**5.0%**
4	2017	148	RN - New Graduates (less than 6 months experience)	87	1	**1.1%**
4	2017	152	Certified Nursing Assistant	1,471	104	**7.1%**
4	2017	9	Certified Registered Nurse Anesthetist (CRNA)	23	0	**0.0%**
4	2017	92	Clinical Nurse Specialist (CNS)	40	6	**15.0%**
4	2017	51	Home Health Aide	45	4	**8.9%**
4	2017	178	Licensed Vocational Nurse (LVN)	537	48	**8.9%**
4	2017	9	Nurse Midwives (NM)	5	0	**0.0%**
4	2017	110	Nurse Practitioner (NP)	195	13	**6.7%**
4	2017	106	Physician Assistant	56	3	**5.4%**
4	2017	87	Unlicensed Nursing Aide/Assistant	922	76	**8.2%**
ALLIED HEALTH						
4	2017	114	Coder	43	2	**4.7%**
4	2017	198	Clinical Laboratory Scientist	1,045	46	**4.4%**
4	2017	142	CT Technologist	227	11	**4.8%**
4	2017	30	CVIR Technologist	25	0	**0.0%**
4	2017	97	Medical Assistant	246	15	**6.1%**
4	2017	77	Medical Laboratory Technician	131	4	**3.1%**
4	2017	140	MRI Technologist	170	3	**1.8%**
4	2017	47	Occupational Therapy Assistant	76	3	**3.9%**
4	2017	191	Pharmacist	968	60	**6.2%**
4	2017	175	Physical Therapist	725	36	**5.0%**
4	2017	192	Radiological Technologist	1,035	56	**5.4%**
4	2017	190	Respiratory Therapist	1,476	78	**5.3%**
4	2017	141	Social Worker (LCSW)	298	11	**3.7%**
4	2017	180	Ultrasound Technician	469	21	**4.5%**

2017 Quarter 4 Healthcare Workforce Data Report ©

Traveling Contract and Agency Nurses

California - *Statewide*

Qtr	Year	# Facilities	Position	Total Headcount	# Full-Time	# Part-Time
TRAVELING/CONTRACT NURSES						
4	2017	57	Registered Nurses (RNs)	1,593	1,463	130
4	2017	5	Licensed Vocational Nurses (LVNs)	5	5	0
4	2017	3	Aides/Unlicensed Nursing Assistants	50	15	35
AGENCY NURSES						
4	2017	21	Registered Nurses (RNs)	407	90	317
4	2017	2	Licensed Vocational Nurses (LVNs)	76	54	22
4	2017	12	Aides/Unlicensed Nursing Assistants	164	7	157

2017 Quarter 4 Healthcare Workforce Data Report ©

Northern California

Turnover, Accession, and Vacancy Rates (All Employees and All RNs)

Allied for Health

2017 Q4 Healthcare Workforce Data Report

California - *Northern*

Qtr	# Facilities	Headcount	# Separations	% Turnover	# Hires	% Hire	# Vacancies	% Vacancies	RNs Headcount	# Separations	% Turnover	# Hires	% Hire	# Vacancies	% Vacancies
			All Employees						**Registered Nurses (Staff, Speciality, Other, New Grad)**						
2015															
1	107	141,580	2,697	**1.9%**	3,646	**2.6%**	5,343	**3.6%**	42,748	816	**1.9%**	1,417	**3.3%**	1,618	**3.6%**
2	115	147,341	4,141	**2.8%**	4,950	**3.4%**	6,518	**4.2%**	44,543	1,178	**2.6%**	1,729	**3.9%**	2,338	**5.0%**
3	87	105,163	3,313	**3.2%**	4,568	**4.3%**	4,469	**4.1%**	36,101	1,146	**3.2%**	1,840	**5.1%**	1,830	**4.8%**
4	110	137,199	2,941	**2.1%**	4,092	**3.0%**	5,959	**4.2%**	42,207	881	**2.1%**	1,423	**3.4%**	2,056	**4.6%**
2016															
1	108	142,868	3,125	**2.2%**	3,944	**2.8%**	6,222	**4.2%**	40,916	941	**2.3%**	1,474	**3.6%**	1,929	**4.5%**
2	105	139,088	2,454	**1.8%**	4,388	**3.2%**	6,677	**4.6%**	43,564	767	**1.8%**	1,547	**3.6%**	2,063	**4.5%**
3	103	140,322	3,547	**2.5%**	4,548	**3.2%**	4,556	**3.1%**	44,594	1,075	**2.4%**	1,878	**4.2%**	1,632	**3.5%**
4	96	134,666	3,302	**2.5%**	3,744	**2.8%**	5,890	**4.2%**	40,862	1,032	**2.5%**	1,210	**3.0%**	1,980	**4.6%**
2017															
1	95	131,232	2,914	**2.2%**	3,371	**2.6%**	5,222	**3.8%**	41,400	901	**2.2%**	1,441	**3.5%**	1,865	**4.3%**
2	98	138,405	3,189	**2.3%**	4,092	**3.0%**	5,037	**3.5%**	43,606	1,006	**2.3%**	1,519	**3.5%**	1,894	**4.2%**
3	107	145,081	3,841	**2.6%**	3,909	**2.7%**	5,739	**3.8%**	45,502	1,000	**2.2%**	1,581	**3.5%**	1,784	**3.8%**
4	96	135,272	2,639	**2.0%**	3,105	**2.3%**	5,257	**3.7%**	41,891	816	**1.9%**	1,115	**2.7%**	1,695	**3.9%**

Turnover, Accession, and Vacancy Rates (Specific Positions)

California - *Northern*

Qtr	Year	# Facilities	Position	Headcount	# Separations	% Turnover	# Vacancies	% Vacancies	# Hires	% Hire
4	2017	96	All Employees	135,272	2,639	2.0%	5,257	3.7%	3,105	2.3%
NURSING POSITIONS										
4	2017	94	Registered Nurse - Staff (Not New Graduates) Direct Care	29,968	512	1.7%	1,155	3.7%	722	2.4%
4	2017	42	RN - Peri-Operative (OR)	1,804	33	1.8%	37	2.0%	23	1.3%
4	2017	43	RN - Critical Care	3,235	90	2.8%	150	4.4%	89	2.8%
4	2017	41	RN - Emergency Department	2,159	66	3.1%	69	3.1%	77	3.6%
4	2017	27	RN - Labor and Delivery	1,368	22	1.6%	35	2.5%	31	2.3%
4	2017	16	RN - NICU	1,016	19	1.9%	27	2.6%	29	2.9%
4	2017	21	RN - Case Manager	847	30	3.5%	48	5.4%	10	1.2%
4	2017	19	RN - Other	1,191	26	2.2%	107	8.2%	40	3.4%
4	2017	59	RN - New Graduates (less than 6 months experience)	303	18	5.9%	67	18.1%	94	31.0%
4	2017	65	Certified Nursing Assistant	3,347	60	1.8%	132	3.8%	81	2.4%
4	2017	5	Certified Registered Nurse Anesthetist (CRNA)	16	0	0.0%	0	0.0%	4	25.0%
4	2017	38	Clinical Nurse Specialist (CNS)	337	9	2.7%	36	9.7%	2	0.6%
4	2017	20	Home Health Aide	152	0	0.0%	0	0.0%	1	0.7%
4	2017	69	Licensed Vocational Nurse (LVN)	854	24	2.8%	26	3.0%	24	2.8%
4	2017	5	Nurse Midwives (NM)	11	0	0.0%	3	21.4%	0	0.0%
4	2017	49	Nurse Practitioner (NP)	872	19	2.2%	76	8.0%	32	3.7%
4	2017	56	Physician Assistant	443	9	2.0%	61	12.1%	26	5.9%
4	2017	28	Unlicensed Nursing Aide/Assistant	1,753	52	3.0%	63	3.5%	45	2.6%
ALLIED HEALTH										
4	2017	37	Coder	211	4	1.9%	15	6.6%	4	1.9%
4	2017	87	Clinical Laboratory Scientist	1,713	27	1.6%	69	3.9%	38	2.2%
4	2017	56	CT Technologist	612	5	0.8%	19	3.0%	6	1.0%
4	2017	13	CVIR Technologist	73	1	1.4%	4	5.2%	3	4.1%
4	2017	41	Medical Assistant	840	25	3.0%	33	3.8%	31	3.7%
4	2017	20	Medical Laboratory Technician	155	2	1.3%	1	0.6%	2	1.3%
4	2017	58	MRI Technologist	287	3	1.0%	15	5.0%	5	1.7%
4	2017	11	Occupational Therapy Assistant	15	0	0.0%	0	0.0%	0	0.0%
4	2017	85	Pharmacist	1,239	20	1.6%	55	4.3%	23	1.9%
4	2017	83	Physical Therapist	1,230	17	1.4%	45	3.5%	22	1.8%
4	2017	82	Radiological Technologist	1,337	24	1.8%	49	3.5%	26	1.9%
4	2017	82	Respiratory Therapist	2,003	33	1.6%	33	1.6%	32	1.6%
4	2017	46	Social Worker (LCSW)	431	13	3.0%	30	6.5%	13	3.0%
4	2017	82	Ultrasound Technician	637	14	2.2%	24	3.6%	12	1.9%

California - *Northern*

Qtr	Year	# Facilities	Position	Headcount	# Total Separations	% Total Separations	# VolSeps	% VolSeps	# InvSeps	% InvSeps	# Layoffs	% Layoffs
4	2017	96	All Employees	135,272	2,639	2.0%	2,108	1.6%	473	0.3%	58	0.0%

NURSING POSITIONS

Qtr	Year	# Facilities	Position	Headcount	# Total Separations	% Total Separations	# VolSeps	% VolSeps	# InvSeps	% InvSeps	# Layoffs	% Layoffs
4	2017	94	Registered Nurse - Staff (Not New Graduates) Direct Care	29,968	512	1.7%	444	1.5%	67	0.2%	1	0.0%
4	2017	42	RN - Peri-Operative (OR)	1,804	33	1.8%	28	1.6%	5	0.3%	0	0.0%
4	2017	43	RN - Critical Care	3,235	90	2.8%	79	2.4%	10	0.3%	1	0.0%
4	2017	41	RN - Emergency Department	2,159	66	3.1%	54	2.5%	12	0.6%	0	0.0%
4	2017	27	RN - Labor and Delivery	1,368	22	1.6%	20	1.5%	2	0.1%	0	0.0%
4	2017	16	RN - NICU	1,016	19	1.9%	19	1.9%	0	0.0%	0	0.0%
4	2017	21	RN - Case Manager	847	30	3.5%	28	3.3%	2	0.2%	0	0.0%
4	2017	19	RN - Other	1,191	26	2.2%	22	1.8%	1	0.1%	3	0.3%
4	2017	59	RN - New Graduates (less than 6 months experience)	303	18	5.9%	16	5.3%	2	0.7%	0	0.0%
4	2017	65	Certified Nursing Assistant	3,347	60	1.8%	42	1.3%	18	0.5%	0	0.0%
4	2017	5	Certified Registered Nurse Anesthetist (CRNA)	16	0	0.0%	0	0.0%	0	0.0%	0	0.0%
4	2017	38	Clinical Nurse Specialist (CNS)	337	9	2.7%	8	2.4%	1	0.3%	0	0.0%
4	2017	20	Home Health Aide	152	0	0.0%	0	0.0%	0	0.0%	0	0.0%
4	2017	69	Licensed Vocational Nurse (LVN)	854	24	2.8%	17	2.0%	7	0.8%	0	0.0%
4	2017	5	Nurse Midwives (NM)	11	0	0.0%	0	0.0%	0	0.0%	0	0.0%
4	2017	49	Nurse Practitioner (NP)	872	19	2.2%	17	1.9%	2	0.2%	0	0.0%
4	2017	56	Physician Assistant	443	9	2.0%	6	1.4%	3	0.7%	0	0.0%
4	2017	28	Unlicensed Nursing Aide/Assistant	1,753	52	3.0%	38	2.2%	14	0.8%	0	0.0%

ALLIED HEALTH

Qtr	Year	# Facilities	Position	Headcount	# Total Separations	% Total Separations	# VolSeps	% VolSeps	# InvSeps	% InvSeps	# Layoffs	% Layoffs
4	2017	37	Coder	211	4	1.9%	3	1.4%	0	0.0%	1	0.5%
4	2017	87	Clinical Laboratory Scientist	1,713	27	1.6%	26	1.5%	1	0.1%	0	0.0%
4	2017	56	CT Technologist	612	5	0.8%	2	0.3%	3	0.5%	0	0.0%
4	2017	13	CVIR Technologist	73	1	1.4%	1	1.4%	0	0.0%	0	0.0%
4	2017	41	Medical Assistant	840	25	3.0%	19	2.3%	6	0.7%	0	0.0%
4	2017	20	Medical Laboratory Technician	155	2	1.3%	1	0.6%	1	0.6%	0	0.0%
4	2017	58	MRI Technologist	287	3	1.0%	3	1.0%	0	0.0%	0	0.0%
4	2017	11	Occupational Therapy Assistant	15	0	0.0%	0	0.0%	0	0.0%	0	0.0%
4	2017	85	Pharmacist	1,239	20	1.6%	19	1.5%	1	0.1%	0	0.0%
4	2017	83	Physical Therapist	1,230	17	1.4%	14	1.1%	3	0.2%	0	0.0%
4	2017	82	Radiological Technologist	1,337	24	1.8%	16	1.2%	8	0.6%	0	0.0%
4	2017	82	Respiratory Therapist	2,003	33	1.6%	30	1.5%	3	0.1%	0	0.0%
4	2017	46	Social Worker (LCSW)	431	13	3.0%	11	2.6%	2	0.5%	0	0.0%
4	2017	82	Ultrasound Technician	637	14	2.2%	10	1.6%	4	0.6%	0	0.0%

Per Diem Turnover - (Specific Positions)

California - _Northern_

Qtr	Year	# Facilities	Position	Headcount Total Per Diem	# Separations	% Turnover
4	2017	96	All Employees	20,466	948	**4.6%**
NURSING POSITIONS						
4	2017	94	Registered Nurse - Staff (Not New Graduates) Direct Care	3,060	152	**5.0%**
4	2017	42	RN - Peri-Operative (OR)	331	19	**5.7%**
4	2017	43	RN - Critical Care	420	29	**6.9%**
4	2017	41	RN - Emergency Department	510	39	**7.6%**
4	2017	27	RN - Labor and Delivery	227	15	**6.6%**
4	2017	16	RN - NICU	173	10	**5.8%**
4	2017	21	RN - Case Manager	152	14	**9.2%**
4	2017	19	RN - Other	96	7	**7.3%**
4	2017	59	RN - New Graduates (less than 6 months experience)	1	0	**0.0%**
4	2017	65	Certified Nursing Assistant	529	26	**4.9%**
4	2017	5	Certified Registered Nurse Anesthetist (CRNA)	8	0	**0.0%**
4	2017	38	Clinical Nurse Specialist (CNS)	25	6	**24.3%**
4	2017	20	Home Health Aide	7	1	**14.3%**
4	2017	69	Licensed Vocational Nurse (LVN)	118	20	**16.9%**
4	2017	5	Nurse Midwives (NM)	3	0	**0.0%**
4	2017	49	Nurse Practitioner (NP)	105	8	**7.6%**
4	2017	56	Physician Assistant	24	2	**8.3%**
4	2017	28	Unlicensed Nursing Aide/Assistant	193	14	**7.3%**
ALLIED HEALTH						
4	2017	37	Coder	10	0	**0.0%**
4	2017	87	Clinical Laboratory Scientist	416	11	**2.6%**
4	2017	56	CT Technologist	88	5	**5.7%**
4	2017	13	CVIR Technologist	12	0	**0.0%**
4	2017	41	Medical Assistant	92	7	**7.6%**
4	2017	20	Medical Laboratory Technician	26	2	**7.7%**
4	2017	58	MRI Technologist	76	0	**0.0%**
4	2017	11	Occupational Therapy Assistant	6	0	**0.0%**
4	2017	85	Pharmacist	347	14	**4.0%**
4	2017	83	Physical Therapist	314	13	**4.1%**
4	2017	82	Radiological Technologist	433	25	**5.8%**
4	2017	82	Respiratory Therapist	549	39	**7.1%**
4	2017	46	Social Worker (LCSW)	74	4	**5.4%**
4	2017	82	Ultrasound Technician	197	8	**4.1%**

Traveling Contract and Agency Nurses

California - *Northern*

Qtr	Year	# Facilities	Position	Total Headcount	# Full-Time	# Part-Time
			TRAVELING/CONTRACT NURSES			
4	2017	21	Registered Nurses (RNs)	395	321	74
4	2017	1	Licensed Vocational Nurses (LVNs)	2	2	0
4	2017	1	Aides/Unlicensed Nursing Assistants	2	2	0
			AGENCY NURSES			
4	2017	5	Registered Nurses (RNs)	6	3	3
4	2017	0	Licensed Vocational Nurses (LVNs)	0	0	0
4	2017	4	Aides/Unlicensed Nursing Assistants	23	0	23

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Southern California

Turnover, Accession, and Vacancy Rates (All Employees and All RNs)

California - *Southern*

Qtr	# Facilities	Headcount	# Separations	% Turnover	# Hires	% Hire	# Vacancies	% Vacancies	RNs Headcount	# Separations	% Turnover	# Hires	% Hire	# Vacancies	% Vacancies
			All Employees							**Registered Nurses (Staff, Other, New Grad)**					
2015															
1	94	151,988	3,369	**2.2%**	4,391	**2.9%**	6,827	**4.3%**	40,495	1,136	**2.8%**	1,281	**3.2%**	2,296	**5.4%**
2	96	155,411	4,335	**2.8%**	4,650	**3.0%**	7,620	**4.7%**	42,153	1,256	**3.0%**	1,388	**3.3%**	2,747	**6.1%**
3	81	105,297	3,694	**3.5%**	4,304	**4.1%**	6,459	**5.8%**	34,946	1,055	**3.0%**	1,743	**5.0%**	2,717	**7.2%**
4	95	142,072	3,321	**2.3%**	4,075	**2.9%**	6,856	**4.6%**	39,718	1,112	**2.8%**	1,556	**3.9%**	2,540	**6.0%**
2016															
1	89	150,419	3,475	**2.3%**	4,977	**3.3%**	8,225	**5.2%**	41,031	1,061	**2.6%**	1,714	**4.2%**	2,821	**6.4%**
2	99	154,152	4,436	**2.9%**	5,146	**3.3%**	8,326	**5.1%**	49,218	1,524	**3.1%**	2,058	**4.2%**	3,582	**6.8%**
3	104	146,797	4,234	**2.9%**	5,014	**3.4%**	7,823	**5.1%**	46,757	1,513	**3.2%**	2,191	**4.7%**	2,794	**5.6%**
4	101	167,988	4,920	**2.9%**	5,079	**3.0%**	9,749	**5.5%**	49,094	1,553	**3.2%**	1,944	**4.0%**	3,557	**6.8%**
2017															
1	102	169,306	4,428	**2.6%**	5,949	**3.5%**	9,294	**5.2%**	48,568	1,513	**3.1%**	2,248	**4.6%**	3,346	**6.4%**
2	105	168,722	4,910	**2.9%**	5,618	**3.3%**	9,195	**5.2%**	49,295	1,756	**3.6%**	2,162	**4.4%**	3,948	**7.4%**
3	101	166,686	4,985	**3.0%**	6,098	**3.7%**	9,484	**5.4%**	42,393	1,533	**3.6%**	2,157	**5.1%**	3,214	**7.0%**
4	96	159,324	3,888	**2.4%**	4,751	**3.0%**	9,625	**5.7%**	44,761	1,375	**3.1%**	1,765	**3.9%**	3,245	**6.8%**

Turnover, Accession, and Vacancy Rates (Specific Positions)

California - Southern

Qtr	Year	# Facilities	Position	Headcount	# Separations	% Turnover	# Vacancies	% Vacancies	# Hires	% Hire
4	2017	96	All Employees	159,324	3,888	2.4%	9,625	5.7%	4,751	3.0%
NURSING POSITIONS										
4	2017	94	Registered Nurse - Staff (Not New Graduates) Direct Care	28,899	855	3.0%	2,031	6.6%	1,003	3.5%
4	2017	61	RN - Peri-Operative (OR)	1,834	24	1.3%	101	5.2%	60	3.3%
4	2017	60	RN - Critical Care	3,822	167	4.4%	284	6.9%	162	4.2%
4	2017	62	RN - Emergency Department	2,315	96	4.1%	211	8.4%	112	4.8%
4	2017	44	RN - Labor and Delivery	1,439	37	2.6%	89	5.8%	50	3.5%
4	2017	32	RN - NICU	1,197	25	2.1%	40	3.2%	23	1.9%
4	2017	53	RN - Case Manager	656	26	4.0%	62	8.6%	23	3.5%
4	2017	50	RN - Other	3,081	91	3.0%	165	5.1%	99	3.2%
4	2017	67	RN - New Graduates (less than 6 months experience)	1,518	54	3.6%	262	14.7%	233	15.3%
4	2017	66	Certified Nursing Assistant	5,411	197	3.6%	325	5.7%	261	4.8%
4	2017	3	Certified Registered Nurse Anesthetist (CRNA)	42	2	4.8%	10	19.2%	3	7.1%
4	2017	36	Clinical Nurse Specialist (CNS)	177	8	4.5%	22	11.1%	3	1.7%
4	2017	12	Home Health Aide	40	2	5.0%	3	7.0%	1	2.5%
4	2017	86	Licensed Vocational Nurse (LVN)	2,398	78	3.3%	158	6.2%	94	3.9%
4	2017	3	Nurse Midwives (NM)	3	0	0.0%	2	40.0%	1	33.3%
4	2017	40	Nurse Practitioner (NP)	705	15	2.1%	70	9.0%	32	4.5%
4	2017	31	Physician Assistant	219	4	1.8%	38	14.8%	13	5.9%
4	2017	42	Unlicensed Nursing Aide/Assistant	3,163	84	2.7%	169	5.1%	105	3.3%
ALLIED HEALTH										
4	2017	55	Coder	566	16	2.8%	26	4.4%	13	2.3%
4	2017	87	Clinical Laboratory Scientist	2,187	43	2.0%	119	5.2%	54	2.5%
4	2017	62	CT Technologist	440	10	2.3%	10	2.2%	6	1.4%
4	2017	17	CVIR Technologist	81	1	1.2%	7	8.0%	4	4.9%
4	2017	34	Medical Assistant	1,351	29	2.1%	49	3.5%	72	5.3%
4	2017	36	Medical Laboratory Technician	510	15	2.9%	29	5.4%	5	1.0%
4	2017	58	MRI Technologist	292	5	1.7%	12	3.9%	7	2.4%
4	2017	18	Occupational Therapy Assistant	89	0	0.0%	5	5.3%	2	2.2%
4	2017	82	Pharmacist	1,453	24	1.7%	44	2.9%	32	2.2%
4	2017	68	Physical Therapist	856	12	1.4%	48	5.3%	27	3.2%
4	2017	86	Radiological Technologist	1,630	39	2.4%	45	2.7%	24	1.5%
4	2017	84	Respiratory Therapist	2,758	35	1.3%	50	1.8%	19	0.7%
4	2017	74	Social Worker (LCSW)	718	14	1.9%	37	4.9%	18	2.5%
4	2017	74	Ultrasound Technician	558	6	1.1%	9	1.6%	10	1.8%

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<u>Turnover by Type - (Specific Position)</u>

