

The State of Flexible Healthcare Delivery

Addressing adaptability, spikes in patient acuity, staffing challenges, and rising costs



Table of Contents

Background	2
Research Methodology	3
Results and Key Findings	3-4
Flexible Care Models — The Current State	
Benefits of Flexible Healthcare Models	6-8
Considerations for Scaling Flexible Care Models	
The Importance of Change Management	10-11
Technology Components of Flexible Care	12
Conclusion	13
Research Demographics	14

Background

COVID-19 served as a catalyst to demonstrate that health systems and hospitals can rapidly adapt with flexible healthcare models when needed.

The industry witnessed hospitals flooded with more highacuity patients than they had beds to accommodate, pop-up tents and stadium parking lots transformed into testing sites, an influx of isolation rooms, surprising swings in patients needing to be moved from room to room, a greater dependence on travel nurses, and more dramatic changes.

New research, further explored in this report, shows that hospitals that implemented flexible care models achieved tangible results, most notably in increased room capacity, reduced time spent transferring patients, decreased length of stay, and improved patient outcomes. But COVID merely brought the potential for flexible care models into the global spotlight. Healthcare organizations throughout the last decade have adapted to difficult circumstances for a number of other reasons as well.

Whether in response to the next pandemic, a seasonal viral outbreak, a natural disaster, a mass trauma event, the ongoing staffing crisis, or something entirely unforeseen, today's hospital and health system leaders are recognizing that their organizations must be able to flex and adapt quickly to critical, and often unexpected and unpredictable, changes. As a result, many hospitals are exploring ways to enhance flexible healthcare delivery, including by adapting care around the patient as acuity changes, rather than transferring the patient to other hospital areas.

Research Methodology

GE HealthCare commissioned healthcare consultancy Sage Growth Partners to research and develop this report. The double blinded research was conducted independently by Sage, which surveyed 204 hospital and health system executives and leaders in the United States, including physicians, nurses, technology leaders, and biomedical engineers, as well as holding qualitative interviews with several of these individuals. Survey respondents represented health systems, integrated delivery networks, academic medical centers, independent acute care hospitals, independent critical access hospitals, as well as healthcare facilities operated by the Department of Veterans Affairs and Department of Defense.

The research sought to understand where healthcare organizations currently are in the journey to increase flexible care models, initial steps they are taking, considerations for scaling flexible care models, and critical components for success, including those related to infrastructure, technology, and change management. For full definition of flexible healthcare, see page 3.

Results

The results illustrate that 77% of survey respondents agree that hospitals that offer a flexible care model based on patient acuity have a distinct competitive advantage. Further, 85% of survey respondents believe hospitals with flexible care models are best positioned to manage physical resources based on the ebb and flow of capacity, 79% believe these hospitals are best able to support patient-centric care, and 75% believe they experience greater staff efficiencies.

Survey respondents that rate themselves as very or extremely flexible when it comes to adapting to changes in patient acuity (27% of all respondents) are even more likely to agree that flexibility provides significant benefits. Among these respondents, 85% say hospitals with a flexible care model have a competitive advantage, 91% say they are best positioned to manage physical resources based on the ebb and flow of capacity, 83% say they are best able to support patient-centric care, and 83% believe they experience greater staff efficiencies.

Regardless of what next significant event occurs that requires organizations to quickly change and adapt clinical operations, 71% of respondents indicated that their organization is working to prepare. To that extent, 36% of survey respondents have implemented flexible models of care where patient rooms can be reconfigured to provide different levels of care based on a change to a patient's acuity, and another 34% are considering doing so. Looking toward the future, in fact, 59% of respondents say most hospitals will have adopted some form of a flexible care model within the next five years (by September 2028).



What is flexible healthcare? For the purpose of this report, survey respondents and interviewees were provided the following definition:

Flexible healthcare refers to the health system's ability to purposefully innovate in the face of changing conditions with speed of implementation, scale, and organizational alignment.

