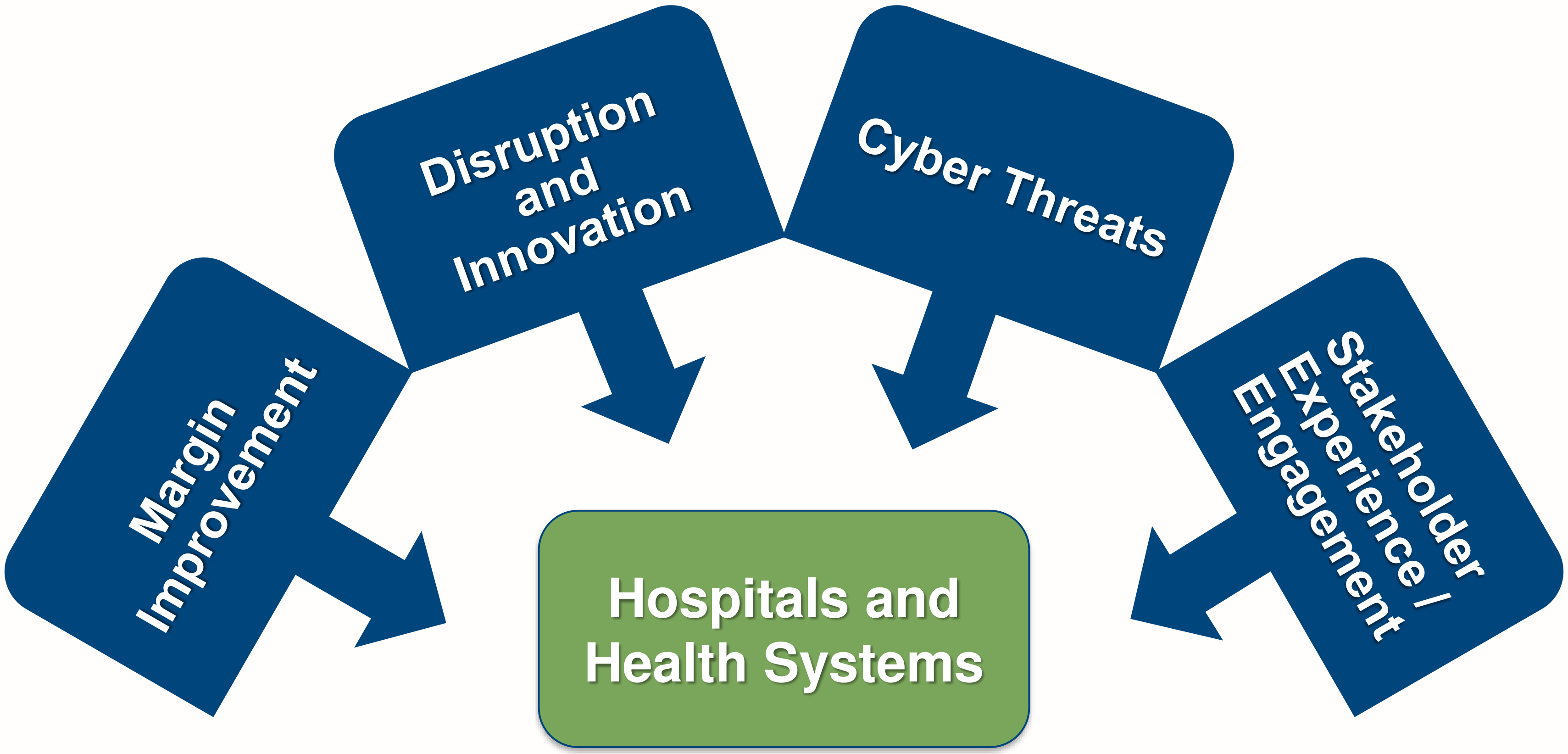
Releasing the Valve on Market Pressures: Actionable Strategies for 2023

