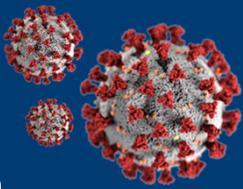


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Kaiser Permanente Northern California Physician Redeployment During COVID-19

Mary Meyer, MD, MPH
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Try to remember back to March 2020 ...

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March 2020

The Situation

The 2019-novel coronavirus has been renamed COVID-19

A devastating COVID outbreak is winding down in Wuhan, China

An equally devastating COVID outbreak is tearing through Italy

Most of the US is in shelter-in-place in order to “flatten the curve”

Medical facilities in Santa Clara County are surging with inpatient and outpatient COVID patients

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March 2020

What We Were Worried About

COVID-19 has the potential to overwhelm our health care system

Disparities exist within patient populations and within geographical regions

Differential impact of the pandemic on different specialties

In addition to managing a surge, our physicians are learning how to manage this disease

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Who We Are ...

Kaiser Permanente Northern California

- Fully integrated health care system
- 21 Medical Centers
- 242 Medical Office Buildings
- 51% of the insured population in Northern California
- Large geographic area



Membership	4.5 Million
Hospitals	21
Medical Offices Buildings (Outpatient Facilities)	259
Physicians	9,547
Employees	39,630

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Who We Are ... (cont.)

Kaiser Permanente Northern California Emergency Management

Extensive Regional and Medical Center-based Emergency Management Program:

- All hazards including mass casualty surge management, hospital evacuation, emerging infectious disease response, air quality, active shooter, others
- Regional Disaster Physician Redeployment program for wildfire/evacuation response

Kaiser Permanente Northern California Population Management

Extensive Regional and Medical Center-based Population Care Program:

- Mature regional and med center quality infrastructures including registry development, analytics, risk-stratification, pop care tools and technologies, quality support physicians and staff
- Member engagement opportunities including 24/7 call center, and asynchronous care via robust on-line resources

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The Question:

How do you design a physician redeployment system to address physician staffing needs during a COVID surge that supports patient-centered care in the safest and most efficient way, while simultaneously supporting physician wellness?

The Answers:

*The Kaiser Permanente
Northern California Physician
Redeployment Program & Toolkit*

The KP NCAL COVID Home Care Team

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Agenda

COVID-19 Epidemiology: A Tale of Three Surges

Physician Redeployment Concepts & Toolkit

Physician Redeployment Timeline

Training for Physician Redeployment

KP NCAL COVID Home Care Team

Lessons Learned

Questions

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COVID-19 Epidemiology: A Tale of Three Surges

Physician Redeployment Concepts & Toolkit

Physician Redeployment Timeline

Mary Meyer, MD, MPH

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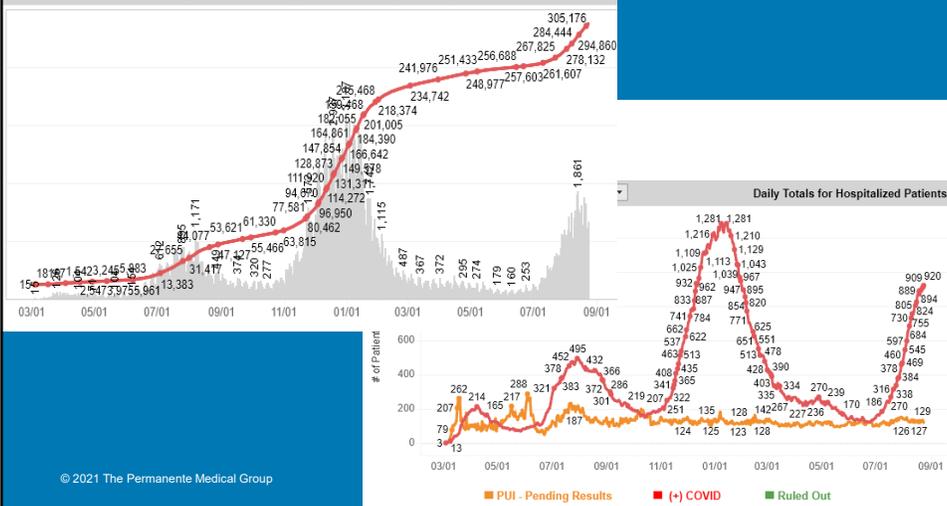
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COVID-19 Epidemiology: A Tale of Three Surges

