



THE STATE OF **HEALTHCARE**
operations

Today's challenges call for action now to face the future with confidence.

There are a lot of conversations about the challenges facing healthcare, and even more about how to solve them, including investing more money. More money is not the answer. Good healthcare doesn't have to cost more. Reorienting care delivery to do what's best for the patient both clinically and operationally and finding ways to reduce complexity and improve productivity to achieve efficiencies is easier said than done—but it is possible.

EVERY MINUTE COUNTS

Forty-six minutes was just enough time to save the life of a new mother.

That's the amount of time it took for her to be transported from a regional hospital emergency department to the intensive care unit at the main medical center, after suffering cardiac arrest following an emergency Cesarean section due to fetal distress.

Specialists were able to save her life because a physician at the regional facility made one phone call to the system's command center and the team there arranged transportation, had a bed secured and contacted on-call specialists in a matter of minutes. And, the nurse who took the call stayed on the phone with the paramedic while the patient was transported.

It's the combination of people, process and technology that allows medical professionals to save lives.

IT'S ABOUT THE PATIENT

Discussions about healthcare operations often focus on specific components such as software and hardware solutions, process improvement initiatives, staffing challenges, the size and design of facilities, etc. However, the heart of healthcare is about the patient—being there to console and help, ensuring the right care, in the right place, at the right time, and being able to effectively treat them so that they can return home. It is about the patient's needs. It is about the patient's experience. Achieving these goals can be challenging in the face of today's issues facing healthcare.

ISSUE #1
The Danger Of The Wait

- The wait is certainly a major care challenge. When patients wait, they're exposed to additional risks. In fact, 37,000 deaths are correlated with ED boarding each year and patient boarding for 6+ hours while waiting for a bed is correlated to a 1.7% increase in mortality rates and an additional 1.5 days in length of stay.
- Patients are waiting because of 20 million unnecessary bed days. If patients were discharged in a timelier manner, 3-5 million additional patients could be seen.
- Waiting also leads to 1.9 million patients leaving without being seen each year while 39% of beds remain unoccupied.
- Health systems in general are facing increased complexity due to mergers, acquisitions and declining reimbursements which can compromise the timing of care.

ISSUE #2
Choice, Culture & Cost

- A focus on the patient is natural. We live in a customer-focused culture—and we know that patients want the same choice, value and convenience they expect in other aspects of their life. We also know they want transparency around price, quality, and safety, along with solutions that are coordinated, convenient, customized, and accessible—and that they freely express their thoughts and opinions when that doesn't happen¹.

- Patients have a right to be vocal because it's about their care, yet of the \$19,000 (on average) that U.S. workers and their employers pay for family coverage each year, \$5,700 goes toward administrative costs. In fact, like the overall cost of the U.S. health system—U.S. administrative cost is No. 1 in the world. And as administrative costs rise, so does administrative staffing—the number of practicing physicians in the U.S. grew 150 percent between 1975 and 2010, while the number of healthcare administrators increased 3,200 percent during the same period².

ISSUE #3
The Economics

The efficiencies that drive care and the best way to deliver care are pure economics. U.S. healthcare spending grew 4.6 percent in 2018, reaching \$3.6 trillion or \$11,172 per person, and as a share of the nation's Gross Domestic Product, health spending accounted for 17.7 percent³.

We know that higher per-person spending does not always equate to higher-quality healthcare. When compared to 10 developed countries, the United States ranks last in overall healthcare performance—highlighted by per capita spending that is 50% greater.

Some of the factors that contribute to this higher spending include⁴:

- Excess supply of healthcare services, along with poorly controlled demand for those services
- The current system of reimbursement models
- Regulatory requirements
- Structural differences between the U.S. and other wealthy countries
- Patient characteristics and behaviors, including managing chronic conditions
- Productivity issues in the healthcare delivery industry—between 2001 and 2016, healthcare delivery contributed 9% of the \$8.1 trillion (\$4.2 trillion in real terms) growth in the US economy—but 29% of the 14.4 million net new jobs

ISSUE #4 Workforce Challenges

A 2019 MedScape report found that 44 percent of physicians feel “burned out,” potentially causing them to leave the profession⁵.

On top of that trend, we are also looking at a significant nursing shortage, including the fact that half of all nurses are also considering leaving their profession.

- One of the reasons leading to this dissatisfaction is the fact that doctors and nurses go into healthcare to be healers—to provide care and comfort at the bedside, not be consumed with administrative burdens. Instead, they are being pulled away from that heartfelt mission.
- The National Academy of Medicine says that on average, nurses and doctors spend 50 percent of their workday treating the screen, not the patient, and that “increased

documentation time” associated with electronic health records is one of the reasons for those feelings of burnout.

- Tasks are not consistently assigned to workers at the appropriate skill level—such as when RNs are performing activities like transporting patients that could be better delegated to nursing assistants or transporters.
- In some cases technology is taking people from the bedside, in other cases technology can be used to safely automate certain tasks, freeing up clinical staff to deliver that meaningful care at the bedside.

ISSUE #5 Complexity, Capacity And Economies Of Scale

As a way of trying to meet demand—in a cost-effective manner—health systems are consolidating facilities to create economies of scale. At the same time, many are also looking for capital, thinking they need to build new facilities because they don’t have enough beds. But the beds are there. Due to operating inefficiencies there is latent capacity that could be accessed under their existing infrastructure.

The impact realized by actively improving efficiency is significant⁶.