October 20, 2022

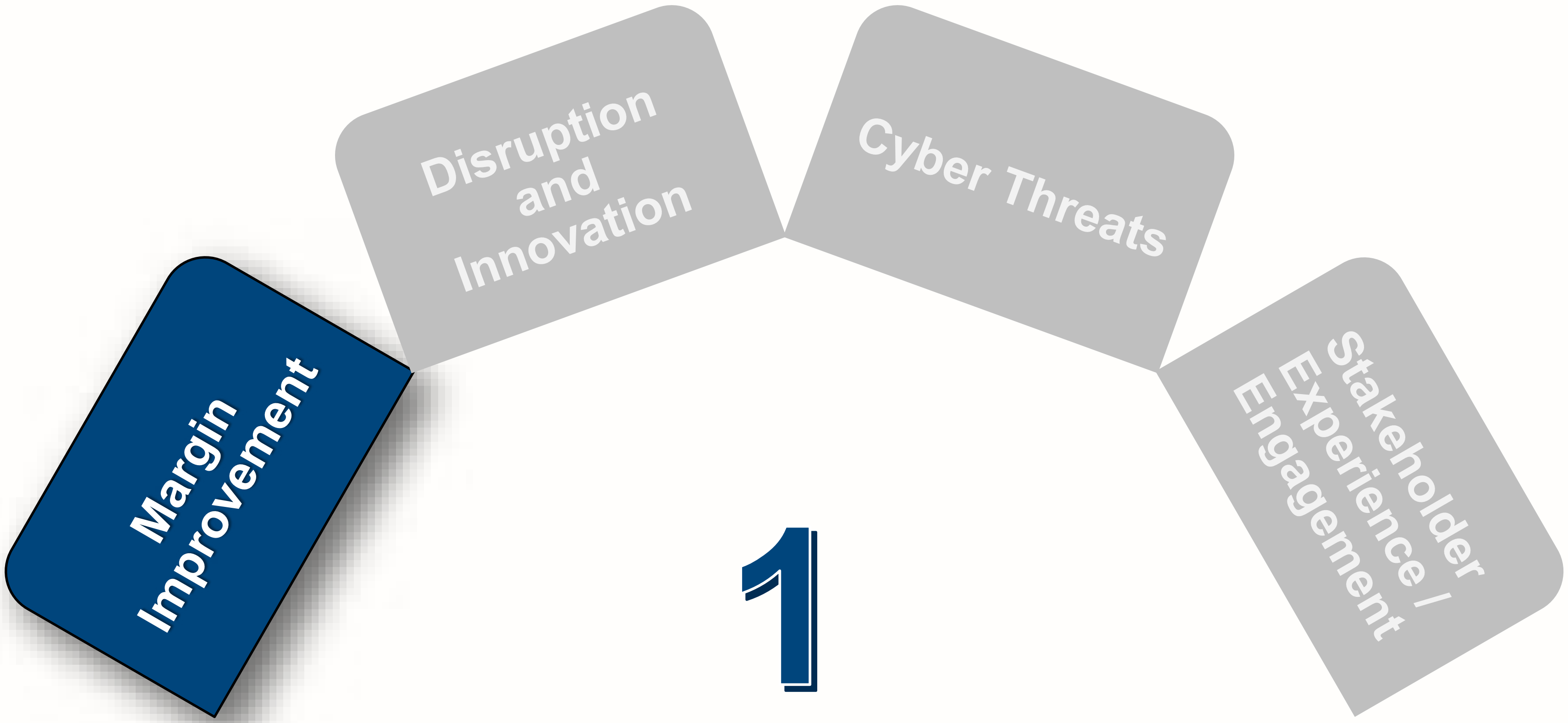
Impact advisors

Current Market Pressures



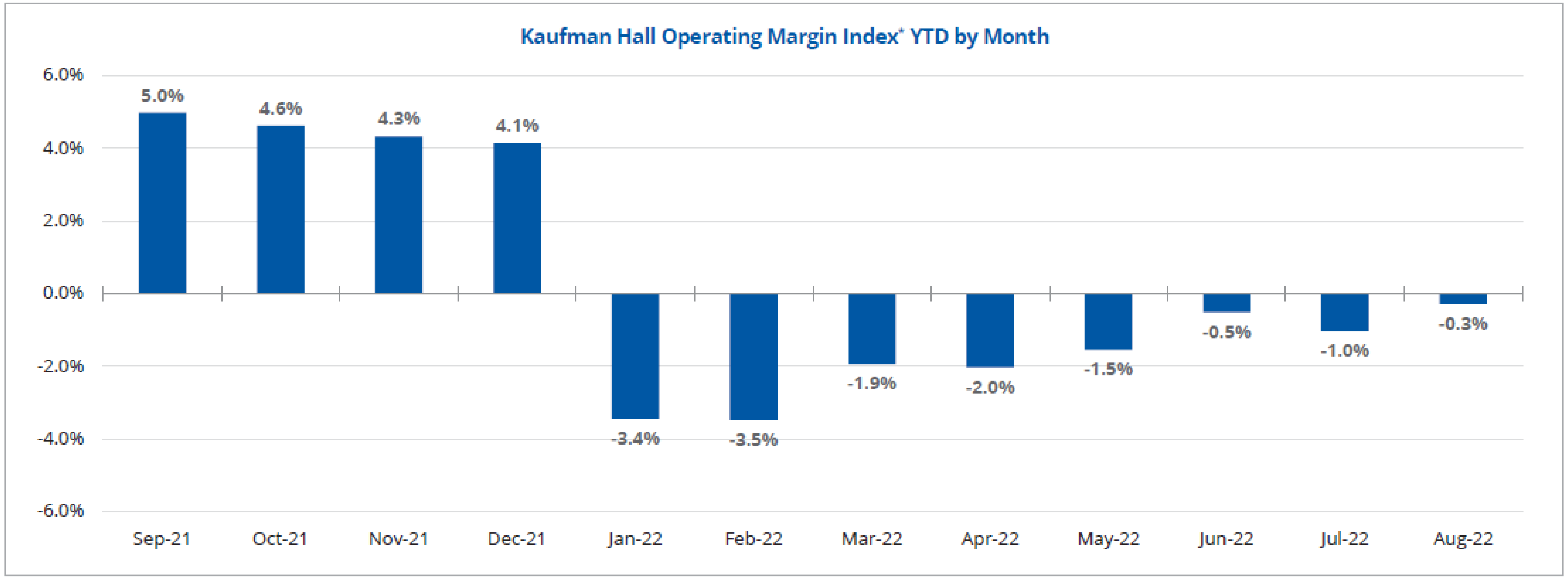
Current Market Pressures

Margin Improvement	Disruption and Innovation	Cyber Threats	Demands and Expectations from Multiple Stakeholders
Maintaining a healthy margin is elusive given a tight labor market, inflationary supply expenses, demand for perioperative services, increased length of stay, and revenue attrition.	Nontraditional competitors (CVS, Amazon, Walmart, etc.) steadily gaining traction – **especially** in primary care. It is critical providers get innovation “right.”	Cybercriminals are not just trying to infiltrate hospitals and health systems **directly;** they are also gaining access by targeting providers’ **business and trading partners.**	Providers need to respond to consumerism, improve employee engagement and development, address clinician burnout – while **also** improving their understanding of SDOH and community needs.


Margin Improvement
Disruption and Innovation
Cyber Threats
Stakeholder Experience / Engagement
1

Margin Improvement

For many healthcare organizations, maintaining a healthy margin is elusive.



Source: *National Hospital Flash Report* (September 2022)

** Note: The Kaufman Hall Hospital Operating Margin and Operating EBITDA Margin Indices are comprised of the national median of our dataset adjusted for allocations to hospitals from corporate, physician, and other entities.*

Note: chart above *includes* offsets from CARES Act funding

Source: "National Hospital Flash Report," Kaufman Hall, Sep 2022

Margin Improvement

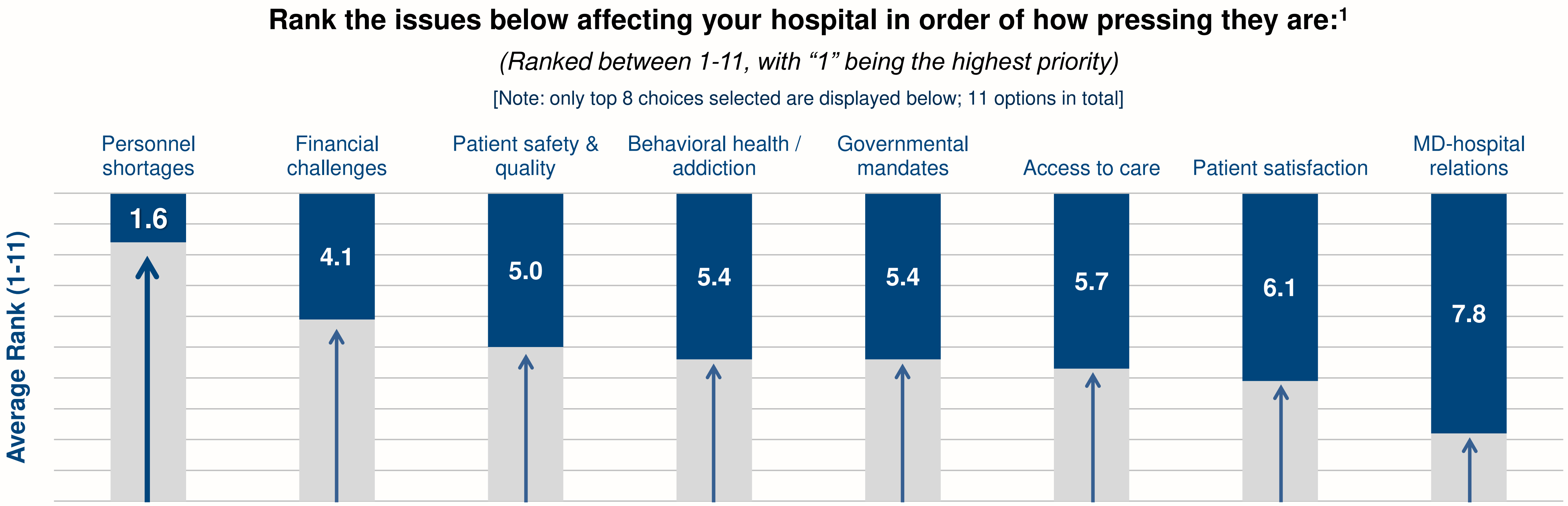
External *and* Internal Headwinds are Constant

The only way to get ahead and stay ahead is to make quantum leaps forward

- **Inflationary Supply Expenses** – Inflationary pressures are impacting the supply chain and increasing supply expense for many organizations
- **Demand for Perioperative Services** – Pent-up demand for elective perioperative services post-COVID is being met by OR capacity constraints
- **Increased Length of Stay** – Increased LOS experienced during the pandemic has stabilized at higher levels post-COVID
- **Tight Labor Market** – A tight labor market has driven up staffing costs via the need for travelers, premium pay, overtime, etc.
- **Revenue Attrition** – High turnover has depleted institutional knowledge and erased previous gains in revenue cycle performance

Margin Improvement
Workforce Shortage

- Personnel shortages ranked #1 on list of hospital CEOs' top concerns last year[1]
  - Financial challenges, which led the rankings since 2004, was #2



[1]Adapted from "Top Issues Confronting Hospitals," ACHE, Feb 2022

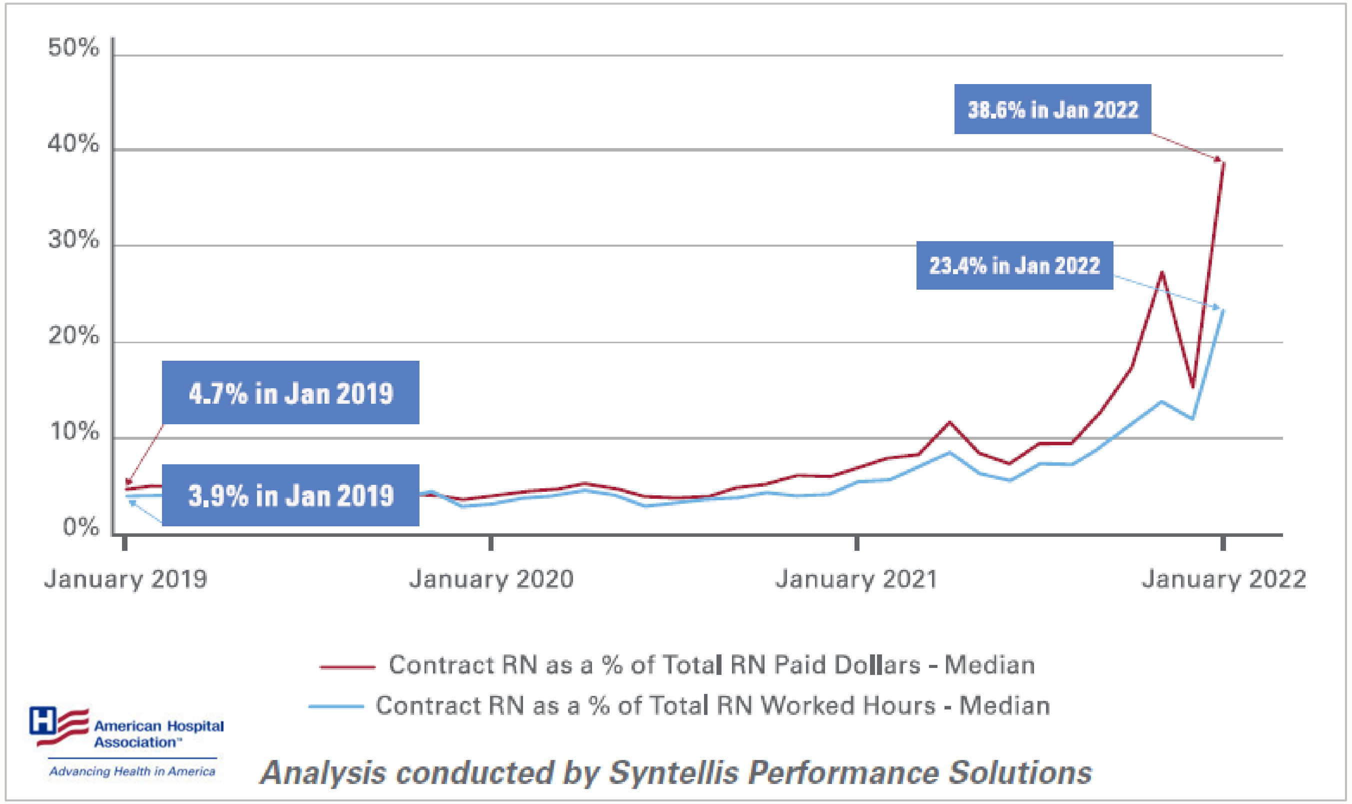
Margin Improvement

RN Agency Spend

- Higher *use* of RN agency staff
- RN agency *costs* also now more expensive

"While contract travel nurses accounted for **23.4% of total nurse hours** in January 2022 [up from 3.9% in 2019], they accounted for nearly **40% of the labor expenses for nurses** [up from 4.7% in 2019]"[1]