Status at Midnight	ED	Admitted	ICU	Admitted-Vent	Current Active Cases	Total To Date
(+) COVID	38	800	186	127	34,439	307,743
PUI - Pending Result	91	97	11	6	398,126	1,324,796

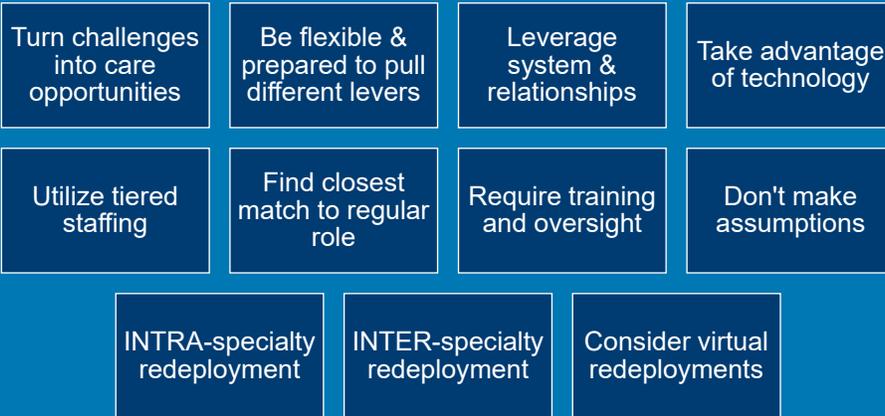
Daily and Cumulative (+) COVID Patients (IP and OP)



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Physician Redeployment: Concepts

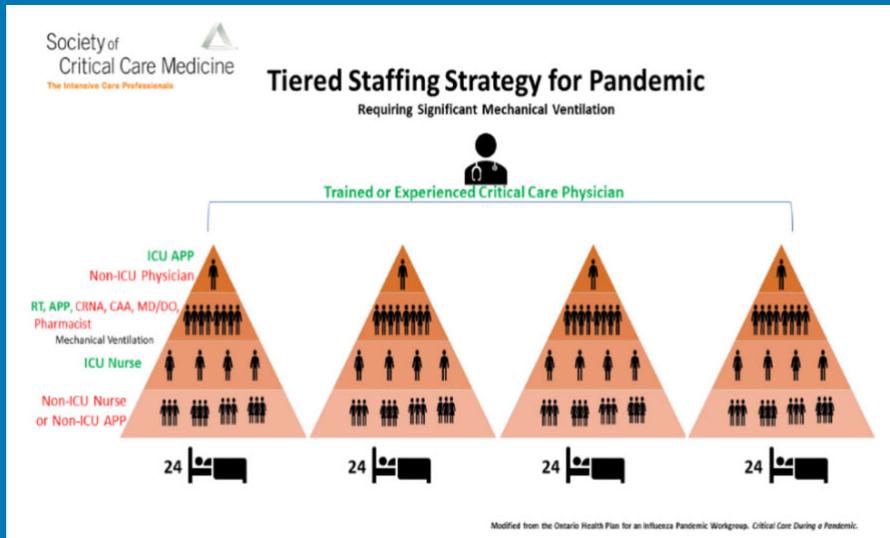


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Physician Redeployment: Concepts (cont.)



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Physician Redeployment Toolkit

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Physician Redeployment Toolkit

Physician Redeployment Checklist

- ✓ Determine local staffing needs
 - Consider what FTE supply is needed for core operations
 - Assign local leadership position (ex: APIC HR) to coordinate staffing needs
- ✓ Solicit list of physicians for redeployment
 - Consider all physicians as part of the labor pool
 - Solicit preference for work in: ICU, Med Surg, ED, Specialty Palliative Care
- ✓ Ensure access to the relevant KPHC Template
 - Submit list of volunteers to local site support. Site support will provide new security
- ✓ Ensure appropriate Credentialing & Privileging
 - Follow Disaster Privileging process
 - Review Credential eCard
- ✓ Ensure physicians complete initial requirements:
 - Confirm Fit testing
 - Confirm PPE training
 - KPHC Template
- ✓ Ensure physicians complete additional relevant trainings:
 - Department specific didactic training
 - Shadow in redeployed department
- ✓ Track physicians:
 - Name, NJID, Current Facility, Upcoming PTO
 - HC template
 - Privileging
 - Training Completed
- ✓ Local orientation
 - Discuss onsite once deployed
 - May include facility and/or unit orientation as required

