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ABOUT THIS STUDY

To understand how COVID-19 has impacted healthcare providers, and their strategies moving forward, we surveyed over 100 professionals at this year's ASHE PDC conference (American Society for Health Care Engineering's Planning and Design Conference).

SURVEY PARTICIPANTS

Respondents included executive, facility, and operational leaders from many of our nation's largest healthcare organizations.

▶▶ KEY INSIGHTS

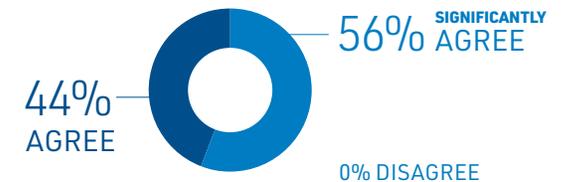
All survey participants agreed the pandemic opened up new ways of thinking that will endure long after COVID-19 subsides.

Providers are rethinking approaches in many areas, including operations, planning, and facilities, as well as patient and staff care.

At the same time, the pandemic accelerated several important health and community trends already taking place. Three major themes emerged that summarize the current focus of many healthcare providers:

- flexibility
- space changes
- telehealth

“ THE PANDEMIC OPENED UP NEW WAYS OF THINKING THAT WILL ENDURE LONG AFTER COVID-19 ”



01

**THE CRITICAL NEED
FOR FLEXIBILITY**

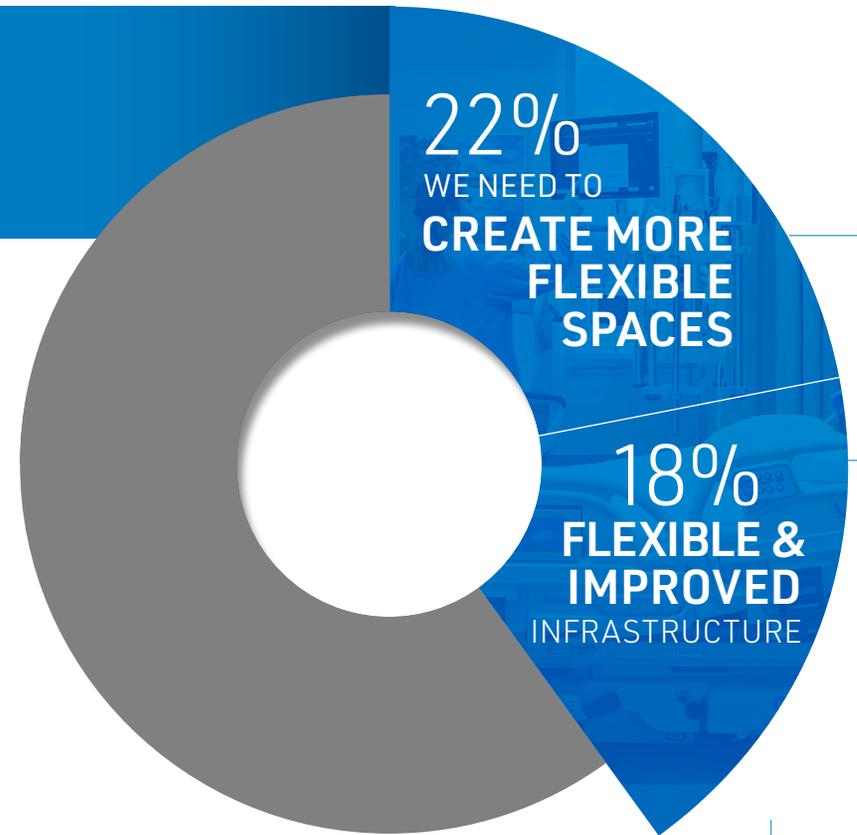
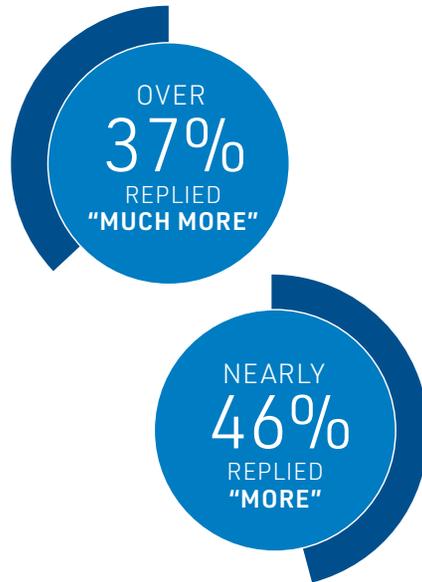
What is the greatest long-term impact of the pandemic ON YOUR HEALTHCARE FACILITIES?

Coded responses to open-ended question

GREATER FLEXIBILITY

was referenced more than any other topic –
it comprised a full 40% of all topics mentioned.

▶▶ When asked
how much more
attention flexibility
is receiving now
vs. pre-COVID-19:



22%: Create more flexible spaces

Facilities need flexible, multi-functional spaces that can quickly scale up or down in acuity and capacity levels.