Contract RN as a % of Total RN Worked Hours and Paid Dollars[1]

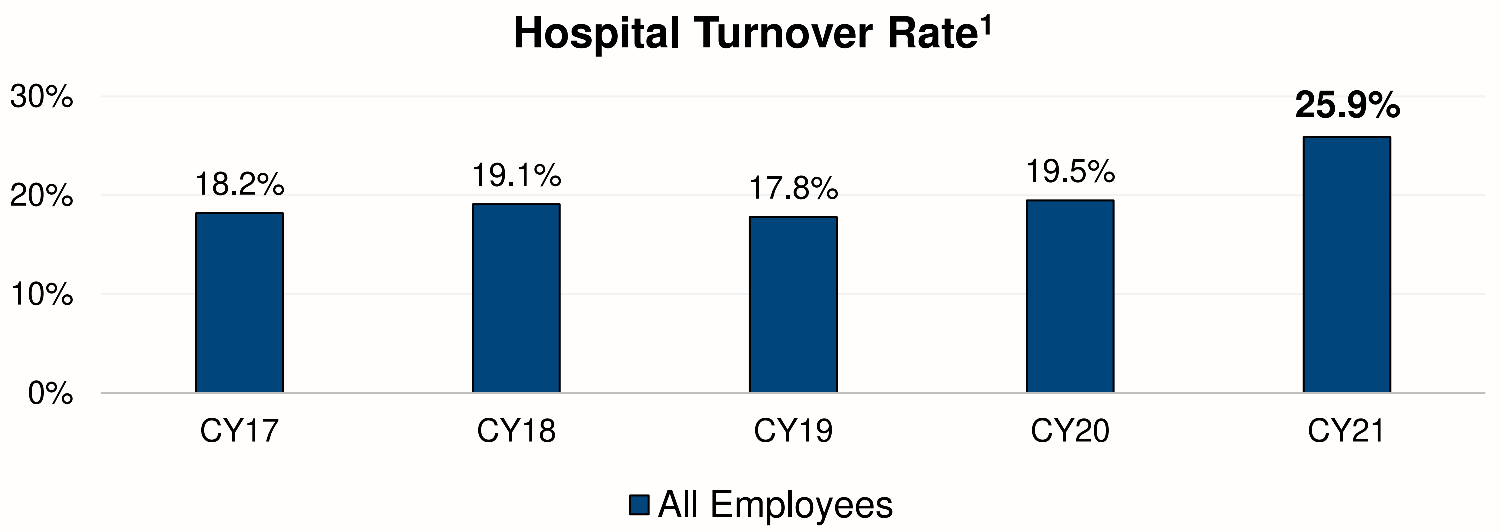


[1]Source: American Hospital Association, Apr 2022

Margin Improvement

Impact of Turnover Among Hospital Leadership

- High turnover among all hospital employees – not just RNs
- Significant implications from tremendous turnover in **leadership positions** of late
  - Revenue cycle, key department leaders, etc.
- Need leaders in place for sustained periods of time to drive change – and the financial outcomes / benefits associated with that change



[1]Adapted from "2022 NSI National Health Care Retention & RN Staffing Report," Mar 2022

Margin Improvement

Impact of Looming Economic Downturn

- Less certainty about hospitals’ and health systems’ investment income
- Time is actively working against provider organizations
- Further pressure on hospitals and health systems to achieve more **near-term** success with internal margin improvement activities

Modern Healthcare

May 02, 2022 04:59 PM

Not-for-profit hospitals lean on investment income to cover losses

BECKER'S

Hospital CFO Report

Investment gains a main driver of health system profits in 2021

Alia Paavola - Monday, March 14th, 2022

Margin Improvement

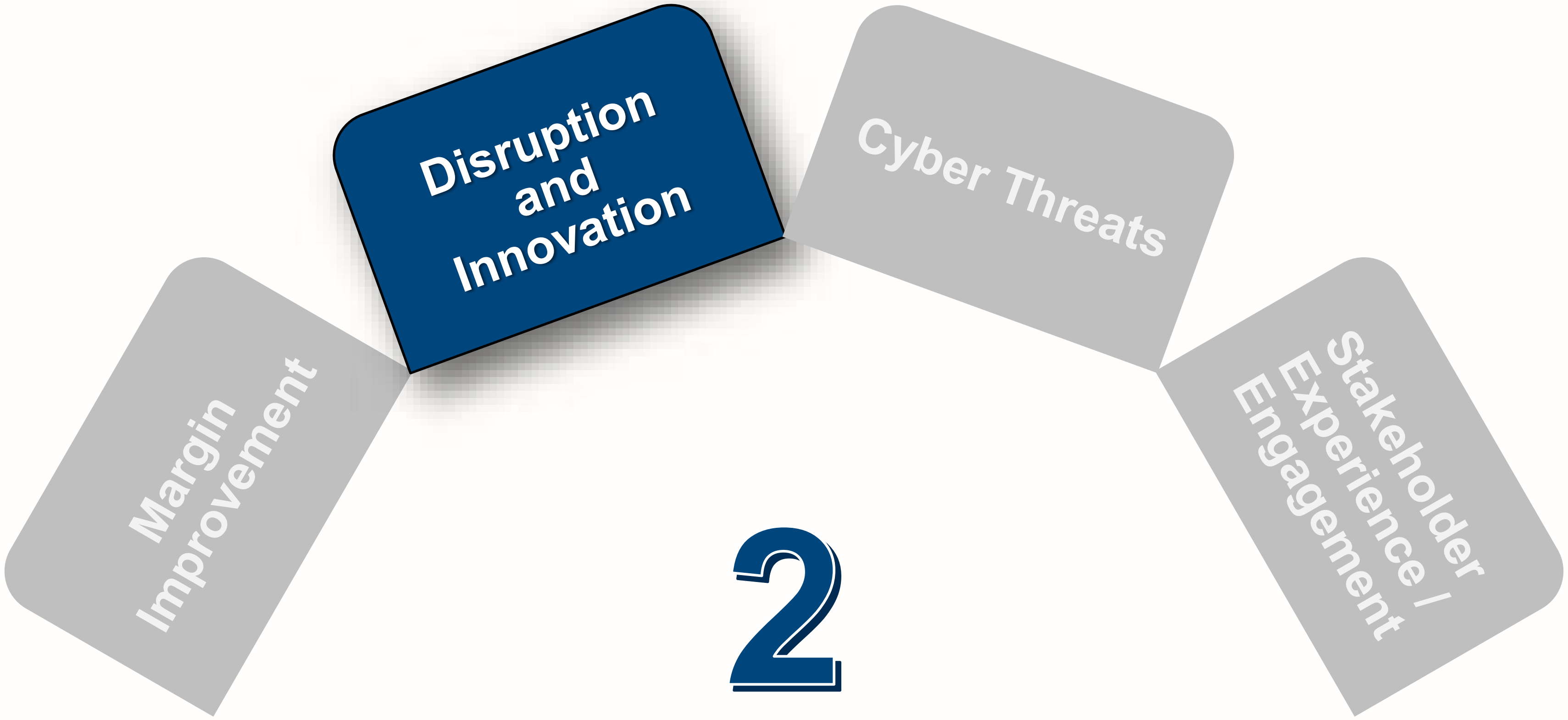
Keys to Success

- Getting down to basics and taking action **now**; time is not working in your favor
- Understanding how to quickly make decisions **within your culture**
  - E.g., If shifting away (temporarily) from a culture of making decisions by consensus, making that transition thoughtfully – with the right communication, messaging, and engagement
- Aligning supply chain strategy and temporary labor to ensure the business terms of any temporary labor contract are favorable and consistent with your overall supplier strategy
- Preparing for continued staff and leadership turnover until the market stabilizes
  - Proactively finding ways to retain institutional knowledge
  - Implementing more creativity with benefits packages for full-time employees (clinical and non-clinical)
  - Formalizing and expanding remote work options

Margin Improvement

Keys to Success continued

- Implementing greater operational discipline and business unit accountability
- Using analytics to identify potential areas of opportunity
- Improving clinical capacity management and OR throughput – and finding ways to drive more efficiencies out of clinical systems and associated workflows
- Targeting longstanding operational inefficiencies and unnecessary administrative expenses (e.g., supply chain)
  - Investing in cloud-based ERP solutions
  - Leveraging RPA (robotic process automation) to complete basic tasks and repeatable, high volume / low complexity processes
  - Outsourcing to lower-cost service providers for non-strategic services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Disruption and Innovation

The volume of nontraditional competitors in health delivery is growing – and initiatives from many key stakeholders continue to rapidly evolve.