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Physician Redeployment: Logistics

- Regional physician redeployment calendar with shifts listed by site/date/specialty
- Regional physician redeployment hotline staffed M-F, 7a.m.-7p.m.
 - ✓ Answered questions
 - ✓ Scheduled shifts
- On-site credentialing confirmation accessible by iPhone in order to grant disaster privileging
- Weekly email blast to encourage enrollment
 - ✓ Sent to all physicians in a specialty (200-800 physicians)
- Voluntary Redeployment
- Travel Time Compensation
- Hotel Vouchers

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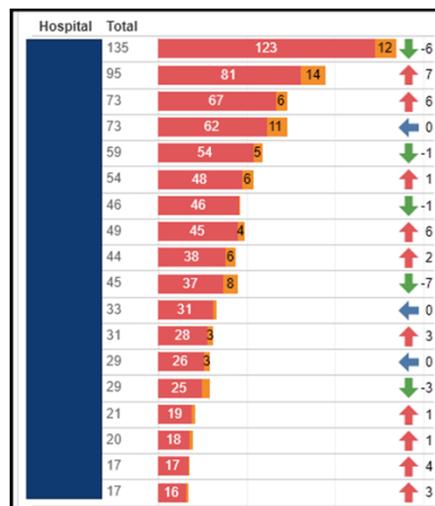
Physician Redeployment Timeline The First Surge: Spring / Summer 2020

Problem:

Medical Centers & Service Areas are unevenly impacted

Solution:

INTRA-specialty redeployment of Emergency Physicians, Hospitalists, and Intensivists across facilities



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Physician Redeployment Timeline The Second Surge: Winter 2020

Problem:

Intensivists and hospitalists are exhausted

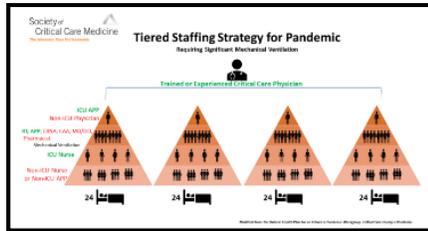
Intra-specialty redeployment is fully deployed

Specialties are unevenly impacted: Critical Care, Hospitalists, *Emergency*, Palliative Care, Adult Primary Care

Solution:

INTER-specialty redeployment

“Intensivist Extenders”



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Physician Redeployment Timeline The Second Surge: Winter 2020

Intensivist Extenders:

Emergency, *Hospitalists*, Cardiology, Anesthesiology

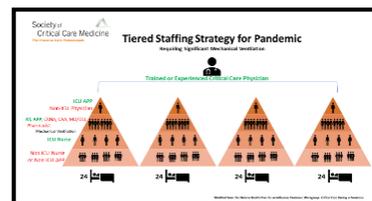
Tiered Staffing

- ▶ Partner with intensivists by performing tasks/clinical care within their areas of expertise
- ▶ Examples: procedures, writing notes, managing vent settings, contacting families

Extenders strongly encouraged to access training (clinical and technological) developed for the program

Compensation offered for training time

Voluntary



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Physician Redeployment Timeline The Second Surge: Winter 2020 (cont.)

Problem:

Intensivists and hospitalists are exhausted

Inter-specialty redeployment (Intensivist extenders) is fully deployed

Solution:

Leverage technology → Virtual INTRA-specialty redeployment

Hospitalist virtual cross-cover



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Physician Redeployment Timeline The Second Surge: Winter 2020 (cont.)