Key Findings:

- Only 27% of respondents rate their organizations as very or extremely flexible, but 59% expect most hospitals to adopt flexible care models within the nextfive years
- ✓ 66% say organizations that implement flexible care models have a stronger bottom line as a result, and 75% say these models increase staff efficiency
- 64% say ongoing workforce shortages are driving efforts to become more flexible

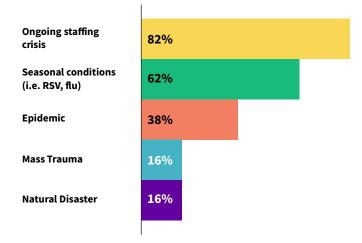
- 98% says continuous monitoring to alert for patient changes in acuity, and 95% say monitoring devices that are standardized throughout the organization to reduce training time, are moderately or critically important to flexible care models
- Fewer than two-thirds (63%) agree or strongly agree that their organization prioritizes robust change management when embarking on new initiatives, such as efforts to enhance flexible care models

Flexible Care Models — The Current State

Flexible care models, such as acuity adaptable units, are not entirely new to healthcare, but recognition of their importance to hospital and health system sustainability, competitiveness, efficiencies, and outcomes is growing. Still, many organizations are very early in the journey toward flexible care models.

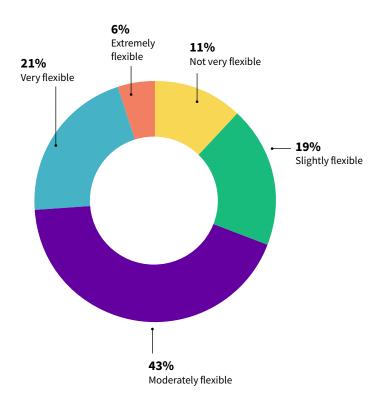
Healthcare Organizations Can Flex Care Delivery When They Have To

Within the last decade, healthcare organizations have quickly and significantly adapted clinical operations in response to:



How Flexible are Hospitals and Health Systems, Really?

Enhancing flexible care models and adaptability is a key improvement opportunity for many organizations, with only about one-quarter of survey respondents saying their organization is *very* or *extremely* flexible in the event of unexpected changes to the acuity balance:



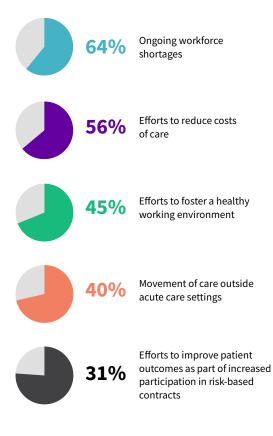
Since the pandemic specifically, hospital and health system leaders say their organizations have been exploring a number of initiatives that support flexible care delivery: 84% are increasing their use of telehealth visits, 80% are moving lower acuity patients to care in their homes more quickly, and 77% are increasing the use of remote patient monitoring.

"There is flexibility in healthcare. It's just usually during a crisis. And the impact of that reality is a barrier to access for patients."



What's Driving Organizations to Explore More Flexible Care Models

A variety of factors are increasing movement toward flexible care models:

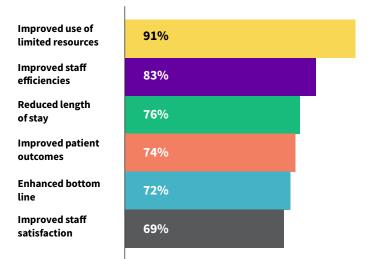


*Percentages reflect number of respondents who rated the above as having a very high or significant impact on the movement

Benefits of Flexible Care Models

Top Benefits of Flexible Care Models

Respondents that rate their organization as *very* or *extremely* flexible point to several benefits, including:

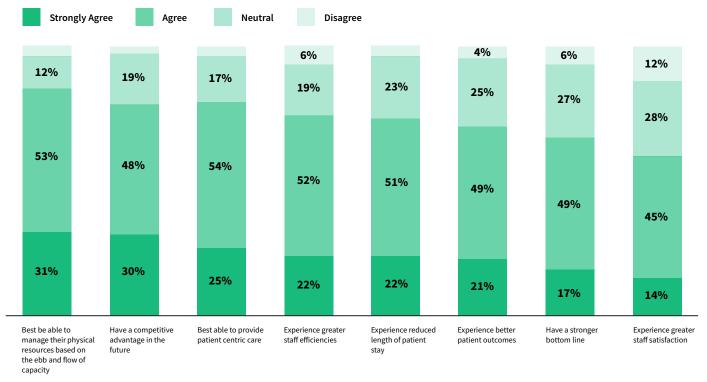


*Percentages reflect number of respondents who *agreed* or *strongly agreed* that a flexible care model based on patient acuity will lead to the above outcomes.