18%: Flexible & improved infrastructure

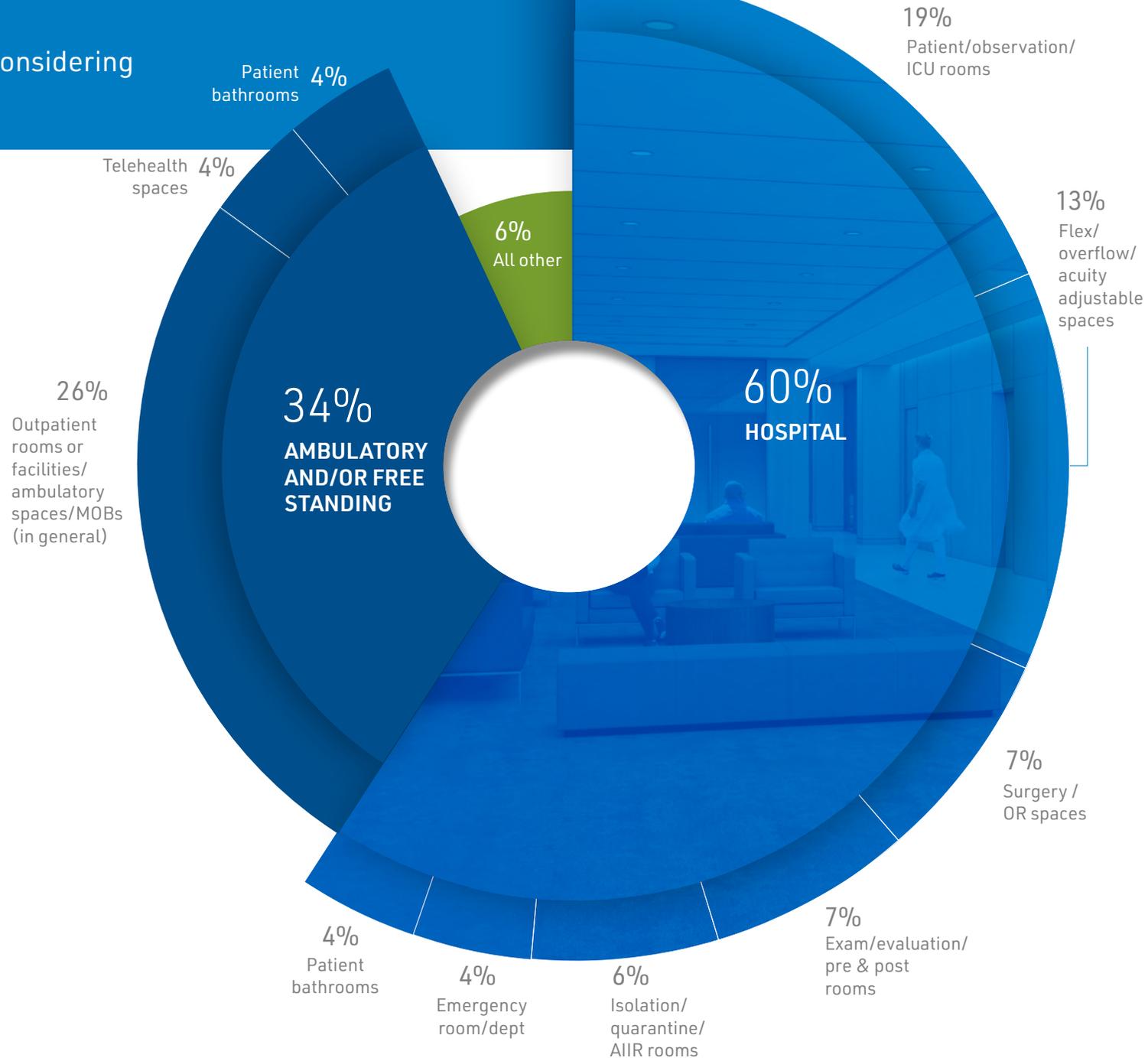
HVAC, air exchange, ventilation, gas lines, and engineering systems must all flex to control airflow and keep patients and caregivers safe.

What types of spaces are you considering FOR MODULARITY?

Coded responses to open-ended question

MODULARITY IS FLEXIBLE and has the potential for cost reduction – it's an approach now being considered for a wide variety of spaces.

Using a modular construction approach, facility components are designed and built in a standardized manner so they can be configured and reconfigured efficiently.



HEALTHCARE PROVIDER COMMENTS

THE LONG-TERM NEED FOR FLEXIBILITY

Flexibility of space to be adapted for a **multitude of uses.**

We are focused on designing our HVAC systems to provide **maximum flexibility** in terms of filtration, ACH and pressure differentials.

Capacity was a great concern... more focus will be placed on creating adaptable/flexible spaces to **handle increased demands.**

We need more flexibility for **quick isolation conversions** to rooms, floors.

We must have the flexibility to **convert a space at a moment's notice.**

We are now **being more thoughtful** about flexible and adaptable designs.

We need the **ability to flex** "non-clinical" spaces for clinical use.

We are **improving ventilation systems** and looking to advances in air cleaning and filtration.

