

## The Foundation for the Malcolm Baldrige National Quality Award

"The award that bears his name reflects the virtues that he brought to public service and how he lived in his private life, a commitment to excellence, shrewd judgment and sound judgment, principled leadership, integrity, and a sense of responsibility."

George W. Bush



"I was proud as a U.S. Senator to vote in favor of the Baldrige Act."... this award has helped us re-focus on the future, on quality, on performance, and most importantly maybe, on innovation."

Joe Biden

"In just a few years, the National Quality Award has literally become the standard of business excellence. And the renewed spirit of excellence in business, of making quality an integral part of America's corporate strategy, has truly, I believe, made us more competitive in the international arena."

George H.W. Bush



"The Malcolm Baldrige National Quality Award, which highlights customer satisfaction, workforce empowerment, and increased productivity, has come to symbolize America's commitment to excellence."

**Bill Clinton** 

*"I always prized the quality of Mac's vision. He had the capacity to look up from the dust of the plains to see the distant mountains."* 

**Ronald Reagan** 

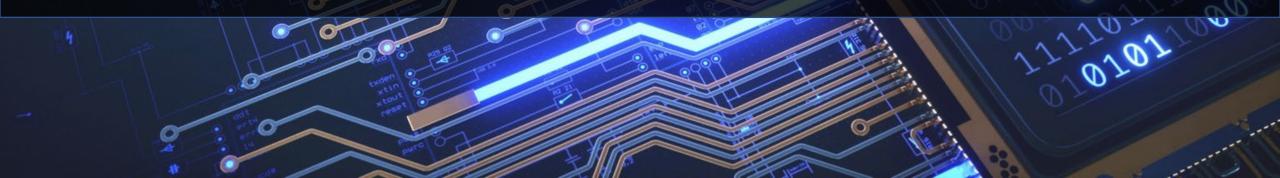
## **Opening Remarks/Agenda**

Introduction	Al Faber, President & CEO, Baldrige Foundation
Guest Presenters	Russ Branzell, CEO and President, College of Healthcare Information Management Executives (CHIME) Theresa Meadows, SVP & CIO Cook Children's Health Care System Karl J, West, CISO and Healthcare Strategist, KJW Ventures, Inc.
Questions	Moderator
Baldrige Performance Excellence Program Update	Bob Fangmeyer, Director, Baldrige Program, NIST
Alliance for Performance Excellence Update	Brian Lassiter, Chair, Alliance for Performance Excellence Board of Directors
Closing Remarks	Al Faber

## Cybersecurity in a Post-Pandemic World

• Russ Branzell, CEO/President – CHIME

- Theresa Meadows, CIO/SVP Cook Children's Health Care System
  - Karl West, CISO/Healthcare Strategist KJW Ventures, Inc



## Pandemic Health Footprint / Time

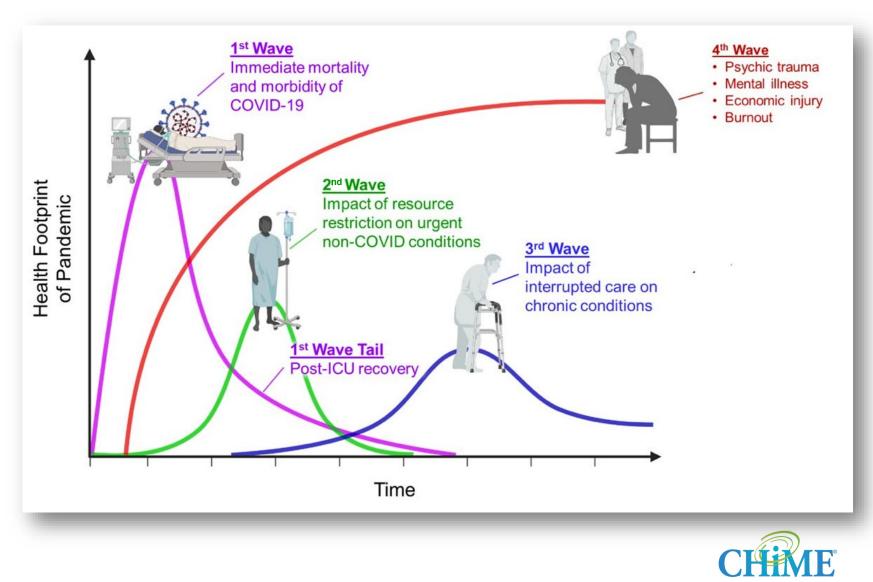
**1st Wave:** Immediate mortality and morbidity of COVID-19.

