

**On the Edge:  
Cybersecurity Health of America's  
Resource-Constrained Health Providers**

**Health Sector Coordinating Council  
Cybersecurity Working Group**

**May 2025**

# Underserved Provider Cybersecurity Initiative

# Agenda



**DETAILS OF  
INTERVIEWS**



**GENERAL FINDINGS  
FROM INTERVIEWS**



**RECOMMENDATIONS  
– FOLLOW UP**

## Defined For This Project

A medical facility or individual practitioner encountering significant obstacles in providing comprehensive healthcare services and conforming to operation standards, often due to financial constraints, geographic isolation, or patient population characteristics. These constraints further impede the ability of Resource-Constrained health providers to implement, maintain, and enhance cybersecurity measures.



# Provider-Types Interviewed

**CAH (Critical Access Hospital)**

**Disproportionate Medicare/Medicaid dependence**

**FQHC (Federally Qualified Health Center)/ Look-Alike**

**Free Clinic**

**LTC (Long Term Care)**

**Native American / Tribal / IHS (Indian Health Service)**

**Regional Health System**

**REH (Rural Emergency Hospital)**

**RHC (Rural Health Clinic)**

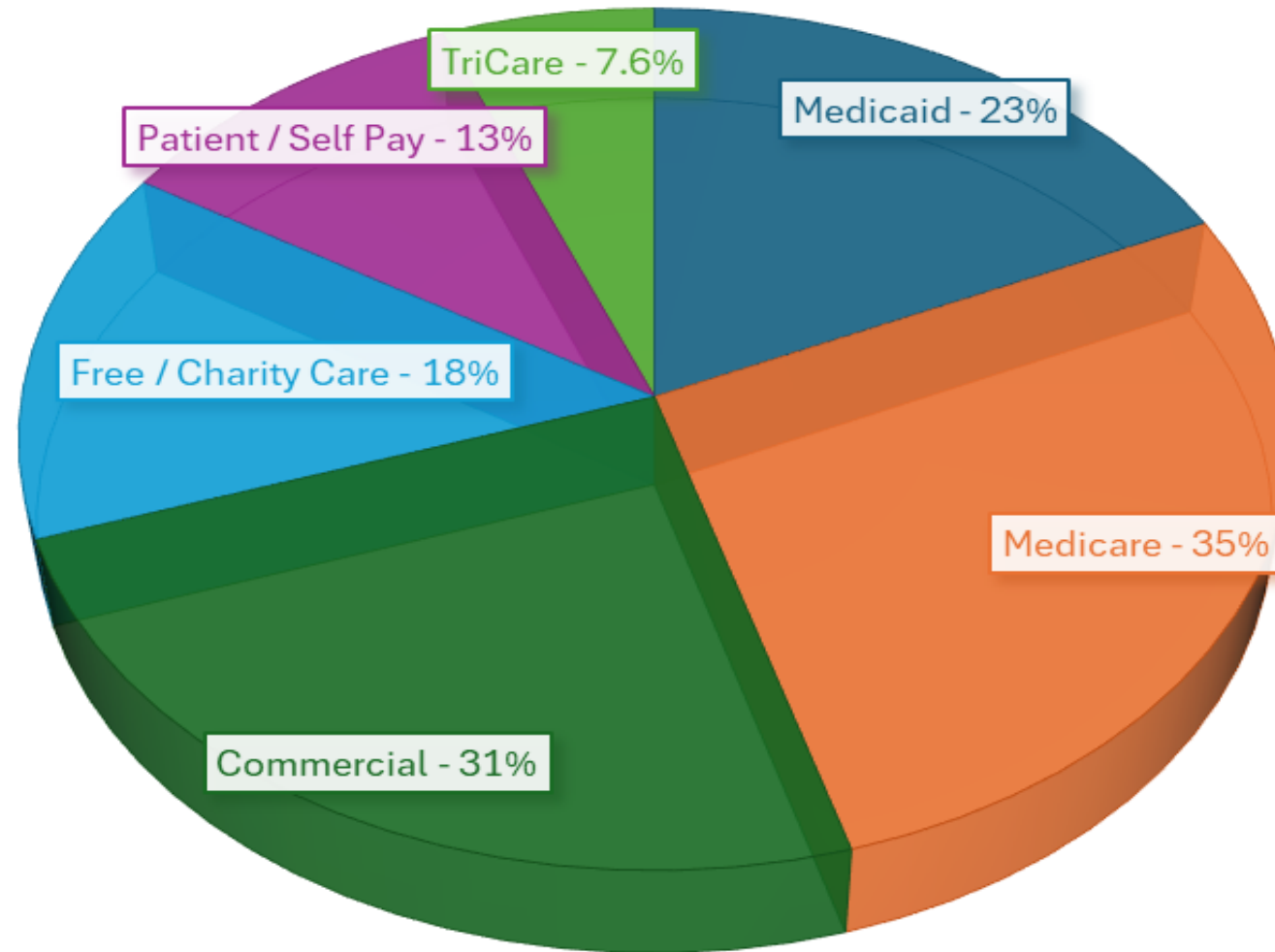
**SAMHSA (Substance Abuse and Mental Health Services Administration)**