California - Southern

Qtr	Year	# Facilities	Position	Headcount	# Total Separations	% Total Separations	# VolSeps	% VolSeps	# InvSeps	% InvSeps	# Layoffs	% Layoffs
4	2017	96	All Employees	159,324	3,888	2.4%	3,153	2.0%	638	0.4%	97	0.1%
NURSING POSITIONS												
4	2017	94	Registered Nurse - Staff (Not New Graduates) Direct Care	28,899	855	3.0%	774	2.7%	81	0.3%	0	0.0%
4	2017	61	RN - Peri-Operative (OR)	1,834	24	1.3%	24	1.3%	0	0.0%	0	0.0%
4	2017	60	RN - Critical Care	3,822	167	4.4%	155	4.1%	12	0.3%	0	0.0%
4	2017	62	RN - Emergency Department	2,315	96	4.1%	86	3.7%	10	0.4%	0	0.0%
4	2017	44	RN - Labor and Delivery	1,439	37	2.6%	35	2.4%	2	0.1%	0	0.0%
4	2017	32	RN - NICU	1,197	25	2.1%	23	1.9%	2	0.2%	0	0.0%
4	2017	53	RN - Case Manager	656	26	4.0%	22	3.4%	3	0.5%	1	0.2%
4	2017	50	RN - Other	3,081	91	3.0%	88	2.9%	1	0.0%	2	0.1%
4	2017	67	RN - New Graduates (less than 6 months experience)	1,518	54	3.6%	45	3.0%	9	0.6%	0	0.0%
4	2017	66	Certified Nursing Assistant	5,411	197	3.6%	144	2.7%	53	1.0%	0	0.0%
4	2017	3	Certified Registered Nurse Anesthetist (CRNA)	42	2	4.8%	2	4.8%	0	0.0%	0	0.0%
4	2017	36	Clinical Nurse Specialist (CNS)	177	8	4.5%	6	3.4%	1	0.6%	1	0.6%
4	2017	12	Home Health Aide	40	2	5.0%	2	5.0%	0	0.0%	0	0.0%
4	2017	86	Licensed Vocational Nurse (LVN)	2,398	78	3.3%	67	2.8%	5	0.2%	6	0.3%
4	2017	3	Nurse Midwives (NM)	3	0	0.0%	0	0.0%	0	0.0%	0	0.0%
4	2017	40	Nurse Practitioner (NP)	705	15	2.1%	14	2.0%	1	0.1%	0	0.0%
4	2017	31	Physician Assistant	219	4	1.8%	4	1.8%	0	0.0%	0	0.0%
4	2017	42	Unlicensed Nursing Aide/Assistant	3,163	84	2.7%	64	2.0%	20	0.6%	0	0.0%
ALLIED HEALTH												
4	2017	55	Coder	566	16	2.8%	14	2.5%	2	0.4%	0	0.0%
4	2017	87	Clinical Laboratory Scientist	2,187	43	2.0%	32	1.5%	9	0.4%	2	0.1%
4	2017	62	CT Technologist	440	10	2.3%	9	2.0%	1	0.2%	0	0.0%
4	2017	17	CVIR Technologist	81	1	1.2%	1	1.2%	0	0.0%	0	0.0%
4	2017	34	Medical Assistant	1,351	29	2.1%	25	1.9%	4	0.3%	0	0.0%
4	2017	36	Medical Laboratory Technician	510	15	2.9%	8	1.6%	7	1.4%	0	0.0%
4	2017	58	MRI Technologist	292	5	1.7%	4	1.4%	1	0.3%	0	0.0%
4	2017	18	Occupational Therapy Assistant	89	0	0.0%	0	0.0%	0	0.0%	0	0.0%
4	2017	82	Pharmacist	1,453	24	1.7%	10	0.7%	1	0.1%	13	0.9%
4	2017	68	Physical Therapist	856	12	1.4%	12	1.4%	0	0.0%	0	0.0%
4	2017	86	Radiological Technologist	1,630	39	2.4%	19	1.2%	20	1.2%	0	0.0%
4	2017	84	Respiratory Therapist	2,758	35	1.3%	27	1.0%	8	0.3%	0	0.0%
4	2017	74	Social Worker (LCSW)	718	14	1.9%	14	1.9%	0	0.0%	0	0.0%
4	2017	74	Ultrasound Technician	558	6	1.1%	5	0.9%	1	0.2%	0	0.0%

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<u>**Per Diem Turnover - (Specific Positions)**</u>

California - Southern

Qtr	Year	# Facilities	Position	Headcount Total Per Diem	# Separations	% Turnover
4	2017	96	All Employees	22,744	1,435	**6.3%**
NURSING POSITIONS						
4	2017	94	Registered Nurse - Staff (Not New Graduates) Direct Care	3,521	294	**8.3%**
4	2017	61	RN - Peri-Operative (OR)	260	27	**10.4%**
4	2017	60	RN - Critical Care	398	51	**12.8%**
4	2017	62	RN - Emergency Department	448	49	**10.9%**
4	2017	44	RN - Labor and Delivery	208	15	**7.2%**
4	2017	32	RN - NICU	171	14	**8.2%**
4	2017	53	RN - Case Manager	138	13	**9.4%**
4	2017	50	RN - Other	340	29	**8.5%**
4	2017	67	RN - New Graduates (less than 6 months experience)	86	1	**1.2%**
4	2017	66	Certified Nursing Assistant	819	71	**8.7%**
4	2017	3	Certified Registered Nurse Anesthetist (CRNA)	2	0	**0.0%**
4	2017	36	Clinical Nurse Specialist (CNS)	13	0	**0.0%**
4	2017	12	Home Health Aide	1	0	**0.0%**
4	2017	86	Licensed Vocational Nurse (LVN)	308	19	**6.2%**
4	2017	3	Nurse Midwives (NM)	2	0	**0.0%**
4	2017	40	Nurse Practitioner (NP)	51	4	**7.9%**
4	2017	31	Physician Assistant	31	1	**3.2%**
4	2017	42	Unlicensed Nursing Aide/Assistant	439	32	**7.3%**
ALLIED HEALTH						
4	2017	55	Coder	33	2	**6.1%**
4	2017	87	Clinical Laboratory Scientist	524	29	**5.5%**
4	2017	62	CT Technologist	124	4	**3.2%**
4	2017	17	CVIR Technologist	12	0	**0.0%**
4	2017	34	Medical Assistant	80	6	**7.5%**
4	2017	36	Medical Laboratory Technician	51	2	**3.9%**
4	2017	58	MRI Technologist	63	3	**4.8%**
4	2017	18	Occupational Therapy Assistant	58	3	**5.2%**
4	2017	82	Pharmacist	522	38	**7.3%**
4	2017	68	Physical Therapist	326	19	**5.8%**
4	2017	86	Radiological Technologist	471	28	**5.9%**
4	2017	84	Respiratory Therapist	745	34	**4.6%**
4	2017	74	Social Worker (LCSW)	139	4	**2.9%**
4	2017	74	Ultrasound Technician	207	12	**5.8%**

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California - Southern

Qtr	Year	# Facilities	Position	Total Headcount	# Full-Time	# Part-Time
			TRAVELING/CONTRACT NURSES			
4	2017	32	Registered Nurses (RNs)	1,067	1,011	56
4	2017	4	Licensed Vocational Nurses (LVNs)	3	3	0
4	2017	2	Aides/Unlicensed Nursing Assistants	48	13	35
			AGENCY NURSES			
4	2017	15	Registered Nurses (RNs)	400	86	314
4	2017	2	Licensed Vocational Nurses (LVNs)	76	54	22
4	2017	8	Aides/Unlicensed Nursing Assistants	141	7	134

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San Diego

Turnover, Accession, and Vacancy Rates (All Employees and All RNs)

California - *San Diego*

Qtr	# Facilities	All Employees							Registered Nurses (Staff, Other, New Grad)						
		Headcount	# Separations	% Turnover	# Hires	% Hire	# Vacancies	% Vacancies	RNs Headcount	# Separations	% Turnover	# Hires	% Hire	# Vacancies	% Vacancies
2015															
1	22	21,012	412	2.0%	471	2.2%	1,493	6.6%	7,259	179	2.5%	233	3.2%	591	7.5%
2	22	21,040	559	2.7%	500	2.4%	2,123	9.2%	7,247	226	3.1%	224	3.1%	767	9.6%
3	21	18,240	526	2.9%	599	3.3%	2,693	12.9%	6,886	223	3.2%	261	3.8%	1,028	13.0%
4	22	23,781	554	2.3%	598	2.5%	2,527	9.6%	8,957	245	2.7%	289	3.2%	1,075	10.7%
2016															
1	22	23,617	407	1.7%	681	2.9%	2,526	9.7%	7,287	152	2.1%	282	3.9%	928	11.3%
2	25	29,631	712	2.4%	939	3.2%	3,796	11.4%	11,670	274	2.3%	478	4.1%	1,409	10.8%
3	25	36,914	1,223	3.3%	1,709	4.6%	2,718	6.9%	13,401	363	2.7%	711	5.3%	1,006	7.0%
4	23	35,211	1,386	3.9%	1,316	3.7%	3,414	8.8%	13,224	532	4.0%	589	4.5%	1,366	9.4%
2017															
1	22	34,391	921	2.7%	1,222	3.6%	3,329	8.8%	12,010	333	2.8%	526	4.4%	1,410	10.5%
2	25	41,416	1,453	3.5%	1,833	4.4%	3,852	8.5%	11,018	479	4.3%	1,040	9.4%	1,498	12.0%
3	25	42,417	1,395	3.3%	1,969	4.6%	4,396	9.4%	14,118	391	2.8%	693	4.9%	1,891	11.8%
4	24	39,363	896	2.3%	1,295	3.3%	2,786	6.6%	14,256	348	2.4%	456	3.2%	1,327	8.5%

Turnover, Accession, and Vacancy Rates (Specific Positions)

California - *San Diego*

Qtr	Year	# Facilities	Position	Headcount	# Separations	% Turnover	# Vacancies	% Vacancies	# Hires	% Hire
4	2017	24	All Employees	39,363	896	2.3%	2,786	6.6%	1,295	3.3%

NURSING POSITIONS

Qtr	Year	# Facilities	Position	Headcount	# Separations	% Turnover	# Vacancies	% Vacancies	# Hires	% Hire
4	2017	24	Registered Nurse - Staff (Not New Graduates) Direct Care	9,325	222	2.4%	828	8.2%	293	3.1%
4	2017	6	RN - Peri-Operative (OR)	200	4	2.0%	36	15.3%	3	1.5%
4	2017	6	RN - Critical Care	114	3	2.6%	7	5.8%	3	2.6%
4	2017	6	RN - Emergency Department	422	14	3.3%	46	9.8%	9	2.1%
4	2017	6	RN - Labor and Delivery	475	17	15.4%	36	7.0%	12	2.5%
4	2017	5	RN - NICU	339	7	2.1%	37	9.8%	15	4.4%
4	2017	22	RN - Case Manager	299	11	3.7%	38	11.3%	16	5.4%
4	2017	21	RN - Other	3,070	68	2.2%	287	8.5%	104	3.4%
4	2017	22	RN - New Graduates (less than 6 months experience)	12	2	16.7%	12	50.0%	1	8.3%
4	2017	21	Certified Nursing Assistant	703	18	2.6%	74	9.5%	28	4.0%
4	2017	1	Certified Registered Nurse Anesthetist (CRNA)	32	0	0.0%	0	0.0%	0	0.0%
4	2017	18	Clinical Nurse Specialist (CNS)	31	0	0.0%	206	86.9%	0	0.0%
4	2017	19	Home Health Aide	79	1	1.3%	3	3.7%	1	1.3%
4	2017	23	Licensed Vocational Nurse (LVN)	758	35	4.6%	104	12.1%	24	3.2%
4	2017	1	Nurse Midwives (NM)	2	0	0.0%	0	0.0%	0	0.0%
4	2017	21	Nurse Practitioner (NP)	239	9	3.8%	37	13.4%	8	3.3%
4	2017	19	Physician Assistant	124	2	1.6%	12	8.8%	6	4.8%
4	2017	17	Unlicensed Nursing Aide/Assistant	456	14	3.1%	31	6.4%	19	4.2%

ALLIED HEALTH

Qtr	Year	# Facilities	Position	Headcount	# Separations	% Turnover	# Vacancies	% Vacancies	# Hires	% Hire
4	2017	22	Coder	53	1	1.9%	4	7.0%	0	0.0%
4	2017	24	Clinical Laboratory Scientist	459	7	1.5%	29	5.9%	20	4.4%
4	2017	24	CT Technologist	84	2	2.4%	13	13.4%	3	3.6%
4	2017	0	CVIR Technologist	0	0	N/A	0	N/A	0	N/A
4	2017	22	Medical Assistant	448	8	1.8%	39	8.0%	32	7.1%
4	2017	21	Medical Laboratory Technician	196	1	0.5%	18	8.4%	9	4.6%
4	2017	24	MRI Technologist	73	2	2.7%	8	9.9%	1	1.4%
4	2017	18	Occupational Therapy Assistant	35	1	2.9%	4	10.3%	0	0.0%
4	2017	24	Pharmacist	532	5	0.9%	19	3.4%	10	1.9%
4	2017	24	Physical Therapist	342	6	1.8%	27	7.3%	17	5.0%
4	2017	24	Radiological Technologist	274	2	0.7%	24	8.1%	13	4.7%
4	2017	24	Respiratory Therapist	474	6	1.3%	22	4.4%	13	2.7%
4	2017	21	Social Worker (LCSW)	357	9	2.5%	29	7.5%	12	3.4%
4	2017	24	Ultrasound Technician	180	2	1.1%	15	7.7%	0	0.0%

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Turnover by Type - (Specific Position)

California - *San Diego*

Qtr	Year	# Facilities	Position	Headcount	# Total Separations	% Total Separations	# VolSeps	% VolSeps	# InvSeps	% InvSeps	# Layoffs	% Layoffs
4	2017	24	All Employees	39,363	896	**2.3%**	729	**1.9%**	156	**0.4%**	11	**0.0%**
NURSING POSITIONS												
4	2017	24	Registered Nurse - Staff (Not New Graduates) Direct Care	9,325	222	**2.4%**	199	**2.1%**	23	**0.2%**	0	**0.0%**
4	2017	6	RN - Peri-Operative (OR)	200	4	**2.0%**	4	**2.0%**	0	**0.0%**	0	**0.0%**
4	2017	6	RN - Critical Care	114	3	**2.6%**	3	**2.6%**	0	**0.0%**	0	**0.0%**
4	2017	6	RN - Emergency Department	422	14	**3.3%**	14	**3.3%**	0	**0.0%**	0	**0.0%**
4	2017	6	RN - Labor and Delivery	475	17	**3.6%**	17	**3.6%**	0	**0.0%**	0	**0.0%**
4	2017	5	RN - NICU	339	7	**2.1%**	6	**1.8%**	1	**0.3%**	0	**0.0%**
4	2017	22	RN - Case Manager	299	11	**3.7%**	9	**3.0%**	2	**0.7%**	0	**0.0%**
4	2017	21	RN - Other	3,070	68	**2.2%**	64	**2.1%**	4	**0.1%**	0	**0.0%**
4	2017	22	RN - New Graduates (less than 6 months experience)	12	2	**16.7%**	2	**16.7%**	0	**0.0%**	0	**0.0%**
4	2017	21	Certified Nursing Assistant	703	18	**2.6%**	15	**2.1%**	2	**0.3%**	1	**0.1%**
4	2017	1	Certified Registered Nurse Anesthetist (CRNA)	32	0	**0.0%**	0	**0.0%**	0	**0.0%**	0	**0.0%**
4	2017	18	Clinical Nurse Specialist (CNS)	31	0	**0.0%**	0	**0.0%**	0	**0.0%**	0	**0.0%**
4	2017	19	Home Health Aide	79	1	**1.3%**	0	**0.0%**	1	**1.3%**	0	**0.0%**
4	2017	23	Licensed Vocational Nurse (LVN)	758	35	**4.6%**	33	**4.4%**	2	**0.3%**	0	**0.0%**
4	2017	1	Nurse Midwives (NM)	2	0	**0.0%**	0	**0.0%**	0	**0.0%**	0	**0.0%**
4	2017	21	Nurse Practitioner (NP)	239	9	**3.8%**	7	**2.9%**	1	**0.4%**	1	**0.4%**
4	2017	19	Physician Assistant	124	2	**1.6%**	2	**1.6%**	0	**0.0%**	0	**0.0%**
4	2017	17	Unlicensed Nursing Aide/Assistant	456	14	**3.1%**	11	**2.4%**	3	**0.7%**	0	**0.0%**
ALLIED HEALTH												
4	2017	22	Coder	53	1	**1.9%**	1	**1.9%**	0	**0.0%**	0	**0.0%**
4	2017	24	Clinical Laboratory Scientist	459	7	**1.5%**	6	**1.3%**	1	**0.2%**	0	**0.0%**
4	2017	24	CT Technologist	84	2	**2.4%**	0	**0.0%**	2	**2.4%**	0	**0.0%**
4	2017	0	CVIR Technologist	0	0	**N/A**	0	**N/A**	0	**N/A**	0	**N/A**
4	2017	22	Medical Assistant	448	8	**1.8%**	6	**1.3%**	2	**0.4%**	0	**0.0%**
4	2017	21	Medical Laboratory Technician	196	1	**0.5%**	1	**0.5%**	0	**0.0%**	0	**0.0%**
4	2017	24	MRI Technologist	73	2	**2.7%**	2	**2.7%**	0	**0.0%**	0	**0.0%**
4	2017	18	Occupational Therapy Assistant	35	1	**2.9%**	1	**2.9%**	0	**0.0%**	0	**0.0%**
4	2017	24	Pharmacist	532	5	**0.9%**	5	**0.9%**	0	**0.0%**	0	**0.0%**
4	2017	24	Physical Therapist	342	6	**1.8%**	6	**1.8%**	0	**0.0%**	0	**0.0%**
4	2017	24	Radiological Technologist	274	2	**0.7%**	2	**0.7%**	0	**0.0%**	0	**0.0%**
4	2017	24	Respiratory Therapist	474	6	**1.3%**	4	**0.8%**	2	**0.4%**	0	**0.0%**
4	2017	21	Social Worker (LCSW)	357	9	**2.5%**	8	**2.2%**	1	**0.3%**	0	**0.0%**
4	2017	24	Ultrasound Technician	180	2	**1.1%**	1	**0.6%**	1	**0.6%**	0	**0.0%**

Per Diem Turnover - (Specific Positions)

California - *San Diego*

Qtr	Year	# Facilities	Position	Headcount Total Per Diem	# Separations	% Turnover
4	2017	24	All Employees	22,744	1,435	6.3%
NURSING POSITIONS						
4	2017	24	Registered Nurse - Staff (Not New Graduates) Direct Care	1050	77	7.3%
4	2017	6	RN - Peri-Operative (OR)	260	27	10.4%
4	2017	6	RN - Critical Care	398	51	12.8%
4	2017	6	RN - Emergency Department	448	49	10.9%
4	2017	6	RN - Labor and Delivery	208	15	7.2%
4	2017	5	RN - NICU	171	14	8.2%
4	2017	22	RN - Case Manager	138	13	9.4%
4	2017	21	RN - Other	340	29	8.5%
4	2017	22	RN - New Graduates (less than 6 months experience)	86	1	1.2%
4	2017	21	Certified Nursing Assistant	110	8	7.3%
4	2017	1	Certified Registered Nurse Anesthetist (CRNA)	0	0	N/A
4	2017	18	Clinical Nurse Specialist (CNS)	3	0	0.0%
4	2017	19	Home Health Aide	32	3	9.4%
4	2017	23	Licensed Vocational Nurse (LVN)	87	4	4.6%
4	2017	1	Nurse Midwives (NM)	0	0	N/A
4	2017	21	Nurse Practitioner (NP)	9	0	0.0%
4	2017	19	Physician Assistant	2	0	0.0%
4	2017	17	Unlicensed Nursing Aide/Assistant	258	30	11.6%
ALLIED HEALTH						
4	2017	16	Coder	1	0	0.0%
4	2017	21	Clinical Laboratory Scientist	83	3	3.6%
4	2017	21	CT Technologist	7	0	0.0%
4	2017	1	CVIR Technologist	1	0	0.0%
4	2017	19	Medical Assistant	26	1	3.8%
4	2017	19	Medical Laboratory Technician	8	0	0.0%
4	2017	21	MRI Technologist	25	1	4.0%
4	2017	16	Occupational Therapy Assistant	4	0	0.0%
4	2017	21	Pharmacist	62	2	3.2%
4	2017	21	Physical Therapist	86	3	3.5%
4	2017	21	Radiological Technologist	79	6	7.6%
4	2017	22	Respiratory Therapist	96	1	1.0%
4	2017	20	Social Worker (LCSW)	73	4	5.5%
4	2017	20	Ultrasound Technician	54	1	1.9%

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California - *San Diego*

Qtr	Year	# Facilities	Position	Total Headcount	# Full-Time	# Part-Time
			TRAVELING/CONTRACT NURSES			
4	2017	4	Registered Nurses (RNs)	131	131	0
4	2017	0	Licensed Vocational Nurses (LVNs)	0	0	0
4	2017	0	Aides/Unlicensed Nursing Assistants	0	0	0
			AGENCY NURSES			
4	2017	1	Registered Nurses (RNs)	1	1	0
4	2017	0	Licensed Vocational Nurses (LVNs)	0	0	0
4	2017	0	Aides/Unlicensed Nursing Assistants	0	0	0

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RN Labor Market Demand

RN Labor Market Demand - California

RN Labor Market Demand	Count	As a % of Participants
High Demand (Difficult to fill positions)	87	57%
Moderate Demand (Some difficulty filling open positions)	62	41%
No Demand	4	3%
Total	**153**	**100%**

RN Degree Requirements

RN Degree Requirements

For positions requiring an RN license, is there a sufficient pool of applicants with a BSN Degree?	Facility Count	Yes	No
Statewide	166	51%	49%
Northern California	72	33%	67%
Southern California	73	62%	38%
San Diego and Imperial Counties	21	76%	24%

RN Length of Service Before Termination

RN Length of Service Before Termination

RN Length of Service Before Termination	Total Employees Reported	Prevalence
Employed less than 1 year	578	23%
Employed 1-2 years	498	20%
Employed 2-3 years	234	9%
Employed 3-4 years	185	7%
Employed 4-5 years	206	8%
Employed more than 5 years	814	32%
Total	**2515**	**100%**

Total # of Facilities Reporting = 125

Difficult to Fill/
Hard to Recruit Positions

Difficult to Fill/Hard to Recruit Positions - California

County	Position Title	Common Reasons for Hiring Difficulty	Most Common Soft Skills Lacking in Candidate
Alameda	Clinical Lab Scientist	Applicants Lack Technical or Occupational Skills	Communication Skills
Alameda	Home Health/Hospice RN	Applicants Lack Credentials (i.e. Certifications)	Communication Skills
		Applicants Lack Sufficient Work Experience	
		Applicants Unwilling to Accept Offered Wages	Enthusiasm
Alameda	Physical Therapist	Applicants Lack Technical or Occupational Skills	Communication Skills
Alameda	RN - ICU, L&D, ED	Applicants Lack Credentials (i.e. Certifications)	Communication Skills
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
Amador	Clinical Lab Scientist	Applicants Lack Technical or Occupational Skills	Communication Skills
Amador	Home Health/Hospice RN	Applicants Lack Credentials (i.e. Certifications)	Communication Skills
		Applicants Lack Sufficient Work Experience	
		Applicants Unwilling to Accept Offered Wages	Enthusiasm
Amador	Physical Therapist	Applicants Lack Technical or Occupational Skills	Communication Skills
Amador	RN - ICU, L&D, ED	Applicants Lack Credentials (i.e. Certifications)	Communication Skills
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
Butte	COTA	Applicants Lack Education Credentials (i.e. Degree)	N/A
Contra Costa	Clinical Lab Scientist	Applicants Lack Technical or Occupational Skills	Communication Skills
Contra Costa	Home Health/Hospice RN	Applicants Lack Credentials (i.e. Certifications)	Communication Skills
		Applicants Lack Sufficient Work Experience	
		Applicants Unwilling to Accept Offered Wages	Enthusiasm
Contra Costa	NP Pysch	Low Number of Applicants	N/A
Contra Costa	Physical Therapist	Applicants Lack Technical or Occupational Skills	Communication Skills
Contra Costa	RN - ICU, L&D, ED	Applicants Lack Credentials (i.e. Certifications)	Communication Skills
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
Contra Costa	RN - Lactation Education	Applicants Lack Credentials (i.e. Certifications)	N/A
		Applicants Lack Sufficient Work Experience	
		Low Number of Applicants	
Contra Costa	RN - (Neuro Trauma ICU, OR)	Applicants Lack Sufficient Work Experience	N/A
		Low Number of Applicants	
Del Norte	Clinical Lab Scientist	Applicants Lack Technical or Occupational Skills	Communication Skills