**1st Wave Tail:** Post-ICU and admission recovery for many patients.

**2nd Wave:** Impact of resource restrictions on non-COVID conditions – all the usual urgent things that people need immediate treatment for – acute.

**3rd Wave:** The impact of interrupted care of chronic conditions (people stayed home).

**4th Wave:** Psychic trauma, mental illness, PTSD, economic injury, burnout, and more.



DIGITAL HEALTH LEADERS

### Digital Health most wired. Survey

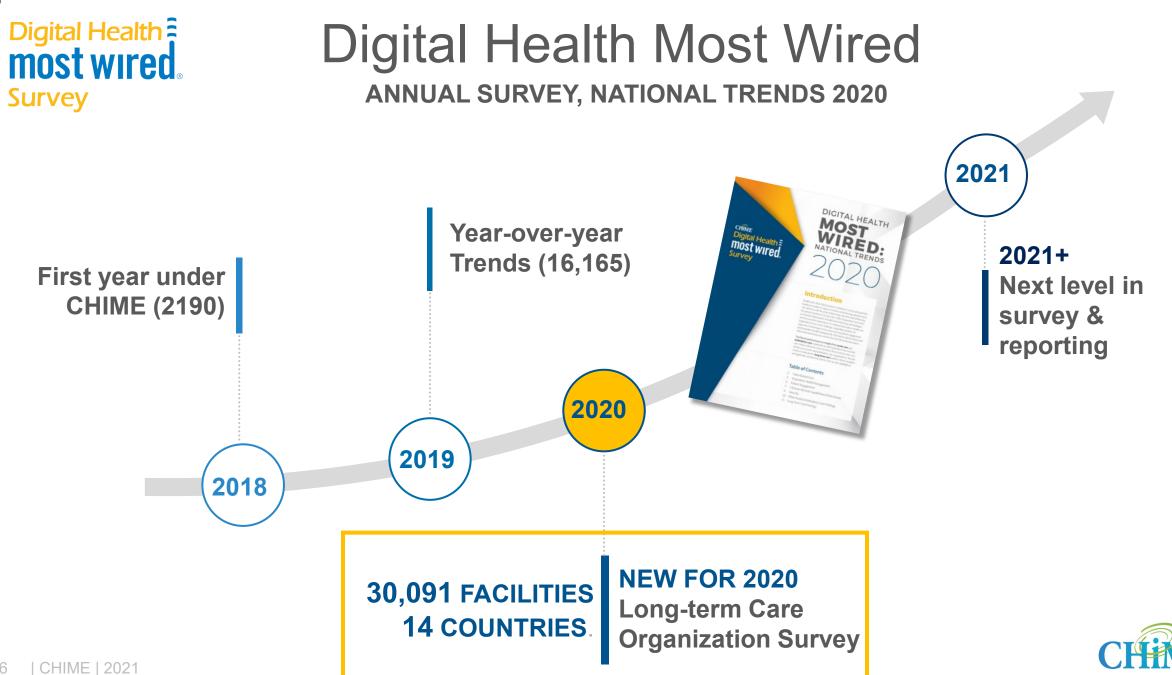
## Digital Health Most Wired ANNUAL SURVEY, NATIONAL TRENDS 2020

The mission of the CHIME "Digital Health Most Wired" program is to elevate the health and care of communities around the world by encouraging the optimal use of information technology.

The program does this by conducting an annual survey to identify, recognize, and certify the adoption, implementation, and use of information technology by healthcare provider organizations.

The results are intended to improve patient safety and outcomes by driving change in the healthcare IT industry.