- Onsite *and* virtual care options from:
  - Major pharmacy, retail, and/or grocery chains
  - Independent urgent care centers
  - Employer-sponsored worksite clinics
  - Payer programs and initiatives
  - “Concierge medicine” providers
  - Emerging tech-enabled primary care startups

- Acquisitions by private equity firms
  - High-value specialty areas (dermatology, orthopedics), imaging, ambulatory surgery centers

amazon one medical

UNITEDHEALTH GROUP

Optum

Impact advisors

Disruption and Innovation

Disruptors' Willingness to Pivot and Embrace Bold Changes

- Major stakeholders are aggressively growing through acquisitions and partnerships
  - Companies like CVS, Walmart, Amazon, etc. have inherent advantages over traditional providers (deep pockets, brand recognition, technology assets)

- Recent announcements underscore the willingness and **ability** of nontraditional competitors to quickly pivot and embrace bold changes in order to capitalize on perceived opportunities in health delivery

HEALTHCAREDIVE

CVS nabs home healthcare company Signify for $8B following bidding war

Published Sept. 6, 2022

Walmart UNITEDHEALTH GROUP

Walmart and UnitedHealth Group Collaborate To Deliver Access to High-Quality, Affordable Health Care

Select Walmart Health locations will help improve health outcomes for people by advancing value-based care, powered by proven Optum clinical capabilities. Collaboration will grow to include additional products and services over time.

Sept. 7, 2022

The Washington Post
Democracy Dies in Darkness

Amazon Care is dead, but the tech giant's health-care ambitions live on

After the sudden shutdown of its ambitious telemedicine experiment, the company continues to explore options for a major expansion into the health industry

September 4, 2022 at 6:00 a.m. EDT

- Providers should fully expect the trend to continue, **regardless** of the success or failure of any individual near-term initiative or announcement

Disruption and Innovation

Pillars of Health Delivery Services

Inpatient Diagnosis & Care	Outpatient Diagnosis & Care	Care Management	Health & Wellness
Basic	**Basic**	**Basic**	**Basic**
Urgent care (life threatening)	Minor illnesses / injuries	Care navigation	Immunizations
Emergency surgery	Basic diagnoses (lab, X-ray, etc.)	Chronic condition coaching	Preventative screenings
Short-term hospitalization	Urgent care (non-life threatening)	Chronic care management (certain conditions only)	Preventative care exams
Advanced	**Advanced**	**Advanced**	**Advanced**
Planned and/or elective surgery	Specialist consult and/or specialist office visit	Outcomes measurement	Health coaching
Inpatient specialty services	Outpatient specialty services (imaging, etc.)	Home healthcare	Diet / nutritional counseling
Long-term inpatient care	Outpatient surgery	Complex chronic disease management	Sleep assessments

Disruption and Innovation

Focus of Nontraditional Competitors

Inpatient Diagnosis & Care	Outpatient Diagnosis & Care	Care Management	Health & Wellness
Basic	**Basic**	**Basic**	**Basic**
Urgent care (life threatening) Emergency surgery Short-term hospitalization	Minor illnesses / injuries Basic diagnoses (lab, X-ray, etc.) Urgent care (non-life threatening)	Care navigation Chronic condition coaching Chronic care management (certain conditions only)	Immunizations Preventative screenings Preventative care exams
Advanced	**Advanced**	**Advanced**	**Advanced**
Planned and/or elective surgery Inpatient specialty services Long-term inpatient care	Specialist consult and/or specialist office visit Outpatient specialty services (imaging, etc.) Outpatient surgery	Outcomes measurement Home healthcare Complex chronic disease management	Health coaching Diet / nutritional counseling Sleep assessments

Area of focus for <u>nontraditional competitors</u> in health delivery (blue)

Area of focus for <u>private equity</u> in health delivery (green)

Disruption and Innovation

Success in a Data-Driven Health Delivery Market

More than ever, is it critical that providers get innovation "right"

- The crisis stemming from the pandemic underscored many health delivery organizations did not have a good handle on their data

- Strategic partnerships are increasingly critical for success
  - Partnerships between provider organizations and tech giants
  - Partnerships between provider organizations

- Partnerships between health delivery organizations and tech giants are becoming more prevalent, especially related to big tech's emerging cloud platforms in healthcare

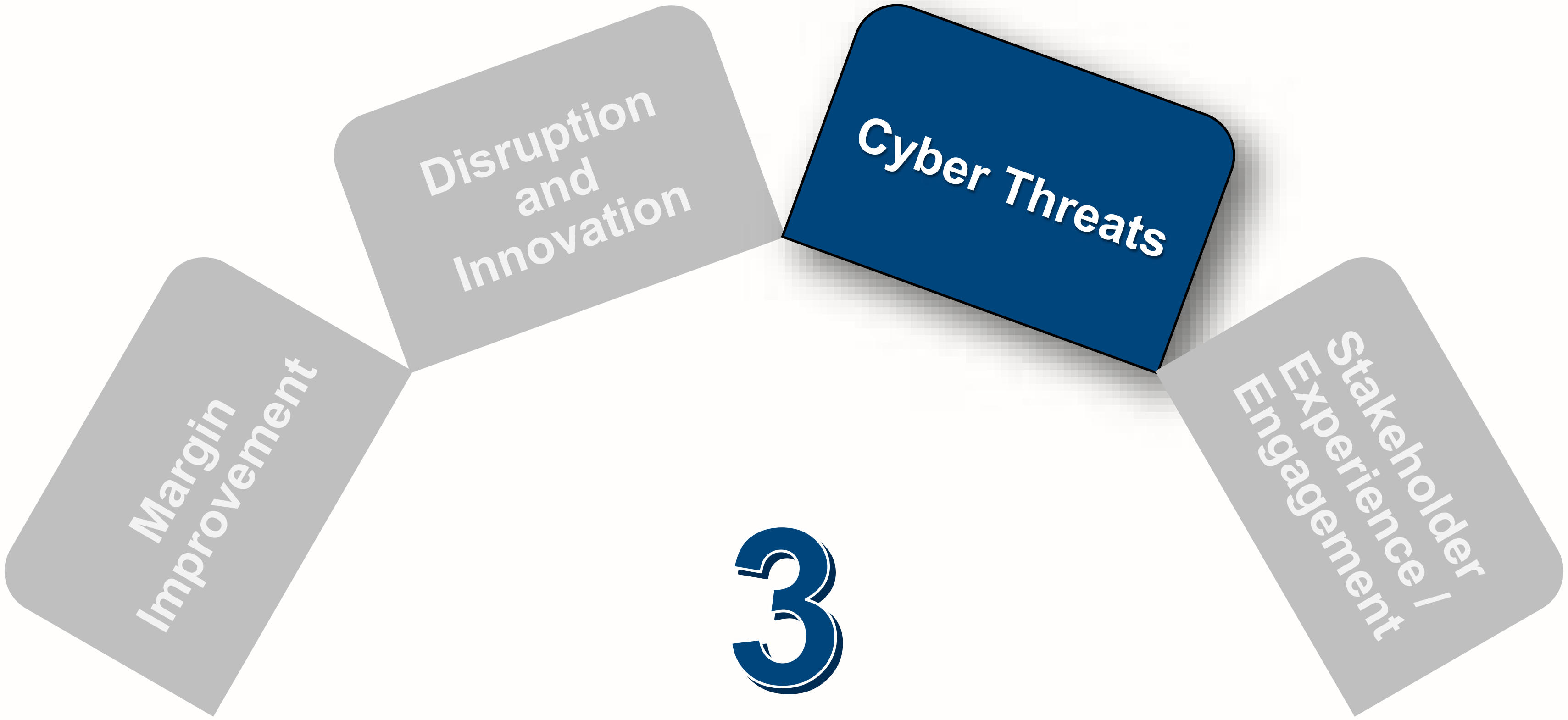
Disruption and Innovation

Keys to Success

- Fostering a **culture** of innovation
  - Willingness of hospital / health system leadership to:
    - Actively participate in disruption efforts
    - Take risks and make calculated “bets” for the future
    - Put structure (and funding) behind innovation
    - Build and expand strategic partnerships with a variety of different stakeholders
  - Establishing a private equity or venture capital “innovation fund” within the hospital

- Having a plan to respond to the **threat** from nontraditional competitors…
  - Finding innovative ways to differentiate the health system’s brand and services
  - Competing directly on convenience and access
  - Focusing on clinical expertise, depth of services, and the patient-provider relationship

- …while also capitalizing on any **opportunities** for strategic partnerships with those organizations (joint ventures, etc.)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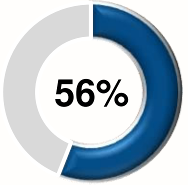
Cyber Threats

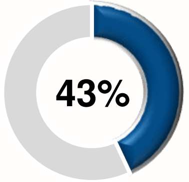
The last year has dramatically underscored the impact of rapidly evolving cyber threats – and information security vulnerabilities – in healthcare.

“[In the past 24 months, has] your organization experienced one or more…”

“…cyberattacks involving an IoMT/IoT device?”[1]



“…data breaches that resulted in the loss or exposure of patient information?”[1]



Repeat Ransomware Attacks Common

- 43% of respondents had experienced “one or more ransomware attacks.” Of that group, 76% said they experienced **three or more** ransomware attacks in the last 24 months[1]

- New attack vectors and vulnerabilities also continue to emerge (i.e., APIs)
- Rising cyber insurance premiums, new coverage exclusions for cyber policies, etc.