**Small Practice**

**SNF (Skilled Nursing Facility)**

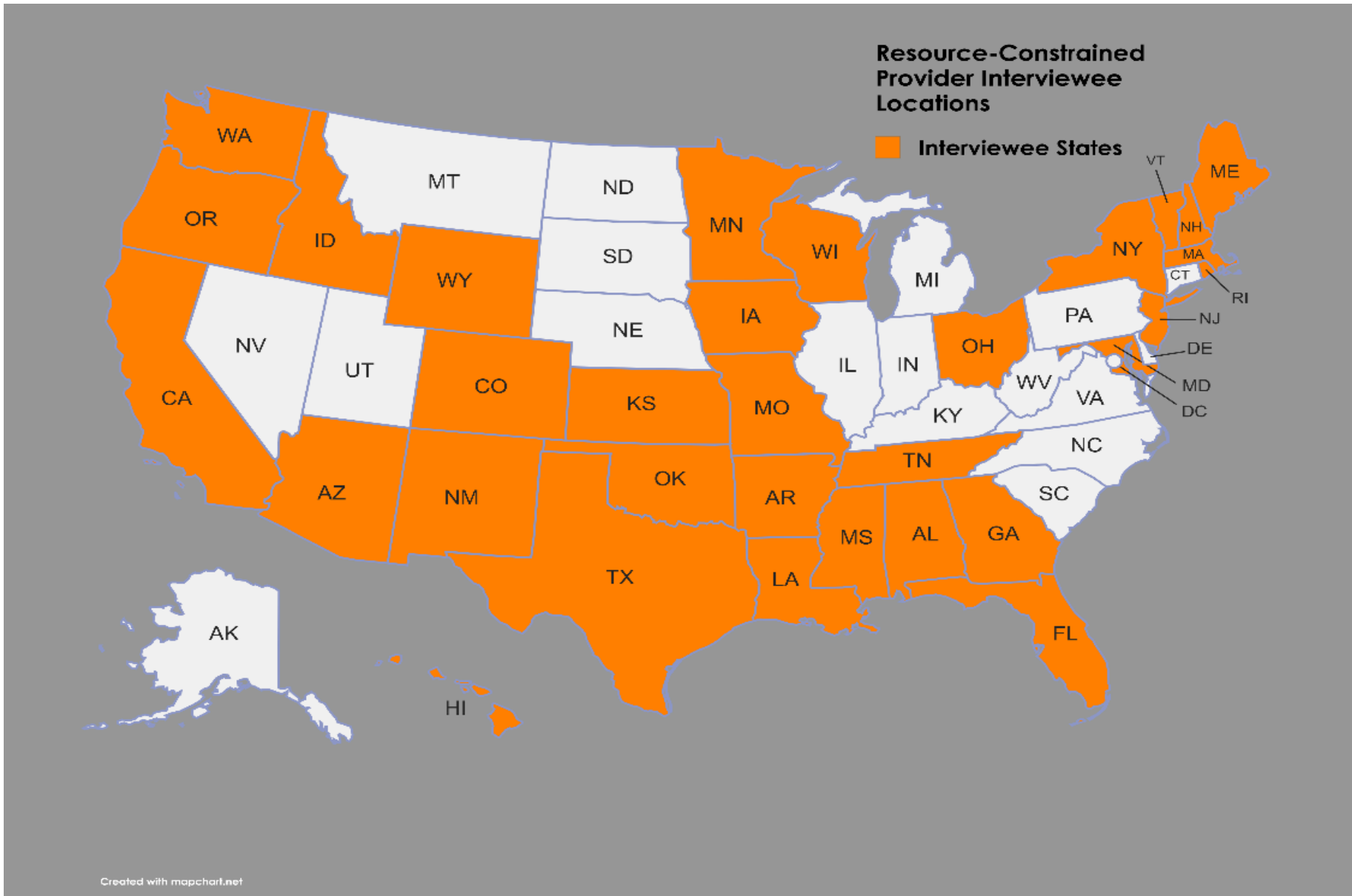
# Revenue Sources

SOURCES OF REIMBURSEMENT AMONG ALL INTERVIEWEES [INCLUDING AVERAGES]





# Interviewee Locations





# Cyber Health

## Resource Constrained Healthcare Providers



- Healthcare most affected by the highest volume of third-party breaches, followed by financial services.
- 14% of healthcare organizations say their IT security teams are fully staffed. Over half say they need more help, and 30% say they are understaffed or severely understaffed.