02

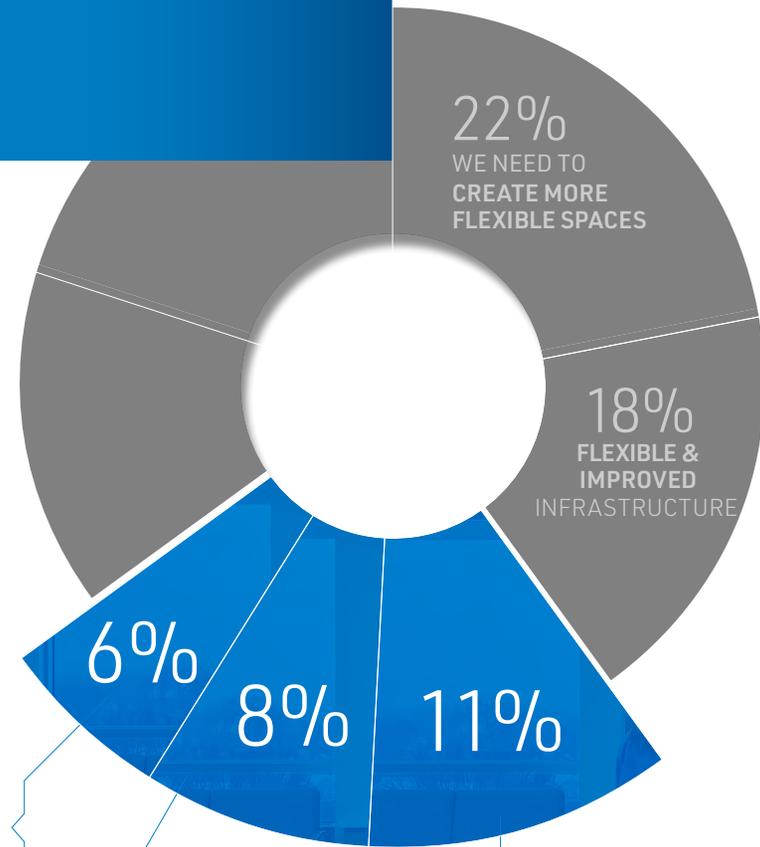
**SPACE CHANGES TO
MAXIMIZE SAFETY
AND COMFORT**

What is the greatest long-term impact of the pandemic ON YOUR HEALTHCARE FACILITIES?

Coded responses to open-ended question

THE NEED FOR DESIGN AND SPACE CHANGES

within facilities was made apparent by COVID-19. Many of these changes are aimed at increasing safety for all, mitigating infectious disease risks, and better supporting their staff.



PHYSICAL SEPARATION

Across facilities, there is a need for more physical barriers, spaces designed for distancing, and touchless designs.

PATIENT & TREATMENT ROOMS

Being better prepared for infectious diseases requires more isolation rooms, negative pressure rooms, and more single occupancy rooms.

COMMON SPACE

Common areas must be designed to keep the sick safely separated from others. Waiting rooms, entrances, screening and queuing spaces, and patient and provider flows are all receiving increased attention.

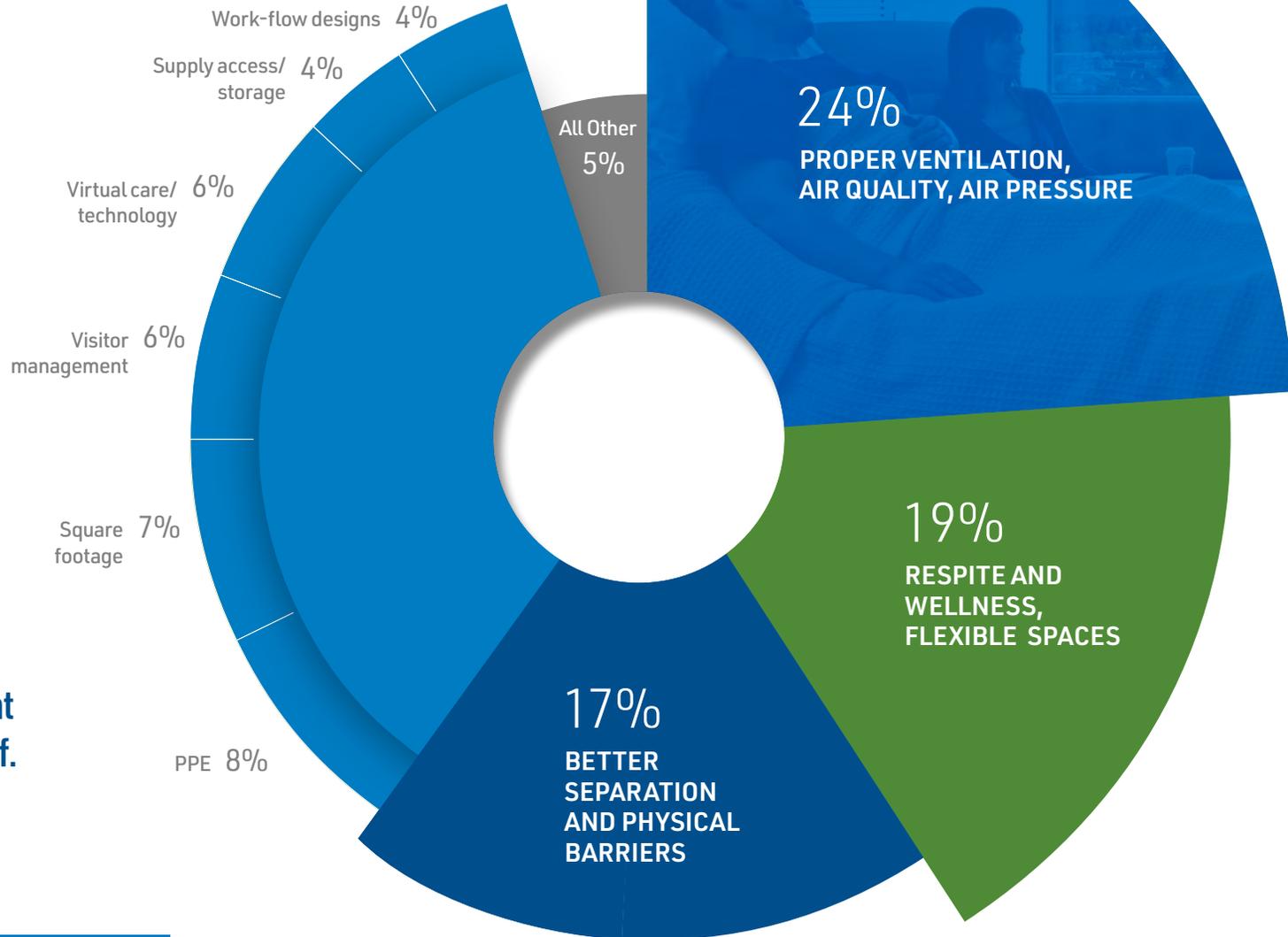
What changes in design can create SAFER ENVIRONMENTS FOR CAREGIVERS?