Difficult to Fill/Hard to Recruit Positions - California

County	Position Title	Common Reasons for Hiring Difficulty	Most Common Soft Skills Lacking in Candidate
Del Norte	Home Health/Hospice RN	Applicants Lack Credentials (i.e. Certifications)	Communication Skills
		Applicants Lack Sufficient Work Experience	
		Applicants Unwilling to Accept Offered Wages	Enthusiasm
Del Norte	Physical Therapist	Applicants Lack Technical or Occupational Skills	Communication Skills
Del Norte	RN - ICU, L&D, ED	Applicants Lack Credentials (i.e. Certifications)	Communication Skills
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
El Dorado	Certified Nursing Asst.	Applicants Lack Credentials (i.e. Certifications)	N/A
		Applicants Lack Education Credentials (i.e. Degree)	
El Dorado	Clinical Lab Scientist	Applicants Lack Credentials (i.e. Certifications)	N/A
		Applicants Lack Education Credentials (i.e. Degree)	
		Applicants Lack Technical or Occupational Skills	
		Low Number of Applicants	
El Dorado	Coder	Applicants Lack Credentials (i.e. Certifications)	N/A
		Applicants Lack Education Credentials (i.e. Degree)	
		Applicants Lack Soft Skills	
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	
El Dorado	Directors	Applicants Lack Sufficient Work Experience	N/A
		Applicants Lack Technical or Occupational Skills	
		Low Number of Applicants	
El Dorado	Medical Assistant	Applicants Lack Credentials (i.e. Certifications)	N/A
		Applicants Lack Education Credentials (i.e. Degree)	
El Dorado	Oncology Pharmacist	Applicants Lack Credentials (i.e. Certifications)	N/A
		Applicants Lack Sufficient Work Experience	
		Low Number of Applicants	
El Dorado	Surgical RN	Applicants Lack Sufficient Work Experience	N/A
Imperial	Clinical Lab Scientist	Applicants Lack Credentials (i.e. Certifications)	Communication Skills
		Applicants Unwilling to Accept Offered Wages	

Difficult to Fill/Hard to Recruit Positions - California

County	Position Title	Common Reasons for Hiring Difficulty	Most Common Soft Skills Lacking in Candidate
Imperial	Physical Therapist	Applicants Lack Technical or Occupational Skills	Enthusiasm
		Applicants Unwilling to Accept Offered Wages	Interpersonal Skills
Imperial	Speech Pathologist	Applicants Lack Credentials (i.e. Certifications)	Critical & Analytical Thinking or Problem Solving
		Applicants Lack Technical or Occupational Skills	
		Applicants Unwilling to Accept Offered Wages	
Inyo	CLS	Low Number of Applicants	N/A
Inyo	Pharmacist	Low Number of Applicants	N/A
Inyo	RT	Low Number of Applicants	N/A
Lake	Clinical Lab Scientist	Applicants Lack Technical or Occupational Skills	Communication Skills
Lake	Home Health/Hospice RN	Applicants Lack Credentials (i.e. Certifications)	Communication Skills
		Applicants Lack Sufficient Work Experience	
		Applicants Unwilling to Accept Offered Wages	Enthusiasm
Lake	Physical Therapist	Applicants Lack Technical or Occupational Skills	Communication Skills
Lake	RN - ICU, L&D, ED	Applicants Lack Credentials (i.e. Certifications)	Communication Skills
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
Los Angeles	Activity Therapist	Applicants Lack Education Credentials (i.e. Degree)	N/A
		Applicants Lack Sufficient Work Experience	
		Applicants Unwilling to Accept Offered Wages	
Los Angeles	Ambulatory Manager	Applicants Lack Education Credentials (i.e. Degree)	N/A
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
		Low Number of Applicants	
		No Pediatric Exp	
Los Angeles	Ambulatory/Clinics	Applicants Lack Sufficient Work Experience	N/A
		Low Number of Applicants	
Los Angeles	Assistant Nurse Manager	Low Number of Applicants	N/A
Los Angeles	Associate Director	Applicants Lack Education Credentials (i.e. Degree)	N/A
Los Angeles	Bilingual Therapist	Applicants Unwilling to Accept Offered Wages	N/A
		Low Number of Applicants	

Difficult to Fill/Hard to Recruit Positions - California

County	Position Title	Common Reasons for Hiring Difficulty	Most Common Soft Skills Lacking in Candidate
Los Angeles	Case Management	Applicants Lack Sufficient Work Experience	N/A
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	
Los Angeles	Case Manager	Applicants Lack Credentials (i.e. Certifications)	Critical & Analytical Thinking or Problem Solving
		Applicants Lack Education Credentials (i.e. Degree)	
		Applicants Lack Soft Skills	
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	
Los Angeles	Case Manager Clinical	Applicants Lack Education Credentials (i.e. Degree)	N/A
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
		Low Number of Applicants	
Los Angeles	Charge Nurse Rehab	Applicants Lack Sufficient Work Experience	N/A
		Applicants Lack Technical or Occupational Skills	
		Low Number of Applicants	
Los Angeles	Clinical Lab Scientist	Applicants Lack Credentials (i.e. Certifications)	N/A
		Applicants Lack Education Credentials (i.e. Degree)	
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	
Los Angeles	Clinical Nurse Specialist	Applicants Lack Sufficient Work Experience	N/A
		Applicants Lack Technical or Occupational Skills	
Los Angeles	Clinical Supervisor	Applicants Unwilling to Accept Offered Wages	N/A
		Low Number of Applicants	
Los Angeles	CLS	Applicants Lack Credentials (i.e. Certifications)	N/A
		Applicants Lack Education Credentials (i.e. Degree)	
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	

Difficult to Fill/Hard to Recruit Positions - California

County	Position Title	Common Reasons for Hiring Difficulty	Most Common Soft Skills Lacking in Candidate
Los Angeles	CNO	Applicants Lack Soft Skills	N/A
		Low Number of Applicants	
Los Angeles	CNS	Applicants Lack Education Credentials (i.e. Degree)	N/A
		Low Number of Applicants	
Los Angeles	COOKS	Applicants Unwilling to Accept Offered Wages	N/A
Los Angeles	CVIR Tech	Applicants Lack Technical or Occupational Skills	N/A
Los Angeles	E.R./E.D. RNs	Applicants Lack Technical or Occupational Skills	Critical & Analytical Thinking or Problem Solving
		Low Number of Applicants	
Los Angeles	Forensic Clinician	Applicants Unwilling to Accept Offered Wages	Critical & Analytical Thinking or Problem Solving
Los Angeles	ICU	Applicants Lack Credentials (i.e. Certifications)	N/A
		Applicants Lack Education Credentials (i.e. Degree)	
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	
Los Angeles	Interventional Radiology	Applicants Lack Sufficient Work Experience	N/A
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	
Los Angeles	Lab Scientist	Applicants Lack Sufficient Work Experience	N/A
Los Angeles	Medical Lab Tech	Applicants Lack Sufficient Work Experience	N/A
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	
Los Angeles	MRI Tech	Applicants Lack Technical or Occupational Skills	N/A
Los Angeles	NICU	Applicants Lack Credentials (i.e. Certifications)	N/A
		Applicants Lack Education Credentials (i.e. Degree)	
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	

Difficult to Fill/Hard to Recruit Positions - California

County	Position Title	Common Reasons for Hiring Difficulty	Most Common Soft Skills Lacking in Candidate
Los Angeles	NIRN - CCU II	Applicants Lack Education Credentials (i.e. Degree)	Communication Skills
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	Interpersonal Skills
		Applicants Unwilling to Accept Offered Wages	
Los Angeles	NP	Applicants Unwilling to Accept Offered Wages	N/A
		Low Number of Applicants	
Los Angeles	NP - Oncology	Applicants Lack Sufficient Work Experience	N/A
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	
Los Angeles	Oncology	Applicants Lack Sufficient Work Experience	N/A
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	
Los Angeles	OR	Applicants Lack Credentials (i.e. Certifications)	N/A
		Applicants Lack Education Credentials (i.e. Degree)	
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	
Los Angeles	PCU/Tele	Applicants Lack Sufficient Work Experience	N/A
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	
Los Angeles	Perioperative Nurses	Applicants Lack Sufficient Work Experience	N/A
		Low Number of Applicants	
Los Angeles	Pharmacist	Applicants Lack Credentials (i.e. Certifications)	N/A
		Applicants Lack Sufficient Work Experience	
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	
Los Angeles	Physical Therapist	Applicants Lack Sufficient Work Experience	N/A
		Applicants Lack Technical or Occupational Skills	
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	

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Difficult to Fill/Hard to Recruit Positions - California

County	Position Title	Common Reasons for Hiring Difficulty	Most Common Soft Skills Lacking in Candidate
Los Angeles	Rad Tech, Cath Lab	Applicants Lack Sufficient Work Experience	N/A
		Applicants Lack Technical or Occupational Skills	
		Low Number of Applicants	
Los Angeles	Research RN	Applicants Lack Credentials (i.e. Certifications)	N/A
Los Angeles	RN	Applicants Lack Education Credentials (i.e. Degree)	Communication Skills
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	
		No Pediatric Exp	
Los Angeles	RN - Cath Lab	Applicants Lack Sufficient Work Experience	Customer Service
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	
Los Angeles	RN - CCU	Applicants Lack Credentials (i.e. Certifications)	Critical & Analytical Thinking or Problem Solving
		Applicants Lack Education Credentials (i.e. Degree)	
		Applicants Lack Soft Skills	
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	
Los Angeles	RN - Critical Care	Applicants Lack Education Credentials (i.e. Degree)	Critical & Analytical Thinking or Problem Solving
		Applicants Lack Sufficient Work Experience	
		Low Number of Applicants	
Los Angeles	RN - ICU	Applicants Lack Sufficient Work Experience	Communication Skills
		Low Number of Applicants	
Los Angeles	RN - L&Ds	Low Number of Applicants	Interpersonal Skills

Difficult to Fill/Hard to Recruit Positions - California

County	Position Title	Common Reasons for Hiring Difficulty	Most Common Soft Skills Lacking in Candidate
Los Angeles	RN - OR	Applicants Lack Credentials (i.e. Certifications)	Critical & Analytical Thinking or Problem Solving
		Applicants Lack Education Credentials (i.e. Degree)	
		Applicants Lack Soft Skills	
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	
Los Angeles	RN - (ER, ICU, Periop, Med/Surg, Tele)	Applicants Lack Education Credentials (i.e. Degree)	Critical & Analytical Thinking or Problem Solving
		Applicants Lack Sufficient Work Experience	
		Low Number of Applicants	
Los Angeles	RN Case Managers	Applicants Lack Sufficient Work Experience	Interpersonal Skills
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	
Los Angeles	RN ED	Applicants Lack Credentials (i.e. Certifications)	Critical & Analytical Thinking or Problem Solving
		Applicants Lack Education Credentials (i.e. Degree)	
		Applicants Lack Soft Skills	
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	
Los Angeles	RN L&D	Applicants Lack Sufficient Work Experience	N/A
		Applicants Unwilling to Accept Offered Wages	
Los Angeles	Senior OT	Applicants Lack Sufficient Work Experience	N/A
		Applicants Lack Technical or Occupational Skills	
		Low Number of Applicants	
Los Angeles	Speech Therapist	Applicants Lack Credentials (i.e. Certifications)	N/A
		Applicants Lack Education Credentials (i.e. Degree)	
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
		Low Number of Applicants	
Los Angeles	Thera Apheresis RN	Applicants Unwilling to Accept Offered Wages	N/A
		Low Number of Applicants	

Difficult to Fill/Hard to Recruit Positions - California

County	Position Title	Common Reasons for Hiring Difficulty	Most Common Soft Skills Lacking in Candidate
Los Angeles	Triage Nurse / Acce	Applicants Lack Education Credentials (i.e. Degree)	Critical & Analytical Thinking or Problem Solving
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
		Low Number of Applicants	Interpersonal Skills
		No Pediatric Exp	
Los Angeles	Wound Care Nurse	Applicants Lack Education Credentials (i.e. Degree)	N/A
Madera	Genetics Counselor	Low Number of Applicants	N/A
Madera	NNP	Low Number of Applicants	N/A
Madera	Occupational Therapist	Low Number of Applicants	N/A
Madera	Peds NP	Low Number of Applicants	N/A
Madera	Registered Nurse	Applicants Lack Sufficient Work Experience	N/A
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	
Marin	Clinical Lab Scientist	Applicants Lack Technical or Occupational Skills	Communication Skills
Marin	Home Health/Hospice RN	Applicants Lack Credentials (i.e. Certifications)	Communication Skills
		Applicants Lack Sufficient Work Experience	
		Applicants Unwilling to Accept Offered Wages	Enthusiasm
Marin	Physical Therapist	Applicants Lack Technical or Occupational Skills	Communication Skills
Marin	RN - ICU, L&D, ED	Applicants Lack Credentials (i.e. Certifications)	Communication Skills
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
Merced	Clinical Lab Scientist	Applicants Lack Technical or Occupational Skills	Communication Skills
Merced	Home Health/Hospice RN	Applicants Lack Credentials (i.e. Certifications)	Communication Skills
		Applicants Lack Sufficient Work Experience	
		Applicants Unwilling to Accept Offered Wages	Enthusiasm
Merced	Physical Therapist	Applicants Lack Technical or Occupational Skills	Communication Skills
Merced	RN - ICU, L&D, ED	Applicants Lack Credentials (i.e. Certifications)	Communication Skills
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
Modoc	CLS	Low Number of Applicants	N/A
Modoc	ER RN	Low Number of Applicants	N/A
Modoc	Radiology Tech	Low Number of Applicants	N/A

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Difficult to Fill/Hard to Recruit Positions - California

County	Position Title	Common Reasons for Hiring Difficulty	Most Common Soft Skills Lacking in Candidate
Modoc	RN	Low Number of Applicants	N/A
Monterey	Certified Surgery Tech	Applicants Lack Credentials (i.e. Certifications)	N/A
		Applicants Lack Education Credentials (i.e. Degree)	
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	
Monterey	Clinical Lab Scientist	Applicants Lack Credentials (i.e. Certifications)	N/A
		Applicants Lack Education Credentials (i.e. Degree)	
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	
Monterey	Pharmacist	Applicants Lack Credentials (i.e. Certifications)	N/A
		Applicants Lack Education Credentials (i.e. Degree)	
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	
Monterey	RN - OB, Surg, OR, L&D	Applicants Lack Credentials (i.e. Certifications)	N/A
		Applicants Lack Education Credentials (i.e. Degree)	
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	
Nevada	Medical Assistant	Low Number of Applicants	N/A
Nevada	Nursing Mgmt	Low Number of Applicants	N/A
Orange	Case Manager (RN)	Low Number of Applicants	Customer Service
Orange	Clinical Lab Scientist	Applicants Unwilling to Accept Offered Wages	N/A

Difficult to Fill/Hard to Recruit Positions - California

County	Position Title	Common Reasons for Hiring Difficulty	Most Common Soft Skills Lacking in Candidate
Orange	Clinical Nurse	Applicants Lack Education Credentials (i.e. Degree)	Critical & Analytical Thinking or Problem Solving
		Applicants Lack Soft Skills	Customer Service
		Applicants Lack Sufficient Work Experience	Enthusiasm
		Applicants Unwilling to Accept Offered Wages	Interpersonal Skills
		Low Number of Applicants	
Orange	Clinical Research Nurse	Applicants Lack Sufficient Work Experience	N/A
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	
Orange	CLS	Applicants Lack Soft Skills	Communication Skills
			Critical & Analytical Thinking or Problem Solving
			Customer Service
		Applicants Lack Sufficient Work Experience	Enthusiasm
			Interpersonal Skills
			Teamwork
		Applicants Unwilling to Accept Offered Wages	Customer Service
			Enthusiasm
			Interpersonal Skills
		Low Number of Applicants	Teamwork
Orange	CNS	Applicants Lack Education Credentials (i.e. Degree)	Critical & Analytical Thinking or Problem Solving
		Applicants Lack Soft Skills	Customer Service
		Applicants Lack Sufficient Work Experience	Enthusiasm
		Applicants Unwilling to Accept Offered Wages	Interpersonal Skills
		Low Number of Applicants	
Orange	Driver	Low Number of Applicants	N/A
Orange	E.R./E.D. RNs	Applicants Lack Technical or Occupational Skills	Critical & Analytical Thinking or Problem Solving
			Teamwork
Orange	NP	Applicants Lack Education Credentials (i.e. Degree)	Critical & Analytical Thinking or Problem Solving
		Applicants Lack Soft Skills	
		Applicants Lack Sufficient Work Experience	Customer Service
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	Enthusiasm
		Applicants Lack Technical or Occupational Skills	Interpersonal Skills

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Difficult to Fill/Hard to Recruit Positions - California

County	Position Title	Common Reasons for Hiring Difficulty	Most Common Soft Skills Lacking in Candidate
Orange	Pharmacist	Applicants Lack Soft Skills	Critical & Analytical Thinking or Problem Solving
		Applicants Lack Sufficient Work Experience	Customer Service
		Applicants Unwilling to Accept Offered Wages	Enthusiasm
		Low Number of Applicants	Interpersonal Skills
Orange	RCP	Applicants Lack Sufficient Work Experience	
Orange	Registered Nurse	Applicants Lack Sufficient Work Experience	Teamwork
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	
Orange	RN - Cath Lab	Applicants Lack Sufficient Work Experience	Customer Service
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	
Orange	RN (ER, ICU, L&D, Periop, Med/Surg)	Applicants Lack Sufficient Work Experience	Critical & Analytical Thinking or Problem Solving
		Applicants Unwilling to Accept Offered Wages	Communication Skills
		Low Number of Applicants	Interpersonal Skills
Orange	RN Case Managers	Applicants Unwilling to Accept Offered Wages	Interpersonal Skills
		Low Number of Applicants	
Orange	RNFA	Applicants Lack Credentials (i.e. Certifications)	N/A
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	
Placer	Clinical Lab Scientist	Applicants Lack Technical or Occupational Skills	Communication Skills
Placer	Home Health/Hospice RN	Applicants Lack Credentials (i.e. Certifications)	Communication Skills
		Applicants Lack Sufficient Work Experience	
		Applicants Unwilling to Accept Offered Wages	Enthusiasm
Placer	Physical Therapist	Applicants Lack Technical or Occupational Skills	Communication Skills
Placer	RN - ICU, L&D, ED	Applicants Lack Credentials (i.e. Certifications)	Communication Skills
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
Riverside	Clinical Lab Scientist	Applicants Unwilling to Accept Offered Wages	N/A
Riverside	Environmental Services Asst.	Applicants Lack Credentials (i.e. Certifications)	Critical & Analytical Thinking or Problem Solving
			Reading
Riverside	Pharmacist	Applicants Unwilling to Accept Offered Wages	N/A
		Low Number of Applicants	

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Difficult to Fill/Hard to Recruit Positions - California

County	Position Title	Common Reasons for Hiring Difficulty	Most Common Soft Skills Lacking in Candidate
Riverside	RN - ER, ICU, L&D, Surg., PACU)	Applicants Lack Sufficient Work Experience	Communication Skills
		Applicants Lack Technical or Occupational Skills	
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	
Riverside	RN - Infection Control	Applicants Lack Credentials (i.e. Certifications)	Critical & Analytical Thinking or Problem Solving
		Applicants Lack Sufficient Work Experience	
		Low Number of Applicants	
Sacramento	Clinical Lab Scientist	Applicants Lack Technical or Occupational Skills	Communication Skills
Sacramento	Home Health/Hospice RN	Applicants Lack Credentials (i.e. Certifications)	Communication Skills
		Applicants Lack Sufficient Work Experience	
		Applicants Unwilling to Accept Offered Wages	Enthusiasm
Sacramento	Physical Therapist	Applicants Lack Technical or Occupational Skills	Communication Skills
Sacramento	RN - ICU, L&D, ED	Applicants Lack Credentials (i.e. Certifications)	Communication Skills
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
San Bernardino	Case Mgmt Director	Applicants Lack Sufficient Work Experience	N/A
		Applicants Lack Technical or Occupational Skills	
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	
San Bernardino	Clinical Lab Scientist	Applicants Unwilling to Accept Offered Wages	Communication Skills
		Low Number of Applicants	
San Bernardino	CT Technologist	Applicants Lack Education Credentials (i.e. Degree)	Attendance Record/Dependability
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	
San Bernardino	Dietary Director	Applicants Lack Credentials (i.e. Certifications)	N/A
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	
San Bernardino	Dietician	Applicants Lack Sufficient Work Experience	N/A
		Low Number of Applicants	

Difficult to Fill/Hard to Recruit Positions - California

County	Position Title	Common Reasons for Hiring Difficulty	Most Common Soft Skills Lacking in Candidate
San Bernardino	Genetic Counselor	Applicants Lack Sufficient Work Experience	N/A
		Low Number of Applicants	
San Bernardino	Nurse Practitioner	Applicants Lack Sufficient Work Experience	N/A
		Low Number of Applicants	
San Bernardino	Physical Therapist	Applicants Unwilling to Accept Offered Wages	Interpersonal Skills
San Bernardino	Resp. Care Pract.	Applicants Unwilling to Accept Offered Wages	Interpersonal Skills
San Bernardino	RN	Applicants Unwilling to Accept Offered Wages	Attendance Record/Dependability
			Interpersonal Skills
San Bernardino	RN - Cath Lab	Applicants Lack Sufficient Work Experience	Customer Service
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	
San Bernardino	RN - CVL	Applicants Lack Sufficient Work Experience	N/A
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	
San Bernardino	RN (ER, ICU, Periop, Med/Surg)	Applicants Lack Sufficient Work Experience	Critical & Analytical Thinking or Problem Solving
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	
San Bernardino	RN Case Managers	Applicants Unwilling to Accept Offered Wages	Interpersonal Skills
		Low Number of Applicants	
San Bernardino	SPD Tech	Applicants Lack Credentials (i.e. Certifications)	N/A
		Applicants Lack Sufficient Work Experience	
		Low Number of Applicants	
San Bernardino	Specialty RN	Low Number of Applicants	N/A
San Bernardino	Speech Pathologist	Applicants Unwilling to Accept Offered Wages	N/A
		Low Number of Applicants	
San Bernardino	Surgical Tech	Applicants Lack Credentials (i.e. Certifications)	N/A
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
		Low Number of Applicants	
San Bernardino	System Administrator - IS	Applicants Lack Sufficient Work Experience	N/A
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	

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Difficult to Fill/Hard to Recruit Positions - California