- Resource constrained healthcare providers report antiquated systems, multiple points of vulnerability and inability to adopt new cyber technologies (MFA).
- Lack staff and myriad of standards (state and federal) increase cost and complexity.



- Drive adoption of modernized health IT
- Prioritize new models of upskilling and workforce development and training
- Drive efficiencies and economies of scale for monitoring, technical assistance, and threat response leveraging provider networks

---

Cyber Attacks  
Dramatically Increasing

Resource Constrained  
Impact Ecosystem

Recommendations  
Cyber Health



# Recommendations



**Third Party Vendors & Risk  
Management**  
**Not Solely Health Provider  
Responsibility**



**Workforce  
Augmentation for  
Cybersecurity**  
**Funded At Federal &  
State Level**



**CMS Reimbursement  
Hesitancy If Tied To  
Compliance**



**USDA Rural  
Loan Program  
Continuation &  
Expansion**



**Training & Best  
Practice Library  
Regulatory &  
Technical**

# Under Served Provider Cybersecurity Task Group Chairs



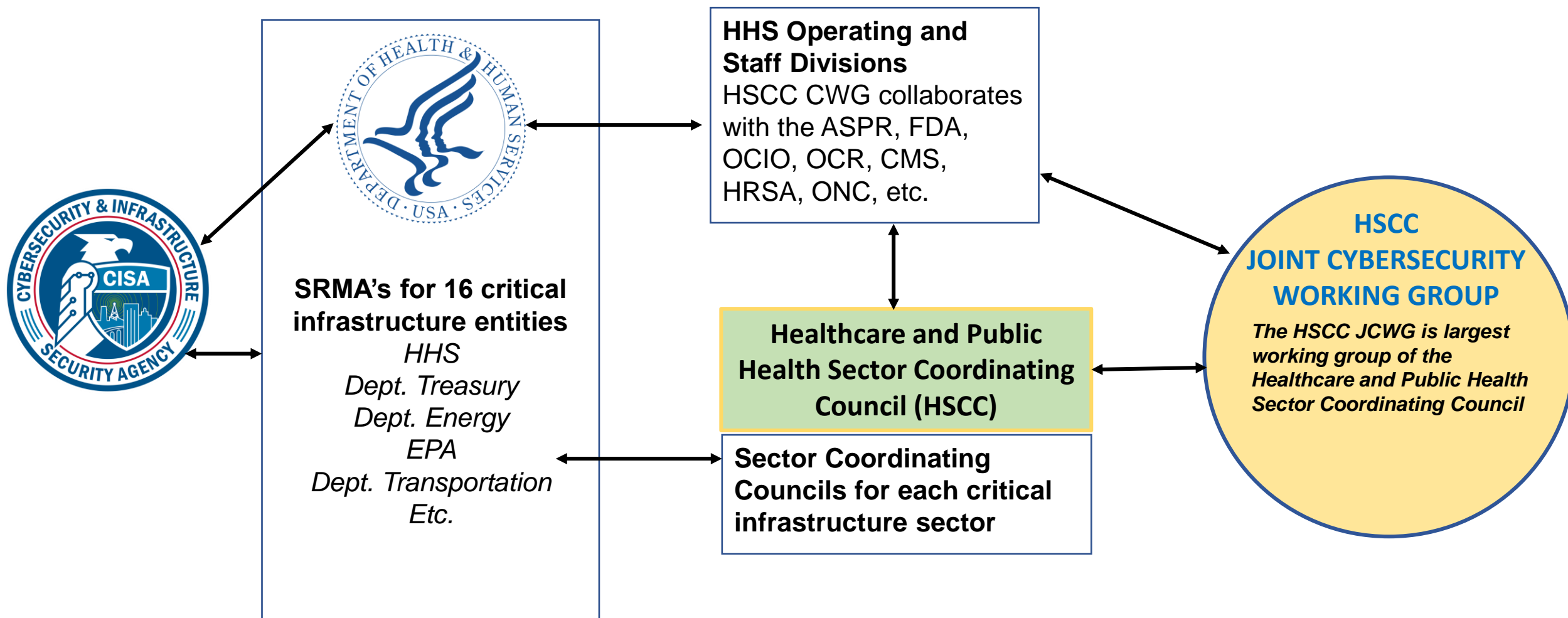
**Jennifer Stoll**  
**Chief External Affairs Officer**  
**OCHIN**