Virtual Hospitalist

Open to Hospitalists

Hospitalists work virtual shifts via phone/facetime
managing non-emergent questions/concerns regarding
patients

Always an adjunct to hospitalist working physically in the
medical facility (in case of emergencies)

Strongly encouraged to access tech training developed for
this program



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The Tallies As of April 2021:



375 Shifts Filled

- Ten Medical Centers
- One Mass Vaccination Site
- Multiple Virtual Shifts

Five Physician
Specialties

Zero No-Shows

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Mosccone Mass Vaccination Center: Spring 2021

One of the first mass
vaccination centers to open in
the US

Physician staffing provided by
The Permanente Medical
Group

Open to emergency medicine
physicians with experience in
event or disaster medicine

Online guide and on-site
onboarding with initial shift

Extraordinarily popular shifts



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Training for Physician Redeployment

Suzy Fitzgerald, MD, FACEP, FAEM

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The Question:

How do you train redeploying physicians?

The Answer:

Depends on the “Who, What, Where, When, & How” of their redeployment

1. Focus on what the redeployed physicians need to know to work as safely and efficiently as possible in the redeployment area
2. Consider knowledge and skillset differences between regular clinical area and the redeployment area
3. Training and redeployment assignment should target the closest fit between regular role and redeployment role

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Who & What

WHO

Who is being redeployed?

Who will they be working with?

Who will be supervising them?

WHAT

What do they do in their regular role?

What will they be doing in the redeployment role?

How does this differ?

How will the work be divided—procedures, etc.?

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Where & When & How

WHERE

Where do they normally work—in what type of clinical setting?

Where will they be redeploying to?

What are the key differences?

WHEN

How quickly will they be redeployed?

When do they need to be ready?

HOW

How do you train physicians efficiently in the era of COVID?

How will you do this in a safe, reliable, reproducible, trackable, and scalable way?

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Training Development Steps



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Training Content Categories

The Logistics	Administrative Processes & Workflows
	Electronic Medical Record Procedures
	Employment Logistics / HR Considerations
	Area-Specific PPE Requirements (PAPR/CAPR Training & N95 Fit Testing)
The Medicine	Clinical Guidelines, Workflows, & Algorithms
	Redeployment Area-Specific Training Ex: ICU for the Non-ICU Physician Inpatient Medicine for the Outpatient Physician

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Determine Training Modalities & Develop Modules

How do you deliver the most efficient, effective, reproducible, trackable, and safe training to an audience spread out over a large geographic area in a timely manner?

- Real-Time Virtual Sessions
- Video / On-Demand Modules
- On-Site Orientation
- Shadow Shifts
- In Situ Simulation for "Mission-Critical" Topics
 - COVID Intubation
 - COVID Code Blue Scenarios

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Create & Locate Support Resources



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Recommended Site-Specific Orientation for ICU Redeployment: Technology

Review Inpatient Health Connect ICU Care Functionality

- Managing Patient Lists
- Rounding and Patient Data
- Documentation: H&P, Progress Notes, and Procedure Notes
- Transfer Navigator
- Set-up HC Preferences (Rounding Reports, Order Sets)
- Intensivist to Share Patient Lists and Note Templates

Additional Education

- Review Training Resources
- Targeted Clinical Review by Intensivist as Needed

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Recommended Site-Specific Orientation for ICU Redeployment: Operations

General Orientation

- Daily Schedule (Sign-outs, MDC Rounds)
- Provider Roles and Responsibilities (Attending, Proceduralist, Other)
- Offices, Door Codes
- Equipment (Airway, Lines, Emergency PPE, Ultrasound)
- Communication Preferences (Pager, Cortext, Other)
 - ✓ MD-MD
 - ✓ RN-MD
 - ✓ Family Communication

Patient Transitions

- Overnight Sign-out and Handoffs
- ICU Transfers
 - ✓ Sign Out Expectations
 - ✓ Transfer Notes

Code Blue Procedures

- Code Team Structure
- Emergency PPE Procedures
- Local Strategies to Minimize Exposure

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COVID-19 Home Care in Kaiser Permanente Northern California

Rick Dlott, MD

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Our Challenge in March 2020:

How do we optimize the *assessment and care* of the **90%** of our COVID-19 positive patients recovering at home?



