

Overcoming capacity constraints: Top healthcare leaders share their strategies



It's no secret that healthcare systems are facing tight margins and capacity constraints. Healthcare leaders are increasingly pressured to innovate and generate new growth strategies to expand units or capabilities, drive revenue and ensure quality patient care. Add to that a growing aging population who will continue to experience more complex illnesses and comorbidities, a decline in the number of healthcare workers and an ever-present reality of hospital closures, and the challenge can seem daunting.

The impact of these constraints on healthcare systems' emergency departments and inpatient care settings is growing, forcing providers to think more creatively and strategically about solutions if they are to climb their way out of the capacity crunch.

How can healthcare leaders tackle these issues and move forward?

The short answer is that it differs for every organization as each serves patient populations with different demographics, case mixes and utilization rates. And a lot can be learned from looking at how some of the leading healthcare providers are overcoming the challenge.

Leaders from five healthcare providers — Froedtert ThedaCare Health, Inc.; Memorial Hermann Health System; NYU Langone; Sanford Health; and UC San Diego Health — discussed these challenges and shared key strategies they've implemented to combat capacity constraints at their organizations.

Recent Vizient data and Sg2 forecasts highlight:

- 3% projected increase in inpatient discharges over the next 10 years
- The number of days a patient spends in the hospital will increase by 9%, with 70% of those days attributed to low and medium acuity patients
- Emergency department volumes are expected to decrease by 4% by 2034, while high-acuity, emergent visits are projected to grow by 8%

9%

increase in total inpatient days by 2034

Data and analytics are key

Data and analytics are key for any multifaceted problem that requires strategic thinking. Healthcare leaders should start their optimization of care delivery by diving into their organization's data, which will help assess and prioritize where to start solving for the complexities of capacity. For example, when leaders clearly understand their organization's clinical and operational data, they're able to gain a line of sight into specific problems that are impacting their hospital and where to best pinpoint efforts.

"Healthcare organizations are using predictive analytics and leveraging forecasts like the Sg2 Impact of Change to determine where patient volumes are anticipated to grow over the next decade," said Eric Burch, Vizient® senior principal leading workforce consulting. "They're coupling those insights with their individual, localized metrics, such as patient demographics, to determine their own growth strategies, manage capacity and determine labor needs."

At Memorial Hermann, Phil Chang, senior vice president and chief medical and quality officer, said he and his team emphasize the value of predictive analytics in improving healthcare delivery and patient outcomes every day. Through various data sets, such as the **patent-pending Vizient Vulnerability Index™** and zip code-specific health outcomes, they can pinpoint where interventions are needed locally, then use those insights to inform their decision-making and resource allocation.

"By layering these tools, we're able to identify certain areas with higher likelihoods of readmission and strategize how to improve healthcare delivery in those regions using targeted interventions that more effectively address disparities in healthcare access and outcomes," he said.

Chad VanDenBerg, chief quality and patient safety officer at UC San Diego Health, notes that the mission control center established in April 2024 uses data and insights to manage patient flow and capacity. This team, led by a physician, uses predictive analytic dashboards developed in-house to optimize the coordination of patient needs and bed availability. This data-driven approach also improved overall patient perception of care, as per HCAHPS.

Sanford Health uses LAMP, an in-house predictive analytics tool to streamline their processes and improve patient care. Leveraging data from EPIC, electronic health records, and HR systems like Workday, leaders can predict their future workforce demand and anticipate the specialized services their patients may require. This approach helps them plan for immediate staffing needs and enables them to forecast their requirements for the future, considering factors such as turnover, vacancy rates and patient census growth.

"LAMP has really helped us enhance our efficiency, reduce reactivity and make well-informed decisions regarding budgets and hiring," said Erica DeBoer, chief nursing officer at Sanford Health. "It helps us not only plan day-to-day, but also informs our planning for the next year and years to come."