**Jim Roeder**  
**Vice President of IT**  
**HIPAA Security & Privacy Officer**  
**Lakewood Health System**

# Health Sector Coordinating Council Cybersecurity Working Group

# Critical Infrastructure Protection Public Private Partnership





# The Health Sector - An Interconnected Ecosystem

## Laboratories, Blood & Pharmaceuticals

Pharmaceutical Manufacturers  
Drug Store Chains  
Pharmacists' Associations  
Public and Private Laboratory  
Associations  
Blood Banks

## Medical Materials

Medical Equipment & Supply  
Manufacturing & Distribution  
Medical Device Manufacturers

## Health Information Technology

Medical Research Institutions  
Information Standards Bodies  
Electronic Medical Record System and  
Other Clinical Medical System Vendors

## Federal Response & Program Offices

Coordinated Response Activities  
Under Emergency Support Function 8  
Government Coordinating Council  
Federal Partners (e.g., HHS, DoD,  
other sector partners)

## Direct Patient Care

Healthcare Systems  
Professional Associations  
Medical Facilities  
Emergency Medical Services  
Consumer Devices \ BYOD

## Mass Fatality Management Services

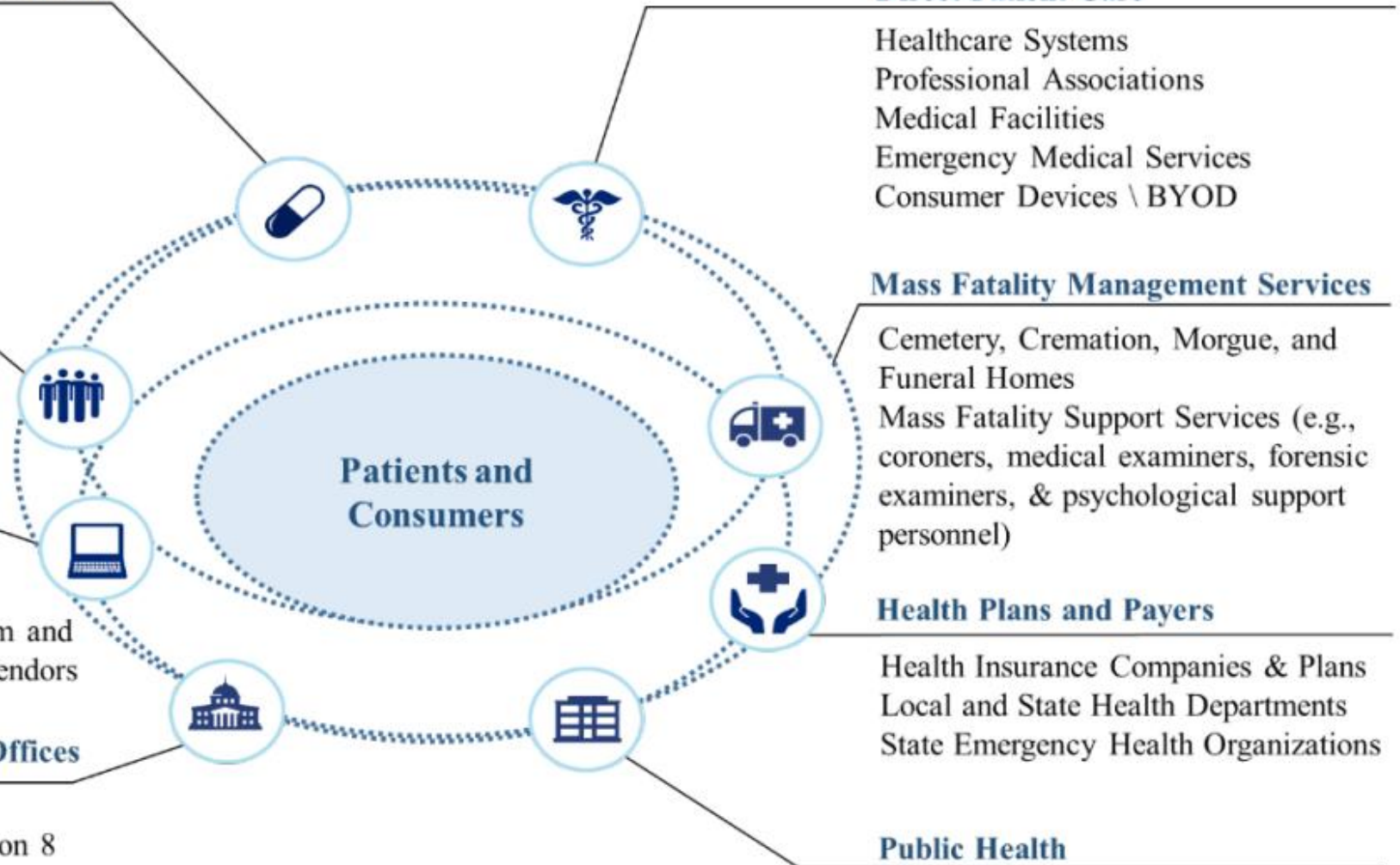
Cemetery, Cremation, Morgue, and  
Funeral Homes  
Mass Fatality Support Services (e.g.,  
coroners, medical examiners, forensic  
examiners, & psychological support  
personnel)