County	Position Title	Common Reasons for Hiring Difficulty	Most Common Soft Skills Lacking in Candidate
San Francisco	Clinical Lab Scientist	Applicants Lack Technical or Occupational Skills	Communication Skills
San Francisco	CLS	Applicants Lack Soft Skills	Attendance Record/Dependability
			Communication Skills
		Applicants Lack Sufficient Work Experience	Critical & Analytical Thinking or Problem Solving
			Customer Service
		Applicants Unwilling to Accept Offered Wages	Enthusiasm
			Interpersonal Skills
		Low Number of Applicants	Teamwork
			Writing
San Francisco	Home Health/Hospice RN	Applicants Lack Credentials (i.e. Certifications)	Communication Skills
		Applicants Lack Sufficient Work Experience	
		Applicants Unwilling to Accept Offered Wages	Enthusiasm
San Francisco	Physical Therapist	Applicants Lack Technical or Occupational Skills	Communication Skills
San Francisco	RN - ICU, L&D, ED	Applicants Lack Credentials (i.e. Certifications)	Attendance Record/Dependability
			Communication Skills
		Applicants Lack Soft Skills	Critical & Analytical Thinking or Problem Solving
			Customer Service
		Applicants Lack Sufficient Work Experience	Enthusiasm
		Applicants Lack Technical or Occupational Skills	Interpersonal Skills
		Applicants Unwilling to Accept Offered Wages	Teamwork
		Low Number of Applicants	Writing
San Joaquin	Clinical Lab Scientist	Applicants Lack Technical or Occupational Skills	Communication Skills
San Joaquin	Home Health/Hospice RN	Applicants Lack Credentials (i.e. Certifications)	Communication Skills
		Applicants Lack Sufficient Work Experience	
		Applicants Unwilling to Accept Offered Wages	Enthusiasm
San Joaquin	Physical Therapist	Applicants Lack Technical or Occupational Skills	Communication Skills
San Joaquin	RN - ICU, L&D, ED	Applicants Lack Credentials (i.e. Certifications)	Communication Skills
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
		Applicants Unwilling to Accept Offered Wages	
San Mateo	Clinical Lab Scientist	Applicants Lack Technical or Occupational Skills	Communication Skills

Difficult to Fill/Hard to Recruit Positions - California

County	Position Title	Common Reasons for Hiring Difficulty	Most Common Soft Skills Lacking in Candidate
San Mateo	Clinical Nurse Specialist	Applicants Lack Sufficient Work Experience	N/A
San Mateo	Clinical Nurse Specialist	Applicants Lack Technical or Occupational Skills	N/A
San Mateo	CVIR Tech	Applicants Lack Technical or Occupational Skills	N/A
San Mateo	Home Health/Hospice RN	Applicants Lack Credentials (i.e. Certifications)	Communication Skills
San Mateo	Home Health/Hospice RN	Applicants Lack Sufficient Work Experience	Communication Skills
San Mateo	Home Health/Hospice RN	Applicants Unwilling to Accept Offered Wages	Enthusiasm
San Mateo	MRI Tech	Applicants Lack Technical or Occupational Skills	N/A
San Mateo	Physical Therapist	Applicants Lack Technical or Occupational Skills	Communication Skills
San Mateo	RN - ICU, L&D, ED	Applicants Lack Credentials (i.e. Certifications)	Communication Skills
San Mateo	RN - ICU, L&D, ED	Applicants Lack Sufficient Work Experience	Communication Skills
San Mateo	RN - ICU, L&D, ED	Applicants Lack Technical or Occupational Skills	Communication Skills
Santa Clara	Advance Practice Professional	Applicants Lack Education Credentials (i.e. Degree)	N/A
Santa Clara	Advance Practice Professional	Applicants Lack Sufficient Work Experience	N/A
Santa Clara	Advance Practice Professional	Low Number of Applicants	N/A
Santa Clara	Case Manager	Applicants Lack Sufficient Work Experience	N/A
Santa Clara	Case Manager	Applicants Lack Technical or Occupational Skills	N/A
Santa Clara	Case Manager	Low Number of Applicants	N/A
Santa Clara	Cath Lab	Applicants Lack Sufficient Work Experience	N/A
Santa Clara	Cath Lab	Applicants Lack Technical or Occupational Skills	N/A
Santa Clara	Cath Lab	Low Number of Applicants	N/A
Santa Clara	Cath Lab Tech	Applicants Lack Sufficient Work Experience	N/A
Santa Clara	Cath Lab Tech	Applicants Lack Technical or Occupational Skills	N/A
Santa Clara	Cath Lab Tech	Low Number of Applicants	N/A
Santa Clara	Clinical IT roles	Applicants Lack Credentials (i.e. Certifications)	N/A
Santa Clara	Clinical IT roles	Applicants Lack Sufficient Work Experience	N/A
Santa Clara	Clinical IT roles	Applicants Lack Technical or Occupational Skills	N/A
Santa Clara	Clinical IT roles	Applicants Unwilling to Accept Offered Wages	N/A
Santa Clara	Clinical IT roles	Low Number of Applicants	N/A
Santa Clara	Clinical Nurse Specialist	Applicants Lack Sufficient Work Experience	N/A
Santa Clara	Clinical Nurse Specialist	Applicants Lack Technical or Occupational Skills	N/A
Santa Clara	CVIR Tech	Applicants Lack Technical or Occupational Skills	N/A
Santa Clara	MRI Tech	Applicants Lack Technical or Occupational Skills	N/A

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Difficult to Fill/Hard to Recruit Positions - California

County	Position Title	Common Reasons for Hiring Difficulty	Most Common Soft Skills Lacking in Candidate
Santa Clara	Patient Care Mgr.	Applicants Lack Sufficient Work Experience	N/A
Santa Clara	Physical Therapist	Applicants Lack Technical or Occupational Skills	N/A
Santa Clara	RN - ICU, CCU, OR	Applicants Lack Education Credentials (i.e. Degree)	N/A
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
		Low Number of Applicants	
		Applicants Lack Soft Skills	
Santa Cruz	Clinical Lab Scientist	Applicants Lack Technical or Occupational Skills	Communication Skills
Santa Cruz	Home Health/Hospice RN	Applicants Lack Credentials (i.e. Certifications)	Communication Skills
		Applicants Lack Sufficient Work Experience	
		Applicants Unwilling to Accept Offered Wages	Enthusiasm
Santa Cruz	Physical Therapist	Applicants Lack Technical or Occupational Skills	Communication Skills
Santa Cruz	RN - ICU, L&D, ED	Applicants Lack Credentials (i.e. Certifications)	Communication Skills
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
Shasta	Clinical Lab Scientist	Applicants Unwilling to Accept Offered Wages	N/A
Shasta	RN - Cath Lab	Applicants Lack Sufficient Work Experience	Customer Service
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	
Shasta	RN (ER, ICU, Periop, Med/Surg)	Applicants Lack Sufficient Work Experience	Critical & Analytical Thinking or Problem Solving
		Applicants Unwilling to Accept Offered Wages	
		Low Number of Applicants	
Shasta	RN Case Managers	Applicants Unwilling to Accept Offered Wages	Interpersonal Skills
		Low Number of Applicants	
Solano	Clinical Lab Scientist	Applicants Lack Technical or Occupational Skills	Communication Skills
Solano	CNS	Applicants Lack Credentials (i.e. Certifications)	N/A
		Applicants Lack Education Credentials (i.e. Degree)	
		Low Number of Applicants	
Solano	Home Health/Hospice RN	Applicants Lack Credentials (i.e. Certifications)	Communication Skills
		Applicants Lack Sufficient Work Experience	
		Applicants Unwilling to Accept Offered Wages	Enthusiasm

Difficult to Fill/Hard to Recruit Positions - California

County	Position Title	Common Reasons for Hiring Difficulty	Most Common Soft Skills Lacking in Candidate
Solano	Inpatient Case Mgr	Applicants Lack Sufficient Work Experience	Critical & Analytical Thinking or Problem Solving
		Low Number of Applicants	
Solano	Physical Therapist	Applicants Lack Technical or Occupational Skills	Communication Skills
Solano	RN - ICU, L&D, ED	Applicants Lack Credentials (i.e. Certifications)	Communication Skills
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
Sonoma	Clinical Lab Scientist	Applicants Lack Technical or Occupational Skills	Communication Skills
Sonoma	Home Health/Hospice RN	Applicants Lack Credentials (i.e. Certifications)	Communication Skills
		Applicants Lack Sufficient Work Experience	
		Applicants Unwilling to Accept Offered Wages	Enthusiasm
Sonoma	Physical Therapist	Applicants Lack Technical or Occupational Skills	Communication Skills
Sonoma	RN - ICU, L&D, ED	Applicants Lack Credentials (i.e. Certifications)	Communication Skills
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
Stanislaus	Clinical Lab Scientist	Applicants Lack Technical or Occupational Skills	Communication Skills
Stanislaus	Home Health/Hospice RN	Applicants Lack Credentials (i.e. Certifications)	Communication Skills
		Applicants Lack Sufficient Work Experience	
		Applicants Unwilling to Accept Offered Wages	Enthusiasm
Stanislaus	Physical Therapist	Applicants Lack Technical or Occupational Skills	Communication Skills
Stanislaus	RN - ICU, L&D, ED	Applicants Lack Credentials (i.e. Certifications)	Communication Skills
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
Tulare	Nurse Practitioner	Low Number of Applicants	Attendance Record/Dependability
Tulare	Occupational Therapist	Low Number of Applicants	Attendance Record/Dependability
Tulare	Pharmacist	Low Number of Applicants	Attendance Record/Dependability
Tulare	RN - Experienced	Low Number of Applicants	Attendance Record/Dependability
Ventura	CLS	Applicants Lack Education Credentials (i.e. Degree)	N/A
		Applicants Lack Sufficient Work Experience	
Ventura	CLS Night	Applicants Lack Credentials (i.e. Certifications)	N/A
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
		Location-Rural, Hosp-Low Census	

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Difficult to Fill/Hard to Recruit Positions - California

County	Position Title	Common Reasons for Hiring Difficulty	Most Common Soft Skills Lacking in Candidate
Ventura	CNS	Applicants Lack Credentials (i.e. Certifications)	N/A
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
		Location-Rural, Hosp-Low Census	
Ventura	Occupational Therapist	Applicants Lack Education Credentials (i.e. Degree)	N/A
		Applicants Lack Sufficient Work Experience	
		Low Number of Applicants	
Ventura	RN - (ICU, Critical Care)	Applicants Lack Credentials (i.e. Certifications)	N/A
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	
		Location-Rural, Hosp-Low Census	
Ventura	RN Surgery	Applicants Lack Sufficient Work Experience	N/A
Yolo	Clinical Lab Scientist	Applicants Lack Technical or Occupational Skills	Communication Skills
Yolo	Home Health/Hospice RN	Applicants Lack Credentials (i.e. Certifications)	Communication Skills
		Applicants Lack Sufficient Work Experience	
		Applicants Unwilling to Accept Offered Wages	Enthusiasm
Yolo	Physical Therapist	Applicants Lack Technical or Occupational Skills	Communication Skills
Yolo	RN - ICU, L&D, ED	Applicants Lack Credentials (i.e. Certifications)	Communication Skills
		Applicants Lack Sufficient Work Experience	
		Applicants Lack Technical or Occupational Skills	

Types of Positions Reported as RN Other

Types of Positions Reported as RN Other

Position Titles

Access Case Mgr.	Clinical Coordinator - Oncology
Admin Quality/Perf. Exc.	Clinical Coordinator - Symptom Management
Admin. Dir. Transitions	Clinical Coordinator ER
Admin. Ed/Disaster Sv	Clinical Director
Administrative Supervisor	Clinical Director, Maternal Child Srvcs
Administrative Svcs Associate	Clinical Documentation Improvement Spec
Admission/Discharge/Transfer Coordinator	Clinical Documentation Specialist
Advance Care Planning Nurse	Clinical Education Specialist
Ambulatory Patient Care Coord	Clinical Educator
Apheresis Specialty Nurse	Clinical Educator PCS
Assessment RN	Clinical Fellow
Assistant Director, Nursing	Clinical Informaticist (Rn)
Assistant House Supervisor	Clinical Informatics Analyst
Assistant Nurse Manager	Clinical Informatics Mgr
Associate Chief Nurse Executive	Clinical Instructor
Associate Director	Clinical Is Spec.
Asst Director, Revenue Integrity	Clinical Manager - Nursing
Asst Nurse Director	Clinical Manager Of Critical Care Services
Avp, Health System & Care Mgmt	Clinical Manger- Nursing
Base Hospital Coord	Clinical Mngr Physiology/Nivl
Call Center Coordinator	Clinical Navigator
Cardia/Radiology Nursing Supervisor	Clinical Nurse Educator
Cardiac Quality Coord	Clinical Nurse Manager
Cardiac Rehab Nurse	Clinical Performance Coordinator
Care Coordinator	Clinical Prog Coord RN
Case Manager	Clinical Program Coord Transplant Svcs
Cath Lab RN	Clinical Quality Program Coord RN
CDI PI Nurse - RN	Clinical Research RN
Cert. Registered Nurse First Assistant	Clinical Resource Nurse
Charge Nurse	Clinical Risk Management Analyst
Charge Nurse (Non-Bedside)	Clinical Services Coord
Charge Nurse, Gi Lab	Clinical Services Supervisor Ops
Charge RNFA	Clinical Supervisor RN
Chart Audit Reviewer	Clinical Support Svcs. Supervisor
Cl Doc Specialist	Clinical Systems Analyst, Sr
Cl Prog Analyst Cancer Ctr	Clinical WOCN Specialist
Cl Supv Hh/Hospice	CNO
Clinic RN	Community Health Coord
Clinical Analyst RN	Compliance Analyst
Clinical Appeals Writer	Compliance RN
Clinical Applications	COO
Clinical Applications Supv	Coord. Phys. Informatics
Clinical Care Associate	Coord. Staff RN/Staff Dev.
Clinical Coord RN , Orthopedic	Coord. Surgical Board
Clinical Coordinator W&F	Coord. Injury Prevention
Clinical Coordinator - IV Team	Coord. Patient Safety

Types of Positions Reported as RN Other

Position Titles	
Coord. QM RN	House Supervisor
Coord. Cardiothoracic	House Supervisor RN
Coord. Clinical Quality - RN	Infect Preventionist Practitioner
Coordinator Perioperative	Infection Control Coordinator
Coordinator - RN	Infection Prevention RN
Core Measures Coord.	Informatics
Department Spvr.	Informatics And Employee Health
Diabetic Educator	Interim Dir. Ur/Medical S/Svcs
Dialysis Services Coord.	Interim Manager Case Management
Dir Breast Health Ct	Internal Clinical Auditor
Dir. Case Mgmt/Care Coord	IT Analyst
Dir. Emergency Services	Kids System Architect
Dir. NICU	Lactation Consultant
Dir. Population Health	Lead Infection Preventionist
Dir. Q&R	Life Support Training Prog. Mgr.
Dir. Surgical Services	Logistics Tech
Dir. Clinical Education & Prof. Development	Magnet Program Coord.
Dir. Infection Prevention	Magnet Program Manager
Dir. Nursing	Management Coordinator, Nursing
Director ICU/Medsurg	Manager OR & SPD
Director of DDMI Program	Manager Researcher
Director of Education	Manager, Nursing
Director of Quality Outcomes Mgmt.	Maternity Follow Up - RN
Director Patient Care	MCCSN Instructor
Director PICU	MDS Coordinator
Director W&F	MDS Staff RN
Discharge Planner	Med/Surg/Telemetry
Don Extended Care	Mental Health Nurse Manager
Dosimetrist	Mgr, Infection Prevention
Educ Prog Coord Nursing	Mgr, Patient Care
Education Support Specialist	Mgr, Care Coordination
Educator, Lead Clinical RN	Mgr, Kids Clinical Info Sys
Employee Health Nurse	Mgr, Nursing
Employee Health/Procedures RN	Mgr, Orthopedics
Environmental Services Tech	Mgr, Patient Safety
Exec. Dir. Nursing	Mgr, Pcs Staff Development
Exec. Dir. Surgical Svcs	Mgr, RN Residency
Head RN	Mgr, Simulation Center
Health Educator / RN	Mgr, Surgical Svcs
HIM Clinical Doc. Impvmnt. Spec. RN	Mgr, Trauma
HIM Revenue Integrity Nurse Auditor	NBS Coordinator
Home Care Coord.	Neuroscience/Stroke RN Coordinator
Hospital Manager	Nurse Admin
Hospital Risk Coordinator	Nurse Auditor
House Resource	Nurse Care Manager
House Resource Lead	Nurse Director

Types of Positions Reported as RN Other

Position Titles

Nurse Educator	RN BSN Wound Care Specialist
Nurse Epidemiologist	RN Care Manager
Nurse Informatics Coordinator	RN Clinical Manager Radiology
Nurse Liaison	RN Clinical Educator
Nurse Manager	RN Clinical Manager
Nurse Manager/ICP	RN Clinical Supervisor
Nurse Navigator	RN Coord Compre Cancer Program
Nurse Recruiter	RN Coord, Transplant
Nursing Analyst	RN Core Measure Coordinator
Nursing Director	RN Core Measures Coord
Nursing Educator	RN First Assistant
Nursing Program Coordinator	RN Hospice Liaison
Nursing Supervisor	RN House Supervisor
Occupational Health	RN Manager, Outpatient Infusion Ctr
Orthopedic Center Coord.	RN Med Practice Mgr
Peer Review Analyst-RN	RN Med Staff Peer Rev Coord
Performance Improvement RN	RN Mgd Care Liaison
Peritoneal Dialysis RN Coordinator	RN Nursing Supervisor
Pesc RN	RN Paramedic Liaison
Physician Advocate	RN Physician Order Sets Coord.
Pi Specialist	RN Pre-Hospital Liaison
PNS Coordinator	RN Qlty Perf Impvmnt & Rvw Spec
Pre Hospital Care Liaison	RN QMS
Primary Charge Nurse	RN Referral Specialist
Principal Trainer	RN Residency Curriculum Admin
Program Director	RN Service Line Coord.
Program Mgr, Patient Safety	RN Stroke Coordinator
Psych Acute Adult Unit	RN Supervisor
Quality Coordinator	RN Vascular Access Nurse
Quality Improvement Nurse	RN Wound Care
Quality Management Nurse	RN Imaging Services
Radiology RN	RN Nursing Admin
Reg. Cardio-Pulmonary Nurse	Safe Patient Coord.
Relief Hospital Manager	Senior Clinical Analyst RN
Research Nurse	Spine Nurse Navigator
Research Nurse Admin, Sr	Spvr. Clinical Nurse
Research Nurse Coord	Sr. Radiology Nurse
Research Nurse Scientist	Staff Nurse Ccl
Research Scientist	Standards Coordinator
Resource Nurse (RN)	Stroke Coord
Risk Manager	Structural Heart Coord
RN - Blood Donor Center	Student Health Services Coord
RN - Coordinator Diabetes	Svp & Chief Clinical Officer
RN - NICU Discharge Planner	Tjc Program Mgr.
RN - Occupational Health	Transition Of Care RN
RN Accreditation Specialist	Trauma Coordinator

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Types of Positions Reported as RN Other

Position Titles

Trauma Nurse Clinician I	Vascular Access Specialist
Trauma Nurse Liason	VP of Center For Family Health
U.R. Nurse	VP Post Acute Care Svcs.
UR Specialist-RN	Wellness Coord
Util Review/Pi Nurse	Workers Comp RN
Utilization Review Nurse	Wound Care RN

National Data

Bureau of National Affairs, Inc.

Turnover Rates: 3rd Quarter 2015

	July 2015					August 2015					September 2015				
	Low	First Quartile	Median	Third Quartile	High	Low	First Quartile	Median	Third Quartile	High	Low	First Quartile	Median	Third Quartile	High
Healthcare (13)	0.67	1	1.3	1.9	4.3	0.32	0.9	1.2	1.7	4.1	0.32	0.5	1.1	1.4	3.7

Turnover Rates: 4th Quarter 2015

	October 2015					November 2015					December 2015				
	Low	First Quartile	Median	Third Quartile	High	Low	First Quartile	Median	Third Quartile	High	Low	First Quartile	Median	Third Quartile	High
Healthcare (14)	1.02	1.1	1.6	2.2	12.6	0.63	1	1.2	2.4	13.5	0.69	1.1	1.2	2.4	12.6

Turnover Rates: 1st Quarter 2016

	January 2016					February 2016					March 2016				
	Low	First Quartile	Median	Third Quartile	High	Low	First Quartile	Median	Third Quartile	High	Low	First Quartile	Median	Third Quartile	High
Healthcare (10)	0.87	1	1.5	1.7	3.4	0.73	0.9	1.1	2.1	3.6	0.87	0.9	1.3	2.4	3.6

Turnover Rates: 2nd Quarter 2016

	April 2016					May 2016					June 2016				
	Low	First Quartile	Median	Third Quartile	High	Low	First Quartile	Median	Third Quartile	High	Low	First Quartile	Median	Third Quartile	High
Healthcare (27)	0	1.2	1.7	2.6	23.1	0	1.1	1.7	2.8	19.2	0	1.1	1.5	2.9	26.9

Turnover Rates: 3rd Quarter 2016

	July 2016					August 2016					September 2016				
	Low	First Quartile	Median	Third Quartile	High	Low	First Quartile	Median	Third Quartile	High	Low	First Quartile	Median	Third Quartile	High
Healthcare (14)	0	1.2	1.5	1.9	2.5	0	1.2	1.4	1.8	3.5	0	1	1.1	1.5	2.1

Turnover Rates: 4th Quarter 2016

	October 2016					November 2016					December 2016				
	Low	First Quartile	Median	Third Quartile	High	Low	First Quartile	Median	Third Quartile	High	Low	First Quartile	Median	Third Quartile	High
Healthcare (13)	0.44	1	1.3	1.4	3	0.35	0.8	1.3	2	2.8	0.56	1	1.4	2.3	4

Turnover Rates: 1st Quarter 2017

	January 2017					February 2017					March 2017				
	Low	First Quartile	Median	Third Quartile	High	Low	First Quartile	Median	Third Quartile	High	Low	First Quartile	Median	Third Quartile	High
Healthcare (14)	0.87	1.1	1.4	1.8	2.8	0.8	0.9	1.1	1.6	3.4	0.55	1	1.3	2.1	3.2

Turnover Rates: 2nd Quarter 2017

	April 2017					May 2017					June 2017				
	Low	First Quartile	Median	Third Quartile	High	Low	First Quartile	Median	Third Quartile	High	Low	First Quartile	Median	Third Quartile	High
Healthcare (16)	0.65	1	1.3	1.6	3.9	0.26	1	1.3	2	4.6	0.8	1.1	1.5	2	5.3

Turnover Rates: 3rd Quarter 2017

	July 2017					August 2017					September 2017				
	Low	First Quartile	Median	Third Quartile	High	Low	First Quartile	Median	Third Quartile	High	Low	First Quartile	Median	Third Quartile	High
Healthcare (13)	0	0.8	1.2	1.6	2.1	0	0.9	1.2	1.5	8.1	0	0.6	0.9	1	2.1

Turnover Rates: 4th Quarter 2017

	October 2017					November 2017					December 2017				
	Low	First Quartile	Median	Third Quartile	High	Low	First Quartile	Median	Third Quartile	High	Low	First Quartile	Median	Third Quartile	High
Healthcare (13)	0	1.1	1.4	1.7	4.7	0	0.8	1	1.8	3.7	0	0.7	1.1	1.5	3.2

Workforce Impact Questions

Workforce Impact Questions

California - *Statewide*

Quarter	Year	# Facilities	Scenario	No Concern				Extremely Concerned	Average
				1	2	3	4	5	