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Vision for the COVID Home Care Team Program



- **Support our patients**
 - Home recovery
 - Home prevention



- **Assess patients who need more care**
 - Do members need 911, ED, PCP follow-up?
 - Document Sx onset date, 'hidden' co-morbidities



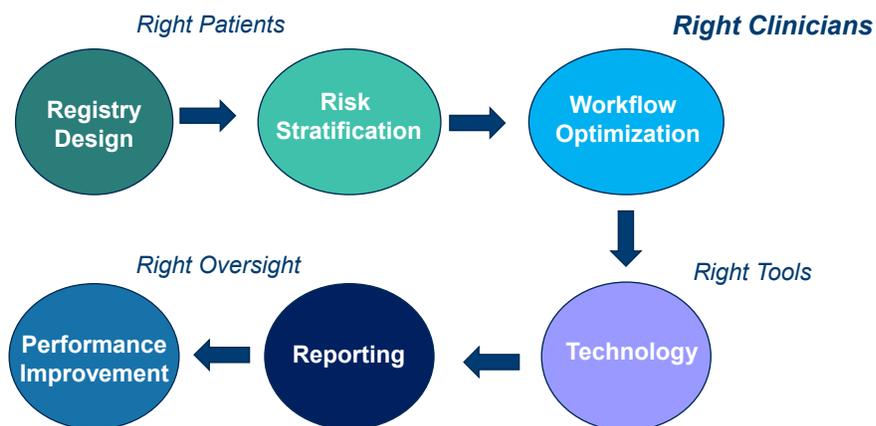
- **Support each other**
 - Internal Medicine, Family Medicine, ED, etc.
 - Other Medical Centers experiencing a surge

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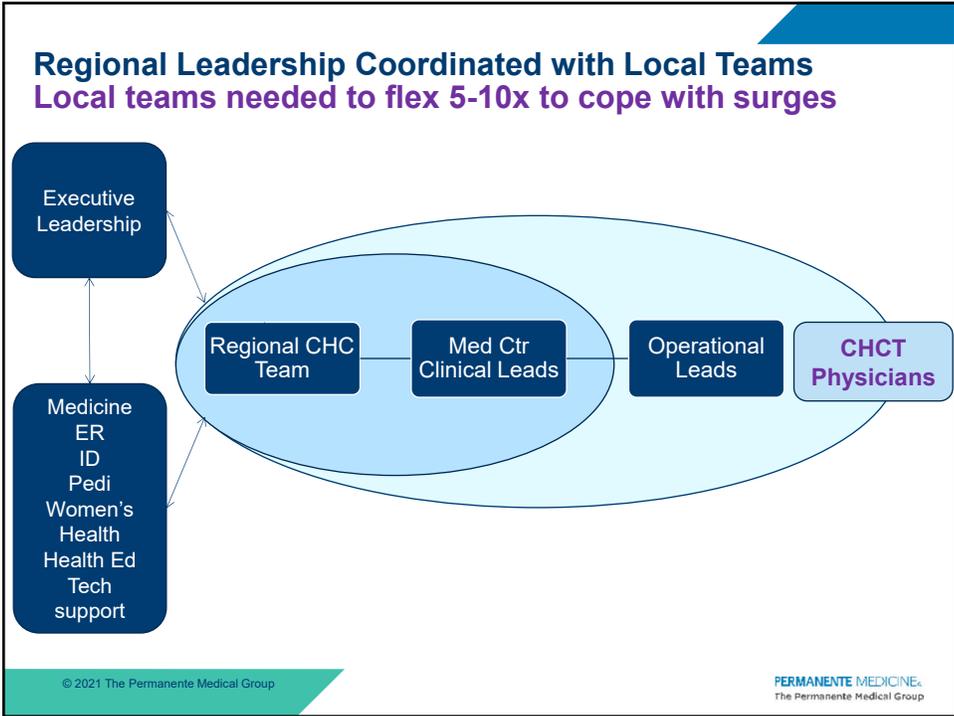
How did we do it? We built on 20+ years of experience doing Pop Care!