Coded responses to open-ended question

CREATING SAFER CAREGIVER ENVIRONMENTS

Providers mentioned that many facilities lack meaningful respite spaces.

The pandemic has heightened my organization's ongoing commitment to the safety and well-being of staff.



HEALTHCARE PROVIDER COMMENTS

HOW TO CREATE SAFER ENVIRONMENTS FOR HEALTH CARE WORKERS

“ We must increase space for staff areas, break rooms, work rooms, and other space intended to cater to their **mental well-being and the emotional needs** of the caregivers. ”

“ We have to provide everything the caregiver needs to do their job... including a **spot for respite.** ”

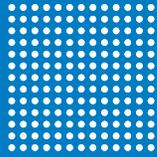
“ Improvements in **air quality, convenient access to PPE, respite spaces for caregivers, and increased use of telehealth** are needed to keep staff safe. ”

“ 1) **Improve air flow** depending on acuity and isolation requirements. 2) Provide spaces for staff to de-compress. 3) Provide storage for PPE and ease of access to PPE. ”

“ Separation between different types of patient care... and additional air changes and **isolation spaces.** ”

“ ...**technology** to allow communication with very contagious patients. ”

03



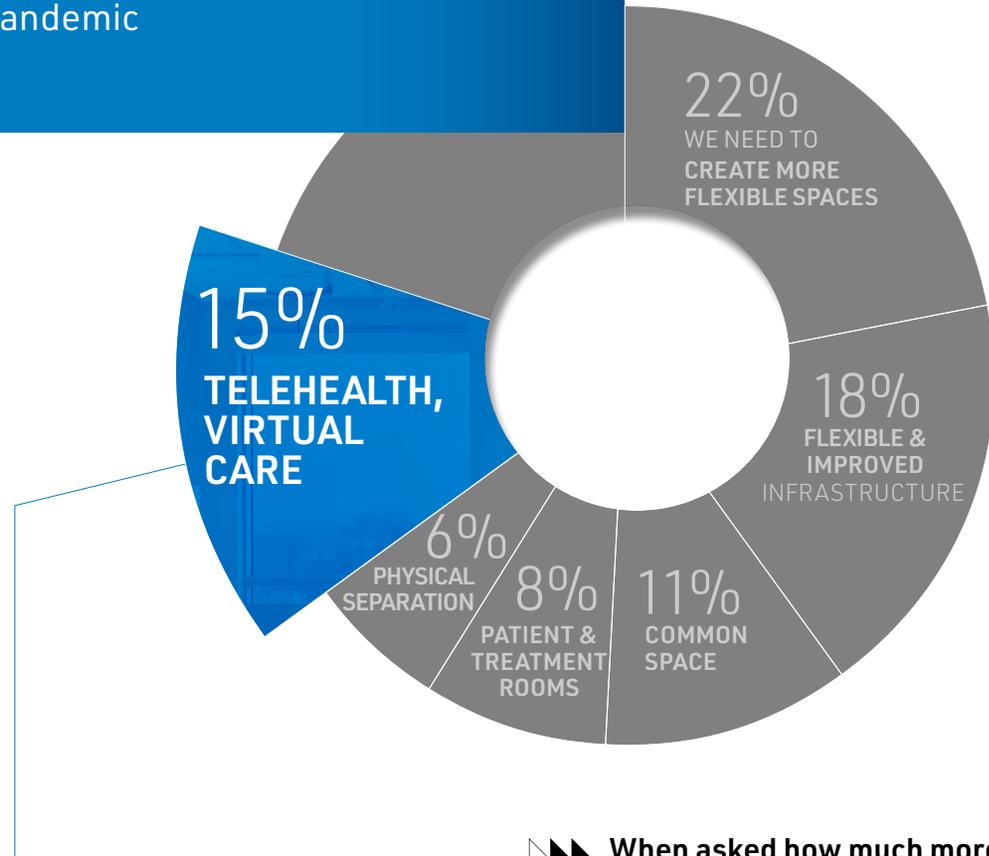
THE POWER OF TELEHEALTH

What is the greatest long-term impact of the pandemic ON YOUR HEALTH CARE FACILITIES?

Coded responses to open-ended question

TELEHEALTH CONTINUES TO DRIVE AGILITY

Out of necessity, the pandemic accelerated the transition to telehealth and providers quickly recognized the positive impacts to their organizations.



What impact will telehealth have on the physical facilities footprint of your medical office and other spaces?



▶▶▶ When asked how much more attention telehealth is receiving now vs. pre-COVID-19:



THE POWER OF TELEHEALTH ACCELERATED BY THE PANDEMIC

Telehealth helps improve the entire continuum of care – virtual care allows providers to triage and direct patients to the right care at the right place.