Impact of Scenario on <u>Hospital's Workforce Adequacy</u>

Quarter	Year	# Facilities	Scenario	1	2	3	4	5	Average
4	2017	143	Aging healthcare workforce within hospital	4	7	29	62	41	3.9
4	2017	140	Population growth in region	38	50	34	13	5	2.3
4	2017	139	Population aging in region	10	50	54	11	14	2.8
4	2017	139	Cultural diversity	18	21	35	42	23	3.2
4	2017	139	Linguistic capabilities	19	71	37	8	4	2.3
4	2017	140	Impact of health reform	12	9	91	16	12	3.1
4	2017	140	Impact of CA state budget cuts on healthcare professional education	26	10	61	29	14	3.0
4	2017	140	Leaves of absence	3	43	16	16	62	3.7
4	2017	138	Disability accommodations and/or physical limitations	26	33	64	8	7	2.5

California - *Statewide*

Quarter	Year	# Facilities	Position	25-35	%	36-45	%	46-55	%	55-65	%	Over 65	%
			Employee Age Demographics by # of Incumbents and %										

Nursing Positions

Quarter	Year	# Facilities	Position	25-35	%	36-45	%	46-55	%	55-65	%	Over 65	%
4	2017	56	Registered Nurse - Staff (Not New Graduated) Direct Care	10889	32%	9457	28%	7155	21%	5472	16%	980	3%
4	2017	49	RN - Peri Operative (OR)	647	22%	770	26%	749	25%	690	23%	147	5%
4	2017	49	RN - Critical Care	2179	38%	1563	27%	1053	18%	813	14%	114	2%
4	2017	47	RN - Emergency Department	1646	37%	1440	32%	889	20%	442	10%	49	1%
4	2017	34	RN - Labor and Delivery	751	29%	759	29%	576	22%	467	18%	71	3%
4	2017	24	RN - NICU	424	25%	429	25%	384	22%	427	25%	60	3%
4	2017	50	RN - Case Manager	235	17%	322	23%	372	27%	376	27%	86	6%
4	2017	41	RN - Other	556	18%	761	25%	793	26%	758	25%	222	7%
4	2017	38	RN - New Graduate (less than 6 months experience)	636	71%	150	17%	38	4%	71	8%	0	0%
4	2017	6	Certified Registered Nurse Anesthetist (CRNA)	20	12%	27	16%	105	64%	9	5%	3	2%
4	2017	42	Certified Nursing Assistant	1400	33%	932	22%	1012	24%	741	18%	107	3%
4	2017	17	Clinical Nurse Specialist (CNS)	20	11%	42	24%	23	13%	79	45%	10	6%
4	2017	13	Home Health Aide	53	19%	56	20%	111	40%	53	19%	7	3%
4	2017	53	Licensed Vocational Nurse	873	37%	618	26%	452	19%	371	16%	76	3%
4	2017	8	Nurse Midwife (CNM)	7	30%	7	30%	6	26%	1	4%	2	9%
4	2017	35	Nurse Practitioner (NP)	275	20%	325	23%	584	42%	169	12%	37	3%
4	2017	24	Physician Assistant	145	33%	112	26%	85	20%	56	13%	36	8%
4	2017	27	Unlicensed Nursing Aide/Assistant	1409	37%	800	21%	858	22%	656	17%	96	3%

Allied Health

Quarter	Year	# Facilities	Position	25-35	%	36-45	%	46-55	%	55-65	%	Over 65	%
4	2017	43	Coder	62	13%	115	24%	167	35%	101	21%	28	6%
4	2017	52	Clinical Laboratory Scientist	466	19%	454	18%	543	22%	703	28%	308	12%
4	2017	45	CT Technologist	114	22%	152	30%	145	28%	83	16%	17	3%
4	2017	16	CVIR Technologist	13	19%	19	27%	22	31%	15	21%	1	1%
4	2017	33	Medical Assistant	902	51%	480	27%	248	14%	125	7%	20	1%
4	2017	29	Medical Laboratory Technician	114	29%	115	30%	87	22%	56	14%	17	4%
4	2017	37	MRI Technologist	58	18%	102	32%	84	26%	64	20%	13	4%
4	2017	18	Occupational Therapy Assistant	17	22%	13	16%	30	38%	12	15%	7	9%
4	2017	53	Pharmacist	741	36%	597	29%	338	16%	283	14%	91	4%
4	2017	43	Physical Therapist	542	31%	510	30%	380	22%	250	15%	41	2%
4	2017	52	Radiological Technologist	746	33%	633	28%	464	21%	339	15%	62	3%
4	2017	52	Respiratory Therapist	1071	33%	881	28%	611	19%	541	17%	99	3%
4	2017	44	Social Worker (LCSW)	262	27%	206	21%	364	37%	103	11%	42	4%
4	2017	49	Ultrasound Technologist	262	24%	468	43%	210	19%	135	12%	9	1%

Workforce Impact Questions

California - *Statewide*

Quarter	Year	# Facilities	Position	No Difficulty	%	Moderate Difficulty	%	Extremely Difficulty	%
			Level of Difficulty in Finding <u>Qualified Applicants</u>						
<u>Nursing Positions</u>									
4	2017	72	Registered Nurse - Staff (Not New Graduated) Direct Care	13	18%	27	38%	32	44%
4	2017	66	Registered Nurse - Other	7	11%	27	41%	32	48%
4	2017	135	RN - New Graduate (less than 6 months experience)	131	97%	4	3%	0	0%
4	2017	29	Certified Registered Nurse Anesthetist (CRNA)	21	72%	4	14%	4	14%
4	2017	100	Certified Nursing Assistant	77	77%	22	22%	1	1%
4	2017	60	Clinical Nurse Specialist (CNS)	13	22%	13	22%	34	57%
4	2017	73	Home Health Aide	68	93%	3	4%	2	3%
4	2017	96	Licensed Vocational Nurse	71	74%	8	8%	17	18%
4	2017	61	Nurse Midwife (CNM)	47	77%	9	15%	5	8%
4	2017	94	Nurse Practitioner (NP)	40	43%	39	41%	15	16%
4	2017	53	Physician Assistant	9	17%	37	70%	7	30%
4	2017	120	Unlicensed Nursing Aide/Assistant	112	93%	7	6%	1	1%
<u>Allied Health</u>									
4	2017	64	Coder	12	19%	19	30%	33	52%
4	2017	62	Clinical Laboratory Scientist	2	3%	18	29%	42	68%
4	2017	92	CT Technologist	43	47%	43	47%	6	7%
4	2017	64	CVIR Technologist	44	69%	13	20%	7	11%
4	2017	121	Medical Assistant	95	79%	25	21%	1	1%
4	2017	89	Medical Laboratory Technician	61	69%	26	29%	2	2%
4	2017	88	MRI Technologist	48	55%	39	44%	1	1%
4	2017	102	Occupational Therapy Assistant	70	69%	22	22%	10	10%
4	2017	63	Pharmacist	13	21%	25	40%	25	40%
4	2017	91	Physical Therapist	40	44%	23	25%	28	31%
4	2017	106	Radiological Technologist	68	64%	35	33%	3	3%
4	2017	105	Respiratory Therapist	79	75%	23	22%	3	3%
4	2017	65	Social Worker (LCSW)	14	22%	29	45%	22	34%
4	2017	62	Ultrasound Technologist	21	34%	39	63%	2	3%

California - *Statewide*

Quarter	Year	# Facilities	Position	No Impact				Extremely Negative Impact	Average
				1	2	3	4	5	

Impact on Patient Care* When a Vacancy Exists

Nursing Positions

Quarter	Year	# Facilities	Position	1	2	3	4	5	Average
4	2017	134	Registered Nurse - Staff (Not New Graduated) Direct Care	0	6	35	16	77	4.2
4	2017	128	Registered Nurse - Other	4	5	39	17	63	4.0
4	2017	129	RN - New Graduate (less than 6 months experience)	24	58	40	3	4	2.3
4	2017	79	Certified Registered Nurse Anesthetist (CRNA)	7	35	10	4	23	3.0
4	2017	123	Certified Nursing Assistant	7	40	59	11	6	2.7
4	2017	102	Clinical Nurse Specialist (CNS)	6	35	35	22	4	2.8
4	2017	96	Home Health Aide	8	35	12	19	22	3.1
4	2017	122	Licensed Vocational Nurse	16	41	31	13	21	2.9
4	2017	78	Nurse Midwife (CNM)	8	36	9	3	22	2.9
4	2017	113	Nurse Practitioner (NP)	18	9	43	9	34	3.3
4	2017	104	Physician Assistant	4	8	23	38	31	3.8
4	2017	114	Unlicensed Nursing Aide/Assistant	17	59	26	8	4	2.3

Allied Health

Quarter	Year	# Facilities	Position	1	2	3	4	5	Average
4	2017	121	Coder	21	56	22	3	19	2.5
4	2017	127	Clinical Laboratory Scientist	4	3	42	22	56	4.0
4	2017	122	CT Technologist	4	37	19	47	15	3.3
4	2017	92	CVIR Technologist	7	33	7	34	11	3.1
4	2017	112	Medical Assistant	9	53	19	10	21	2.8
4	2017	111	Medical Laboratory Technician	4	58	23	25	1	2.6
4	2017	114	MRI Technologist	3	38	12	17	44	3.5
4	2017	105	Occupational Therapy Assistant	4	34	19	46	2	3.1
4	2017	127	Pharmacist	3	31	19	10	64	3.8
4	2017	118	Physical Therapist	3	32	11	38	34	3.6
4	2017	126	Radiological Technologist	7	34	18	36	31	3.4
4	2017	127	Respiratory Therapist	5	32	33	36	21	3.3
4	2017	126	Social Worker (LCSW)	7	37	43	13	26	3.1
4	2017	123	Ultrasound Technologist	4	40	12	53	14	3.3

* Refers to services rendered by members of the healthcare community for the benefit of the patient

California - *Statewide*

Quarter	Year	# Facilities	Position	No Impact				Extremely Negative Impact	Average
				1	**2**	**3**	**4**	**5**	

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Impact on Hospital Efficiencies* When a Vacancy Exists

</div>

Nursing Positions

Quarter	Year	# Facilities	Position	1	2	3	4	5	Average
4	2017	133	Registered Nurse - Staff (Not New Graduated) Direct Care	1	1	5	43	83	4.5
4	2017	127	Registered Nurse - Other	2	3	7	46	69	4.4
4	2017	124	RN - New Graduate (less than 6 months experience)	19	21	64	10	10	2.8
4	2017	79	Certified Registered Nurse Anesthetist (CRNA)	6	35	4	7	27	3.2
4	2017	122	Certified Nursing Assistant	6	39	47	21	9	2.9
4	2017	102	Clinical Nurse Specialist (CNS)	5	40	23	29	5	2.9
4	2017	97	Home Health Aide	11	40	6	38	2	2.8
4	2017	121	Licensed Vocational Nurse	13	40	34	15	19	2.9
4	2017	78	Nurse Midwife (CNM)	7	33	9	7	22	3.1
4	2017	114	Nurse Practitioner (NP)	20	6	42	14	32	3.3
4	2017	104	Physician Assistant	10	2	52	7	33	3.5
4	2017	113	Unlicensed Nursing Aide/Assistant	8	38	45	11	11	2.8

Allied Health

Quarter	Year	# Facilities	Position	1	2	3	4	5	Average
4	2017	118	Coder	7	39	13	10	49	3.5
4	2017	126	Clinical Laboratory Scientist	2	2	38	19	65	4.1
4	2017	120	CT Technologist	5	35	10	56	14	3.3
4	2017	92	CVIR Technologist	6	32	6	31	17	3.2
4	2017	111	Medical Assistant	13	58	8	6	26	2.8
4	2017	109	Medical Laboratory Technician	4	55	17	31	2	2.7
4	2017	115	MRI Technologist	4	36	14	40	21	3.3
4	2017	107	Occupational Therapy Assistant	5	37	10	46	9	3.2
4	2017	128	Pharmacist	5	4	40	22	57	4.0
4	2017	119	Physical Therapist	4	3	37	36	39	3.9
4	2017	127	Radiological Technologist	7	38	18	38	26	3.3
4	2017	127	Respiratory Therapist	7	32	27	44	17	3.3
4	2017	126	Social Worker (LCSW)	6	37	35	37	11	3.1
4	2017	124	Ultrasound Technologist	4	37	16	58	9	3.3

* Refers to increased labor costs due to staff overtime, scheduling/staffing efficiencies, supply/equipment efficiencies

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Workforce Impact Questions

California - *Statewide*

Quarter	Year	# Facilities	Position	Yes	%	No	%
			Limited Services Due to Vacancies in the Past 12 Months				

Nursing Positions

Quarter	Year	# Facilities	Position	Yes	%	No	%
4	2017	126	Registered Nurse - Staff (Not New Graduated) Direct Care	47	37%	79	63%
4	2017	121	Registered Nurse - Other	29	24%	92	76%
4	2017	119	RN - New Graduate (less than 6 months experience)	3	3%	116	97%
4	2017	84	Certified Registered Nurse Anesthetist (CRNA)	0	0%	84	100%
4	2017	117	Certified Nursing Assistant	2	2%	115	98%
4	2017	106	Clinical Nurse Specialist (CNS)	0	0%	106	100%
4	2017	100	Home Health Aide	1	1%	99	99%
4	2017	117	Licensed Vocational Nurse	19	16%	98	84%
4	2017	81	Nurse Midwife (CNM)	1	1%	80	99%
4	2017	114	Nurse Practitioner (NP)	5	4%	109	96%
4	2017	108	Physician Assistant	1	1%	107	99%
4	2017	112	Unlicensed Nursing Aide/Assistant	2	2%	110	98%

Allied Health

Quarter	Year	# Facilities	Position	Yes	%	No	%
4	2017	115	Coder	17	15%	98	85%
4	2017	122	Clinical Laboratory Scientist	27	22%	95	78%
4	2017	113	CT Technologist	19	17%	94	83%
4	2017	89	CVIR Technologist	1	1%	88	99%
4	2017	109	Medical Assistant	0	0%	109	100%
4	2017	109	Medical Laboratory Technician	2	2%	107	98%
4	2017	110	MRI Technologist	18	16%	92	84%
4	2017	107	Occupational Therapy Assistant	9	8%	98	92%
4	2017	120	Pharmacist	19	16%	101	84%
4	2017	114	Physical Therapist	25	22%	89	78%
4	2017	119	Radiological Technologist	19	16%	100	84%
4	2017	119	Respiratory Therapist	6	5%	113	95%
4	2017	119	Social Worker (LCSW)	3	3%	116	97%
4	2017	118	Ultrasound Technologist	23	19%	95	81%

California - *Statewide*

Quarter	Year	# Facilities	Position	Yes	%	No	%	Don't Know/Not Applicable	%
			Professional Development Provided by Organization						
4	2017	130	Certified Nursing Assistant	52	40%	69	53%	9	7%
4	2017	130	Clinical Laboratory Scientist	47	36%	74	57%	9	7%
4	2017	134	Coder	45	34%	74	55%	15	11%
4	2017	131	Licensed Vocational Nurse	43	33%	77	59%	11	8%
4	2017	126	Medical Assistant	44	35%	68	54%	14	11%
4	2017	125	Medical Laboratory Technician	34	27%	76	61%	15	12%
4	2017	129	Radiological Technologist	46	36%	74	57%	9	7%
4	2017	139	Registered Nurse	109	78%	29	21%	1	1%
4	2017	127	Ultrasound Technologist	44	35%	74	58%	9	7%

Workforce Impact Questions

California - *Statewide*

Types of Professional Development Offered to Employees

Quarter	Year	Position	In-house trainer – delivered by our own staff				Outside contractor– on/off-site training delivered by an outside vendor				Community college – on/off-site training delivered through a community college partner (credit/no credit)				Online vendor – online training contracted through a vendor				Other
			# Facilities	Yes	No	N/A	# Facilities	Yes	No	N/A	# Facilities	Yes	No	N/A	# Facilities	Yes	No	N/A	# Facilities
4	2017	Certified Nursing Assistant	48	83%	15%	2%	27	78%	22%	0%	22	14%	82%	5%	45	91%	9%	0%	0
4	2017	Clinical Laboratory Scientist	40	75%	20%	5%	20	95%	5%	0%	40	20%	78%	3%	38	97%	3%	0%	0
4	2017	Coder	37	73%	22%	5%	20	85%	5%	10%	40	70%	28%	3%	35	89%	6%	6%	0
4	2017	Licensed Vocational Nurse	39	79%	18%	3%	21	86%	14%	0%	36	6%	92%	3%	38	87%	13%	0%	0
4	2017	Medical Assistant	39	82%	15%	3%	18	83%	17%	0%	32	72%	25%	3%	35	97%	3%	0%	0
4	2017	Medical Laboratory Technician	33	73%	24%	3%	15	93%	0%	7%	32	72%	25%	3%	34	97%	0%	3%	0
4	2017	Radiological Technologist	36	78%	19%	3%	19	100%	0%	0%	39	69%	28%	3%	38	92%	8%	0%	0
4	2017	Registered Nurse	95	92%	7%	1%	67	49%	51%	0%	89	37%	62%	1%	85	92%	7%	1%	1
4	2017	Ultrasound Technologist	37	76%	19%	5%	19	95%	5%	0%	39	74%	23%	3%	38	95%	5%	0%	0

Appendix

Definitions

Agency Nurse: A nurse that is part of a nursing agency that sends out their nurses to different hospital facilities based on the facility's staffing needs for any shifts. Agencies usually do not offer insurance or job perks.

Contract Nurse: Independent Nurses who work for health providers on a direct contract basis independent of any agency or organization.

Full-Time Employees: Employees who are not in a temporary or introductory status AND who are regularly scheduled to work the full-time schedule at their hospital. In most cases, regular full-time employees are eligible for all benefit programs, subject to the terms, conditions, and limitations of each benefit program.

Part-Time Employees: Part-time employees receive all legally mandated benefits, such as Social Security and workers' compensation insurance. Part-time employees are generally not eligible for the other benefit programs.

Per Diem Employees: Employees who work with or without an established schedule but do not receive benefits.

Full-Time Equivalent: One FTE corresponds to one person working 40 hours per week for a total of 2080 hours per year (40 hours x 52 weeks).

Voluntary Separations: The employee made the decision to leave; includes normal retirement.

Involuntary Separations: The employee was asked to leave due to performance.

Layoffs: The involuntary release of employees due to down-sizing, closing of floors/units, shift in business scope, etc.

Job Openings (Vacancies): Vacant positions that are being actively recruited.

RN Nurse Staff: Provide direct patient care and does not include new graduate RNs.

Registered Nurse (Other): Registered nurses who do not provide direct patient care but serve in other capacities.

RN – New Graduate: Registered nurses with less than 6 months' experience.

Turnover Formulas

TURNOVER RATE: The rate at which employees are moving out of an organization.

$$\frac{\text{Total number of separations during the quarter}}{\text{Total number of employees (full- and part-time)}} \times \quad 100 =$$

Turnover Rate for the Quarter

HIRE RATE: The rate at which people are joining or rejoining an organization. It does not cover internal transfers and placements.

$$\frac{\text{Total number of hires during the quarter}}{\text{Total number of employees (full- and part-time)}} \times \quad 100 =$$

Hire Rate for the Quarter

VACANCY RATE: The rate at which job gaps and skill shortages exist in the labor market.

$$\frac{\text{Total number of job openings during the quarter}}{\text{Total number of (+) Job openings Employees plus during the quarter*}} \times \quad 100 =$$

Vacancy Rate for the Quarter

Please note job openings are assessed at the end of the quarter.

Participant List

Region: Northern

Adventist Health Lodi Memorial

Alta Bates Summit Medical Center

Arroyo Grande Community Hospital

Bakersfield Memorial Hospital

Barton Memorial Hospital

California Pacific Medical Center

Caritas Business Services

Chinese Hospital

Community Hospital of the Monterey Peninsula

Daughters of Charity Health System/Verity Health System

Dominican Hospital

Eden Medical Center

El Camino Hospital

Enloe Medical Center

French Hospital Medical Center

George L. Mee Memorial Hospital

John Muir Behavioral Health Center

John Muir Health

John Muir Medical Center Concord Campus

John Muir Medical Center Walnut Creek

Kaiser Permanente Antioch

Kaiser Permanente Fremont

Kaiser Permanente Fresno Medical Center

Kaiser Permanente Manteca

Kaiser Permanente Modesto

Kaiser Permanente Oakland

Kaiser Permanente Redwood City Medical Center

Kaiser Permanente Richmond

Kaiser Permanente Roseville Medical Center

Kaiser Permanente Sacramento Medical Center

Kaiser Permanente San Francisco Medical Center

Kaiser Permanente San Jose

Kaiser Permanente San Leandro Medical Center

Kaiser Permanente San Rafael Medical Center

Kaiser Permanente Santa Clara Medical Center

Kaiser Permanente Santa Rosa Medical Center

Kaiser Permanente South Sacramento Medical Center

Kaiser Permanente South San Francisco Medical Center

Kaiser Permanente Vacaville Medical Center

Kaiser Permanente Vallejo Medical Center

Kaiser Permanente Walnut Creek Medical Center

Kaweah Delta Health Care District

Lucile Salter Packard Children's Hospital

Mark Twain St. Joseph's Hospital

Region: Northern

Marshall Medical Center

Memorial Hospital Los Banos

Memorial Medical Center

Mercy General Hospital

Mercy Hospital of Folsom

Mercy Hospitals Bakersfield

Mercy Medical Center Merced

Mercy Medical Center Mount Shasta

Mercy Medical Center Redding

Mercy San Juan Medical Center

Methodist Hospital of Sacramento

Mills-Peninsula Health Services

NorthBay Healthcare

Northern Inyo Hospital

Novato Community Hospital

O'Connor Hospital

Oroville Hospital

Saint Francis Memorial Hospital

Saint Louise Regional Hospital

Salinas Valley Memorial Healthcare System

Sequoia Hospital

Seton Coastside

Seton Medical Center

Shasta Regional Medical Center

Shriners Hospitals for Children Northern California

Sierra Nevada Memorial Hospital

Sierra View District Hospital

St. Elizabeth Community Hospital

St. Joseph's Behavioral Health Center

St. Joseph's Medical Center

St. Mary's Medical Center

Stanford Hospital and Clinics

Sutter Amador Hospital

Sutter Auburn Faith Hospital

Sutter Care at Home

Sutter Coast Hospital

Sutter Davis Hospital

Sutter Delta Medical Center

Sutter Lakeside Hospital

Sutter Maternity and Surgery Center of Santa Cruz

Sutter Medical Center - Sacremento

Sutter Medical Center of Santa Rosa

Sutter Roseville Medical Center

Sutter Solano Medical Center

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Region: Northern

Sutter Tracy Community Hospital

Tahoe Forest Hospital District

UCSF Benioff Children's Hospital Oakland

UCSF Medical Center

Valley Children's Hospital

Woodland Healthcare

Region: Southern

Alhambra Hospital Medical Center

Anaheim Regional Medical Center

Arrowhead Regional Medical Center

Avanti Hospitals

Beverly Hospital

California Hospital Medical Center

California Rehabilitation Institute

Cedars-Sinai Medical Center

Centinela Hospital Medical Center

Children's Hospital Los Angeles

Children's Hospital of Orange County

Chino Valley Medical Center

City of Hope

College Hospital - Cerritos

College Hospital - Costa Mesa

Community Hospital of San Bernardino

Community Memorial Hospital

Cottage Health System

Desert Valley Hospital

Eisenhower Medical Center

Encino Hospital Medical Center

Garden Grove Hospital and Medical Center

Garfield Medical Center

Gateways Hospital and Mental Health Center

Glendale Memorial Hospital and Health Center

Glendora Community Hospital

Goleta Valley Cottage Hospital

Good Samaritan Hospital - L.A.