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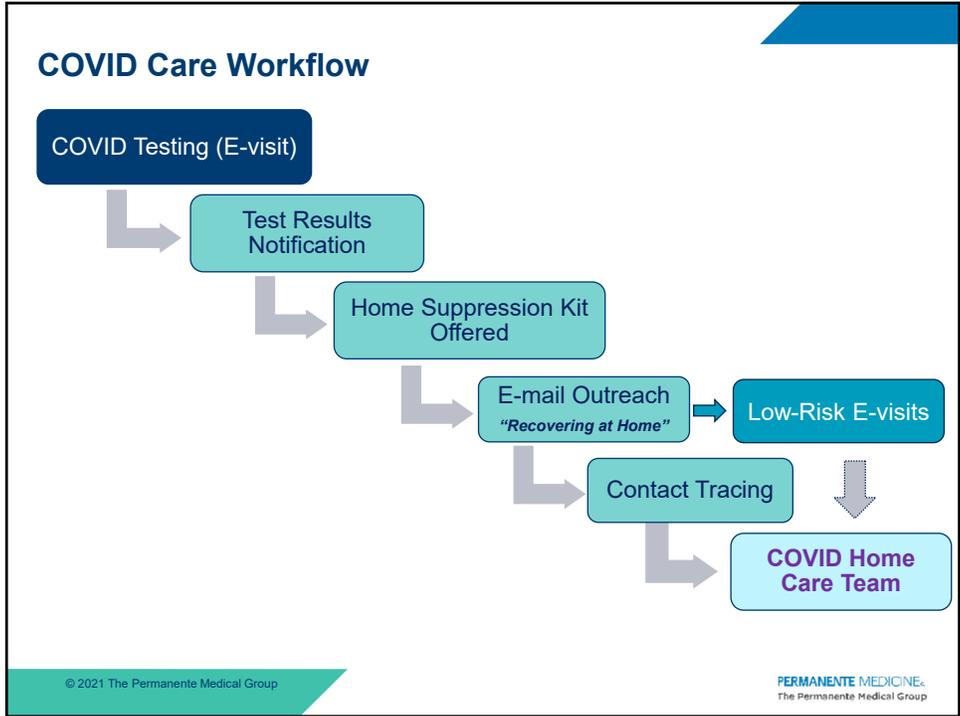
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Risk-Stratify Our Population using Augmented Intelligence

Risk Level ED / Hosp	Examples
High 10% / 11%	<ul style="list-style-type: none"> • Organ Transplant • O2 at Home • Cancer Dx • Post hospitalization
Mod 8% / 4%	<ul style="list-style-type: none"> • Age over 60 • Uncontrolled Diabetes • Recent Cardiac Event • Recent ED visit
Low 4% / 1%	

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COVID-19 Home Recovery Support

Automated Email Outreach:
Advice, monitoring, isolation guidance and mental health support.

Available on-line and through our 'My Doctor On-line' App in **English, Spanish and Chinese.**

My Doctor Online
The Permanente Medical Group

Kaiser Permanente

You have new information about your care from Kaiser Permanente.

Sign on to My Doctor Online to view information about how to care for yourself and when to call us.

Sign On

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Get Care

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Regional COVID-19 Home Prevention Support Program

Who:

Members with COVID-19 in household situations that put others at risk

How / When:

Members learn about this no-cost program when notified they are COVID +

What:

A contracted vendor mails a Suppression Kit to their home.

Vendor phone support: Education, problem solving to minimize viral spread

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Quarantine Support Kit Contents

See Chapter 2 (page 8) of the Caregiver's Guide to learn how to properly use the items in this kit.