▶▶ CONTINUUM OF CARE



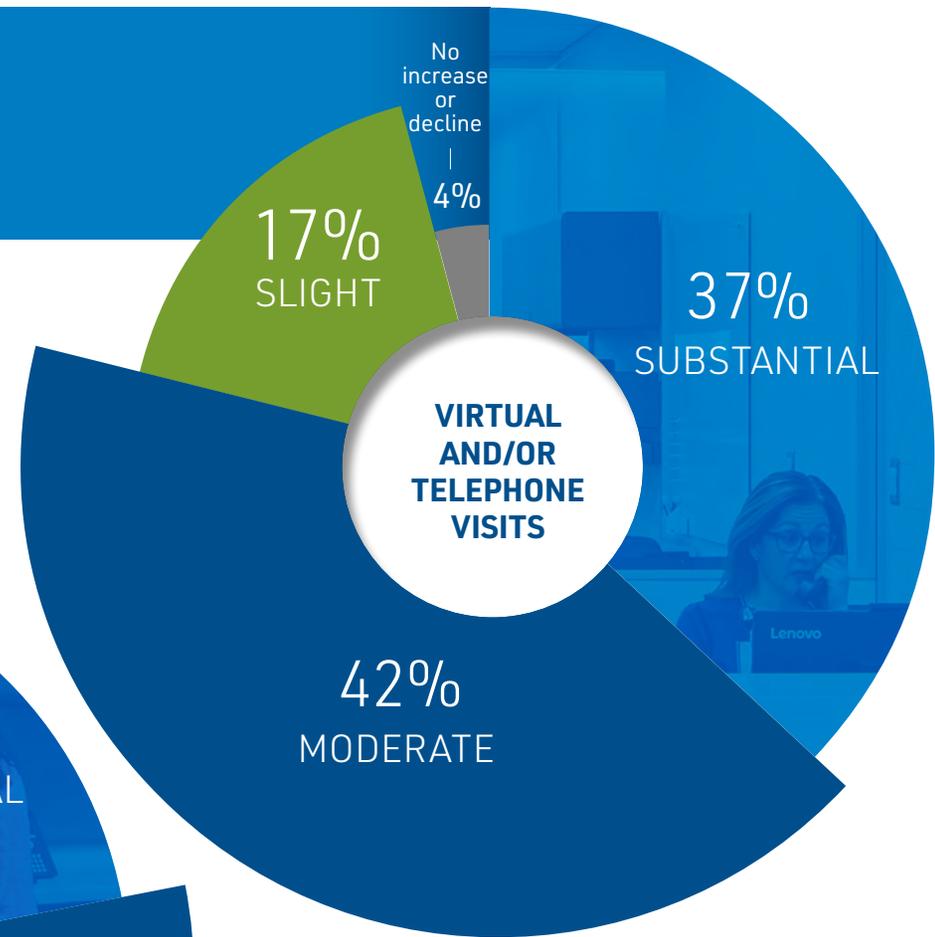
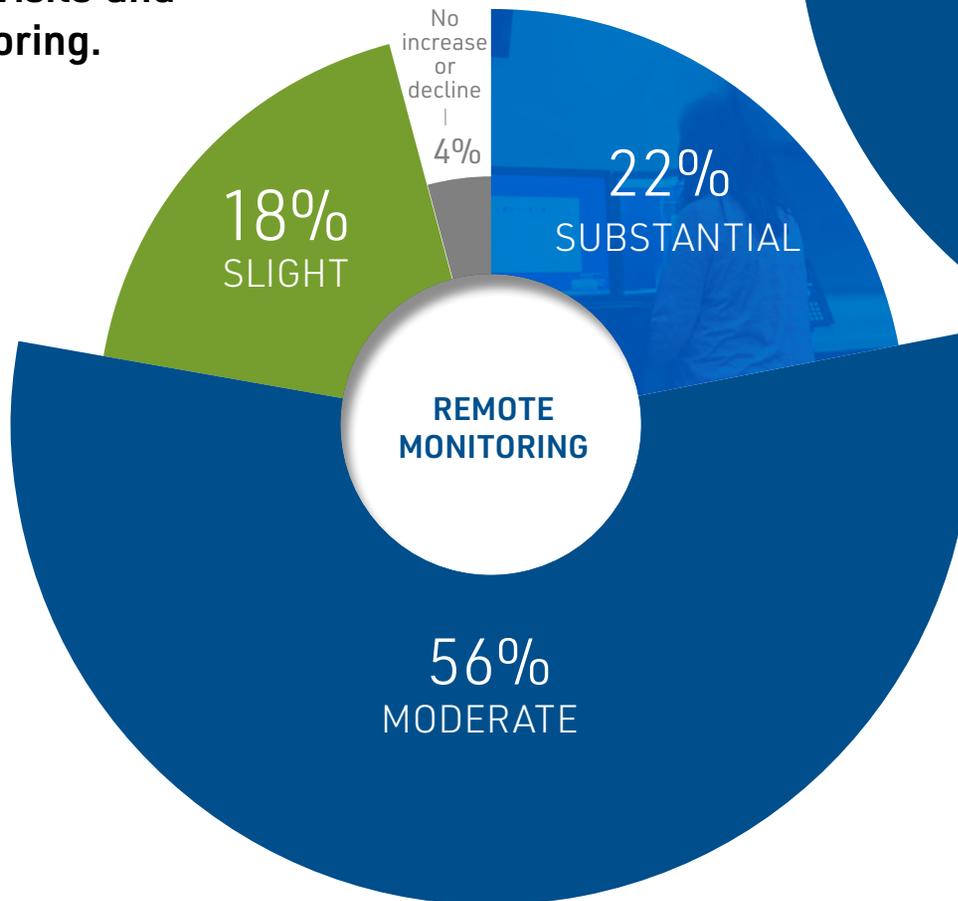
Telehealth enables providers to:

- Reach new patients and under served communities.
- Enhance preventive, proactive on-going care, including management of medicines, and follow-up treatments.
- Improve patient outcomes.
- Maximize efficiency and facility utilization.
- Reduce costs.

