

## CASE STUDY

Keck Medicine of USC

vizient®



# A data-driven approach to capacity management

Keck Medicine of USC improves patient care using the Vizient Clinical Data Base

Hospitals and health systems must care for patients as individuals first and foremost, but that's not their only duty; they must also manage patients collectively. The daily routine of admitting and discharging patients as well as scheduling surgeries and procedures poses daunting organizational and logistical challenges.

Los Angeles-based Keck Medicine of the University of Southern California (USC) has embarked on a multiyear initiative to optimize the movement of patients through its facilities; the process is simply known as patient flow. Thanks to staff-wide commitment—and with the valued assistance of Vizient data

and analytics tools—the length of hospital stays has been significantly reduced.

## Identifying and eliminating bottlenecks

Keck Medicine is one of only two university-based medical systems in the Los Angeles area. In 2016, the nonprofit regional health system launched a program with a goal of reducing the length of patient stays in specific service lines. Although the system's capacity management and patient flow initiatives generally met established goals, bottlenecks remained that delayed patient care and frustrated care teams.

## CASE STUDY

# Keck Medicine of USC



Dana Asato, RN, a former Keck nurse who also served as manager of capacity and staffing, acknowledged the challenges of this undertaking. “What is the saying? How do you eat an elephant, one bite at a time? That’s what I kind of flash to,” she said. “And in fact, when you look at capacity management, it can be this large, overwhelming obstacle to tackle.”



As an initial step, Keck joined Vizient’s Capacity Management: Agility in a Time of Uncertainty 2020 Collaborative project to discover how other health systems across the country address this complex problem and learn about leading practices and initiatives that could be implemented to improve its patient flow. Through the collaborative, Keck developed a capacity management plan that accounted for the impacts of the COVID-19 pandemic.

All areas of the facility were involved. A strategy committee was formed, comprising of team-leading physicians, nurses, care coordinators and transfer center and environmental services (EVS) personnel. Subgroups from this committee were formed to focus on improvement initiatives in four areas: capacity management/patient flow, admissions, discharge planning and bed turnaround.

Another new team, the capacity management office, specifically addressed the issue of bottlenecks, approaching the problem similarly to the way air traffic controllers manage and coordinate incoming and outgoing flights at airports.

## Capacity Management: Agility in a Time of Uncertainty 2020 Collaborative

The collaborative project brings together teams from health systems across America to address a common issue. Led by a subject matter expert, these teams participate in conversations, implement learnings into their own systems and share best practices and tips for success.

### As part of the capacity management collaborative, teams:



Introduce and utilize a change management framework to develop clear structure and ownership for future improvement and changes.



Define capacity management roles and responsibilities, reporting structures and data and status reporting needs.



Engage physician partners in improvement efforts and leadership responsibilities.



Identify and complete “Just Do It” improvements.

## CASE STUDY

# Keck Medicine of USC



“Participating in the Vizient collaborative helped us get the right individuals in place,” says Jason Willardson, MHA, process architect. “It pushed us to say, ‘Hey, we need to hold ourselves accountable. We’re going to be reporting out.’ That’s been one big thing.”

### Seeing results

Additional initiatives — dubbed “Just Do it” improvements — addressed patient bed assignments and hospital occupancy. Using the Vizient Clinical Data Base (CDB), Keck examined historical data concerning its patient stays and hospital capacity. This is an important element of managing patient flow, as this information can be used to gauge future demand. CDB allows users to create custom reports and dashboards and use the Vizient Quality & Accountability (Q&A) scorecard in their planning and improvement efforts. In addition, CDB provides access to data from other medical facilities, so personnel could compare Keck’s performance to its peers. A major benchmark that Keck utilizes as part of its capacity management work is the CDB Length of Stay Index by hospital. When the improvement work began in 2016, Keck ranked 119th among its customized peer group. As of early 2021, the facility ranked 12th in this metric within its customized peer group.



While staff members are pleased with the improvements that have been achieved, their work is ongoing. Keck continues to monitor this data and expand its use of technology. Implementing AI-based software to further optimize patient flow is a near-term priority. And in response to the findings from the Vizient collaborative, Keck plans to streamline communications and reorganize its reporting structures.

“The Clinical Data Base has been a huge help for us,” Willardson says. “Especially early on, our physicians — but really all of our team members — were very interested in comparison data.” Keck was able to compare how it was performing against other organizations, including seeing what ICU length of stay looked like for similar patient populations elsewhere. “So we were able to use that to say, ‘Our patients for this specific procedure or this diagnosis are staying for eight days, but elsewhere, it’s only five to six days. Where are we missing the boat?’ We’ve also had times where our team members have said, ‘I know someone from this organization that’s seeing really good results. Let me reach out, and we can learn from them specifically.’ So our team really gets excited when we see that data from the Clinical Data Base.” ■



●● Participating in the Vizient collaborative helped us get the right individuals in place. It pushed us to say, ‘Hey, we need to hold ourselves accountable.’ ●●

**Jason Willardson, MHA**  
Process Architect, Keck Medicine of USC

**CASE STUDY**

# Keck Medicine of USC

---



© 2022 Vizient, Inc. All rights reserved.

290 E. John Carpenter Freeway  
Irving, TX 75062  
(972) 830-0000

[vizientinc.com](https://vizientinc.com)

For more information on Vizient capabilities, contact us at [futureofhealthcare@vizientinc.com](mailto:futureofhealthcare@vizientinc.com).

As the nation's largest member-driven health care performance improvement company, Vizient provides solutions and services that empower health care providers to deliver high-value care by aligning cost, quality and market performance. With analytics, advisory services and a robust sourcing portfolio, we help members improve patient outcomes and lower costs.

© 2022 Vizient, Inc. All rights reserved.

The reproduction or use of this document in any form or in any information storage and retrieval system is forbidden without the express, written permission of Vizient.