**California Department of Public Health (CDPH)**

**Hospital Bed Tracking System**

**December 2024 Update**

**Summary**

The COVID-19 pandemic highlighted a need for timely and accurate hospital bed capacity data. This was especially critical in the early days of the pandemic response as state and local officials, hospitals, and others had limited insight into the number of hospital beds available to take infected patients. The absence of data and timely information impacted the abilities of government officials, hospitals, and others to make data-informed decisions on hospital utilization and level-loading. This was especially evident in the early days of the pandemic response, and it resurfaced in the 2022-23 surge in pediatric hospitalizations due to respiratory viral illnesses. Future surges in hospital utilization are a certainty in California for which CDPH continues to prepare and identify ways to improve its response. To this end, CDPH began evaluating systems that could provide insight into hospital bed capacity and has selected the Healthcare Capacity System (HCS), developed by Apprise, an affiliate of the Hospital Association of Oregon.

**Background on HCS**

In 2021, realizing the need to understand the capacity of the hospital care system and coordinate activities across hospitals, a group of health systems in Oregon agreed to develop a real-time bed capacity system.

The HCS captures and shares real-time data on bed capacity trends, peak occupancy rates, divert status, and other critical metrics. Data is securely and automatically sent from the electronic health records (EHR) of participating hospitals. The data provide crucial information to health care providers and administrators, enabling them to make day-to-day, data-driven decisions. All data feeds are fully automated, closely monitored by Apprise, and completely secure. In addition to more reliable and up-to-date data, the system does not require any manual reporting of bed capacity data, reducing the burden on hospital staff and improving the ability of hospitals to manage and coordinate patient surges. In addition, no personally identifying or personal health information is included, and the automated system fulfills any federal reporting for hospitals.

HCS has been implemented by all of Oregon’s hospitals with the following outcomes:

* A decrease in the average patient transfer time from 20 to 4.5 hours, saving hospitals over 45,000 staff hours. The data available through the system has resulted in reductions in the time and work necessary to find an available and appropriate bed for a patient transfer and accept patient transfers because staff are focused on hospitals with the appropriate bed availability.
* Improvements in day-to-day operations such as interfacility transfers and regional load balancing — since the system automatically updates, hospitals in Oregon do not need to manually input data, which has reduced staff burden during times of emergency.
* Better information is available to hospitals and the state — removing the manual reporting of bed capacity, due to the automatic refreshing of data through hospitals’ electronic health record systems, resulted in more timely information. As such, hospitals and government officials were able to coordinate and manage surges in hospitalization during the last year of the COVID-19 Public Health Emergency

Access to this data continues to enable the efficient distribution of patients within the hospital care delivery system in times of surging hospital use and in the inter-crisis periods where lower-level, variable demand continues to stress the hospital network. Due to the success demonstrated in Oregon, Apprise has been named a Resource Hub to the Centers for Disease Control and Prevention.

**California’s Activities and Plans for 2025**

In 2024, CDPH received the authority and funding to implement a real-time hospital bed capacity system through AB 177 and will be working with the Hospital Association of Oregon to implement the Apprise HCS. The state’s goal is to have this data to monitor hospital surge and system capacity to help with developing policies, understanding regional needs, and positioning resources, as appropriate. It is important to note that CDPH and related state and local agencies, however, will continue to follow the Standardized Emergency Management System principles and will not take any action at the local level unless this is specifically requested by local authorities. Barring the rare instance of a necessary public health order or a governor’s emergency order, facilities will maintain autonomy around patient transfer and acceptance decisions.

*What will be required of hospitals to implement the system?*

Apprise will work with hospitals to create a flat file export of bed availability from their EHR system or a data push using an application programming interface (API), which is a connection between computer programs. The software solution then ingests and organizes the data on a dashboard showing unit-level bed capacity will be broken down by region, county, and hospital. The data on this dashboard is automatically updated every 15 minutes. Apprise estimates that it will take hospitals approximately two weeks to onboard the HCS system. To facilitate the onboarding process, hospitals will need to designate a technical and clinical lead to work with the Apprise team. Aside from the staff’s time during the onboarding process, there are no other costs to hospitals.

*What will Apprise be responsible for?*

Apprise will be responsible for monitoring the data connection to ensure updates continue to flow and will notify participating hospitals if changes are needed. Apprise will onboard hospitals, train users, and provide ongoing support with a virtual help desk. In addition to CDPH and hospitals, local/state emergency response agencies, and local/state public health agencies will have access to the bed capacity dashboards. Further, hospitals will have the ability to pull custom reports and queries to monitor trends and activity in hospital and regional activity.

**Next Steps**

CDPH is in the process of developing regulations and guidance documents for hospitals and others. In addition, CDPH will be convening a governance committee to inform decision making. The committee will be composed of CDPH and Emergency Medical Service Authority officials, CHA policy staff, and hospital leaders. CDPH expects to convene the committee in January/February 2025.

Contact Trina Gonzalez, vice president, policy at tgonzalez@calhospital.org with any questions.