Over the next three years, what will be your increase in these
REMOTE/AMBULATORY PATIENT CARE OPTIONS?

8 OUT OF 10 PROVIDERS

believe they will see substantial or moderate increases in the use of virtual visits and remote monitoring.



Increase:

Substantial Moderate Slight No increase or Decline

INSTITUTION'S MIX OF AMBULATORY vs. INPATIENT



WEB-BASED PATIENT "SELF-SERVICE" OPTIONS



KIOSKS



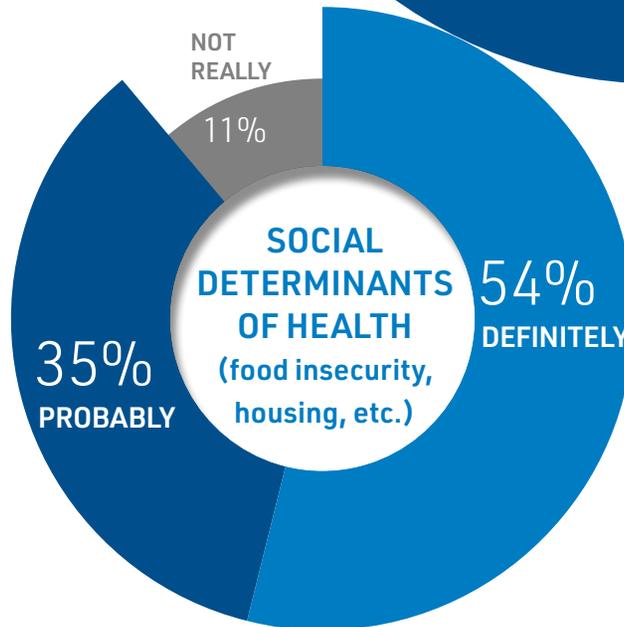
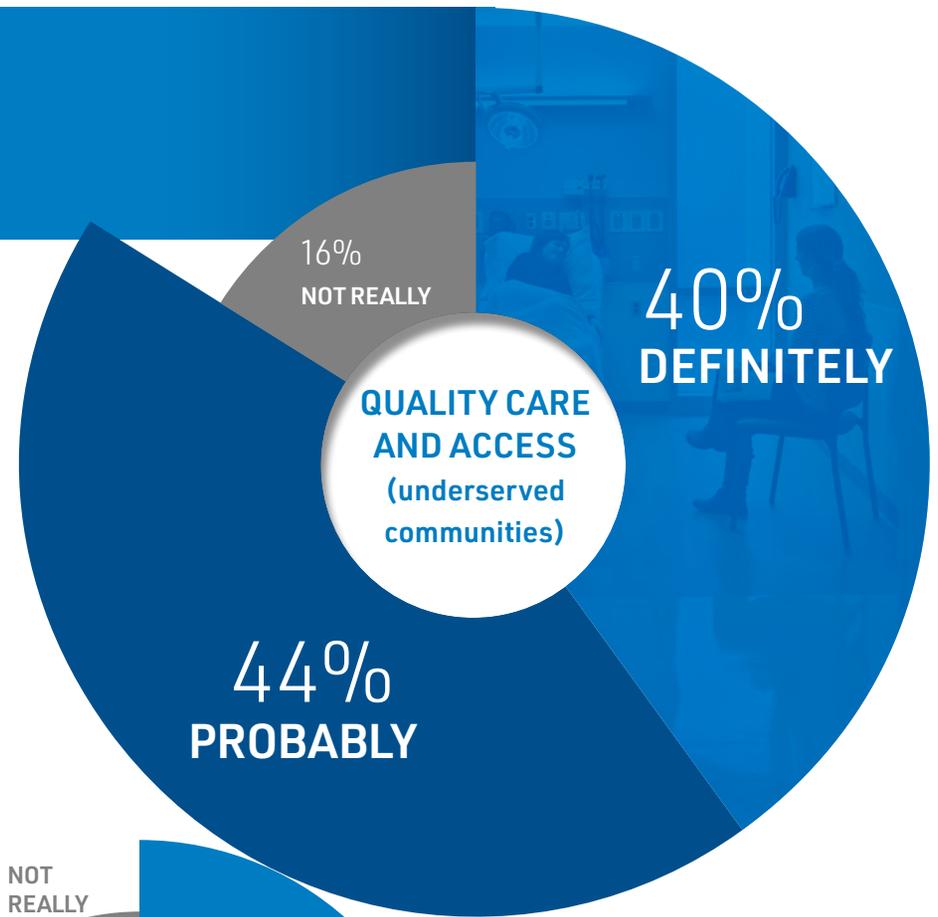
RETAIL PARTNERSHIPS



The pandemic has heightened my organization's
ONGOING COMMITMENT TO...

UNDERSERVED COMMUNITIES RECEIVING QUALITY CARE AND ACCESS

Providers overwhelmingly agree that their organization will make a stronger commitment to providing quality care and access to underserved communities - with telehealth and extended ambulatory networks playing a key role.



Heightened attention will also be placed on social determinants of health such as food insecurity and housing. However, providers realize that these changes on their own are not enough to serve patients who face challenges accessing food, housing, security and other basic needs.