Greater El Monte Community Hospital

Henry Mayo Newhall Memorial Hospital

Hollywood Presbyterian Medical Center

Huntington Beach Hospital

Huntington Memorial Hospital

Kaiser Permanente Baldwin Park

Kaiser Permanente Downey Medical Center

Kaiser Permanente Fontana

Kaiser Permanente Irvine

Kaiser Permanente Los Angeles

Kaiser Permanente Ontario

Kaiser Permanente Orange County/Anaheim

Kaiser Permanente Panorama City

Kaiser Permanente Riverside

Kaiser Permanente South Bay/Harbor City

Kaiser Permanente West Los Angeles

Region: Southern

Kaiser Permanente Woodland Hills

Keck Hospital of USC

La Palma Intercommunity Hospital

Loma Linda Children's Hospital

Loma Linda University Behavioral Health Center

Loma Linda University Medical Center

Marian Medical Center

MemorialCare Health System

Methodist Hospital of Southern California

Mission Hospital

Montclair Hospital Medical Center

Monterey Park Hospital

Moreno Valley Community Hospital

Northridge Hospital Medical Center

Ojai Valley Community Hospital

Orange County Global Medical Center

PIH Health Hospital - Downey

Presbyterian Intercommunity Hospital - Whittier

Providence Holy Cross Medical Center

Providence Little Company of Mary Medical Center - San Pedro

Providence Little Company of Mary Medical Center - Torrance

Providence Saint John's Health Center

Providence Saint Joseph Medical Center

Providence Tarzana Medical Center

San Antonio Regional Hospital

San Dimas Community Hospital

San Gabriel Valley Medical Center

Santa Barbara Cottage Hospital

Santa Ynez Valley Cottage Hospital

Sherman Oaks Hospital

St. Bernardine Medical Center

St. Francis Medical Center

St. John's Pleasant Valley Hospital

St. John's Regional Medical Center

St. Joseph Hospital - Orange

St. Mary Medical Center

St. Vincent Medical Center

Torrance Memorial Medical Center

UCLA Health System

Valley Presbyterian Hospital

Victor Valley Global Medical Center

West Anaheim Medical Center

Whittier Hospital Medical Center

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Region: San Diego

Kaiser Permanente San Diego

Kaiser Permanente Zion

Palomar Health

Palomar Medical Center

Paradise Valley Hospital

Pioneers Memorial Healthcare District

Pomerado Hospital

Sharp Chula Vista Medical Center

Sharp Coronado Hospital and Healthcare Center

Sharp Grossmont Hospital

Sharp HealthCare

Sharp Mary Birch Hospital for Women & Newborns

Sharp Memorial Hospital

Sharp Mesa Vista Hospital

Sharp Metropolitan Medical Campus

University of California San Diego Medical Center

How fast will the registered nurse workforce grow through 2030? Projections in nine regions of the country

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ABSTRACT

Background: After an unprecedented increase in nursing school enrollment and graduates in the past 10 years, projected shortages of nurses have been erased at a national level. However, nursing markets are local, and an uneven distribution of health care providers of all types is a longstanding feature of health care in the United States.
Purpose: The purpose of this study was to understand how the outlook for future registered nurse (RN) supply varies regionally across the United States.
Methods: We apply our nursing supply model to the nine U.S. Census Divisions to produce separate supply forecasts for each region.
Discussion: We find dramatic differences in expected future growth of the nursing workforce across U.S. regions. These range from zero expected growth in the number of RNs per capita in New England and in the Pacific regions between 2015 and 2030 to 40% growth in the East South Central region (Mississippi, Alabama, Tennessee, Kentucky) and in the West South Central region (Texas, Oklahoma, Arkansas, Louisiana).
Conclusion: Assuming growth in the demand for RNs per population, some regions of the United States are expected to face shortfalls in their nursing workforce if recent trends do not change.

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Introduction

After a decade-long unprecedented expansion in nursing school enrollments, the outlook for the nursing workforce has turned from one of dire shortages to near-balance and even a small surplus according to one forecast (Auerbach, Buerhaus, & Staiger, 2015; Spetz, 2015; U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, National Center for Health Workforce Analysis, 2014). However, these national-level assessments belie substantial differences at the subnational level. Researchers recently projected the future supply of full-time equivalent (FTE) registered nurses (RNs) through 2030 according to four regions of the country—Northeast, South, Midwest, and West (Buerhaus, Auerbach, Staiger, & Muench, 2013). The

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study found substantial differences in outlook in each region, with states in the Midwest and South having younger RN workforces and much higher expected supply growth relative to the region's population growth through 2030 (17.4% per capita and 10.8% per capita, respectively). In contrast, the size of the RN workforces in the West and Northeast regions was projected to decline relative to the growth of their overall population (−2.5% per capita and −6.0% per capita).

This article provides regional projections of the number of FTE RNs based on workforce data through 2014. Unlike the previous regional forecasts published in 2013, the projections reported here extend that analysis by further dividing the country into nine census divisions. These more detailed forecasts provide agencies and stakeholders with more actionable information at a local level. We find strikingly different patterns by region suggesting some areas of the United States may be facing large shortages over the next decade while others are poised to readily meet the growing demands of an aging population.

Methods

Data

The workforce projection model requires information on the age of RNs, their employment status, hours worked, and the age and size of the U.S. population. Data on the age and employment of RNs were obtained from the Current Population Survey (CPS) and the American Community Survey (ACS). The CPS is a household-based, nationally representative survey of over 100,000 individuals administered monthly by the Bureau of the Census. The CPS has asked detailed questions about employment (including occupation and hours worked) since 1973 and is used by the Department of Labor to estimate current trends in unemployment, employment, and earnings. When the monthly surveys are aggregated to a yearly basis, the CPS provides data on approximately 3,000 RNs per year.

The ACS, which began reporting data in 2001, is modeled after the long form of the decennial census. Although it contains fewer questions than the CPS, the ACS obtains much larger sample sizes—approximately 12,000 RNs from 2001 to 2004 and roughly 35,000 RNs per year thereafter (after the sampling frame was expanded). These larger sample sizes enable workforce trends in nursing to be analyzed with greater accuracy. Consequently, the projection model uses data from the ACS data rather than the CPS data beginning in 2001.

The data analyzed included all individuals between the ages of 23 and 69 years who reported being employed as an RN during the week of the survey between 1979 and 2014 ($N = 70{,}201$ in the CPS, $N = 366{,}927$ in the ACS). To be consistent with previous projections, RNs reporting working fewer than 30 hr in a typical

week were recorded as .5 FTEs. These data were used to estimate the number of FTE RNs of each single year of age who were working in each year of our data. To make estimates representative of the U.S. noninstitutionalized population, observations were weighted by sampling weights provided by the CPS and ACS. Additional data on the U.S. population by year, state, and age between 1979 and 2014 were obtained from the U.S. Bureau of the Census. Forecasts of the U.S. population through 2030 by age were obtained from projections prepared by the U.S. Bureau of the Census.

Statistical Analysis

CPS and ACS data were used to estimate the number of FTE RNs by age and year. These estimates were subsequently used in a projection model that was run separately for each of nine regions within the United States (Figure 1). The model predicts the proportion of the population in a given birth cohort that will be working as RNs at each age as the product of a cohort effect (defined by birth year) and an age effect. Cohort effects refer to the propensity of individuals born in any given year to work as RNs and capture changes across birth cohorts in the perceived attractiveness of a nursing career relative to other occupations. Age effects refer to the relative propensity of RNs to be working at different ages and capture life-cycle patterns such as retirement and the tendency of female RNs to work less during childbearing years. Thus, the proportion of any particular cohort working as RNs at a given age is the product of the propensity of that cohort to choose nursing as a career and the propensity of RNs to be working at that age.

Estimation

Analysis of variance was used to estimate the age and cohort effects for each U.S. region. The dependent variable in the model was the logarithm of the number of FTE RNs of every age between 23 and 69 years for every year between 1979 and 2014 (46 years of age times 36 years equals 1,656 total observations) divided by the regional U.S. population in that given year-age cell. The analysis of variance model estimated main effects for cohort (birth year) and age, and two interaction effects to capture instances where the life-cycle pattern of nursing careers changed: the shift toward older ages of first entry into the workforce by cohorts born after 1965 (Auerbach, Buerhaus, & Staiger, 2007) and the shift toward older ages of retirement starting roughly in the early 2000s (Auerbach, Buerhaus, & Staiger, 2014). All statistical analyses were performed using Stata, version 14.1.

Projections

Estimates of age and cohort effects were used to project the numbers of FTE RNs through 2030. We assumed that age effects in future years will be the same as those
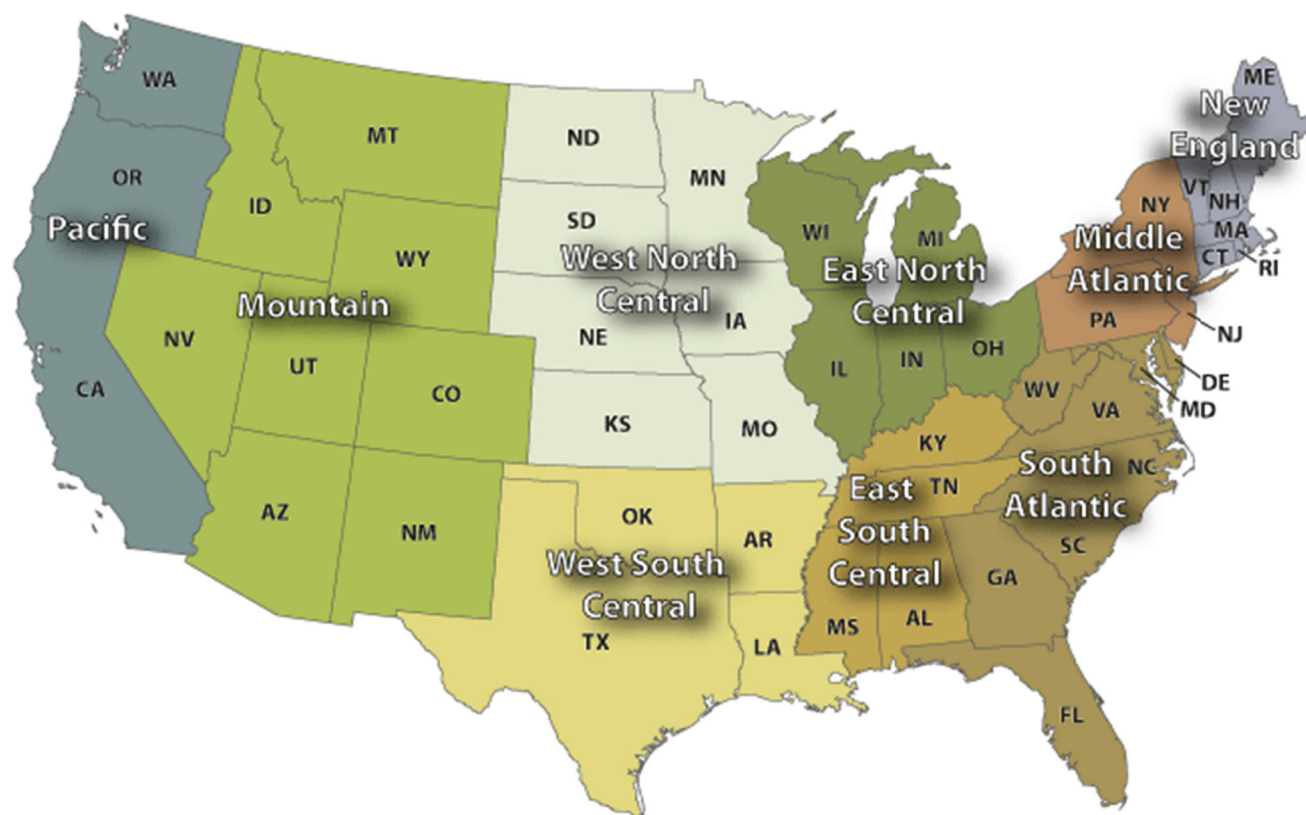
Figure 1 — U.S. states and census divisions ("regions") used in this article.

observed in the most recent cohorts and that the cohort effect for future cohorts (entering the workforce after 2014) will equal the average of the five most recent cohorts observed (i.e., the 1987 through 1991 birth cohorts, who were first observed at age 23 years in 2010—2014). Based on these age and cohort effects, we project the proportion of the U.S. population in each birth cohort that will be working as RNs at each age and multiply by census population projections for that age and year to obtain total FTE RNs. These projections assume that the cohorts already in the workforce will follow the same lifecycle pattern as that observed in recent cohorts and that the size of new cohorts entering the workforce will remain constant at recently observed levels. To generate projections at a regional level, states were grouped into the nine regions shown in Figure 1.

Model Validation

To ensure further confidence in the model's forecasting ability at the regional level of analysis, we performed a validation exercise in which we applied the model to workforce data through 2009 only and forecast supply growth in each region between 2009 and 2014. We then compared these forecasts with *actual* supply growth in each region over this time period. Despite the fact that there is uncertainty in our supply estimates and that there are numerous factors that affect supply that cannot be explained by the model, it performed quite well. The region that the

model had forecast, as of 2009, to grow the fastest in nursing FTE between 2009 and 2014 (the South Central region) was, in fact, the region that grew the fastest. The region that was forecast to grow second slowest (New England) turned out to be the slowest growing region. Overall, the correlation between the model's forecast and actual growth between 2009 and 2014 was .42. In contrast, a simple straight-line forecast method that calculated each region's observed supply growth from the previous 5 years (2004—2009) and projected that growth forward from 2009 to 2014 failed to predict actual supply growth by region. In fact, the correlation was negative (−.43) when comparing forecasts using this simple method with actual supply growth. That is, regions with high growth between 2004 and 2009 tended to have low growth between 2009 and 2014; a phenomenon foreseen by the model but missed by a naïve extrapolation.

Findings

Figure 1 shows the nine regions of the country used in this analysis and the states represented within each region.

These regions vary in total population (2015) from just under 15 million (New England) to 63 million (South Atlantic) and are commonly used by the U.S. Census Bureau to describe regional demographic trends.
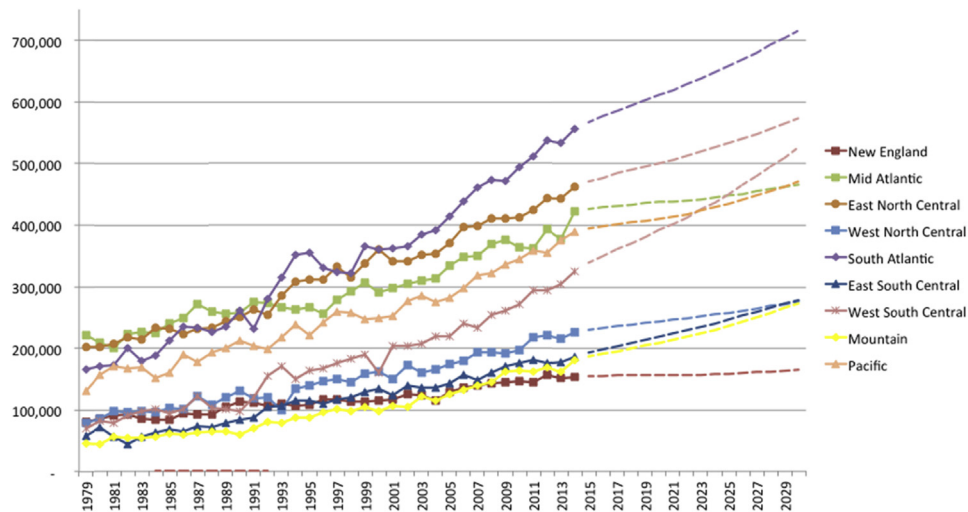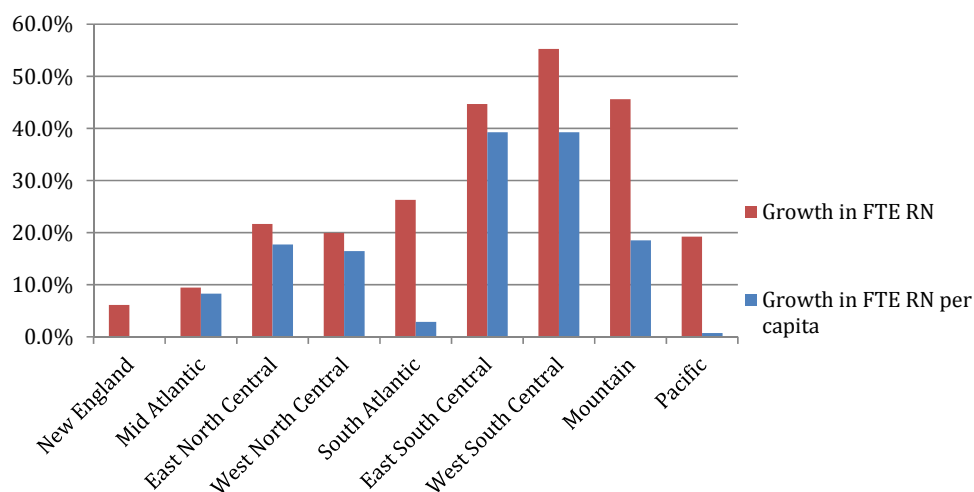
Figure 2 − Actual (1979−2014) and forecast (2015−2030) FTE RN supply, by region. FTE, full-time equivalent; RN, registered nurse. Source: Authors' calculations and modeled projections based on data from the U.S. Census Bureau.

Figure 2 displays trends in nursing supply (solid lines) on an FTE basis from 1979 to 2014 and shows each region's forecast of FTE RNs (dotted lines) from 2015 to 2030.

FTE RN supply grew strongly in all regions from 1979 to 2014, though rates of growth varied fourfold from 90% in New England and the Mid-Atlantic regions to 368% in the West South Central region. While the number of RNs was similar in New England and the West South Central in 1979 (80,000 and 70,000, respectively), by 2014, there were twice as many RNs in the West South Central region as in New England (325,000 vs. 153,000). These divergent rates of growth reflect a number of differences across regions—primarily differences in the rate of entry of RNs into nursing and the age patterns of working RNs (they also reflect differing population growth by region, which are factored out separately in Figure 3). The underlying causes of different rates of entry into nursing by region are still not well understood, however.

Future forecasts in the number of RNs by region are shown in the dotted lines in the right half of Figure 2. These forecasts reflect the same underlying factors mentioned previously and are described more specifically in the Methods section. They are dependent, for example, on recent trends in entry into nursing education programs in the region, the age and work patterns of existing RNs, and the interactions between these factors. These different underlying factors lead to strikingly different forecast trajectories, as is evident in the figure; for example, very rapid projected growth in the West South Central region compared with almost no growth projected in New England.

Figure 3 summarizes the 2015 to 2030 growth forecasts both in absolute numbers of RNs and in the growth of RNs relative to the growth of the population in each of the nine regions (i.e., RNs per capita). These data are also summarized in Table 1 (available online at www.nursingoutlook.org).

Figure 3 − Total and per capita growth in FTE RN, 2015 to 2030. FTE, full-time equivalent; RN, registered nurse. Source: Authors' calculations and modeled projections based on data from the U.S. Census Bureau.

Differences in rates of population growth by region lead to even greater variation in the forecast growth in per-capita RNs by region: from zero growth in New England and the Pacific regions and 2.9% growth in the South Atlantic to almost 40% growth in RNs per capita in the East and West South Central regions.

To better understand what underlies the substantial variation in growth by region, we next highlight differences in the ages of RNs and in trends in recent entry into the workforce by region. Figure 4 arrays regions from left to right by those with the oldest RNs on the left and compares to both observed growth rates from 2009 to 2014 and forecast RN growth rates from Figure 3.

The regional patterns highlight the strong relationship between the age distribution of RNs in each region and past and future expected growth. The New England region has the oldest RNs, with 45% older than 50 years, 32% younger than 40 years, and an average age of 46 years. That region also saw the lowest rate of growth in RN supply from 2009 to 2014 among the regions and is projected to grow the slowest from 2015 to 2030. At the other extreme, the West South Central region is essentially the inverse, with 42% of RNs younger than 40 years and 32% of RNs older than 50 years, an average age of just under 43 years has the fastest-growing regional growth in RN supply between 2009 and 2014 and is expected to increase the fastest between 2015 and 2030.

Age does not explain the full picture of the RN workforce, however. For example, the mountain region states have the third-oldest RN population but are projected to grow among the fastest. This is partly because there has been rapid growth in entry in those states in the last decade, meaning that there is a relatively large and growing group of younger RNs aging into their most productive years spent in the workforce—ages 40s and 50s. We estimated net entry into and exit from the RN labor force by region each year and found large differences. In New England, a region that averaged just under 140,000 FTE RNs from 2001 to 2014, roughly 4,500 RNs entered the labor force

each year over that time and 1,800 RNs exited. In contrast, in the West South Central region, which averaged 250,000 RNs over this period, more than three times as many new RNs entered the workforce each year (14,000) while a similar number left (2,200) as in New England. The mountain region had similar numbers of RNs over this period as New England but averaged new entry of 7,350 RNs per year, or 62% more than New England. These figures for all regions are enumerated in Table 1.

We can use a different measure of how interest in nursing varies by region to further understand why regions are faring differently in the growth of their nursing workforce. A core parameter of the forecast model measures the likelihood of someone born in a given year to eventually work as an RN. As we have reported elsewhere that measure hit a relative peak nationally with individuals born in 1955, the height of the baby boom when nursing was a dominant choice of profession among women (Buerhaus, Staiger, & Auerbach, 2009). However, there has been substantial regional variation in this measure. As shown in Figure 5, in the New England region, the likelihood of individuals born after 1955 to become RNs dipped and then rose again, just matching the 1955 level with individuals born in the late 1980s. In the West South Central region, individuals born in the 1970s and 1980s were increasingly more likely to become RNs as the 1955 cohort. Someone born in 1990 living in the West South Central region was twice as likely to work as an RN as someone born in 1955 in that region.