Survey respondents who rate their organization as *very* or *extremely* flexible in their ability to respond to unexpected changes to the acuity balance (27% of respondents), report several benefits. In addition, these respondents have higher confidence that their organization will be able to achieve key organizational goals.

Where Flexible Care Models Deliver Advantages

Most hospital leaders, regardless of how flexible they rate their organization, see distinct advantages of flexible care models.



*Some percentages may not add up to 100% due to rounding

Leaders of Flexible Organizations are More Confident About Achieving Key Goals

How would you rate your confidence that your organization will succeed in each of these areas? (percentages reflect the number of respondents who say they are extremely confident)

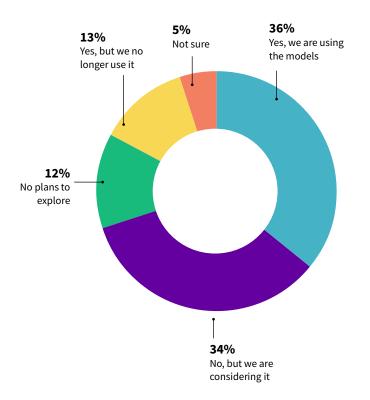
	Not Very Flexible (11% of respondents)	Slightly to Moderately Flexible(62% of respondents)	Very or Extremely Flexible (27% of respondents)
Improving patient outcomes	4%	25%	39%
Improving operational efficiency	0%	10%	22%
Improving staff efficiency	0%	8%	26%
Reducing cost of care	0%	8%	17%
Capacity management	13%	9%	31%
Standardizing clinical workflows	4%	12%	28%
Workforce stabilization	4%	6%	17%

"Having an adaptable unit where the patient doesn't have to move is just more seamless. It's not only great for the patient and the family, but also there's a lot of benefits specifically to the hospital itself in that we reduce handoffs, chances that patients are going to get infections, and we reduce staff injuries from moving."

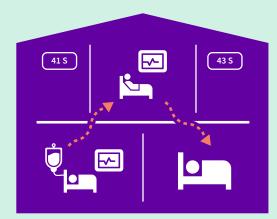
IOHN J. GALLAGHER | DNP, RN, CCRN-K, CCNS, TCRN, RRT, FCCM, PROFESSOR, FRANCES PAYNE BOLTON SCHOOL OF NURSING AT CASE WESTERN RESERVE UNIVERSITY

Advancing Flexible Care Models with Acuity Adaptable Units

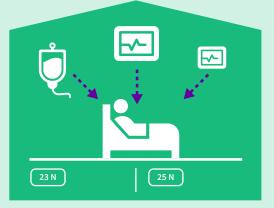
How many hospitals and health systems are implementing patient rooms that can be reconfigured to provide different levels of care based on changes to a patient's acuity or a shift in the system's acuity balance?



Often referred to as Acuity Adaptable Units (AAUs), these models are established and mature, and now a growing number of hospitals and health systems are adopting them. Among hospitals and health systems that implemented these care rooms, 58% did so in the last 1-2 years, 27% in the last 3-6 years, 7% in the last 7-10 years, and 8% more than 10 years ago.



Patient moved from location to location based on acuity and care needs



Patient location independent from acuity level

Benefits of Acuity Adaptable Models

Hospitals that have implemented AAUs (36% of survey respondents) experience significant benefits, including:

- 87% report AAUs have a positive impact on the workforce
- 80% cite reduced length of stay as a benefit of enhanced flexibility
- **81%** cite greater staff efficiencies as a benefit of enhanced flexibility

"Inflexibility can be disastrous. Absolutely. If we're not flexible and adaptable to the changing best practices, to the evolving tools that are out there for physicians, providers, nurses, then we're going to have untoward patient outcomes."