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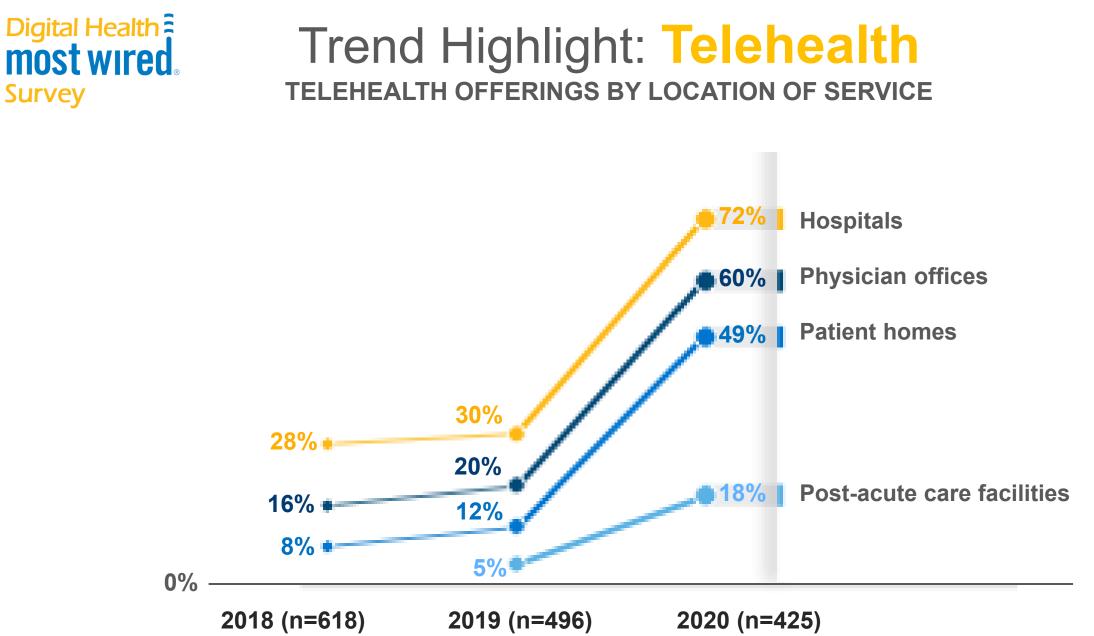
DIGITAL HEALTH LEADERS

### Digital Health most wired. Survey

# Digital Health Most Wired

Score Range	Digital Health Most Wired Certified Level	Digital Health Most Wired Recognition	2020 Percentage Achievement of Level
100-90.1	LEVEL 10	Superior Performance Excellence Award	Top 1.6%
90.0-80.1	LEVEL 9	Performance Excellence Award	14.4%
80.0-70.1	LEVEL 8	Quality Award	34.2%
70.0-60.1	LEVEL 7	Special Recognition	24.7%
60.0-50.1	LEVEL 6	Most Wired Participant	11.6%
50.0-40.1	LEVEL 5	Most Wired Participant	6.5%
40.0-30.1	LEVEL 4	Most Wired Participant	4.3%
30.0-20.1	LEVEL 3	Most Wired Participant	1.5%
20.0-10.1	LEVEL 2	Most Wired Participant	1%
10.0-0.00	LEVEL 1	Most Wired Participant	0%







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### Digital Health **most wired**. Survey

| CHIME | 2021

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# Trend Highlight: Patient Engagement

### **PATIENT PORTAL ACCESS**

Percent of Patients Who Accessed Patient Portal in Last 12 Months (n=396)