Think creatively about workforce allocation

In 2021, 16.8% of the U.S. population was aged 65 or older; by 2030, that population is expected to grow to 21%. And with a 5% increase in hospital emergency department case mix and a 10% increase in the average length of stay, it's crucial that healthcare leaders think creatively about workforce allocation in managing capacity.

At Memorial Hermann, they partnered with local high schools to train students for healthcare professions.

“Our commitment to these students is not just that they come and rotate with us,” Chang said. “If we have an opening, these students get first dibs on our jobs.”

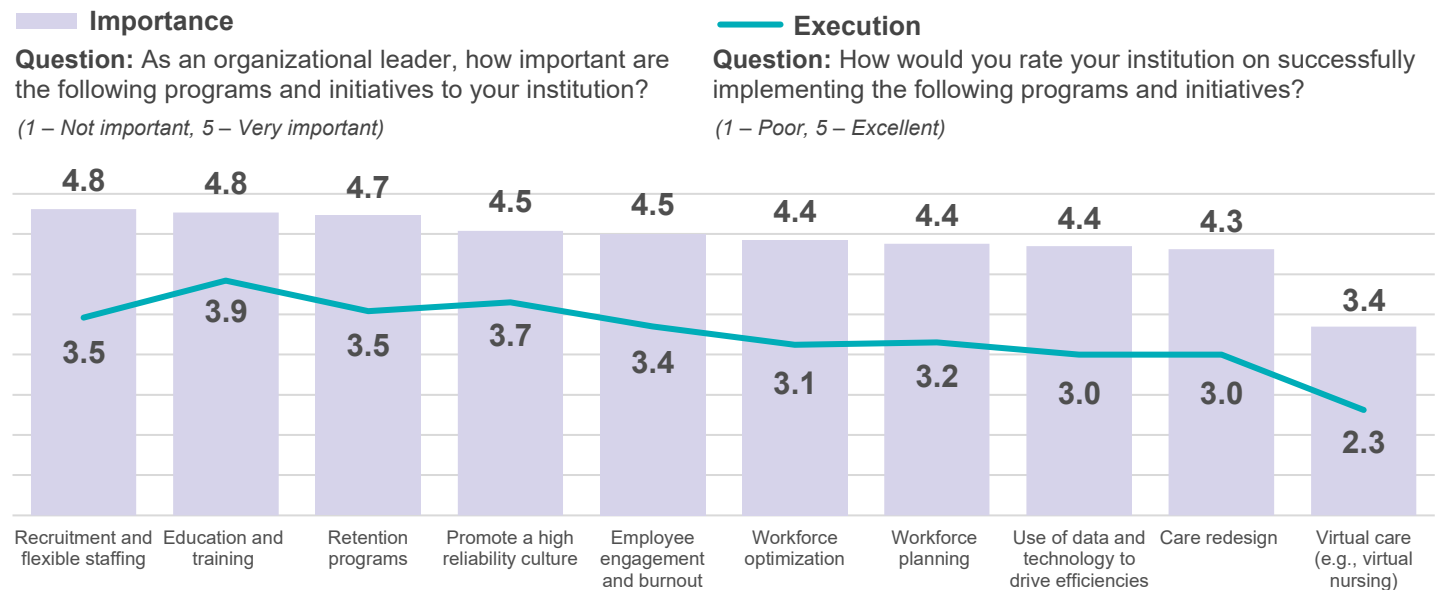
He said this opportunity not only allows students to gain practical experience within the field, but also allows them to network with healthcare professionals at Memorial Hermann.

NYU Langone changed the scheduling of didactics for residents, moving them from the traditional morning teaching rounds to afternoons, to streamline workflow around consultations and tests.

“The simple act of moving the didactic schedule allowed our morning hours to focus on progressing care and facilitating discharges earlier in the day. Everything from calling consultations to coordinating discharges with skilled nursing facilities benefited from this change and helped improve overall efficiency in our hospital operations,” said Ilseung Cho, chief quality officer at NYU Langone.