[1]Adapted from “The Insecurity of Connected Devices in Healthcare 2022,” Ponemon Institute / Cynerio, Aug 2022

Cyber Threats

Cybercriminals Targeting Providers’ Business Partners

- Cybercriminals are not just trying to infiltrate hospitals and health systems **directly;** they are also gaining access to health delivery organizations by targeting providers’ **business partners**

FEDERAL BUREAU OF INVESTIGATION • CYBER DIVISION

14 September 2022

Cyber Criminals Targeting Healthcare Payment Processors, Costing Victims Millions in Losses

- Further complicated by:
  - Increasing consolidation among third-party IT vendors
  - Inconsistent due diligence from third-party vendors in vetting **their own** vulnerabilities
  - Misconceptions about what is ultimately still a **shared** cloud security model

Cyber Threats
Concerns in Healthcare

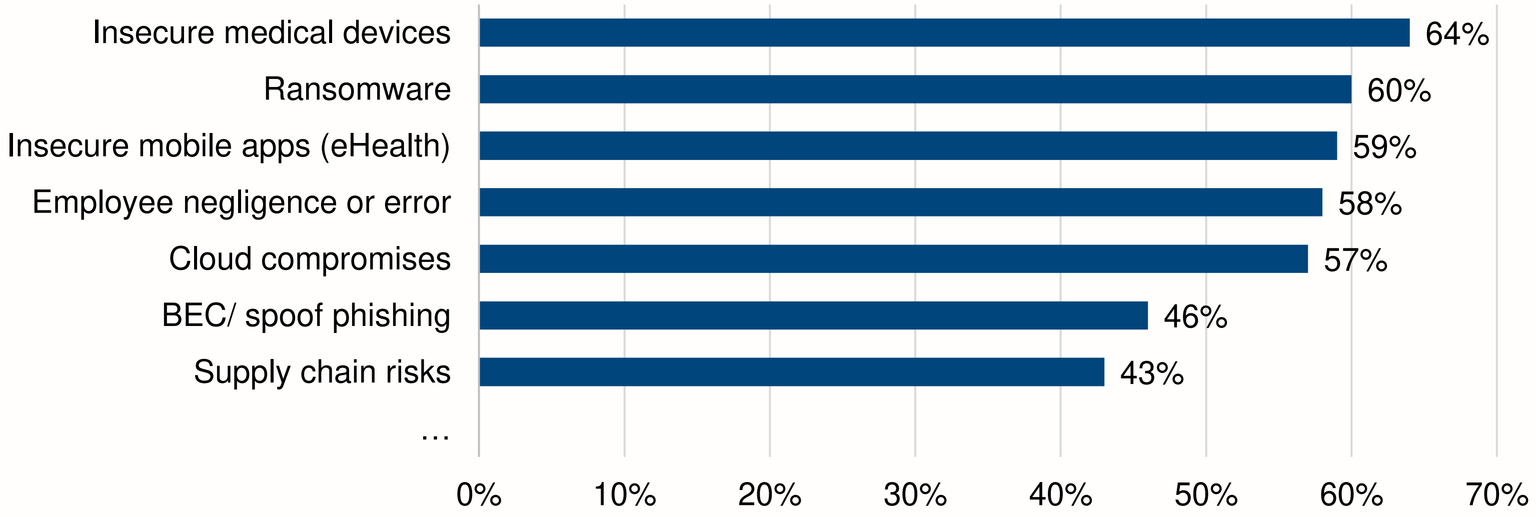
- Although organizations across all sectors of healthcare are **concerned** about a variety of different cyber threats…

"What cybersecurity threats is your organization most concerned about?"[1]

(Please select the top six)

n = 641 "IT and IT security practitioners in healthcare organizations"[2]

[Note: only choices selected by *more* than 40% of respondents displayed below; 15 options in total]



[2]Note: in addition to healthcare provider organizations (41% of respondents), respondents also included payers, health insurance companies, pharma companies, and life sciences and biotech firms

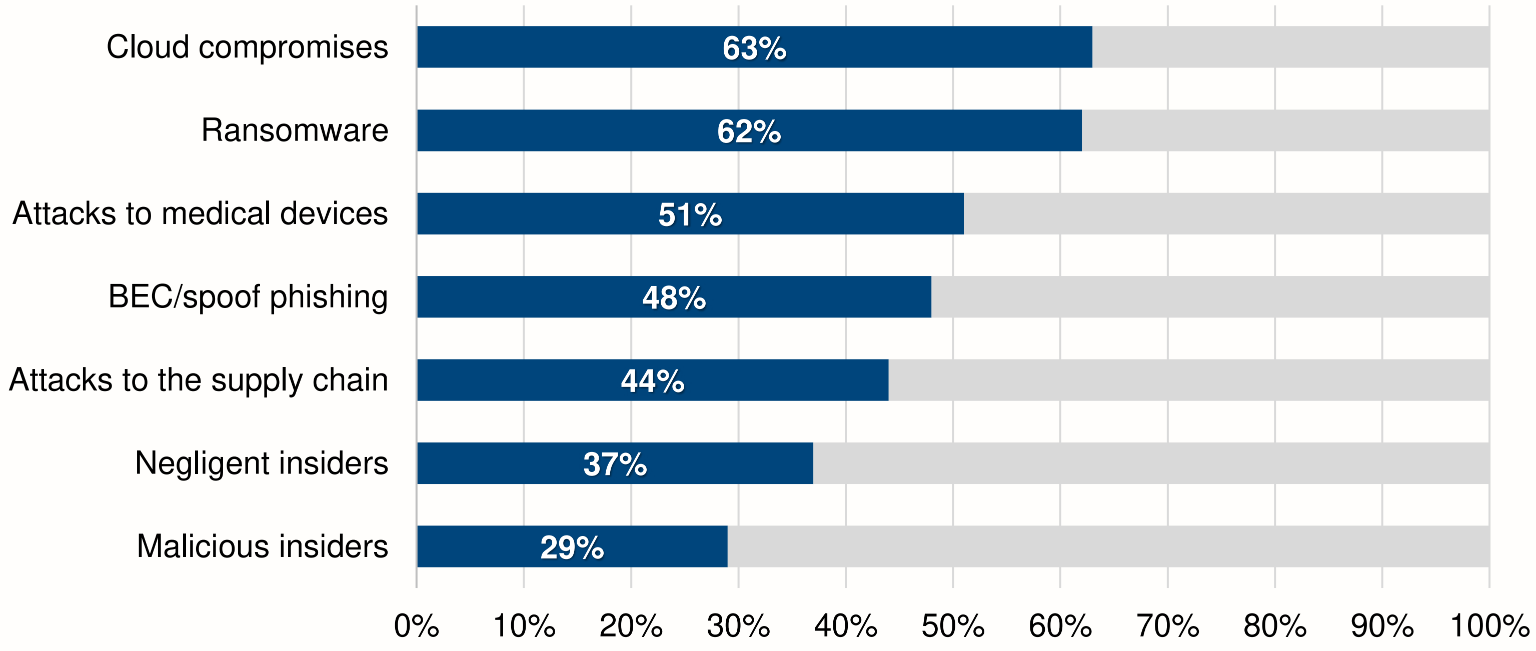
[1]Adapted from "Cyber Insecurity in Healthcare," Ponemon Institute / Proofpoint, Sep 2022

Cyber Threats
Prevention and Response

- …the reality is that more can and should be done to **prepare** for those threats

"Does your organization include the prevention and response to the following threats as part of its cybersecurity strategy?"[1]

n = 641 "IT and IT security practitioners in healthcare organizations"[2]



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[1]Adapted from "Cyber Insecurity in Healthcare," Ponemon Institute / Proofpoint, Sep 2022

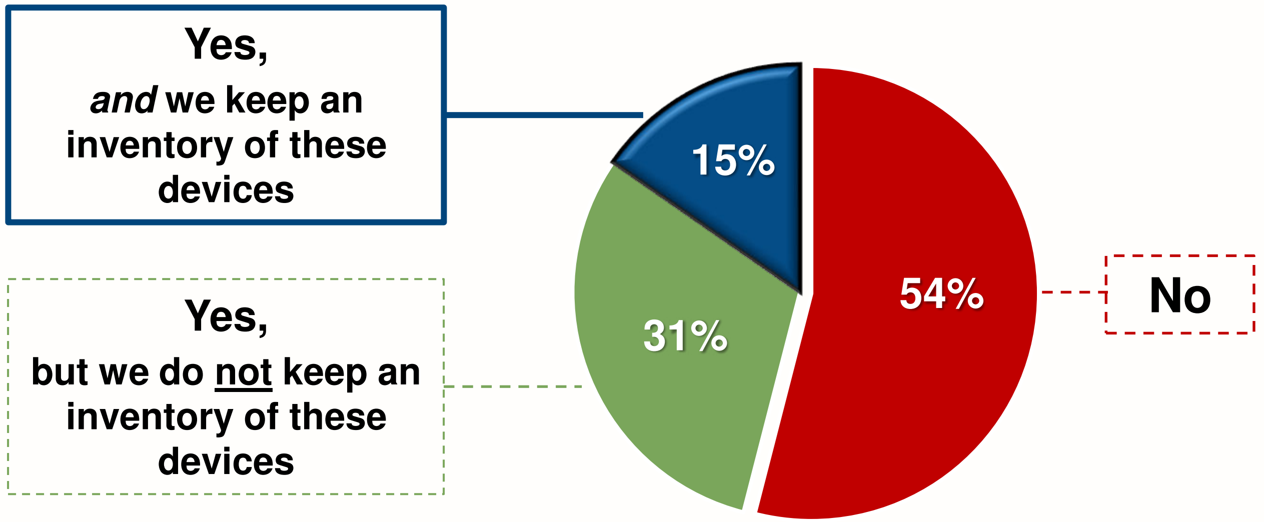
Cyber Threats

Lack of Insight into Device Inventory

- Many organizations still lack even basic visibility into the medical devices and other connected devices they own
  - Only 15% use technologies to scan & identify IoMT/IoT devices **and** keep an inventory of those devices[1]
  - Lack of oversight and/or lack of formalized processes for adding new devices to the network is often a contributing factor