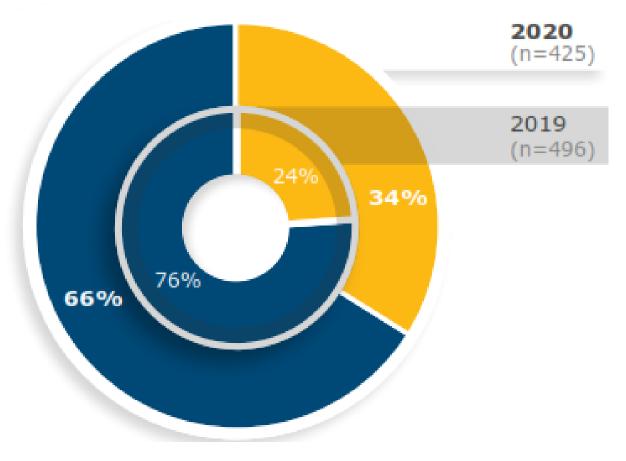
2020 (n=425) 2019 (n=496) Secure messaging 73% Prescription renewal Text appointment reminders 65% Personal health record 65% Visit scheduling 40% eVisit/virtual assistant Health library 46% Personal health tracker Alerts from mobile health devices Click-to-call contact directory 27% Real-time news and blog feed Price list for different services Wayfinding with floor plans and maps ER wait times information Electronic insurance card 15% 9% No mobile app is available 0% 100%



## Comprehensive Security Program Adoption Has Increased

### **Percent of Organizations with a Comprehensive Security Program**

Comprehensive<sup>+</sup>
 Non-comprehensive



Note: 2019's "HealthCare's Most Wired: National Trends" report incorrectly stated that 30% of respondents had a comprehensive security program. The correct number was actually 24%. That error has been corrected in this report.



### Digital Health **most wired** Survey

# Adoption of Core Components of a Comprehensive Security Program

Security progress reported to board at least annually Security deficiencies reported to board at least annually Security workforce receives training/education Risk assessment to identify compliance gaps and security vulnerabilities conducted at least annually 80% Dedicated cybersecurity committee Board is given security updates at least annually Inventory of all business associates updated annually 81% Tabletop exercise performed annually 64% 79% Documented risk management program reported to board in a formal way 61% 74% Dedicated security operations center (SOC) 70% 72% Designated CISO 0%

Note: No new components of a comprehensive security program have been added to this research since 2019.

Note: In 2019's "HealthCare's Most Wired: National Trends" report, organizations that reported their documented risk management program to the board were incorrectly counted as reporting to all levels of leadership, including executives and IT leaders. That error has been corrected in this report.

100%

99% 100%

99% 100%

99%

97%

94%

93%

92%

85%

2020 (n=425)

2019 (n=496)

90% 91%

### Digital Health most wired Survey

## Participation in Information Sharing & Analysis Groups to Identify Security Threats/Vulnerabilities

Informal sharing in professional society			1	80%	8
Informal sharing in HIT user groups			7	79%	839
Health information sharing & analysis center (H-ISAC)		52%			82%
State hospital associations			70%	739	Ya
Commercial service providers (CSPs)		6	1%	69%	
HIE partners		55%	6	69%	
Department of homeland security		54%	6	69%	
Cyber information sharing & collaboration program (CISCP)		48%		64%	
NCCIC	34	%	51%		
HITRUST Alliance		44%	49%		
HC3	23%	4	3%		
None 0%	1%				

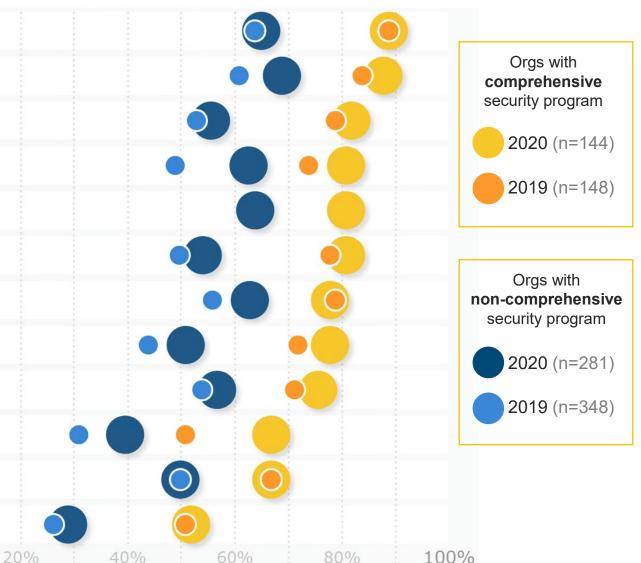
Comprehensive<sup>+</sup> (n=144)