- Cumulatively, \$1.2 trillion to \$2.3 trillion could be saved over the next decade if healthcare delivery were to move to a productivity-driven growth model.
- Savings of this magnitude would bring the rise in healthcare spending in line with—and possibly below—GDP growth.
- In addition, the increased labor productivity in healthcare delivery would boost overall U.S. economic growth at a faster rate than current projections—an incremental 20 to 40 basis points (bps) per annum.
- Technological advances, including artificial intelligence, computer-assisted coding, and natural language processing, could be used.
- Demand for inpatient services continues to drop, yet excess—and therefore unproductive—capital continues to remain in the healthcare delivery infrastructure.

SOURCES:

[1] www2.deloitte.com/content/dam/Deloitte/global/Documents/Life-Sciences-Health-Care/gx-lshc-hc-outlook-2019.pdf - page 16

[2] www.beckershospitalreview.com/hospital-physician-relationships/growth-of-healthcare-administrators-outpaced-physicians-increasing-3-200-between-1975-2010.html

[3] www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical

[4] McKinsey Center for US Health System Reform February 2019 Study: *The productivity imperative for healthcare delivery in the United States* - Page 4

[5] www.nytimes.com/2019/12/31/opinion/doctors-nurses-and-the-paperwork-crisis-that-could-unite-them.html

[6] McKinsey Center for US Health System Reform February 2019 Study: *The productivity imperative for healthcare delivery in the United States* - Page 5

FACING THE ISSUES

The time is now.

Healthcare is complicated—capacity issues, mergers, acquisitions, changing reimbursement models and staffing shortages are just some of the things that need to be navigated. But there are solutions and through dedication and collaboration the needs of both patients and caregivers can be met. Below are just a few examples of how a solutions-based, centralized approach effectively tracks a patient across the care continuum—helping ensure a positive patient experience and efficiencies for everything from individual facilities to large enterprises.

SUCCESS IN ACTION Today’s Best Practices at Work

So, how do we begin to address today’s issues and be ready for tomorrow? Here at TeleTracking, we have concrete client examples of the impact that increased efficiency—and a centralized approach to care—has on healthcare operations, caregivers and most importantly on patients. We hope these examples inspire ideas for where to begin.

01 KETTERING HEALTH NETWORK DAYTON, OH

Four factors served as catalysts for Kettering Health Network, located in Dayton, OH to make the decision to implement a health system command center: network growth; capacity challenges, an area hospital closure; and a goal of maximizing revenue by decreasing length of stay, left without being seen, diversion and leakage.

Kettering launched a health system command center to centralize care and currently all nine of Kettering Health

Networks are currently up and running. The first phase focused on bed placement and access—moving patients in and out of the system, including coordinating internal transports in order for lateral moves to go smoothly. The team is also working with utilization management and social services teams to ensure patients are receiving the best care and resources are being used most effectively by system attributes to prioritize the work.

The positive outcomes generated include:

- An increase in volume of 159 patients/month.
- Improvements in EVS turn times have led to improvements in patient throughput with the ability to open up capacity more quickly.
- ICU capacity has improved as a result of having visibility across the network and staff is placing patients at the right level of care the first time and not moving them.
- Emergency department holds have significantly decreased—for example, at the Fort Hamilton location it went from 5.68 hours in January 2019 to 1.35 hours in April 2019.

02 CARILION CLINIC ROANOKE, VA

Carilion Clinic, located in Roanoke, VA is a pioneer in implementing a health system command center and a centralized approach to care. They began their centralization journey in 2004 by doing bed placement and transfer functionality for two campuses. Over the years, they continued to evolve and recently expanded their bed placement capabilities to all six campuses—including three rural sites. The command center currently houses a communications center that provides dispatchers for the ambulance fleet, as well as three helicopters; environmental services; oversight for clinical transport operations; and integration with our nursing teams. The results have been impressive:

- Eliminating 30 minutes of wasted time per patient means beds become available 30 minutes quicker and overall length of stay decreases.
- Using the metric of 1,900 admitted patients per month moving through the emergency department via the CTaC translates to approximately 60,000 hours saved

per month to care for even more critically-ill patients and 720,000 hours per year.

- Real-time emergency department alerts make it possible to precisely place patients and free up space to treat more people, resulting in a 50 percent reduction in the time it takes to place a patient in a room.
- There are year-over-year increases in transfer volumes, including a 40-percent increase in transfer admissions to the secondary campus.
- There is a decrease of 0.3 days in intensive care length of stay.

03 UNIVERSITY OF LOUISVILLE HOSPITAL LOUISVILLE, KY

University of Louisville Hospital in Louisville, KY is an academic teaching and research hospital with 340 beds, with the only Level I trauma center and adult burn unit in the region. Each year they admit more than 3,000 patients—including 1,500 patients who live outside Jefferson County and its surrounding communities. In July of 2017, UofL ended its relationship with its parent organization, KentuckyOne Health, and a multi-disciplinary black belt team was formed to address challenges within the organization—resulting in the decision to take a centralized approach.

Strong support from senior leadership, the dedication of the entire UofL team led by a passionate advocate for patient flow, and the combination of people, process and technology has resulted in the following outcomes in a very short period of time:

- The ability to admit and provide care for 589 additional patients January—September 2019.
- A 525-hour reduction in capacity status hours and a decrease in patient length of stay from 6.1 days to 5.3 days.
- An increase in discharge compliance from 39% to 56%.
- 169 additional OR cases.
- An increase in the number of patient transport trips from 3,604 per month to 5,135 per month and decrease in total trip time of more than 5 minutes.