"Do you currently use technologies to scan and identify IoMT/IoT devices in your organization?"[1]

n=517 hospital and health system leaders



[1]Adapted from "The Insecurity of Connected Devices in Healthcare 2022," Ponemon Institute / Cynerio, Aug 2022

Cyber Threats

Keys to Success

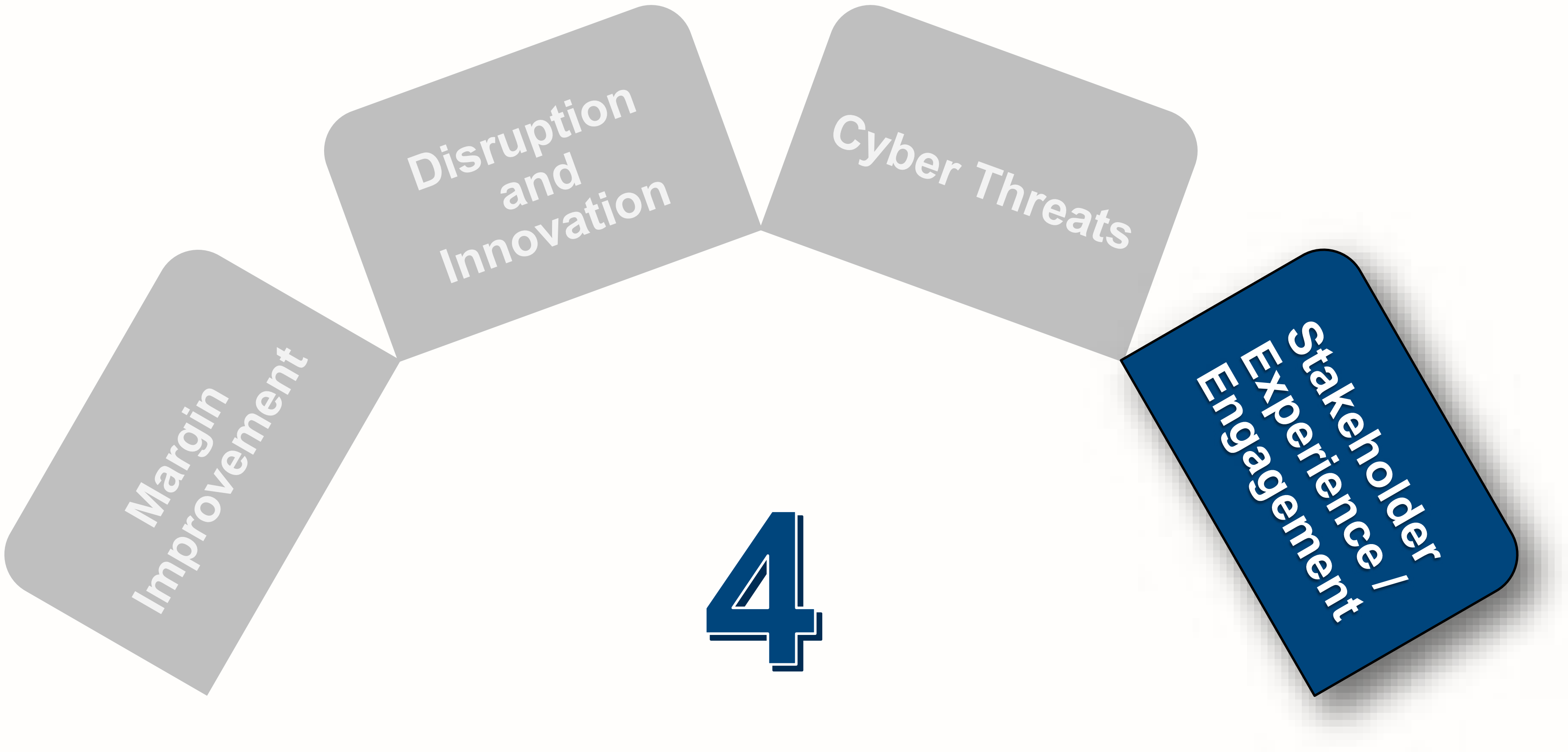
- Conducting regular, comprehensive, and objective evaluations of your information security program to assess overall maturity and the measures needed to effectively prepare for and **respond to** emerging cyber threats

- Evaluating business partners, third-party vendors, and device makers; holding them accountable to the same standards and aligning with those that have appropriate security controls

- Conducting a business impact analysis to determine an intolerable amount of risk for the organization and aligning IT security spending accordingly

- Engaging and retaining the right staff to enable and support security posture

- Ensuring key decision makers have access to comprehensive, real-time information on enterprise risk posture (inclusive of an exhaustive device inventory) to fuel proactive, analytics-driven processes and provide an accurate depiction of overall risk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Stakeholder Experience and Engagement

Providers need to simultaneously engage <u>with</u> – and address evolving demands <u>from</u> – multiple categories of stakeholders.

Employees	**Patients**
• Expectations for virtual / hybrid work options • Importance of maintaining healthy workplace culture and fostering professional development • Growing competition from *other industries* for non-clinical talent	• Premium on *convenience* • Demands for price transparency • Expectations for virtual care • Varying communication and access preferences
Clinicians	**Community**
• Longstanding burnout among MDs and RNs • High workloads and administrative burdens • Desire to practice at top of license • Competition with RN agencies for talent	• Importance of understanding unique needs within the community • Active collection – and *use* – of SDOH data • Effective outreach and coordination with partners in the community

Stakeholder Experience and Engagement

Employees

- Expectations for virtual / hybrid work options
- Importance of maintaining healthy workplace culture and fostering professional development
- Growing competition from *other industries* for non-clinical talent

Stakeholder Experience and Engagement

Non-Clinical Employee Engagement

- Employers across all industries are struggling with employee engagement

GALLUP

WORKPLACE APRIL 25, 2022

U.S. Employee Engagement Slump Continues

GALLUP

WORKPLACE MARCH 18, 2022

Percent Who Feel Employer Cares About Their Wellbeing Plummets

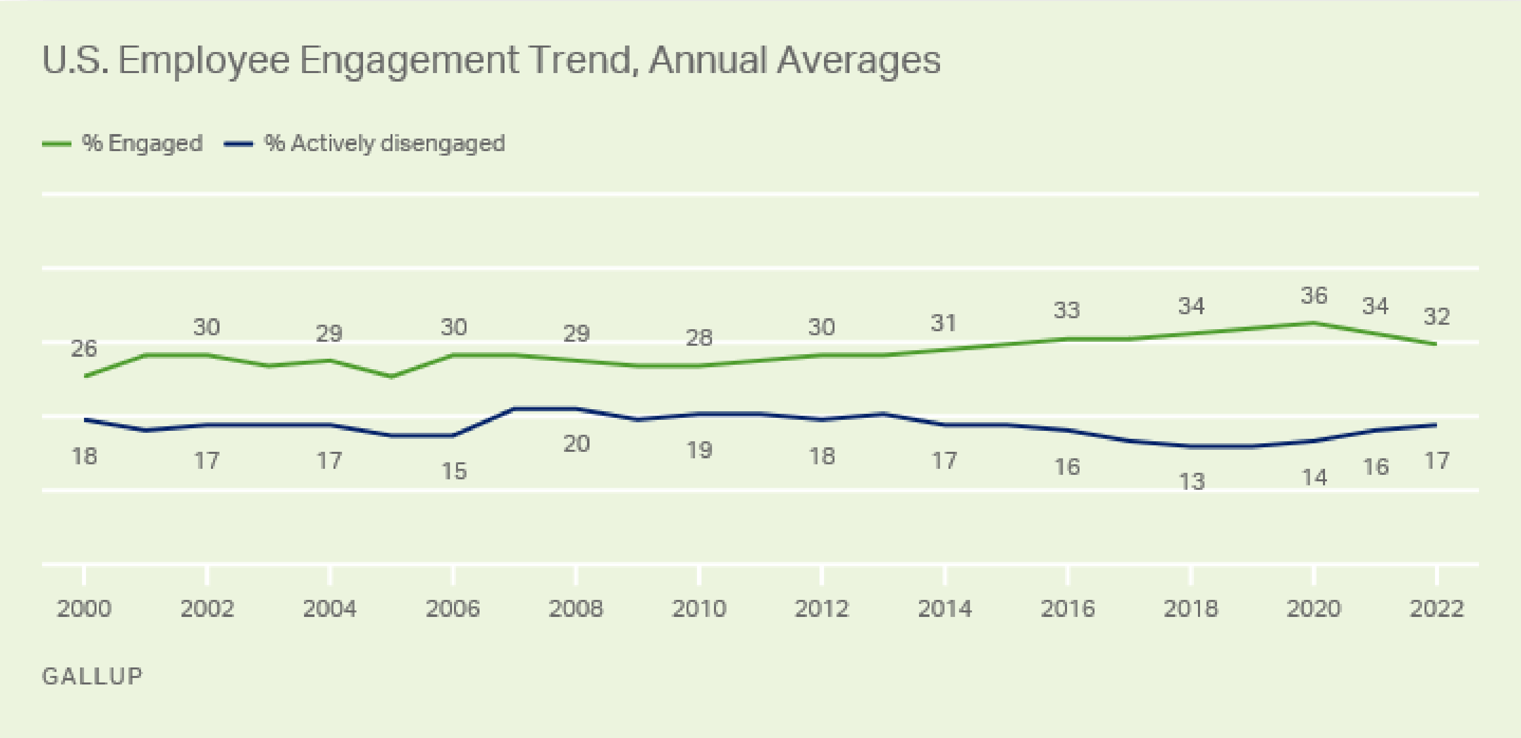


Image source for chart above: Gallup, Apr 25, 2022

Stakeholder Experience and Engagement

Clinicians

- Longstanding burnout among MDs and RNs
- High workloads and administrative burdens
- Desire to practice at top of license
- Competition with RN agencies for talent