A 2023 Vizient workforce management market assessment found that healthcare executives agree workforce is a significant capacity challenge, but implementing key strategies is not easy.

Importance vs. execution rating of key solutions



Source: Workforce Management Market Assessment, Vizient OSM, June 2023

“There are a lot of ways healthcare organizations can address these shortages, but navigating this challenge is going to require some creativity,” Burch said. “What works for some providers, may not work for others, but those who are top performers in healthcare are those who are being the most innovative in their approach.”

Across the industry, healthcare leaders are finding:

- According to Fierce Healthcare, 124,000 more physicians are needed by 2034 and 800,000 nurses are anticipated to leave nursing by 2027.
- The 2023 Vizient Nursing Workforce Intelligence Report noted a 7-8% turnover rate of nurses, with costs of up to \$88,000 to replace every RN who departs.
- According to the American Society of Health-System Pharmacists (ASHP) Pharmacy Technicians Shortage Survey Findings, 97% of health system pharmacy administrators reported increasing the use of overtime to fill shifts, and 89% reported using pharmacists to fill pharmacy technician shifts or perform technician activities.

Some tactics to overcome workforce constraints include:

- Incorporate advanced practice providers (APPs) and top-of-license work into current patient care models, both in ambulatory and acute settings, to optimize workforce allocation and improve patient outcomes. Vizient data shows an 8.6% increase in APP jobs (like advanced practice registered nurses and physician assistants) from 2021 to 2022, and another 8.4% increase from 2022 to 2023.
- Incorporate health equity measures to support employee growth and development, especially as the current labor market has made recruiting and retaining nonclinical workers a particularly challenging task. One option is to support education opportunities for employees in terminal services so they can eventually rise to clinical or administrative positions within the organization.
- Use the Vizient SCORE™ survey to assess the wellbeing of your teams through data analysis and benchmarking. SCORE — accredited by Leapfrog and ANCC Magnet — measures and provides insights about psychological safety, wellbeing and engagement, and enables a strong understanding of the workforce and the interventions providers can implement to reliably drive meaningful cultural improvement. It also provides interventions and next steps for providers to create an action plan around and immediately start implementing. To date, SCORE has been used to survey more than 15% of the U.S. healthcare workforce, making it the largest benchmark on burnout and resilience in the country.
- Explore AI innovations that help the current workforce to operate more efficiently and reduce burnout, such as automated task managers to help floor nurses prioritize patient needs; virtual assistants that can help with patient questions, onboarding, or transcribing office visits; and AI-enabled centralized scheduling systems to predict and align acute care staff with demand.

Take a deeper dive into these strategies and more in [From Every Angle: Workforce](#).

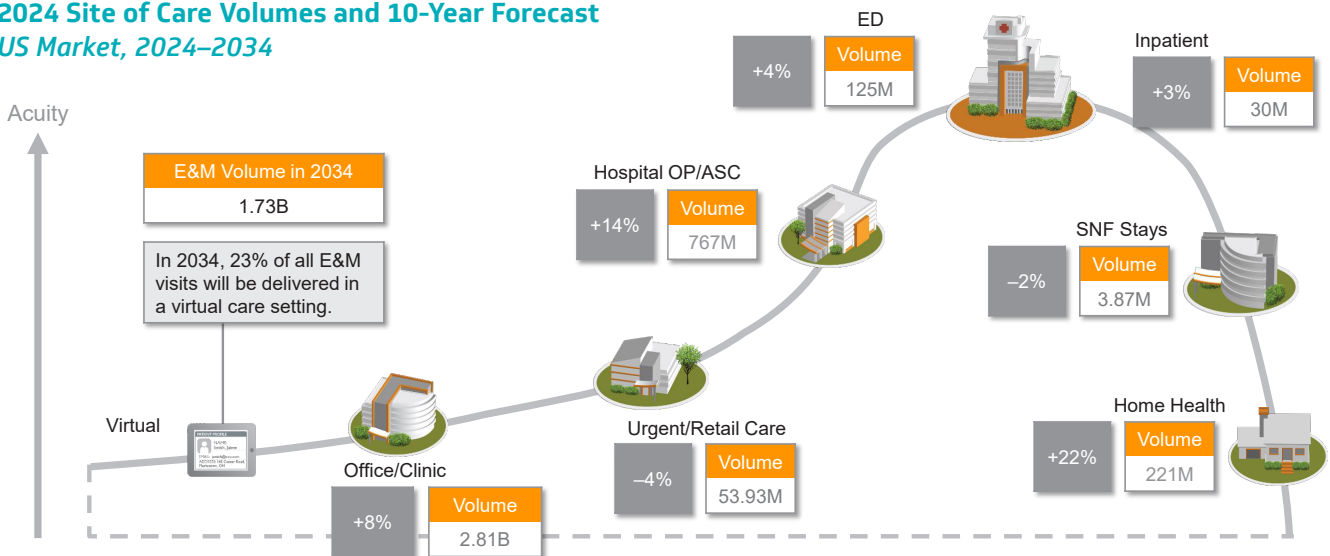
Redefine care as a function, not a place