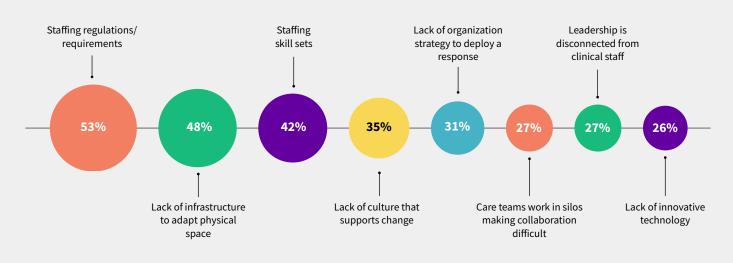
CHIEF NURSING OFFICER | MIDWEST HEALTH SYSTEM

Considerations for Scaling Flexible Care Models

When asked what their organization needs in order to support flexible care models, 73% of survey respondents identified monitoring equipment that easily accommodates a wide range of clinical needs as the most important. In addition to monitoring equipment, survey respondents listed facility upgrades to accommodate patients' changing needs (68%), technical infrastructure (51%), workforce management software that facilitates flexible staffing requirements (51%), and ways to address the need for staff to change (51%).

What Inhibits Flexible Healthcare?

Survey respondents who rated their organizations as *slightly* or *not very* flexible said the following factors contribute to their inability to be flexible in response to unexpected events:



Reaping the benefits outlined in the previous section will require hospitals and health systems to address barriers that have historically pushed against flexible care models, including resource, technology, and infrastructure limitations.

A Great Leader: The Must-Have Ingredient

When asked which elements are very or most critical to the success of flexible care models, survey respondents ranked strong leadership as most important:



Note: Only 203 survey respondents answered this question

The Acuity Balancing Act

Multiple experts interviewed for this report noted that bed licensing is another widely encountered challenge when attempting to implement flexible care models.

"The restrictions on what beds can be used for forces hospitals into a box. These beds are for behavioral health, those beds are for med-surg, those for outpatient, and there are only this many beds in the ED," one clinical leader says. "It's not just when pandemics hit, but with outbreaks, RSV or the flu, and all of a sudden we are seeing more patients. We need some flexibility with beds to treat the community the way we need to."

Another healthcare leader says that hospitals and health systems need to have calculations at their fingertips to monitor the acuity of patients so they can balance the nurseto-patient ratio: "Those solutions should handle your staffing, your patient acuity, and payroll should be tied in as well because you will need to match specific skillsets in order to take care of certain patients."

"Leaders cannot simply pile on new tools and technologies and keep asking clinicians to do even more. Instead, it's critical that leaders earn buy-in from clinicians and other teams"

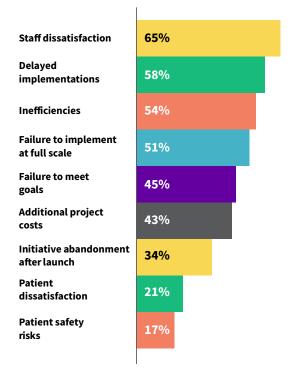
The Importance of Change Management

This research indicates that when pursuing more flexible care models, hospitals and health systems must prioritize change management. Fewer than two-thirds (63%) agree or strongly agree that their organization prioritizes robust change management. Only 38% have a culture that is dynamic and supportive when it comes to managing change, 37% say they have clearly articulated goals, and 31% have guidelines for organizational preparedness.

Yet, the consequences of not managing change well are far ranging, and include delayed, inefficient, or failed implementations.