Stakeholder Experience and Engagement

Clinician Dissatisfaction and Burnout

Only 12% of surveyed RNs said they are happy in their current job

Image source: "State of Nursing 2022," Nurse.org, Jan 2022

47% of MDs say they are burned out; up from 42% last year[1]

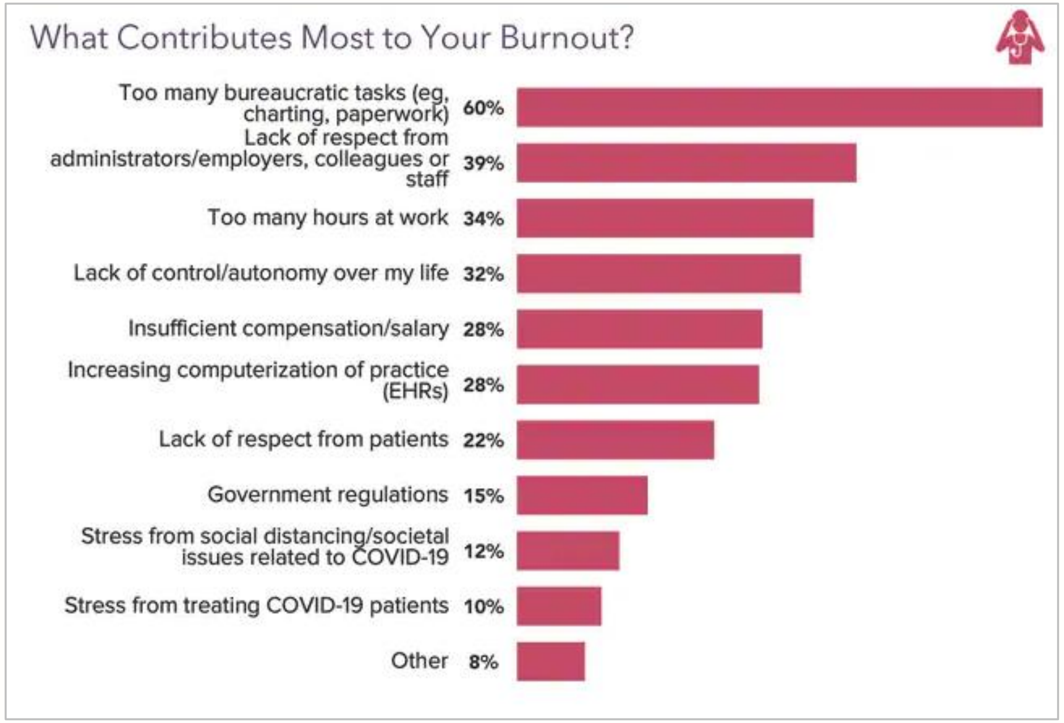


Image source: "Physician Burnout & Depression Report 2022," Medscape, Jan 21, 2022

[1]"Physician Burnout & Depression Report 2022," Medscape, Jan 21, 2022

Stakeholder Experience and Engagement

Patients

- Premium on *convenience*
- Demands for price transparency
- Expectations for virtual care
- Varying communication and access preferences

Stakeholder Experience and Engagement

Adapting to Evolving Consumer Expectations

Meanwhile, patients are quickly becoming more discerning – and demanding – consumers of healthcare.

- Premium on convenience, access, personalization, and cost
- Expectations defined by patients' experience in other consumer-facing service industries

- Providers need to be able to understand and account for a variety of consumer demands and preferences (e.g., communication and access options)
- Agility and "speed to value" are critical in health delivery
  - Hospitals and health systems can't afford to wait 6-12 months to roll out a given type of digital functionality to consumers

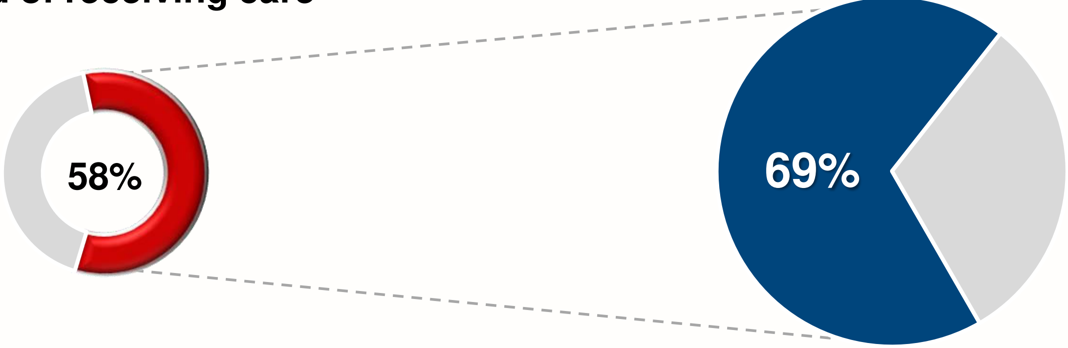
Stakeholder Experience and Engagement

Need for More Focus on the Patient *Financial* Experience

- The patient **financial** experience is a critical – yet often overlooked – aspect of the consumer's overall digital journey in health delivery

Consumers who have tried to obtain out-of-pocket costs ahead of receiving care[1]

Consumers who said "the information was difficult to find or even inaccurate"[1]



Other survey findings:

- "93% of consumers say the **quality of the financial experience** is an important factor in their decision to return to a healthcare provider"[1]
- "35% of survey respondents say they have changed (or would change) providers to get a **better digital patient administrative experience**"[1]

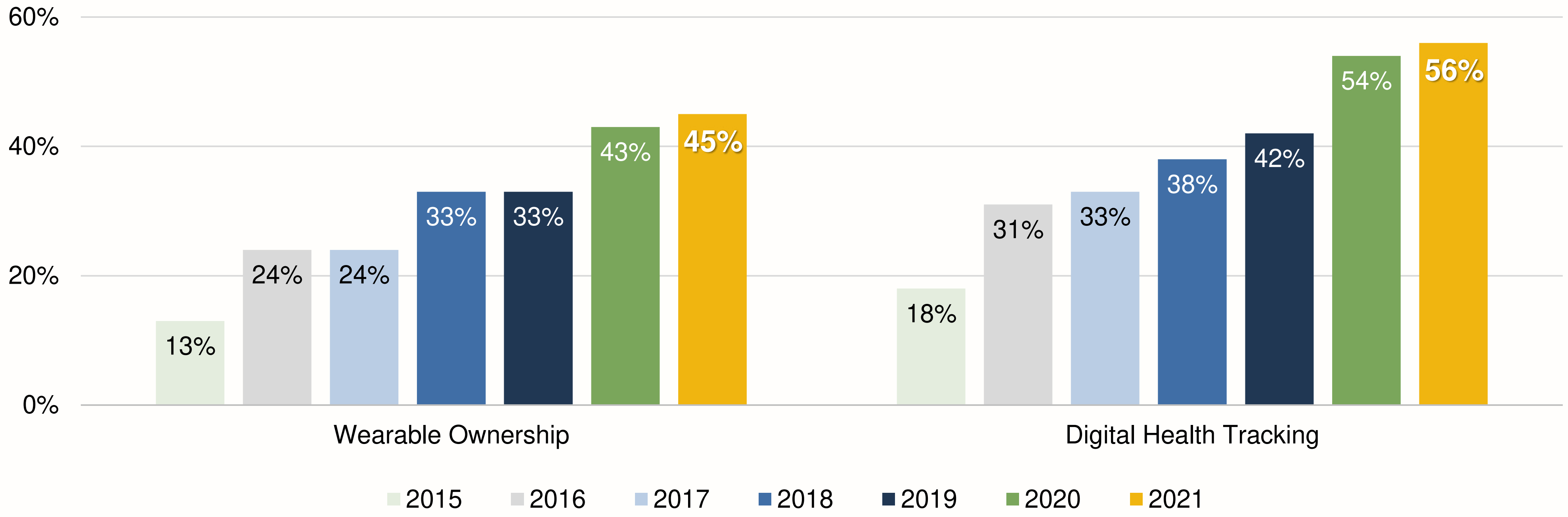
[1]Adapted from "2021 Healthcare Consumer Experience Study," Cedar, Dec 2021

Stakeholder Experience and Engagement

Growing Ecosystem of Patient Apps, Tools, Wearables, etc.