Now, more than ever, is the time for healthcare leaders to contemplate site of care strategies, given the increasing constraints on inpatient care. Vizient data shows that from 2022 to 2023, emergency department volumes increased 4% nationwide, and inpatient admissions from the emergency department are holding constant, suggesting that patients are struggling to access care at alternative sites before their conditions deteriorate.

And it's expected to worsen.

The 2024 Sg2 Impact of Change Forecast, a 10-year look ahead, predicts that the number of days a patient spends in the hospital will increase by 9%, with 70% of those days attributed to low and medium acuity patients. This is why it's critical that health leaders assess the care mix and demand in their systems and model that out locally to make strategic decisions for tackling these challenges.

2024 Site of Care Volumes and 10-Year Forecast US Market, 2024–2034



Note: ED forecast defined as urgent and emergent visits. E&M Visits defined as procedures visits—evaluation and management, established patient visits—in person, established patient visits—virtual, new patient visits—in person, new patient visits—virtual. Home Health defined as procedures home nurse visits and home visits other. Analysis excludes 0–17 age group. ASC = ambulatory surgery center; E&M = evaluation and management; SNF = skilled nursing facility. Sources: Impact of Change®, 2024; HCUP National Inpatient Sample (NIS). Healthcare Cost and Utilization Project (HCUP) 2019. Agency for Healthcare Research and Quality, Rockville, MD; Proprietary Sg2 All-Payer Claims Data Set, 2022; The following 2022 CMS Limited Data Sets (LDS): Carrier, Denominator, Home Health Agency, Hospice, Outpatient, Skilled Nursing Facility; Claritas Pop-Facts®, 2024; Sg2 Analysis, 2024.

“Patient care has traditionally been anchored to specific locations, rather than determined by function, which can limit the flexibility and responsiveness of that care,” said Manuel Hernandez, principal at Sg2. “There needs to be a systemic reevaluation of site-of-service strategies to better accommodate patient needs and enhance efficiency.”

Like many providers, Scott Hawig, chief financial and administrative officer at Froedtert ThedaCare Health, Inc., says they have overcome some of their capacity challenges by shifting inpatient care to the outpatient setting where they have unused or underutilized capacity.

“Given that we expanded our ambulatory settings later than others in our market, we have a relatively unique opportunity to be proactive around expanding our capacity in sites like ambulatory surgical centers, medical office buildings and standalone procedure sites,” he said. “These spaces have been incredibly helpful in relieving some of the pressure on our hospital campuses and it’s allowed us to better serve our communities.”

Another silver lining is that the shift to virtual care is rising. By 2034, 23% of all evaluation and management visits are expected to be performed virtually, contributing to a gradual decline in urgent care center and retail visits of 4% in 10 years.