100%

Non-comprehensive (n=281)



## Trend Highlight: Security ADOPTION OF SECURITY MEASURES



Secure system baseline images

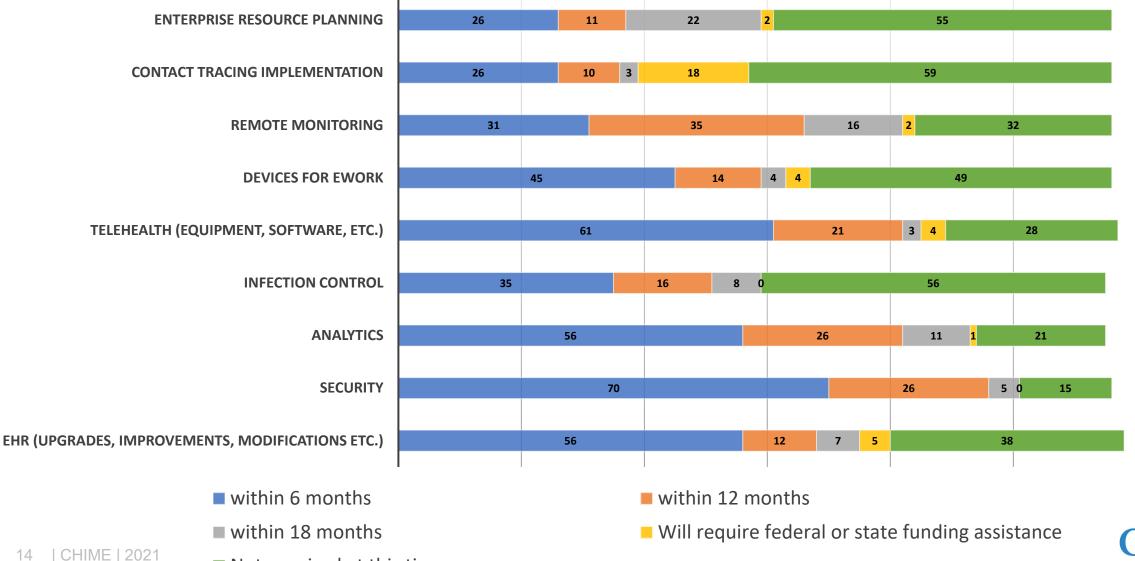
Inventory of authorized medical devices

Social engineering risk assessment performed at least annually Next-generation endpoint protection systems Anomalous network monitoring and analytics Automated user-access provisioning systems Network access control-enforcement of devices joining network Governance, risk & compliance (GRC) systems PKI/digital signature systems Medical device security tools Testing recovery plan (all tiers) performed at least annually