Consequences of Not Managing Change Effectively

Survey respondents shared the negative impacts organizations should expect when neglecting to prioritize change management:

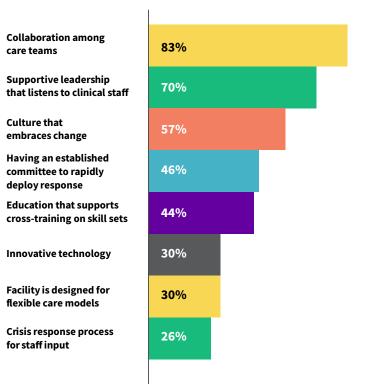


Note: Only 203 survey respondents answered this question

"It's a combination of the technology and the willingness of the workforce that really goes to making sure we have clinicians buy into this. The nurses are embracing the fact that [a given nurse] can take care of pediatrics or take care of step down or take care of med-surg. So our nurses like it." Of note, and further in support of the link between change management and flexible care models, survey respondents who rated their organization as very or extremely flexible were much more likely than other respondents to say their organization prioritizes change management. They were also more likely to say that clinicians and staff members are routinely involved in change management initiatives (75%, compared to 42% among those with poor flexibility, and 60% among those with moderate flexibility).

Learning from the Frontlines: Involve the Staff

Survey respondents from *very* or *extremely* flexible organizations say the following factors support their ability to adapt in response to unexpected events:



While hospitals that are not very flexible cite staffing regulations (46%), lack of culture that supports change (46%) and staffing skill sets (46%) as the top barriers, 69% of survey respondents from very or extremely flexible organizations say a more flexible care approach improves staff satisfaction.

"The ability to connect patients when they come in the door and have no interruptions monitoring vital signs with that data going into the EHR with minimal human intervention, and to monitor patients on the same platform as they go to the ICU, as they're fortunate enough to work their way toward the exit door for discharge — that would be ideal."

DIRECTOR | BIOMEDICAL SERVICES, HEALTH SYSTEM IN THE SOUTHEAST

Technology Components of Flexible Healthcare

Laying a Technological Foundation for Flexible Care Models

Survey respondents (regardless of how flexible they rate their organizations) say the following technologies are moderately or critically important to flexible care models:

98%

98%

Continuous monitoring to alert for patient changes in acuity

97%

Visual dashboards for monitoring patient status



Tele-monitoring for observing patients in their rooms

93%

Tele-visit for engaging providers remotely

Data integration from devices to visualization and records tools

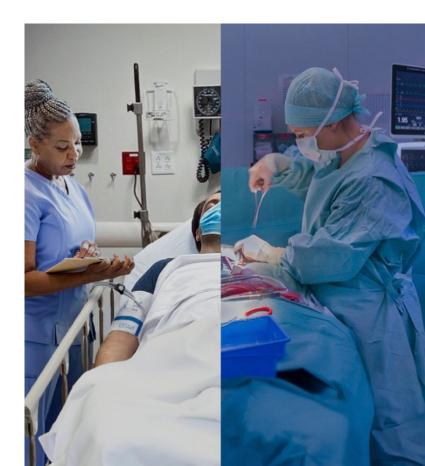
97%

Monitoring devices that are standardized throughout the organization to reduce training time



Monitoring devices that are configurable and flexible with plug and play technology Among survey respondents who rated themselves as very or extremely flexible, most pointed to monitoring technologies — notably continuous monitoring, plug-andplay configurable devices, and standardized monitoring tools across the organization — as critical to supporting their approach.

These survey respondents also say that expanding the use of continuous monitoring technologies to new areas within the hospital or health system would help identify deterioration earlier (74%), reduce reliance on telemetry beds (52%), and reduce length of stay (52%).



Monitoring Tools and Data: Driving Flexible Healthcare

To enable flexible models of care, respondents who rate their organization as very or extremely flexible, say monitoring tools need to be continuous, configurable and standardized.

	Critically Important	Moderately Important	Not Important
Continuous monitoring to alert for patient changes in acuity	78%	20%	2%
Monitoring devices that are configurable and flexible with plug and play technology	65%	31%	4%
Monitoring devices that are standardized throughout the organization to reduce training time	59%	37%	4%
Tele-monitoring for observing patients in their rooms	57%	33%	9%
Tele-visit for engaging providers remotely	44%	46%	9%
Data integration from devices to visualiza- tion and records tools	69%	30%	2%
Visual dashboards for monitoring patient status	61%	33%	6%

Conclusion

Healthcare organizations have demonstrated during a number of scenarios in the last decade that they can adapt quickly to changing conditions when necessary, and almost all agree that becoming flexible is a competitive advantage critical for organizational sustainability.