Household Size	Duration of Supplies
3 people	14 Days

Hand Sanitizer

One-Time-Use Masks

Digital Thermometer

Disinfectant Spray

Alcohol Swabs

Waste Bags

Soap

Latex-Free Gloves

Paper Dishes & Cutlery

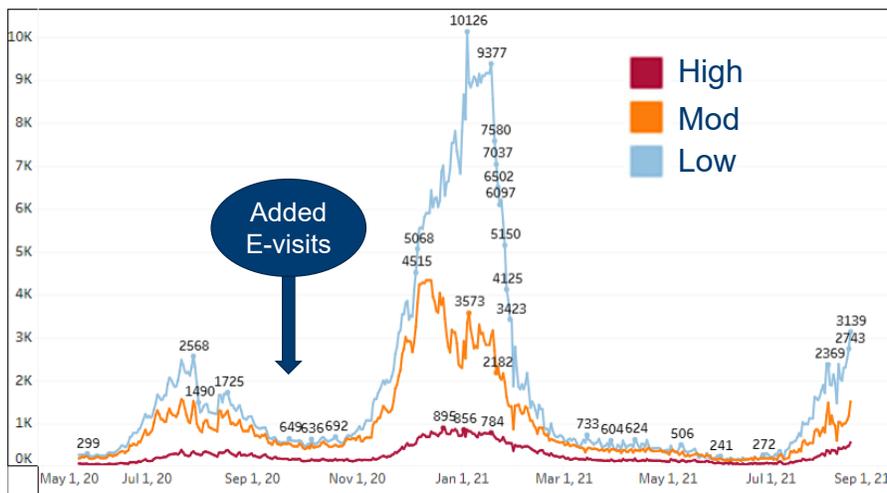
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CHCT COVID Cases Pilot March 22nd - Live April 22nd

COVID-19 Risk Type Trend
Medical Center: All



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Redeploying Physicians to Help with COVID Home Care

How did we cope with 10x surge demands?

- With regional executive leadership approval . . .
- Message sent to Dept. Chairs / Chiefs:

“If you have physicians who can help with CHCT in the next two weeks, please have them contact us and provide their availability”

- Physicians used local dept budgets to help across med centers when needed
- ~ **450** Physicians participated within their own med center from multiple specialties
- 48** Physicians participated in cross-med center efforts

Specialties		
Allergy	Nephrology	Gastroenterology
Cardiology	Ortho / Podiatry	Head & Neck Surgery
Dermatology	Surgery	Oncology
Endocrine	Plastic Surgery	Radiology
ED / Minor injury	Rheumatology	Urology
Continuing Care / SNF	Ob / Gyn	Ophthalmology

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By the Numbers . . .

Since March 2020

270,000

Patients followed by the COVID Home Care team

4400

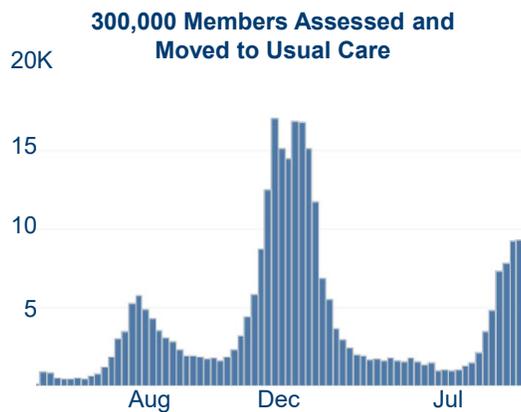
Patients referred to an emergency department

1,100,000

Total number of case reviews, outreach efforts, and contacts

3100

Hours of time donated to program by physician specialists



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Here's What We Learned:

Redeployment Can Be Stressful

- Stress / Exhaustion / Fear / Uncertainty
- Unfamiliar facility & unfamiliar specialty

The Struggle is Real

- By late winter, all facilities were impacted.
- We struggled to fill shifts

Innovation & Flexibility Essential

- Be nimble
- Don't make assumptions

Silos Exist

- Physicians often unaware of other physicians' working conditions & medical center impacts
- Large variability in willingness to redeploy as a result

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Here's What We Learned: (cont.)

Tiered Staffing Has Limitations

- Limits to the work a physician can perform in another specialty
- Tiered staffing is psychologically and physically difficult
- Physician care is affected by care team staffing (nursing, RTs)

Logistics

- Regional calendar/hotline had few miscommunications
- Physicians were committed to their shifts: zero no-shows