- Growing ecosystem of patient-facing apps, third-party tools, wearables, etc.
  - Patients more willing to track health information digitally
  - Non-homogenous ecosystem of patient-facing apps creates problems for clinicians

Consumer Adoption of Digital Health Tools (2015-2021)[1]



[1]Adapted from "Digital Health Consumer Adoption Insights," Rock Health, May 2022 *and* "Digital Health Consumer Adoption Report," Rock Health, Mar 2021

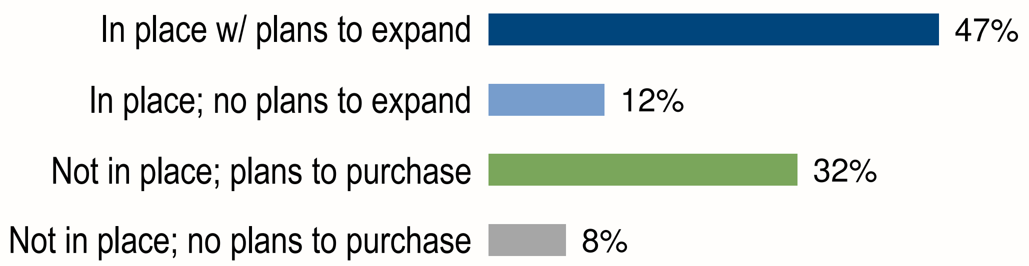
Stakeholder Experience and Engagement

Cohesive Patient and Clinician Experience for Virtual Care

- Telehealth and virtual care programs are expanding and evolving
  - Focus on centralizing / optimizing governance, ensuring alignment with strategic goals, measuring outcomes, etc.
  - Growing investment in RPM (remote patient monitoring) initiatives

Remote Patient Monitoring (RPM) Program Status

n=74



Source: Adapted from "RPM 2022," KLAS, Jul 2022

- Need to measure, analyze, and understand the patient **and** the clinician "virtual care experience" and continue to optimize / refine
  - Per a *NEJM Catalyst* survey of U.S. clinicians, clinical leaders, and health delivery executives:[1]
    - Only 55% said their organization measures "patient experience for telemedicine care"
    - Only 39% said their organization offers "either an internal or external training program for telemedicine [for clinicians]"

[1] "Telemedicine Is Mainstream Care Delivery," *NEJM Catalyst Innovations in Care Delivery*, Jul 2022

Stakeholder Experience and Engagement

Community

- Importance of understanding unique needs within the community
- Active collection – and *use* – of SDOH data
- Effective outreach and coordination with partners in the community

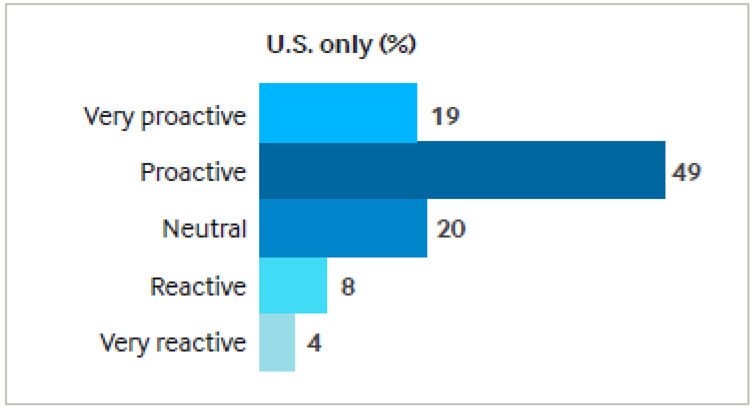
Stakeholder Experience and Engagement

Community Engagement and Understanding of SDOH

- Critical that provider organizations understand the unique needs within their community…
  - Active collection and use of SDOH data
    - Informed decisions when providing individual patient care
    - Development of SDOH-related initiatives to improve health outcomes
    - Alignment with health equity initiatives

"To what extent is your organization addressing social determinants of health (SDOH)?"[1]

n=597 (U.S. only)



- …and engage internal **<u>and</u>** external stakeholders
  - Outreach and coordination with local community-based organizations, social services agencies, public health institutions, payers, etc.
  - Efforts to raise awareness internally and provide clinicians with education about initiatives

[1]"Health Care Is Confronting the Social Determinants of Health," *NEJM Catalyst Innovations in Care Delivery*, Aug 2022

Stakeholder Experience and Engagement

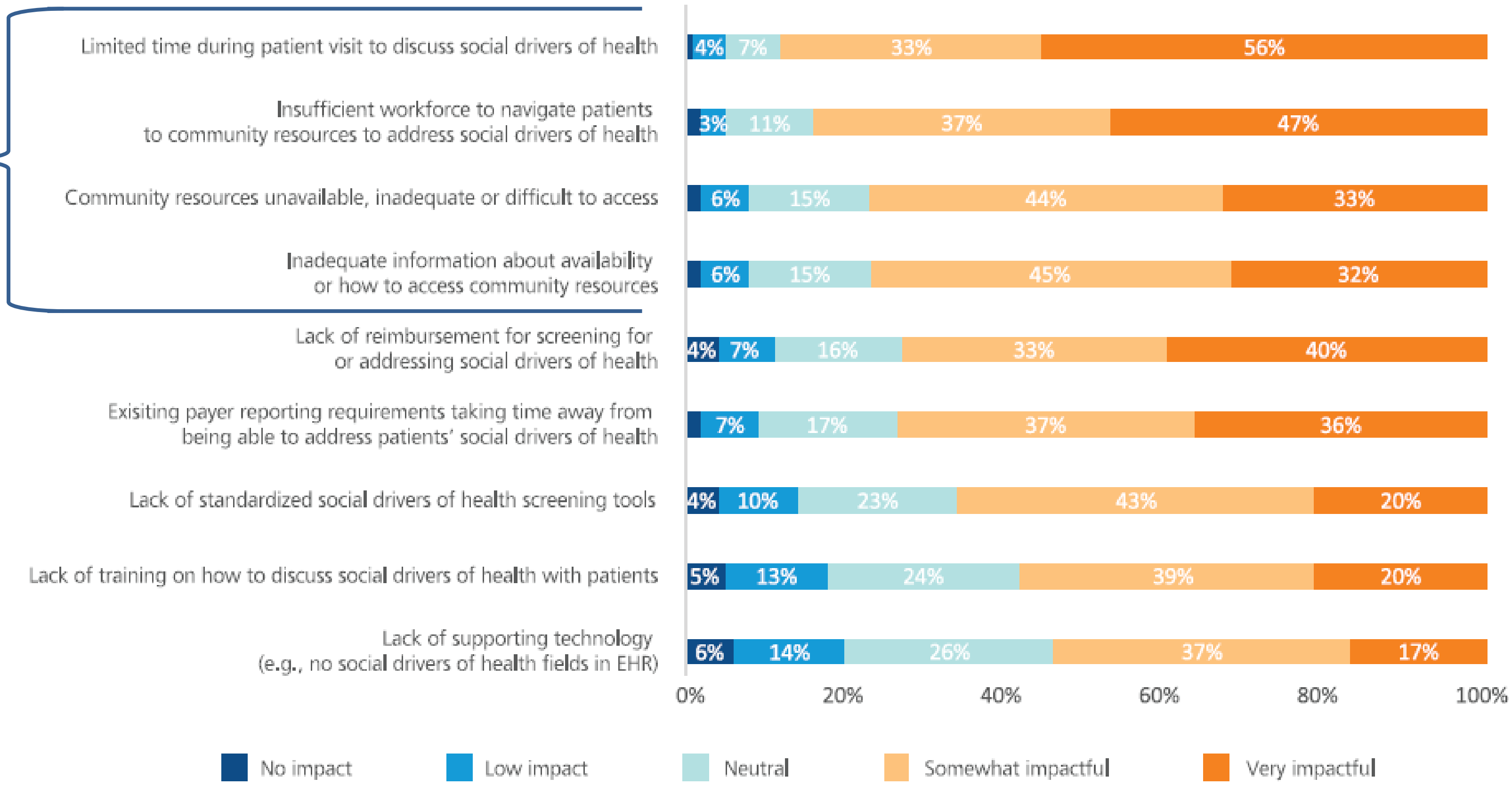
Community Engagement and Understanding of SDOH continued

"Limited time during patient visits to address SDOH" and "insufficient workforce to navigate patients to community SDOH resources" cited as greatest challenges.

Closely followed by "community resources not available, inadequate or difficult to access" and "inadequate information about availability / access to community resources."

"Please rate the impact of each of the following, if any, on your time and ability to address your patients' SDOH."[1]

n=1,502 physicians



[1]"2022 Survey of America's Physicians: Part 1 of 3," The Physicians Foundation, Mar 2022

Stakeholder Experience and Engagement

Keys to Success

- Leveraging tools and data to understand specific pain points, frustrations, and concerns among non-clinical employees, clinicians, and patients
- Investing in market research; collecting data at every step in the patient journey; having actual knowledge of the customer
- Investing in customer relationship management (CRM) capabilities to support new patient acquisition, patient service, marketing campaign initiatives, and physician relationship management
- Having a human-centered design approach to technology solutions and ensuring all relevant stakeholders are considered during decision making
- Being agile and flexible to adapt to ever-changing needs
- Focusing on the 3 Cs (Communication, Change Management, Culture)