Discussion

While the nursing workforce continues to increase in size overall, there are strikingly different workforce dynamics in different areas of the country. At the extremes, New England has the oldest RNs in the United States (45% are over age 50 years), has experienced
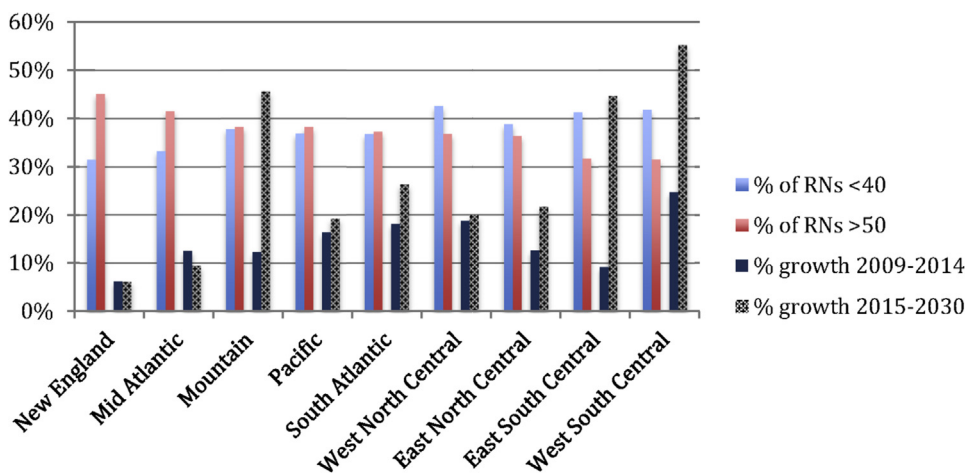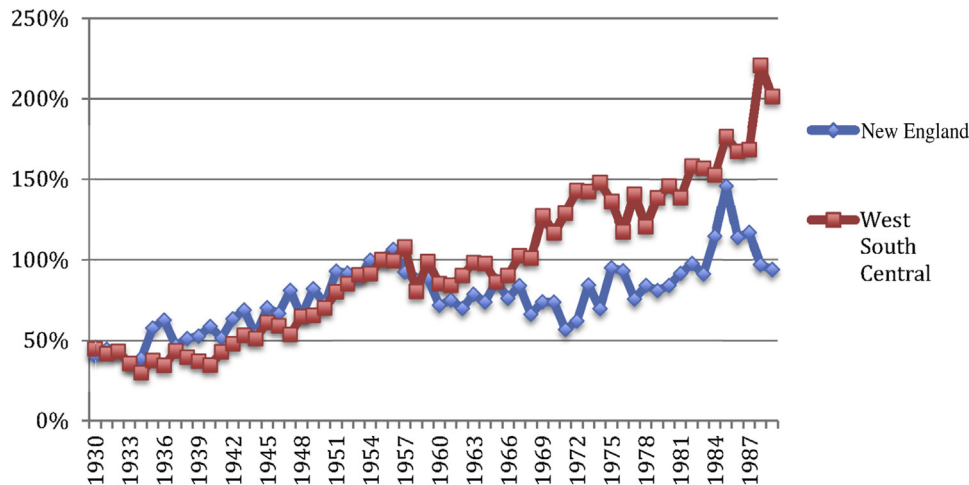

Figure 4 − Age distribution and forecast growth for each U.S. region. Source: Authors' calculations and modeled projections based on data from the U.S. Census Bureau.

Figure 5 − Difference in cohort effects by region. Source: Authors' calculations and modeled projections based on data from the U.S. Census Bureau.

relatively low rates of entry into nursing with incoming cohorts equal in size to the peak baby boomer cohorts, and is projected to have the same number of RNs per capita in 2030 as today. At the other end, the West South Central region of the United States (Texas, Oklahoma, Arkansas, Louisiana) has the youngest RNs in the United States (35% are over 50 years), has experienced rapid rates of entry into nursing with incoming cohorts double the size of the baby boomer cohorts, and is projected to increase its numbers of RNs per capita by more than 40% by 2030.

Regional forecasts do have an additional source of uncertainty compared with national forecasts—the possibility of RNs moving between regions to mitigate imbalances of supply and demand (Siow & Ng, 2013). While we know that such movement occurs, sometimes aided by temporary staffing agencies, there is likely only a small percentage of RNs with the ability and willingness to move—indeed, our model shows that regional imbalances have tended to persist. Furthermore, the validation exercise described in the Methods section confirms that the forecasting model can successfully forecast regional trends based on repeated observations of regional supply.

We can trace back the different regional patterns to difference in entry and age structure of the nursing workforce by region. But, the underlying root causes of these differences are not clear. We have previously described long-run trends in the nursing workforce as related to overall trends in health care markets and payment systems, as well as underlying factors in the economy that can make nursing careers more or less attractive relative to other career choices (Buerhaus et al., 2009). We have also noted that in the last decade, there have been a number of new nursing school openings, particularly for-profit schools (Auerbach, Staiger, Muench, & Buerhaus, 2013). While the areas where these schools have chosen to locate could be a response to underlying demand in those

areas, there could also be idiosyncratic reasons in some cases that are not necessarily demand related. We continue to seek to understand the underlying causes of differences in supply growth.

Whatever the case, there are important implications of such striking differences in supply growth implied by our forecasts. For example, population aging will tend to increase the need for RNs, and regions are expected to age at different rates. In fact, the region that is aging most rapidly (New England) is also the region with the lowest forecast RN supply growth. The U.S. Census Bureau has forecast that the percent of the population over age 65 years will increase by 7.8 percentage points (from 14.0% to 21.8%) in New England between 2010 and 2030. The West South Central region is aging less rapidly, with an expected 5.4 percentage point increase in the population over age 65 years (from 11.4% to 16.8%). Previous research has associated an increase in aging with an increase in demand for health care providers (Petterson et al., 2012).

Implications for Policy

Having a picture of the projected future supply of RNs at the regional level vs. the national level has implications for planning and workforce policy. For example, health care delivery organizations in the New England region should anticipate a tighter labor market in the near future than other areas. Retirement of RNs may occur more quickly and be more difficult to absorb for health care organizations. Policy makers in this and other regions we have identified may want to move more aggressively to seek to increase the capacity of the nursing education system, promote nursing careers, attract RNs from other areas, and help organizations retain RNs and decrease turnover. State health workforce centers may be a useful vehicle through which to undertake these and other related efforts.

Finally, the uneven future growth of the RN workforce by region of the country also means that implementation of health reforms may be adversely affected, particularly those linked to an adequate supply of RNs. Delivery system changes that are likely to depend on an adequate supply of nurses include those aimed at increasing accountability for quality, costs, and population health (e.g., accountable care organizations); increasing health education and prevention, expanding insurance coverage (via increasing Medicaid enrollments and federal and state exchanges), shifting payment away from fee-for-service toward value-based payment, and increasing use of health information technology. Being aware of the future projections in RN supply growth at a regional level can provide information needed by workforce planners to assess the timing and likely success of implementing such reforms.

Acknowledgment

Supplementary Data

Supplementary data related to this article can be found at http://dx.doi.org/10.1016/j.outlook.2016.07.004.

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California Newly Licensed RN Employment Survey
January 2018

INTRODUCTION

The employment landscape for newly licensed Registered Nurses in California has been building momentum since 2013, as evidenced by increased hiring trends and greater opportunities for new graduates to work in various settings and roles. In the few years prior to 2013, challenges faced by newly licensed RNs in finding employment had been a workforce concern in California and nationally. Economic recovery and ongoing change in the delivery of health care services in recent years have fueled demand for more nurses in specific specialties and areas. This is occurring as the nursing workforce continues to age, with retirements on the rise, while the state's population also ages and grows, with health care needs becoming more complex.

Forecasts for the RN workforce in California from 2017 through 2035 indicate that supply and demand for RNs are fairly well-balanced over the next 10 years if current nursing school enrollment and state-to-state migration patterns remain stable and future demand does not increase, according to data from the 2016 California Board of Registered Nursing (BRN) Survey of Registered Nurses, the 2015-2016 BRN Annual Schools Report, data extracted from the BRN license records, and other state and national data sources.[1] Projections by the Health Resources and Services Administration (HRSA)'s National Center for Health Workforce Analysis indicate California's RN supply will be 11.5% (44,500 RNs) lower than demand in 2030.[2] California will need to maintain and perhaps increase the present number of nursing graduates in order to meet long-term health care needs.

Employers report escalating need for RNs to be prepared in specialty areas, emerging new practice settings and roles, and indicate preference in hiring RNs with a minimum of a BSN degree.[3] Trends in healthcare delivery and payment models are also shifting focus of care and resources toward health maintenance and prevention, providing further opportunity for nurses to impact value-based outcomes. These factors will continue to influence future demand for nurses prepared to provide care in a wide range of employment settings. Tracking employment paths of newly licensed nursing graduates filling open positions as experienced nurses continue to retire, and new roles emerge in varied settings will help inform workforce planning. Enrollment trends in California nursing schools and programs and course content provided need to be aligned with changes in local labor market conditions to meet evolving workforce needs.

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[1] Spetz, J. 2017. Forecasts of the Registered Nurse Workforce in California, June 2017. California Board of Registered Nursing, June 2017.

[2] U.S. Department of Health and Human Services, Health Resources and Services Administration, National Center for Health Workforce Analysis. The Future of the Nursing Workforce: National- and State-Level Projections, 2014-2030. Rockville, Maryland, 2017.

[3] Chu, L., Bates, T., Spetz, J. 2017. Survey of Nursing Employers in California, Fall 2016. San Francisco, CA: Philip R. Lee Institute for Health Policy Studies, University of California, San Francisco.

KEY FINDINGS - EMPLOYMENT EXPERIENCES OF NEWLY LICENSED RNs

To better understand the employment experiences of newly licensed RNs in California, an annual statewide study conducted by Health**Impact** (formerly the California Institute for Nursing and Health Care) since 2010 was replicated again in fall 2017. A random sample of 50% (4,549) of RNs newly licensed in the 12-month period between September 2016 and August 2017 were invited to participate in the fall 2017 study, with 1,262 nurses completing the survey for a 27.9% survey response rate overall.

➢ 81.1% of RNs reported working in their first registered nursing job

➢ 96.4% of those employed found jobs within 6 months (75.0% within 3 months, 21.4% between 3 to 6 months)

➢ Employment rate reported was 3.6% less than the prior year (margin of error rate 2.56% indicates slight change from prior year)

➢ Percent employed by nursing degree: 80.2% ADN, 83.2% BSN, 73.3% Masters Entry

➢ Regional differences in rural and metropolitan area employment rates are reported, ranging from the highest percent employed in the Central Coast (94.0%) and San Joaquin Valley (93.2%) areas, to the lowest percent employed in the San Francisco Bay Area (70.5%)

➢ Most frequent employment settings reported include: hospital inpatient (64.9%), Emergency Department (10.8%), Nursing Home/Extended Care/Skilled Nursing/Group Home (3.5%), and Rehabilitation/Long-Term Acute Care (3.4%), Other types of hospital departments (2.9%), Home Health/Hospice (1.9%), and Correctional Facility/Prison/Jail (1.4%)

➢ 58.9% report participating in a new graduate transition to practice residency program

DESIGN AND SAMPLE

A random sample of 4,549 (50%) of RNs newly licensed by exam in California between September 2016 and August 2017 was identified by the BRN to be included in this study, and invited to participate in the survey. Each nurse received an invitation email from the BRN in October 2017 requesting they participate in the study by completing an online survey. Of the 4,549 surveys sent, 18 were undelivered, and a total of 1,262 nurses completed the survey, for a 27.9% survey response rate. No personal identification information was gathered and results are reported only in aggregate. The margin of error rate calculated for questions for which the expected responses are evenly split was 2.56 percentage points, with 95% confidence. This should be kept in mind when interpreting findings throughout this report as applicable to the state overall.

RESPONDENT PROFILE

The profile of newly licensed RNs participating in this sample survey included 99.0% (1,249) RNs who completed their nursing program in California, and 1.0% (13) from another state. All were newly licensed by exam as RNs in California within the 12-month period between August 2016 and September 2017 prior to the survey. Peak months when RN licenses were obtained were reported following graduation twice a year in summer between July (18.9%) and August 2017 (23.4%), followed next in frequency in spring between

February (9.8%) and March 2017 (10.1%). The balance of nurses responding to the survey, 37.8%, reported obtaining their RN license distributed across each of the remaining 8 months included in the survey.

Of the 1,262 RNs completing the survey, 48.8% (616) graduated with an associate degree in nursing (ADN), 44.7% (564) with a baccalaureate degree in nursing (BSN), and 5.9% (75) from an entry level master's program in nursing (ELM or MEPN). A few respondents 0.6% (7) indicated "other" type of degree, specifying LVN to RN program, or LVN to BSN program. This distribution of respondents closely approximates the distribution of students reported to have completed an RN program by type of degree reported in the most recent 2015-2016 California BRN Annual School Report, with 50.7% ADN, 43.5% BSN, and 5.8% ELM respectively.[4]

Geographic distribution of survey respondents also reflects the density of population in each area, with 24.2% residing in the Los Angeles/Ventura area; 22.3% in Orange, Riverside, and San Bernardino counties; 13.7% in the San Francisco Bay Area; 13.1% in Northern California; 7.8% in the San Diego/Imperial County area; 7.0% in the San Joaquin Valley; 5.7% in the Greater Sacramento area; 4.0% in the Central Coast, and 1.3% in the Northern Sacramento Valley. While larger numbers of new graduates participated from the more densely populated areas, influencing the aggregate statewide survey results by heavily representing the employment experiences within these large metropolitan regions, there are notable employment differences unique to each of the 9 regions, as discussed in the employment section later in this report.

REGIONAL DISTRIBUTION OF SURVEY PARTICIPANTS
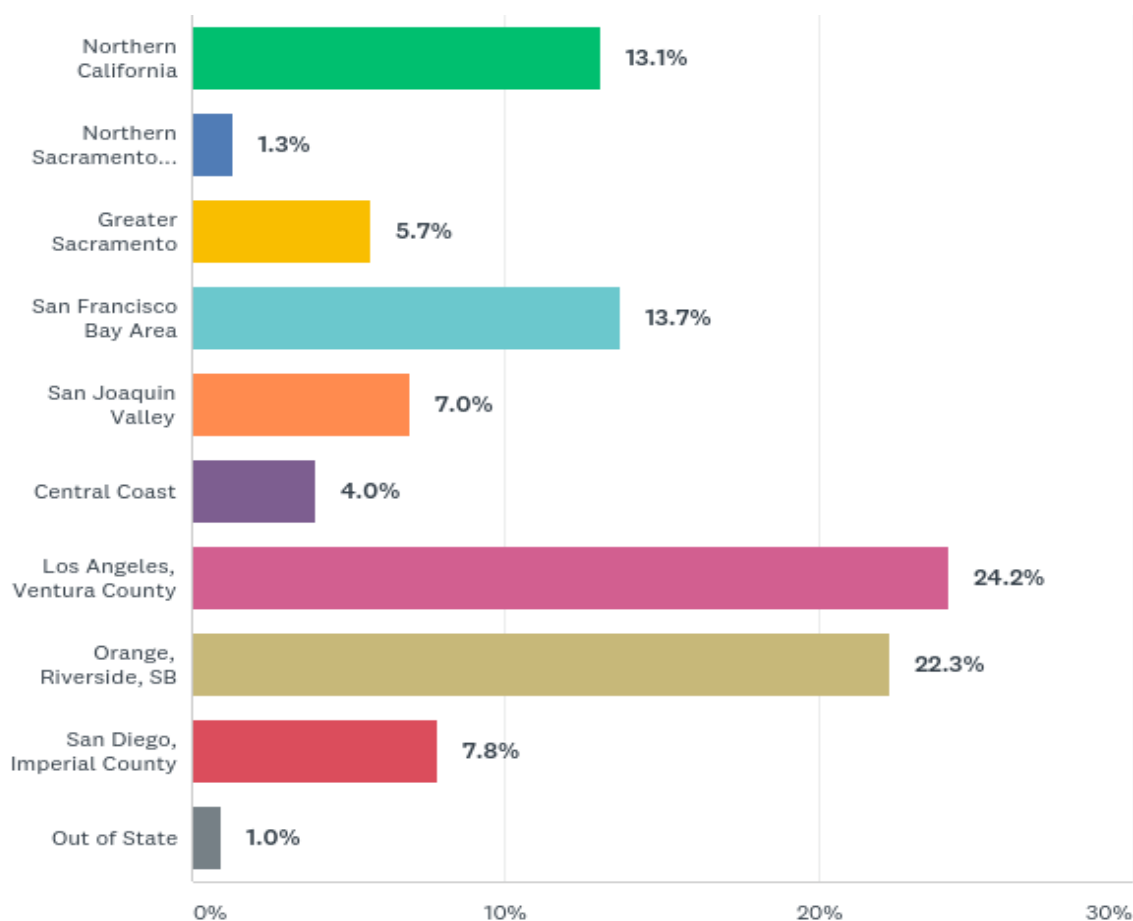
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[4] Waneka, R., Bates, T., Spetz, J. 2015-2016 Annual School Report: Data Summary and Historical Trend Analysis. Sacramento, CA: California Board of Registered Nursing, June 2017

The age distribution of survey participants indicate 37.6% were between 25-30 years of age; 23.3% were less than 25 years of age; 18.4% between 31-35; 9.7% age 36-40; 5.9% age 41-45; 3.3% age 46-50; and 2.0% over 50 years old. The age range for entry into nursing practice is consistent with historical and national trends in nursing as a younger, career-oriented profession. Survey respondents were 83.2% female and 16.8% male.

California's nursing workforce diversity is evident by the wide range of ethnicities represented including: 44.5% Caucasian/White, followed by 20.1% Latino/Hispanic, 11.3% Asian, 10.3% Native Hawaiian/Pacific Islander, 5.4% African American/Black/African, and 0.2% American Indian/Native American/Alaskan Native. A detailed listing of specific ethnic groups included within each category is provided.

ETHNIC DISTRIBUTION

Ethnic/Racial Category	Percent	Ethnic Groups Included
Caucasian	44.5%	Caucasian, White, European, Middle Eastern
Latino/Hispanic	20.1%	Central American, South American, Cuban, Mexican, Other Hispanic
Asian	11.3%	Cambodian, Chinese, Indian, Indonesian, Japanese, Korean, Laotian/Hmong, Pakistani, Thai, Vietnamese
Native Hawaiian/ Pacific Islander	10.3%	Fijian, Filipino, Guamanian, Hawaiian, Samoan, Tongan
African American	5.4%	African American, African, Black
Native American	0.2%	American Indian, Alaskan Native
Other/Mixed	8.3%	Other/Mixed

The survey obtained information on languages other than English that were spoken fluently, with 9 primary categories listed for participants to select from, along with an open answer text box for other languages to be written in. A total of 60 languages were reported to be spoken fluently.

LANGUAGES SPOKEN FLUENTLY

Language	Percent
English only	57.7%
Spanish	20.8%
Tagalog/Other Filipino dialect	5.5%
Vietnamese	2.5%
Cantonese	1.8%
Mandarin	1.7%
Korean	1.2%
Hindu/Urdu/Punjabi/other South Asian language	1.2%
French	1.0%

Other Chinese dialect	0.7%
Other languages: American Sign Language, Arabic, Armenian, Assyrian, Bamba, Bosnian, Bulgarian, Burmese, Cambodian, Croatian, Danish, Dutch, Efik, Fanti, Farsi, Fukienese, German, Romanian, Hakka, Hebrew, Hmong, Icelandic, Igbo, Indonesian, Japanese, Lao, Mien, Nigerian, Moldovan, Ndebele, Nyanja, Persian, Polish, Portuguese, Punjabi, Russian, Siswati, Swahili, Swedish, Taiwanese, Tamil, Tibetan, Turkish, Twi, Ukranian, Yoruba, Zulu	<1% each

EMPLOYMENT AND TYPE OF RN JOBS OBTAINED

The majority of newly licensed RNs responding to the survey reported being employed as an RN, with 81.1% working in their first registered nursing job, and 18.9% not yet working as a registered nurse. These results indicate a strong employment landscape for newly licensed nurses for the fourth consecutive year. The 3.6% decline in employment rate reported in this study compared with the prior year was small, although still concerning and bears close monitoring, when considering the 2.56% margin of error rate calculated in this study.

EMPLOYMENT OF NEWLY LICENSED RNs WITHIN 12 MONTHS OF LICENSURE

Survey Year	2011	2012	2013	2014	2015	2016	2017
Percent RNs Employed	57.0%	54.0%	59.3%	65.1%	74.2%	84.7%	81.1%

New graduates who found employment were asked how long it took to find their first nursing job, with 75.0% of respondents indicating fewer than three months; 21.4% in 3-6 months, 2.8% in 6-9 months, 0.5% in 9-12 months, and 0.3% taking more than 12 months. Of the nurses who were employed in their first RN job, a majority found employment within the first 6 months after licensure, with 96.4% reporting being employed, an increase of 0.7% compared with the prior year.

Length of Time Between Licensure and Employment in an RN Role

	< 3 m	3 to 6 m	6 to 9 m	9 to 12 m	> 12 m
☐ Percent Employed	75.00%	21.40%	2.80%	0.50%	0.30%
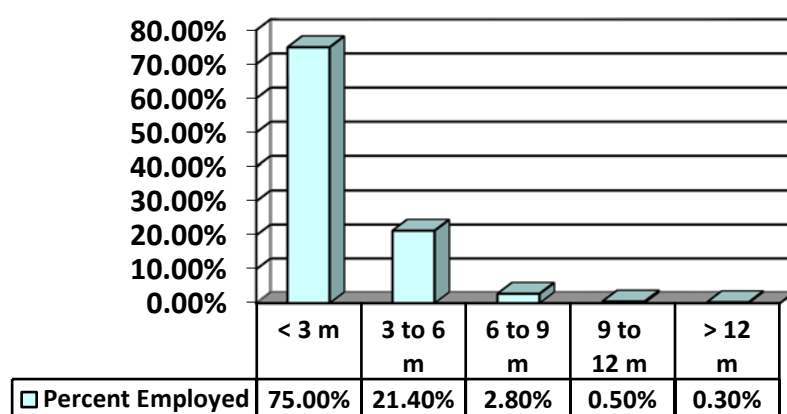
Survey results indicate a greater employment rate reported by newly licensed RNs when compared with the 2015-2016 California Board of Registered Nursing's Annual School Report, where nursing school deans and directors reported 76% of new graduates from pre-licensure programs in the prior academic year were

employed.[5] While various factors impact results between studies, including differences in sampling, type of survey questions, number of responses by region, and availability of local employment, the employment picture for newly licensed RNs compared over time remains strong for the fourth consecutive year.

Employment pattern by type of nursing degree is one indicator of employer needs and preferences. Of the nurses reported to be employed, 80.2% (N=494) of ADN nurses were working in their first RN job, 83.2% (N=469) of BSN nurses, and 73.3% (N=55) of nurses graduating from a Masters Entry Program in Nursing. Differences found in the percent of pre-licensure RNs employed fall slightly beyond the 2.56% margin of error rate in this study, indicating a slight difference in employment found between ADN and BSN graduates. The lower employment rate reported for ELM nurses may be influenced by the small sample size, and some California ELM programs are structured for students to complete pre-licensure coursework and take the NCLEX licensing exam prior to graduation. In these cases, some ELM RNs licensed prior to graduation may choose not to seek employment until they complete their ELM program.

	EMPLOYMENT OF RNs BY TYPE OF NURSING DEGREE		
	ADN 48.8% (N=616)	BSN 44.7% (N=564)	ELM 5.9% (N=75)
Employed as RN	80.2% (N=494)	83.2% (N=469)	73.3% (N=55)
Not Employed as RN	19.8% (N=122)	16.8% (N=95)	26.7% (N=20)

Notable differences in new graduate employment rates are found in specific areas of the state as reported by newly licensed RNs in the sample study residing in different regions, from a low of 70.5% in the San Francisco Bay Area to a high of 94.0% in the Central Coast, followed closely by the San Joaquin Valley with 93.2%. Employer demand is also reported to be greater in rural versus urban areas, which is consistent with higher employment rates for newly licensed nurses in this statewide study.

Consistent with prior years, these employment patterns also reflect supply and demand along with hiring for new RN graduates reported by California hospital chief nursing officers in the fall 2016 Survey of Nurse Employers.[6] Differences in regional demand for new RN graduates indicated that with the exception of the Central California region, hospitals reported demand for new RN graduates was less than the available supply. Central California, the San Francisco Bay Area, Los Angeles, and the Sacramento and Northern California regions indicated the labor market for new graduates has improved compared with previous years, with early indications that shortages of new graduates may be emerging in some regions. It is important to note that such data related to hiring demand for new graduates is impacted in part by the need for some open positions to be filled by RNs with prior experience that remain challenging to fill for hospitals across the state.

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[5] Waneka, R., Bates, T., Spetz, J. 2015-2016 Annual School Report: Data Summary and Historical Trend Analysis. Sacramento, CA: California Board of Registered Nursing, June 2017.
[6] Bates, T., Chu, L., Keane, D., Spetz, J. Survey of Nursing Employers in California, Fall 2016. San Francisco, CA: Philip R. Lee Institute for Health Policy Studies, University of California, San Francisco. July 2017.