Adaptive/risk-based authentication for network access

0%

# When do you anticipate your organization making investments in the following categories?



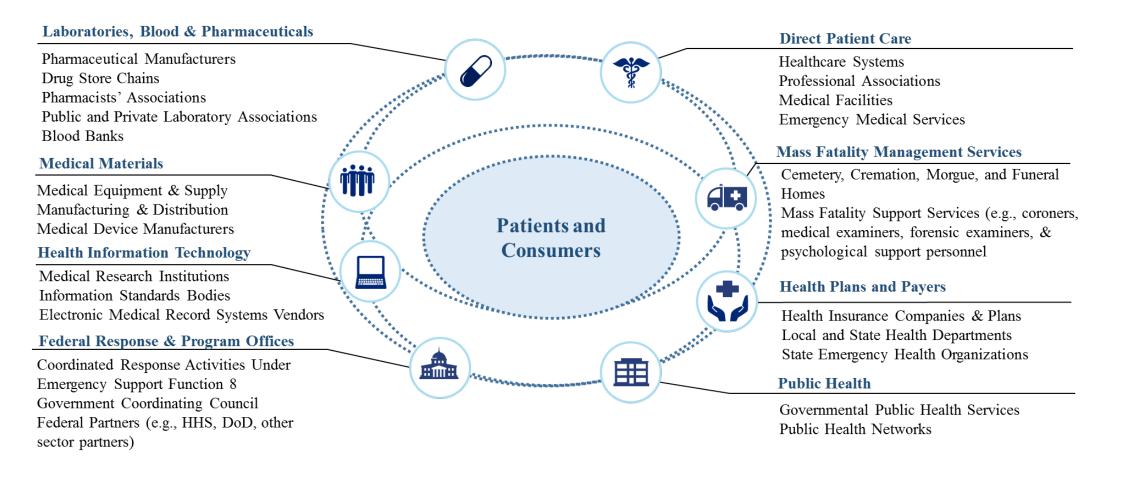
Not required at this time



## Why Healthcare?



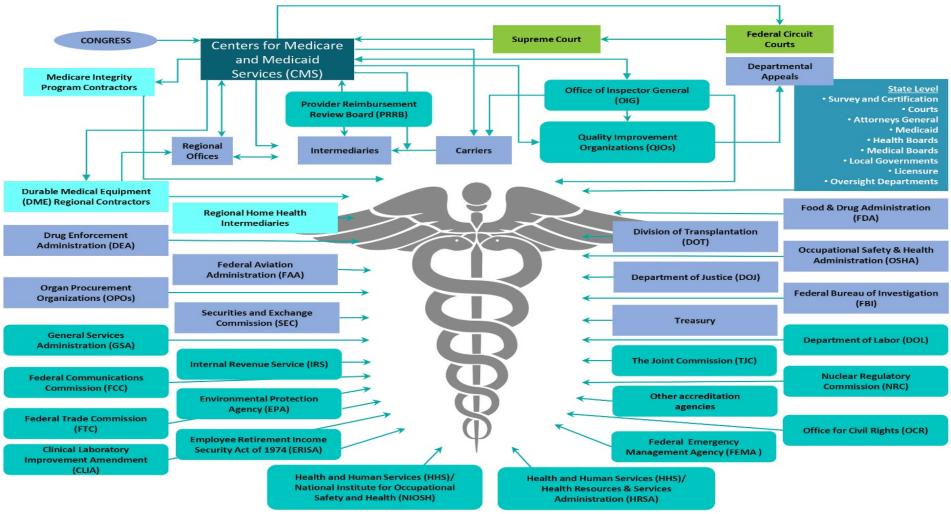
## Healthcare is Complex



\*HHS Health Care Industry CyberSecurity Task Force Report



## Healthcare Regulatory Environment





## **Other Factors\***

- Unique Culture
- Digital Transformation
- Regulatory Environment
- Organizational Size Varies
- Patient Safety
- Complexity of types of exposure
- Lack of skilled resources

\*HHS Health Care Industry CyberSecurity Task Force Report

## HEALTHCARE CYBERSECURITY IS IN CRITICAL CONDITION

Severe Lack of Security Talent The majority of health delivery orgs lack full-time, qualified security personnel

#### Legacy Equipment

Equipment is running on old, unsupported, and vulnerable operating systems.

#### Premature/Over-Connectivity

'Meaningful Use' requirements drove hyperconnectivity without secure design & implementation.

Vulnerabilities Impact Patient Care One security compromise shut down patient care at Hollywood Presbyterian and UK Hospitals

Known Vulnerabilities Epidemic One legacy, medical technology had over 1,400 vulnerabilities



Between the months of February and May of 2020, there was 132 reported breaches, according to HHS. This is almost a 50% increase in reported breaches during the same time period the previous year.