HEALTHCARE PROVIDER COMMENTS

GREATER USE OF TELEHEALTH AND VIRTUAL CARE

- Improved telehealth options are providing **much better access for our community.**
- Greater use of virtual care and technology solutions are enabling us to **improve facility space utilization.**
- We are now thinking more about ways to **bring care out to the patient.**
- There are now telemedicine and virtual opportunities that help **enhance patient, provider, and family interactions.**
- Moving forward, we will **give far more emphasis to remote or virtual visits.**
- The ability to provide telemedicine has significantly **changed the landscape of the facility design approach.**
- The pandemic pushed us **much faster to virtual visits.**



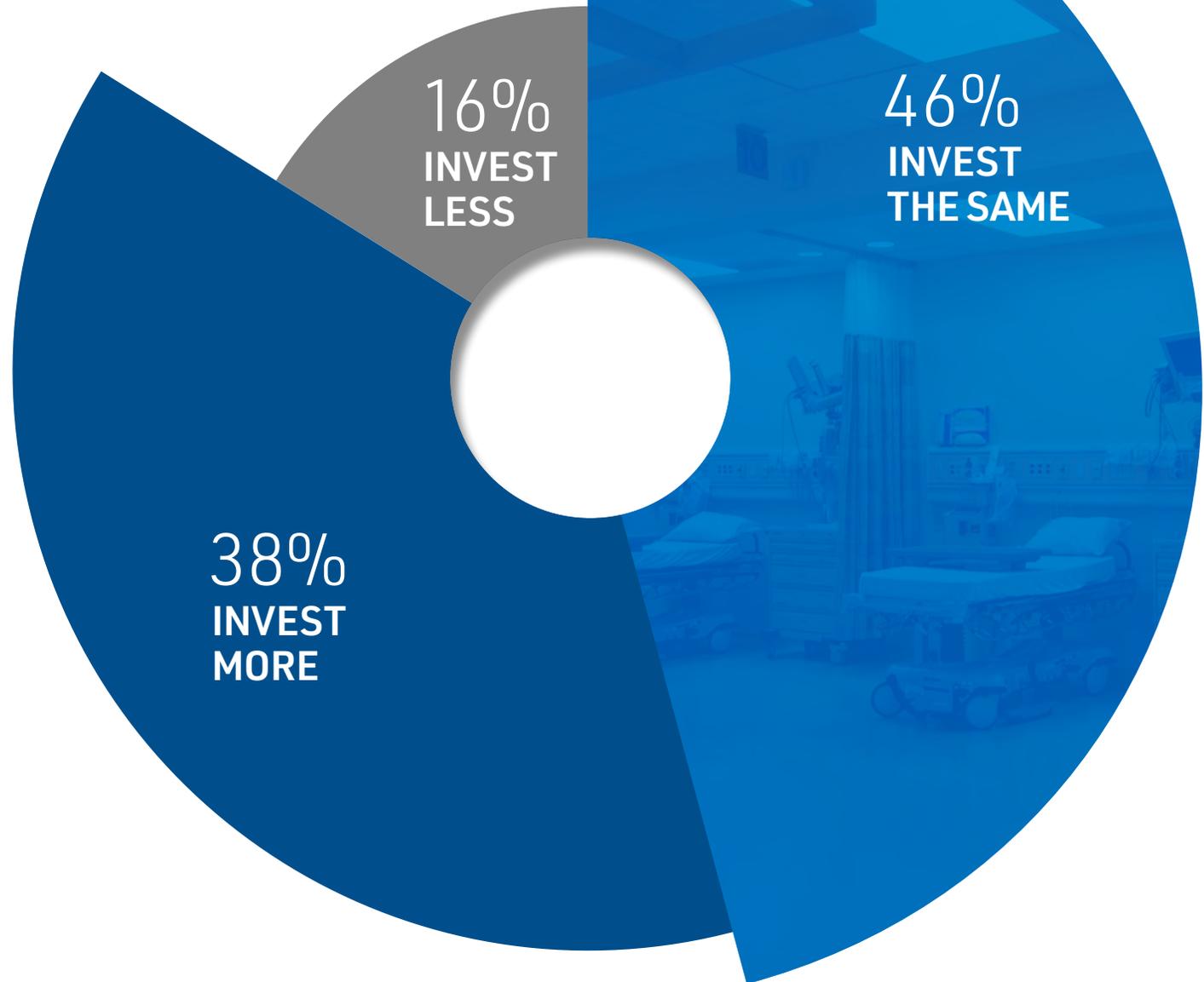
04

**IMPLICATIONS FOR
INVESTMENTS
MOVING FORWARD**

How will your **FACILITY INVESTMENTS IN THE NEXT 12-18 MONTHS COMPARE** to the 12-18 months before COVID-19?

**NEARLY 40%
PLAN TO
INVEST MORE**

Facility investments are anticipated to exceed pre-COVID-19 levels according to nearly 4 out of 10 respondents.



Which facility types will see MAJOR NEW INVESTMENTS IN THE NEXT TWO YEARS?