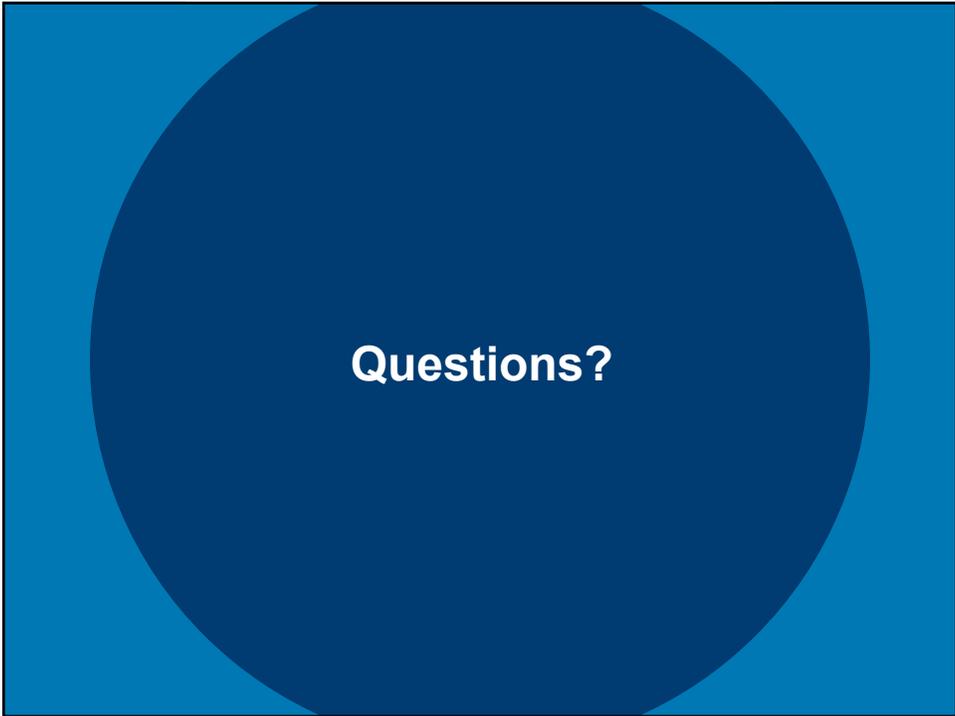
If You Build It, They Will Come

- Compassion and courage
- Weekends and night shifts

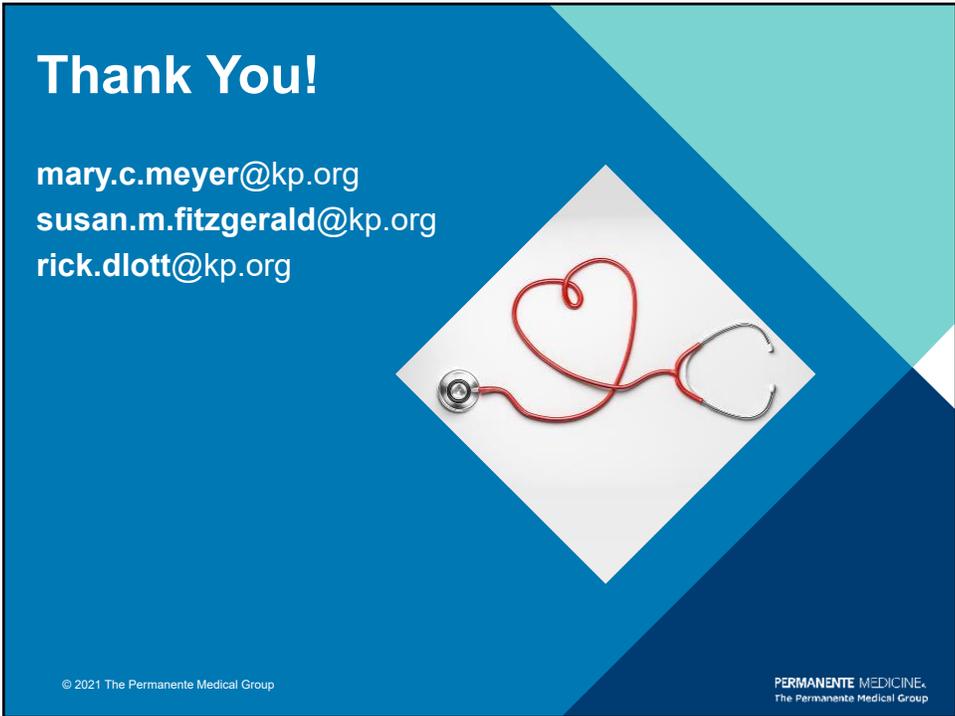
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