EMPLOYMENT RATES OF NEWLY LICENSED RNS BY AREA OF CALIFORNIA

Geographic Area	Employed as an RN	Not Employed as an RN	Number of Respondents
Northern California	80.6% (133)	19.4% (32)	165
Northern Sacramento Valley*	76.5% (13)	23.5% (4)	17
Greater Sacramento*	76.4% (55)	23.6% (17)	72
San Francisco Bay Area	70.5% (122)	29.5% (51)	173
San Joaquin Valley*	93.2% (82)	6.8% (6)	88
Central Coast*	94.0% (47)	6.0% (3)	50
Los Angeles/Ventura Counties	79.0% (241)	21.0% (64)	305
Orange/Riverside/San Bernardino Counties	85.8% (241)	14.2% (40)	281
San Diego/Imperial County*	81.8% (81)	18.2% (18)	99

* Regional results are provided as these are of particular interest to local communities; however, as such data exhibit small sample sizes per region, these may not be representative of the region overall.

Employment patterns across various types of facilities, clinical practice areas, and specialties were reported by newly licensed nurses hired during the 12-month period surveyed. Results reflect a broad range of organizations, with a majority of 81.2% working in their first job as an RN in an acute care hospital, predominantly in an inpatient care setting (64.9%) or emergency/urgent care department (10.8%), indicating these settings continue to attract newly licensed nurses in their first job, and hospitals typically hire them. When employment patterns for newly licensed RNs are compared with the distribution of hospital-based employment settings in the overall population of RNs employed statewide, 66.3% of the existing RN workforce was reported to be working in hospitals in 2016.[7] Small but consistent trends year to year continue to reflect the ongoing shift in new graduate employment from acute care hospitals to a broader range of non-acute and community health settings.

The majority of newly licensed RNs working report doing so full time or a minimum of 32 hours per week (89.8%), with 4.2% working part time or fewer than 32 hours per week, and 6.0% working in occasional positions, per diem, or on call. There continues to be a slight shift over the past three years toward a greater number of new graduates working full time. Most survey respondents (80.8%) indicated they were working in a "job of choice" this past year, which has remained relatively high for two consecutive years compared with employment preferences reported in prior years: 83.0% reported working in a job of choice in 2016, 73.9% in 2015, 70.2% in 2014, 61.6% in 2013, 64.5% in 2012, and 62% in 2011. These combined trends are key indications the job market for new graduate nurses has recovered, is favorable and strong.

TYPES OF FACILITIES WHERE NEW GRADUATE NURSES
REPORT BEING EMPLOYED

Hospital	81.2% (811)
• Inpatient Care	64.9% (651)
• Emergency/Urgent Care	10.8% (105)
• Other Type of Department	2.9% (29)
• Ambulatory Care (Outpatient Surgery, Clinic etc)	1.8% (18)
• Home Health	0.3% (3)

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[7] Spetz, J., Chu, L., Jura, M., Miller, J. 2016 Survey of Registered Nurses. (biannual) Sacramento, CA: California Board of Registered Nursing, September 2017.

• Ancillary Unit	0.3% (3)
• Nursing Home Unit	0.2% (2)
Nursing Home/Extended Care/Skilled Nursing/Group Home	3.5% (35)
Rehabilitation Facility/Long-Term Acute Care	3.4% (34)
Home Health Agency (including hospice)	1.9% (19)
Correctional Facility/Prison/Jail	1.4% (14)
Private Medical Practice, Physician Office, Clinic	1.2% (12)
Inpatient Mental Health/Sub Acute Abuse	1.1% (11)
Ambulatory Surgery Center (free-standing)	1.1% (11)
School Health (K-12 or college)	0.9% (9)
Outpatient Dialysis Center	0.8% (8)
Public Clinic, Rural Health Center	0.7% (7)
Public Health or Community Health Agency (not a clinic)	0.7% (7)
Outpatient Mental Health/Substance Abuse	0.5% (5)
Occupational Health or Employee Health Service	0.5% (5)
Government Agency (other than public/community health or corrections)	0.4% (4)
Case Management/Disease Management	0.3% (3)
Urgent Care (non-hospital)	0.2% (2)
Self-Employed	0.2% (2)
Call Center/Telemedicine	0.2% (2)
Inpatient Hospice (not hospital-based)	0.1% (1)
University/College Academic Department	0.1% (1)

CLINICAL SPECIALTY OR POPULATION

General Medical-Surgical	22.6% (226)	Rehabilitation	2.0% (20)
Telemetry	11.5% (115)	Orthopedics	1.8% (18)
Critical Care/Intensive Care	10.0% (100)	Home Health	1.7% (17)
Emergency Care/Trauma	8.9% (89)	Work in Multiple Areas	1.6% (16)
Pediatrics	4.9% (49)	Cardiology	1.5% (15)
Oncology	3.6% (36)	Dialysis	1.1% (11)
Surgery/Pre-Op/Post-Op/PACU	3.3% (33)	School Health K-12, Post-Secondary Education	1.0% (10)
Geriatrics	3.0% (30)	Ambulatory/Primary Care	0.8% (8)
Psychiatry/Mental Health	2.6% (26)	Community/Public Health	0.7% (7)
Step-Down or Transitional Care	2.4% (24)	Hospice	0.7% (7)
Labor and Delivery	2.2% (22)	Corrections	0.7% (7)
Mother-Baby/Normal Newborn	2.2% (22)	Obstetrics/Gynecology	0.5% (5)
Neonatal Care	2.2% (22)	Ambulatory Care/Specialty	0.4% (4)

Newly licensed nurses reported finding jobs in a variety of ways, including: 40.0% obtained using a hospital or health facility website; 26.7% had clinical education experience at the health facility where they were hired; 21.6% knew someone at the hospital or health facility where they went to work; 21.0% found employment through a referral; 10.0% were hired through a job fair; 5.6% through social media, and 2.8% through volunteering. While respondents were able to select more than one category in answering this question, the

majority of those employed indicating having some type of prior relationship with the employer who hired them, consistent with prior years. Review of open-ended responses indicated that jobs were also found through networking, academic career placement services, military placement, general job advertisements, and through participation in a new graduate program.

Among the 18.9% (N=239) of respondents who indicated that they were not yet working as an RN, 43.1% had been looking for fewer than 3 months, 35.4% for 3-6 months; 8.7% for 6-9 months; 2.3% for 9-12 months and 0.5% for longer than 12 months.

REASONS FOR DIFFICULTY IN FINDING EMPLOYMENT REPORTED BY RNs

	2013	2014	2015	2016	2017
Lack of experience needed for position	92.1%	83.3%	85.0%	79.1%	72.9%
No position available	46.5%	41.3%	36.6%	26.7%	31.0%
Lack of a (minimum) of a BSN degree	37.8%	38.5%	30.1%	39.5%	21.1%
California hospital employers who prefer or require a minimum of a BSN degree upon hire[8]	80.4%	80.5%	85.3%	57.6%	

Respondents not yet employed as an RN reported three main reasons given by potential employers for not extending a job offer. These included lack of experience for the position (72.9%); no positions available (31.0%) and BSN degree preferred or required (21.1%). While the issue of RNs having no prior experience remains the primary barrier to hire, this seems to be declining over time as reported by RNs. This can also reflect that more employers are hiring newly licensed RNs. RNs reporting lack of a BSN to be a barrier in finding employment in this study is noted to be lower than reported by the annual Survey of Nurse Employers in California conducted by UCSF in collaboration with the Hospital Council of Southern California (HASC) and *HealthImpact* in 2016. This may indicate that an employer preference or expectation that RNs have a minimum of a BSN degree upon hire may not always be evident or known to applicants. A smaller share of hospitals in 2017 indicated having a preference or requirement for hiring RNs with a minimum of a BSN degree compared with prior years. This is unusual given the increased importance academic progression has had in recent years. With more newly licensed ADN RNs dually enrolled and starting BSN coursework while enrolled in an ADN program or enrolling in RN to BSN programs upon completion of their ADN, it is possible that more employers are open to hiring newly licensed ADN RNs who are known to be in the process of completing a BSN degree.

Additionally, 13.8% of RNs not yet employed indicated their resume was weak with regard to volunteering in health care or extracurricular activities that might have enhanced their experience or skills to strengthen options for employment, 4.8% were told their academic preparation was insufficient for the position scope or specialty; 1.4% reported being told they'd been out of school too long; and 0.5% reported not getting a job offer related to having a low GPA.

Nurses who were not working as RNs were asked what they were doing at this time. Data indicated 26.5% were working in non-nursing/non-health-care jobs (21.8% working part time, and 4.7% full time), and 26.1% indicated working in health care although not as an RN. Thirty-six percent (36.5%) of nurses reported they were currently continuing their education, which was slightly lower than the prior two years (41.0%) yet

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[8] Bates, T., Chu, L., Keane, D., Spetz, J. Survey of Nursing Employers in California, Fall 2016. San Francisco, CA: Philip R. Lee Institute for Health Policy Studies, University of California, San Francisco. July 2017.

remained up from 20.5% in 2014. RNs also indicated they were volunteering in a health-related service (15.6%) while looking for a job. Beyond these primary response categories, 26.1% of respondents indicated they were doing something other than working as an RN, categorized in the survey tool as "other" with 55 open-ended narrative responses describing activities they are currently involved in while looking for employment. These optional open-ended responses provided qualitative evidence that many newly graduated nurses are motivated and eager to begin professional practice, staying engaged in career-enhancing activities. Typical categories reported with the greatest frequency and often in combination comparable to activities reported in prior years include: volunteering, continuing their nursing education to obtain a BSN, MSN or Advanced Practice degree, taking CE courses to increase skills, working in a temporary RN role or position, working in the healthcare field but not as an RN, working in a non-health-care job, continuing in a prior job, continuing to work as an LVN, and participating in an RN Transition program or unpaid internship.

PARTICIPATION IN TRANSITION TO PRACTICE PROGRAMS FOR NEWLY LICENSED RNs

Transition to practice programs were identified in the survey questionnaire as programs provided for newly licensed graduate nurses, conducted either by a school of nursing prior to employment, or by an employer, upon hire. Of those employed, 52.7% (N=521) indicated participating in an employer-provided program following graduation upon hire, 4.2% (N=41) participated in a program provided by a school of nursing after licensure and graduation and prior to hire; and 2.0% (N=20) reported participating in both types of programs. Participation in any or all types of transition to practice programs were reported to have been completed by 56.9% (N=582) of newly licensed RNs prior to or upon employment in their first RN position.
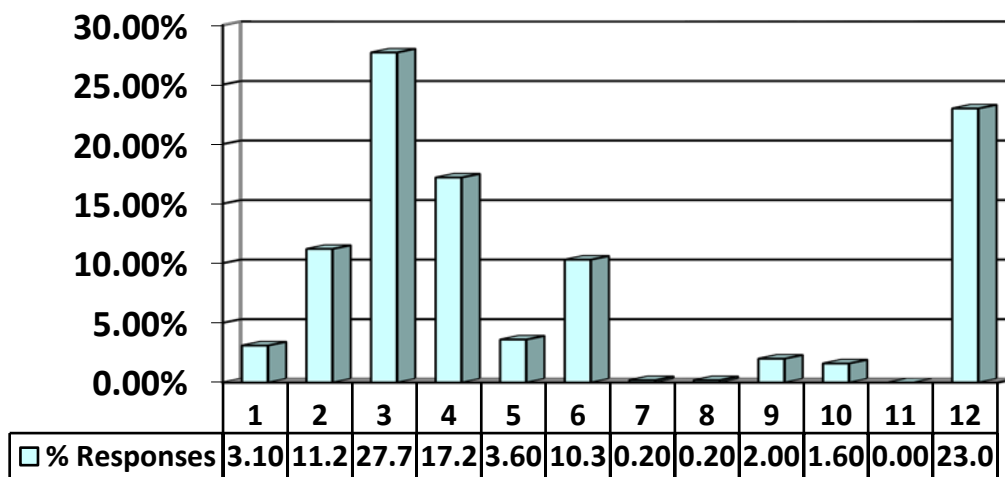
PARTICIPATION IN TRANSITION TO PRACTICE PROGRAMS

EMPLOYED RNs THAT REPORTED PARTICIPATING IN A TRANSITION TO PRACTICE PROGRAM	Fall 2015	Fall 2016	Fall 2017
Participated **only** in program provided by a school of nursing	2.8% (N=14)	5.2% (N=57)	4.2% (N=41)
Participated **only** in program provided by their employer	40.9% (N=203)	41.6%(N=460)	52.7% (N=521)
Participated in **both** school-based and employer-provided programs	1.8% (N=9)	0.8% (N=9)	2.0% (N=20)
Total participation in **employer-provided programs**	42.7% (N=212)	42.4% (N=469)	54.7% (N=541)
Total participation in **any type** of transition to practice program	45.6% (N=226)	47.6% (N=526)	58.9% (N=582)

These results provide evidence of the current baseline of transition to practice programs completed in the prior year by newly licensed RNs in California, helping illuminate progress in meeting the 2020 IOM Future of Nursing Report goal that all newly licensed RNs complete a transition to practice program as they enter practice. A significant increase of 12.3% participation in employer-provided transition to practice programs was reported by newly licensed RNs, compared with the prior year.

Nurses reported the length of employer-provided programs (including both classroom and supervised clinical components) which varied significantly, from one to twelve months. Program lengths most frequently reported were clustered, ranging from two to four months reported by 73.2% (N=310) of respondents, six months reported by 10.3% (N=57), or twelve months as reported by 23.0% (N=127) of working nurses. This pattern indicates the prevalence of distinctly different types of practices or program models, anticipated to have varied design, content and curricular components, with both directly supervised and mentored experiences over time. Programs conducted based on national standards and those that are also nationally accredited are anticipated to be twelve months in length. Further examination of the scope and composition of various types of employer-provided transition to practice programs and evidence-based outcomes remains a priority to guide further adoption and expansion.

Length (# months) of New Graduate RN Transition to Practice Programs Provided by Employers

	1	2	3	4	5	6	7	8	9	10	11	12
☐ % Responses	3.10	11.2	27.7	17.2	3.60	10.3	0.20	0.20	2.00	1.60	0.00	23.0

One third of the nurses, 30.7%(N=35) who participated in a transition to practice program prior to employment provided by a school of nursing reported the program helped them to obtain employment, while 25.4% (N=29) indicated it did not. A large number of respondents, 43.9% (N=50) did not reply either yes or no, but provided specific comments indicating some believed participation in the program may have influenced hiring but were uncertain, or they did not know. This may indicate an opportunity to more directly and deliberately connect available academic programs and their newly licensed RN participants with potential employers, to strengthen these programs as intended pipelines to employment.

Participants were asked if they paid fees to participate in the transition to practice program being conducted prior to employment, or if they were paid in some way to participate. Nurses that participated in a transition to practice program prior to employment indicating they paid tuition or enrollment fees to participate were reported by 41.8% (N=41) of the respondents. No fees were paid by 19.4% (N=19) of those enrolled in a program. While 28.6% (N=28) reported they did not receive any payment for participation, a small number of respondents 13.8% (N=13) indicated receiving a stipend or payment for participation in a program. The survey question regarding fees or payment allowed respondents to select more than one answer to this question.

COST PAID OR PAYMENT RECEIVED AS REPORTED BY NEWLY LICENSED NURSES THAT PARTICIPATED IN A TRANSITION TO PRACTICE PROGRAM PRIOR TO EMPLOYMENT (N=98*)

Tuition or enrollment fees were paid by participants	41.8% (N=41)
No fees were paid by participants	19.4% (N=19)
Participants did not receive any payment for participation	28.6% (N=28)
Nurses received a stipend or payment for participation	13.8% (N=13)

*Total answer choices exceed the number of respondents, as more than one answer was allowed.

All respondents, regardless of employment status or participation in a transition to practice program, were asked what program incentives did or would engage their participation. The opportunity to gain experience as a licensed RN, increase skills, competencies, build confidence, and the opportunity for potential employment in a specific practice area or specialty were reported most often as primary incentives:

➢ Opportunity to gain experience as a licensed RN (76.5%)

➢ Opportunity to increase skills, competencies, and confidence (73.0%)

➢ Opportunity for potential employment in specific practice area or specialty (62.0%)

➢ Improving resume and employability (57.4%)

➢ Opportunity for potential employment where clinical education was scheduled (53.3%)

➢ Obtaining college credit applicable to BSN or MSN degree (40.4%)

➢ Deferment of student loans (36.5%)

ATTITUDES AND INTEREST REGARDING TRANSITION TO PRACTICE PROGRAMS

Newly licensed RNs were asked about their interest in participating in a transition to practice or new graduate residency program following graduation and prior to being hired, whether they had participated in a program or not. Declining interest in unpaid programs or those that required tuition to be paid was reported compared with prior years. This change in interest may be influenced in part by greater job opportunities and increased employer demand for hiring newly licensed RNs in recent years. The growing importance of maintaining health and preventing illness through care provided in ambulatory care settings is driving the need for more RNs to practice in primary care and other types of non-acute settings. There is further opportunity to support newly licensed RNs to work in non-acute or specialty practice areas through transition to practice programs.

RN INTEREST IN A TRANSITION TO PRACTICE PROGRAM	FALL 2014	FALL 2015	FALL 2016	FALL 2017
Interest in a program if it was an unpaid internship	66.1%	47.8%	32.4%	33.5%
Interest in a program if payment of tuition was required	33.5%	30.8%	20.5%	19.4%
Interest in a program to gain experience in a non-acute health care setting	51.0%	56.7%	44.8%	47.6%

STATEWIDE SURVEY SUMMARY

This sample survey provides a snapshot of the hiring experiences of newly licensed RNs in California in the prior 12-month period, with comparison of trends noted in recent years. Such evidence-based findings of these employment patterns provides valuable information for nurse leaders and educators working together to align academic programs with emerging workforce needs by supporting the development and integration of competencies in specialty areas and with emerging roles. Caution is advised in interpreting the results from this statewide study due to the moderate survey response rate of 27.9%, as findings may not be representative of the population of all newly licensed graduates in distinct regions of the state. This is particularly important when overall results are analyzed and reported by region due to the small number of respondents in each area. It is possible that nurses who have not found employment may have been more motivated to answer the survey, and if so, the actual employment rate in the overall population of newly licensed nurses may be higher than reported. The survey methods have been consistent each of the eight years the study has been conducted, and the survey instrument has included standard questions to inform progress and trends over time.

These results reflect the demographic pattern and regional distribution of new graduates reported in the annual BRN school survey, and also mirror data obtained from other sources including employer surveys of nurses, and surveys fielded by schools of nursing. Data from this current California survey indicates a high and stable employment rate as reported by newly licensed RNs for the fifth consecutive year within the past eight years the survey has been conducted.

California trends reported in this survey indicate that of newly licensed, employed RNs, 96.4% are employed within 6 months. This finding is consistent with findings reported by the American Association of Colleges of Nursing (AACN)[9] in conducting its eighth survey of nursing schools offering baccalaureate and graduate programs in the U.S. to assess the experience of new graduates in finding employment. The national AACN survey found 94% of entry-level BSN and 95% of entry level MSN graduates had been offered a job within 4-6 months of graduation. Employment rates were noted to vary across the country by region, with the lowest rates reported to be in the West with 86% BSN and 95% MSN respectively.

California employment trends are relatively consistent with findings reported by the National Student Nurses' Association (NSNA) study of new graduate employment trends through a post-graduate RN survey conducted annually since 2008. Their national fall 2016 survey findings reported in summer 2017 indicated employment rates continue to trend up with 88% of new graduates employed four months following graduation and 94% by six months.[10] The NSNA analysis of new graduate RN employment data continues to indicate regional differences across the country from a low of 85% in the Western Region to 88% in the Northeast, 92% in the South, and 94% in the Central region. Differences in national employment rates by type of RN degree were also reported, with 84% ADN, 92% BSN, and 93% Masters Entry Program RNs that graduated in spring 2016 reported to be employed within 6 months at the time of the study in fall 2016. (Mancino, D., Dean's Notes, 38 (4-5) summer 2017).

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[9] American Association of Colleges of Nursing, AACN Research Brief (December, 2017). Employment of New Nurse Graduates and Employer Preferences for Baccalaureate-Prepared Nurses Report.

[10] V. Feeg, D. Mancino, National Student Nurses' Association, Dean's Notes Volume 38, No. 4-5 (Summer, 2017). Upward Peak in Employment Suggests a Changing Future Landscape of Workforce Issues.

While various state and national surveys have some notable differences in survey populations, questions, and measures than this California New Graduate Employment Survey, there are consistencies in findings and trends comparing employment experiences supported with evidence-based results across various studies. National, statewide, and regional trends across the past eight years reflect workforce needs and the emergence of a progressive and dynamic job market for newly licensed RNs.

CONCLUSIONS

California needs to prepare newly licensed RNs to practice in traditional acute care settings as well as emerging new roles and settings to meet evolving healthcare trends and demand, ensuring the state has the supply of nurses needed to provide health care in diverse settings and services. Interest in nursing as a career and enrollment of new students in RN programs remains strong with slight increases in the number of RN program completions annually. With 11,191 new graduates in California completing RN programs in the 2015-2016 academic year, current workforce demand and nursing education supply are said to be in balance. The Health Resources and Services Administration (HRSA) National Center for Health Workforce Analysis projects that RN supply in California in 2030 will be 11.5% less than demand. The California Employment Development Department forecasts there will be 300,300 registered nurse jobs in California by 2024 (California Employment Development Department, 2016). These indications are reminders of the importance for California to continue monitoring workforce changes, and position to support future growth in nursing pre-licensure programs. The nursing workforce needs to also be prepared to fill more diverse roles, respond to employer expectations for RNs to be prepared with at least a BSN degree, and the growing demand for nurses to be prepared to practice in specialty areas.

It is evident from the survey that newly licensed nurses are eager to obtain employment, often working a combination of temporary or part-time jobs, with further engagement and interest in career options outside traditional acute care hospital settings. With the improved economy and as an increased exodus of experienced nurses is now retiring, the demand for new nurses is anticipated to remain strong and continue to rise. This trend is further impacted by increasing demand resulting from an aging population, a greater proportion of insured individuals having more access to care, and growth in services resulting from these trends. Hospitals have historically been the largest employer of nurses and new graduates. California's hospital RN vacancy rates reported to be relatively low in prior years have been increasing, with average vacancy rates of 3.2% (2014), 4.9% (2015), and 5.9% (2016) reported.[11] Hospitals indicate a growing need for open positions to be filled with RN applicants experienced in specialty areas. Nurse leaders from both academia and practice should continue to share best practices and innovative strategies to ensure that new RNs maintain, gain, and expand essential competencies needed to meet emerging health care needs in multiple practice settings.

This survey also indicates transition to practice programs and residencies have been important and effective ways for new nurses to obtain further skills and competencies needed to increase employability. Lack of experience as an RN continues to be reported as the number one reason new graduates are not offered available jobs. Transition to practice programs have and will continue to provide options for specialty training and guided experience as newly licensed RNs enter the workforce.

The research team wishes to thank all of the newly licensed RNs who took time to share their hiring experiences with us. These results will be reviewed by nursing leaders, employers, schools of nursing and others concerned about the challenges new graduates have in finding RN jobs, the importance of preparing

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[11] Healthcare Workforce Survey Report, Fourth Quarter 2016, Hospital Association of Southern California.

future nurses consistent with hiring needs, and the value of establishing effective transition to practice programs. Results from this annual survey continue to inform strategies that support and improve collaborative academic practice pathways to employment for newly licensed nurses.

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The complete report is available on the *Health**Impact*** website: www.healthimpact.org