“Sanford Health has a large, geographic footprint of about 250,000 square miles, roughly the size of Texas. It’s very rural,” DeBoer said. “So, when I think about the capacity challenges that we have, it’s more than just what is within our emergency departments — it’s also about serving our patients close to home and delivering the care they need. Virtual care has been a really important way that we’ve been able to serve our patients.”

But perhaps the most promising — and equally challenging — alternative is care at home or hospital at home. Caregivers are increasingly treating patients at home, with forecasts suggesting this trend will increase by 28% over the next 10 years.

Care at home requires considerations around technology and digital care; remote, skilled nursing; infusion opportunities; and potentially leveraging new strategic partnerships to provide care at home services at scale.

NYU Langone’s Hospital at Home is an innovative example of delivering patient care in the home. Their model — different from most — utilizes 100% registered nurses in the patient’s home as well as at the hospital to navigate patients through the process and remote patient monitoring. After a field nurse admits the patient in their home and syncs them to the virtual command center, they visit the patient in their home at least twice daily to provide hands-on care. Additionally, a dedicated hospitalist provides a daily evaluation, either in the home or remotely, and coordinates consultations with other specialists as needed. The results have been astounding: an observed length of stay at 0.73, lower than the initial target of 0.82, and fewer readmissions at 8.7% versus brick-and-mortar med-surg patients at 11.3%.

“Health systems are re-evaluating how to deliver care, and care at home, or hospital at home, is one of those innovative approaches we’re seeing many of our providers explore,” Burch said. “It can be complicated to deliver, but proactively shifting lower acuity patients to the home reduces patient length of stay, acute care costs and readmissions rates.”

Emphasize care around social determinants of health

A focus on social determinants of health (SDOH) is crucial for healthcare leaders, especially as it relates to capacity challenges. A recent Vizient analysis showed higher hospitalization rates were evident in higher social needs zip codes, creating significant strain on capacity and length of stay for hospitals in communities with significant health equity challenges.

Using the patent-pending **Vizient Vulnerability Index™**, the **analysis closely examined diabetes across five states** — Arizona, Florida, New York, Pennsylvania and Texas — and found that 14% of diabetes patient discharges came from communities with high social needs, despite only representing 8% of the total population. Additionally, the inpatient discharge use rate for diabetes was over 70% higher for patients coming from these communities. The study further analyzed the potential effect of decreasing diabetes admissions within those zip codes by 20% and found this would provide an 8% decrease in bed days for the market, despite anticipated growth in discharges and average length of stay, and a potential savings of \$126 million in bed day cost nationwide.

This correlation between community need and higher inpatient use rates is very strong for a variety of conditions, including antepartum conditions and high-risk pregnancy (83% higher inpatient use rate), blunt or penetrating injury (224% higher inpatient use rate) and persistent mood disorders (92% higher use rate).

“Capacity and social determinants of health are inextricable,” said Karyl Kopaskie, Vizient principal of Sg2 intelligence. “A one-size-fits-all strategy won’t work to address these challenges across all communities; you have to identify the specific needs and barriers to access for these communities with need and implement targeted approaches based on that data. By being intentional about addressing social determinants that specifically impact inpatient utilization within these communities, health systems will very likely begin to see improvements in their capacity and improve outcomes for patients.”

UC San Diego Health, recognizing the aging population of the county, established a geriatric-specific emergency department to support the unique needs of the patient population and became the first accredited geriatric emergency department in California. The careful understanding of these patient needs led to many adjustments in the care space including lighting, signage, sound absorbing walls and flooring.

At Sanford Health, elderly care and women's health are two important — and intentional — areas of focus, particularly for their more rural patients. Through critical access hospitals located within these regions and virtual care, Sanford Health is better prepared to deliver care closer to these patients.