Achieving the benefits of flexible care models, however, requires change management and the right technological infrastructure to address traditional barriers to flexible care models and adaptability. Hospitals and health systems that implement flexible healthcare are more effectively utilizing resources, providing patient-centric care, improving staff efficiencies and satisfaction, and delivering better patient experiences and outcomes.

The Case for Flexible Care Models

In the face of increasing case load and complexity, along with ongoing staffing challenges, hospitals are finding innovative ways to evolve care models, including revisiting acuity adaptable care models, continuing to expand the "care anywhere" concept, and leveraging new use cases for continuous monitoring to manage these challenges head on.

Learn more

Research Demographics

All survey respondents were recruited independently by Sage Growth Partners and all research was double blinded.

Survey Respondents Title/Role

17% Chief Medical Officer
14% Manager Nursing
13% Chief Nursing Officer
10% VP/Director Nursing
8% Chief Information Officer
7% VP/Director/Service Line Leader
6% VP/Director Clinical Operations
5% VP/Director IT
5% VP/Director Biomedical Engineering
2% Chief Medical Information Officer
11% Other

Type of Hospital or Health System

54% Health system/integrated delivery network
23% Academic medical center
18% Independent acute care hospital (not affiliated with a health system or IDN)
3% Independent critical access hospital
1% Veterans Administration or Department of Defense hospital
1% Children's hospital

Number of Acute-Care Hospitals in Respondent's Organization

21% 1	
28% 2-5	
20% 6-10	
13% 11-25	
9% 26-50	
4% 51-100	
3% More than 100	

Responses may not add up to 100% due to rounding.

Organization Annual Net Patient Revenue

16% \$250-\$500M 11% \$500-\$750M 9% \$750M-\$1B 26% \$1-\$5B 14% \$5B+ 23% Don't know

Organizational Ownership Structure

76% Not for-profit/non-government
16% For-profit/investor owned
6% Government, non-federal (state, county, city)
2% Government, federal (Department of Defense, Veterans Affairs)

Geographical Settings

38% Urban35% Suburban27% Rural

About GE HealthCare

GE HealthCare is a leading global medical technology, pharmaceutical diagnostics, and digital solutions innovator, dedicated to providing integrat-ed solutions, services, and data analytics to make hospitals more efficient, clinicians more effective, therapies more precise, and patients healthier and happier. Serving patients and providers for more than 100 years, GE HealthCare is advancing personalized, connected, and compassionate care, while simplifying the patient's journey across the care pathway. Together our Imaging, Ultrasound, Patient Care Solutions, and Pharma-ceutical Diagnostics businesses help improve patient care from diagnosis, to therapy, to monitoring. We are an \$18.3 billion business with 50,000 employees working to create a world where healthcare has no limits. Visit our website

https://www.gehealthcare.com.

About Sage Growth Partners

Sage Growth Partners is a healthcare advisory firm with deep expertise in market research, strategy, and communications. Founded in 2005, the company's extensive domain experience ensures that healthcare organizations thrive amid the complexities of a rapidly changing marketplace. Sage Growth Partners serves clients across the full healthcare spectrum, including GE HealthCare. For more information, visit https://sage-growth.com.

Not all products or features are available in all markets. Full product technical specification is available upon request. Contact a GE HealthCare Representative for more information.

Please visit www.gehealthcare.com/promotional-locations.

Data subject to change.

© 2023 GE HealthCare

GE is a trademark of General Electric Company used under trademark license.

All other trademarks are property of their respective owners.

Reproduction in any form is forbidden without prior written permission from GE HealthCare. Nothing in this material should be used to diagnose or treat any disease

or condition. Readers must consult a healthcare professional.

JB26180XX 10/2023