NUMEROUS COVID-19 IMPACTS

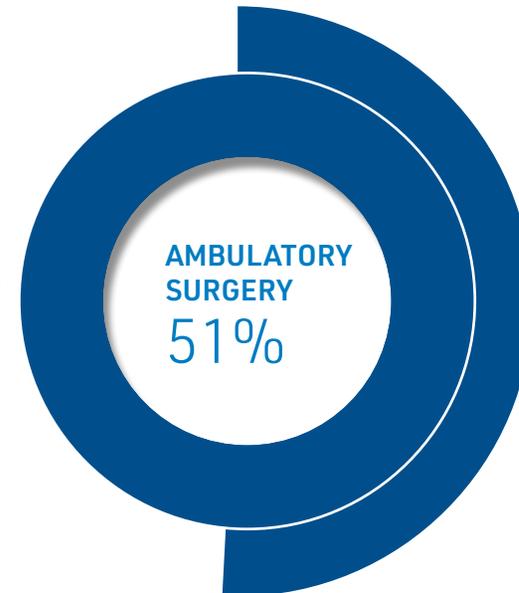
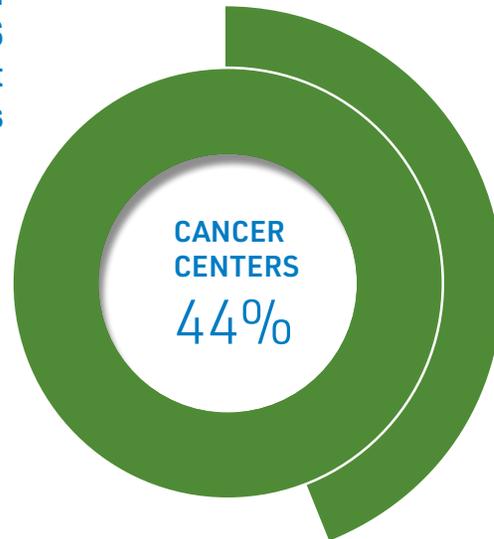
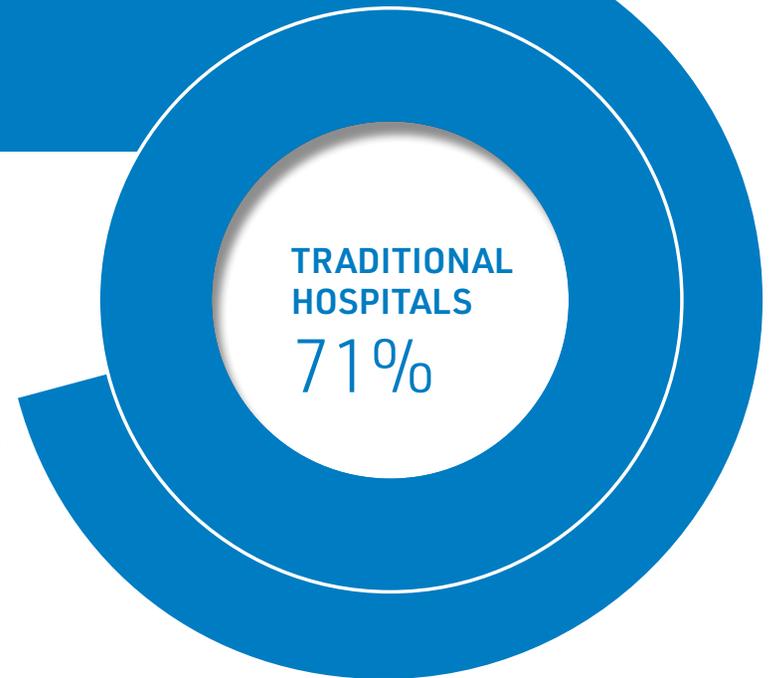
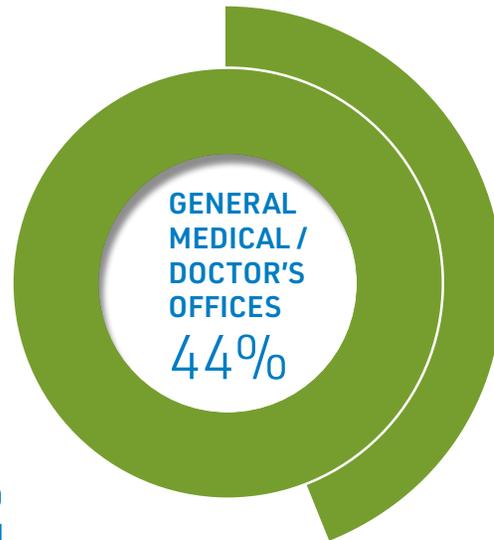
to traditional hospitals will potentially lead to major new investments.

Over 80% of respondents said THESE 4 FACILITY TYPES will see at least minor investments

PRE-PANDEMIC RESULTS

From 2018 ASHE PDC Survey:

- 49% Clinics / Ambulatory
- 48% Traditional Hospitals
- 48% Focused Medical Facilities
- 47% Micro Hospitals
- 45% Remote Screening Facilities
- 40% Nursing Homes
- 35% Wellness Centers
- 34% Mobile Kiosks



URGENT CARE
38%

MENTAL HEALTH
31%

WELLNESS
25%

NURSING HOMES
8%



A PARTNER YOU CAN RELY ON

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HOW WE CAN HELP

Check out these links to see how we have helped healthcare systems, like yours, improve their care team spaces, increase adaptability, all while prioritizing the safety of their patients.

- ▶ [Advocate Aurora Mount Pleasant Medical Center](#)
- ▶ [Froedtert Ambulatory Master Plan](#)
- ▶ [Kaiser Permanente IDIQ](#)
- ▶ [Providence Health Reed's Crossing Wellness Center](#)
- ▶ [Tri-County Health Care Expansion](#)
- ▶ [Allina Abbott Northwestern Neuro ICU Buildout](#)