# WHO reports fivefold increase in cyber attacks, urges vigilance

23 April 2020 | News release | Geneva



# Android malware posing as Covid-19 contact tracing apps

By Anthony Spadafora July 31, 2020

**COVID-19: over 70% of organizations report cyber attacks** 

ON SEPTEMBER 15, 2020 5:07 AM / IN BUSINESS /





## **Most Prevalent Threats**

- E-mail phishing attacks
- Ransomware attacks
- Loss or theft of equipment or data
- Insider, accidental or intentional data loss
- Attacks against connected medical devices that may affect patient safety



# Healthcare is a Target

# Healthcare system facing 'increased and imminent' cyber threat

November 3, 2020 Cyber Security Review



Chi @C

Chris Krebs #Protect2020 🤣 🔰 @CISAKrebs

Healthcare and Public Health sector partners - shields up! Assume Ryuk is inside the house. Executives - be ready to activate business continuity and disaster recovery plans. IT sec teams - patch, MFA, check logs, make sure you have a good backup point.

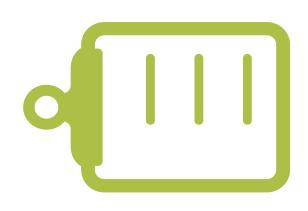
### 🚱 Cybersecurity and Infrastruct... 🤣

1 There is an imminent and increased cybercrime threat to U.S. hospitals and healthcare providers.

We released an advisory with the @FBI & @HHSgov about this #ransomware threat that uses #Trickbot and #Ryuk malware. Here is how to mitigate your risk: bit.ly/2TyHPnk

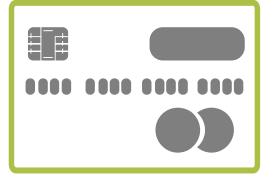


# High Value of PHI











## Impact of Cybersecurity Risks in Healthcare

- Competition patient privacy violations can influence where individuals choose to get their care
- **Reputation** security incidents that lead to media coverage can significantly damage public perception of the organization
- **Culture** outstanding care is also about how well the integrity and privacy of patient records and electronic transactions are maintained
- **Financial** significant penalties, litigation for security incidents where protected patient health information, credit card or other information protected by federal laws is disclosed



## **Goals of Cybersecurity Preparedness**



Confidentiality



Integrity



Availability



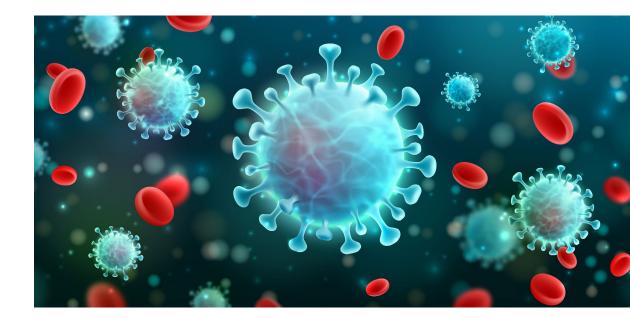
**Patient Safety** 



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# What Just Happened?

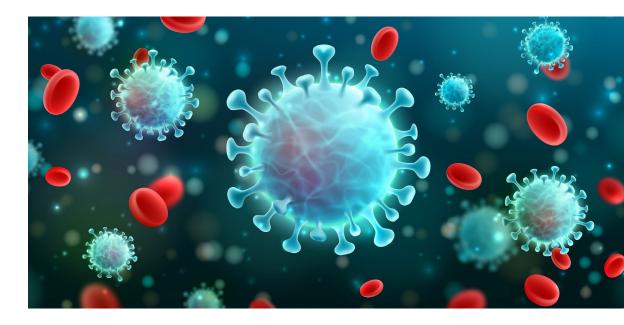
- COVID
- Third-party breach
- Healthcare transformation
- Consumerization
- Relevance
- Solar Winds
- Blackbaud
- Cloud
- Remote work force





# The Cyber Future

- Any person Any place "Any time"
- Frictionless security
- Machine learning and AI
- Zero trust
- Understanding the crown jewels –
  Data classification
- Segmentation
- Perimeter
- Cloud
- Identity





## Elements of a successfe Cyber Program

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## **Panelist Questions and Discussion**





www.baldrigefoundation.org

## **Baldrige Performance Excellence Program**

Robert Fangmeyer, Director BPEP









## Public-Private Partnership to improve our national competitiveness

...through a three-pronged mission:

- Establish a national "standard" of quality and performance excellence the Baldrige Excellence Framework
- Identify role models—the Baldrige Award
- Foster the use of the standard and sharing of best practices—everything else we do



NIST

Framework is core to our mission and critical to the success of the entire Baldrige Enterprise

- Multi-purposed and the foundation of all our offerings
- Process-driven, results-focused, systems-thinking, nonprescriptive approach to organization-wide leadership, management, and improvement
- Ever evolving to address the drivers of long-term success and sustainability
- Cycle of refinement every two years
  - Relevant
  - Easy to understand and use
  - Concise



2021–2022 Criteria: What's Changed? NST



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BALDRIGE EXCELLENCE FRAMEWORK

2021

Theme	Builds on
Resilience	Agility, business continuity
Equity and inclusion	Diversity; Valuing People core value
Digitization/4 <sup>th</sup> industrial	Emphasis on planning for and leveraging
revolution	changing technology
Societal contributions	Expanding on existing theme
Innovation	Clarification and additional emphasis
Safety	Expanding on existing theme





Due to evolving drivers of national competitiveness and the success of the Program, our mission space has increased over the years:





National Institute of Standards and Technology U.S. Department of Commerce



### **Alliance for Performance Excellence Update**





Brian Lassiter Chair Alliance for Performance Excellence

## Reminder: Alliance for Performance Excellence

- Mission: Enhancing our members' ability to grow Baldrige-based performance excellence
- Footprint:
  - 29 programs serving all 50 states and US territories, plus 5 Supporting Members
  - Over 1600 annual applications in 2020
  - Over 1200 examiners, 33 paid staff, 300 non-examiner other volunteers
  - Over 700 members



## **Alliance Current Focus Areas**

- Launched a Professional Development Series this quarter
  - March 31 online workshop on managing change
  - May 26 online workshop on being more courageous, taking risks
- Planning 2021 Baldrige Fall Conference Oct 21-22 online
- Other efforts
  - Collaborating with *Communities of Excellence 2026*
  - Developing more robust marketing plan
  - Building infrastructure to better support the Baldrige "feeder system"

**Get Involved:** to find your local Baldrige-based program, visit <u>http://baldrigealliance.org/</u>



### COME AND GET YOUR LEAN TRAINING AND CERTIFICATION WITH US! 100% ONLINE

### Affordable, Practical, Self-Paced

### **GROUP PURCHASES**

Empower Your Team with Lean Six Sigma Are you looking to enroll your team/group into one of our programs? If so, contact us to pay for all accounts at once. We will then provide you with an activation link that your team can follow to begin the program.

### GLOBALLY RECOGNIZED CERTIFICATION

#### Invest in Education for Your Team.

Earn a globally recognized certification that you can add to your resume and attach to your LinkedIn profile.

### PRICING

Lean Six Sigma Standard White Belt - \$50 Yellow Belt - \$99 Green Belt - \$157 Black Belt - \$299

Lean Six Sigma Healthcare White Belt - \$50 Yellow Belt - \$99 Green Belt - \$157

#### **Additional Programs**

Scrum Master - \$299 Diversity & Inclusion Yellow Belt - \$99 Project Management - \$157 Data Analytics - \$199

### **View Our Entire Course Catalog Here:**

https://www.baldrigeinstitute.org/online-training



"I appreciated the opportunity to take the Yellow Belt Course online and at a pace that was appropriate for me given my full-time work and family."

#### Melanie Powell

Director of Business Development and Marketing for Memorial Hospital and Health Care Center



The Baldrige Yellow Belt class is thought provoking, educational, relevant to the healthcare setting and a true investment in the future of healthcare."

Roxanne M. Williams, MSN, RN, CHC, CPHQ Director of Corporate Quality, Associate & Patient Safety at Blanchard Valley Health System





"The case studies with actual healthcare examples helped me relate the content to real world scenarios that healthcare professionals face on a daily basis. The tools were organized in a way that helped me understand and build on my knowledge. I enjoyed the content and believe the course will make me more effective ..."

Todd Jordan PA-C, MBA Director, Vascular Center of Excellence CAMC Health Systems, Inc



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