“The critical access hospitals help us manage patient overflow and provide necessary care closer to home for elderly patients while also reducing the strain on our larger medical centers and emergency departments,” DeBoer said. “And virtual care has been instrumental in providing access to patients in need of women's healthcare at a time when many rural areas are closing OB services. Virtual care eliminates the need for patients to travel long distances for care.”

Moving forward

As the healthcare industry looks to the next year, five years or even 10 years, it's clear these capacity constraints aren't going away soon, at least not without proactive, strategic approaches to solving these challenges. Health systems and their leaders will need to be bold in their efforts to optimize care delivery to successfully manage patient needs and capture growth in an increasingly competitive environment. By utilizing data, rethinking workforce allocation, redefining care delivery and focusing care on areas where SDOH barriers are prevalent, hospitals will be better prepared to take on the capacity crunch.

Methodology

This report was created through the analysis of a Vizient Member Networks roundtable discussion and interviews of C-suite executives from five unique health systems. The selection of these interviewees was determined through an evaluation of health systems actively participating in multiple collaborative projects and networking offerings and integration of data into their continuous performance improvement efforts. The invited participants represent the breadth of healthcare operating models and university (non)affiliation.



Participating health systems

Five health systems participated in the roundtable discussion on capacity in April 2024.

Froedtert ThedaCare Health, Inc.

Formed from the combination of two leading Wisconsin-based health systems, Froedtert ThedaCare Health, Inc. is an integrated healthcare delivery network offering coordinated local care. The organization is a partner to the Medical College of Wisconsin and has more than 22,000 employees and 3,400 providers offering services in 18 hospitals and more than 360 outpatient locations.

Memorial Hermann Health System

Memorial Hermann has more than 6,600 affiliated physicians and 33,000 employees practice the highest standards of safe, evidence-based, quality care to provide a personalized and outcome-oriented experience across more than 260 care delivery sites. As one of the largest not-for-profit health systems in Southeast Texas, Memorial Hermann has an award-winning and nationally acclaimed Accountable Care Organization, 17 hospitals and numerous specialty programs and services conveniently located throughout the Greater Houston area. Memorial Hermann-Texas Medical Center is one of the nation's busiest Level I trauma centers and serves as the primary teaching hospital for McGovern Medical School at UTHealth.

NYU Langone

NYU Langone Health is a world-class, patient-centered, integrated academic medical center, with a culture rooted in excellence in patient care, education, and research. Ranked #1 for quality and patient safety by Vizient, Inc., and with 10 clinical specialties among the top 10 in the nation, according to U.S. News & World Report. NYU Langone offers a comprehensive range of medical services across six inpatient locations, its Perlmutter Cancer Center and more than 300 outpatient sites across the New York area and Florida. The system also includes two medical schools, in Manhattan and on Long Island, and a vast research enterprise.

Sanford Health

Sanford Health, the largest rural health system in the U.S., is dedicated to transforming the healthcare experience and providing access to world-class health care in America's heartland. Headquartered in Sioux Falls, South Dakota, the organization serves more than 1.4 million patients and nearly 200,000 health plan members across 250,000 square miles. The integrated health system has 48 medical centers, 211 clinic locations, more than 160 Good Samaritan Society senior living centers, 2,900 Sanford physicians and advanced practice providers, 540 active clinical trials and nine world clinic locations around the globe.

UC San Diego Health

UC San Diego Health is one of five academic medical centers within the University of California. The 1,101-bed academic health system includes three hospitals —Hillcrest Medical Center, Jacobs Medical Center and East Campus Medical Center — as well as Sulpizio Cardiovascular Center, Moores Cancer Center, Shiley Eye Institute, Koman Family Outpatient Pavilion and Altman Clinical and Translational Research Institute. The health system also includes primary care and same-day services at clinics throughout Southern California. For 2023-24, *U.S. News and World Report* ranked UC San Diego Health as the No. 1 hospital system in San Diego, placed UC San Diego Health on the National Honor Roll for the second consecutive year, and named the system among the nation's best in 11 adult medical and surgical specialties.



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