## Health Plans and Payers

Health Insurance Companies & Plans  
Local and State Health Departments  
State Emergency Health Organizations

## Public Health

Governmental Public Health Services  
Public Health Networks



## Mission

- Industry advisory council that identifies and develops strategic, cross-sector solutions to cybersecurity threats and vulnerabilities affecting the security and resiliency of the healthcare sector
- Outcome-oriented task groups develop best practices; Full JCWG membership meets twice a year in-person around the country
- Works closely on joint initiatives with:
  - HHS Administration for Strategic Preparedness and Response
  - Food and Drug Administration
  - Other HHS Operating Divisions and DHS CISA

## Membership

- Largest standing Working Group under the HSCC umbrella
  - **456 private sector organizations**, including:
    - 393 owner-operators
      - Includes 53 industry associations and professional societies
    - 63 non-voting advisor companies
  - **20 government organizations**, including 11 federal, 4 state, 2 city, 1 county and 2 Canadian
  - Total representing **personnel: 1036**

# Five-Year Health Industry Cybersecurity Strategic Plan (HIC-SP)



Health Sector Coordinating Council  
Cybersecurity Working Group



Monitor  
Threats



Manage  
Risks



Respond &  
Recover



Measure  
Effectiveness

## Health Industry Cybersecurity – Strategic Plan (2024–2029)



FEBRUARY 2024



# Cybersecurity Strategic Plan

## Implementing Objectives

<b>O1</b>	<b>Develop, adopt and demand safety and resilience requirements for products and services offered, from business to business, as well as health systems to patients, with the concept of secure-by-design and secure-by-default</b>	<b>O7</b>	<b>Increase incentives, development and promotion of health care cybersecurity-focused education and certification programs</b>
<b>O2</b>	<b>Simplify access to resources and implementation approaches related to the adoption of controls and practices aligned with regulatory and sector standards for securing devices, services, and data</b>	<b>O8</b>	<b>Increase utilization of automation and emerging technologies like AI to drive efficiencies in cybersecurity processes</b>
<b>O3</b>	<b>Develop and adopt practical and uniform privacy standards to protect personal information and promote fair and ethical data practices while sharing the data in a consensual eco-system</b>	<b>O9</b>	<b>Develop health sub-sector specific integrated cybersecurity profile aligned with regulatory requirements</b>
<b>O4</b>	<b>Increase new partnerships with public/private entities on the front edge of evaluating and responding to emerging technology issues to enable safe, secure, and faster adoption of emerging technologies</b>	<b>O10</b>	<b>Develop meaningful cross-sector third-party risk management strategies for evaluating, monitoring, and responding to supply chain and third-party provider cybersecurity risks</b>
<b>O5</b>	<b>Enhance health sector senior leadership and board knowledge of cybersecurity and their accountability to create a culture of security within their organizations</b>	<b>O11</b>	<b>Increase meaningful and timely information sharing of cyber related disruptions to improve sector readiness</b>
<b>O6</b>	<b>Increase utilization of cybersecurity practices / resources / capabilities by public health, physician practices and smaller health delivery organizations (e.g., rural health)</b>	<b>O12</b>	<b>Develop mechanisms to enable “mutual aid” support across sector stakeholders to allow for timely and effective response to cybersecurity incidents</b>

# 2029 Target Future State

If we succeed, the diagnosis of healthcare cybersecurity will upgrade from “Critical Condition” in 2017 to “Stable Condition” in 2029. “Cyber Safety is Patient Safety” will be characterized by:



## Reflexive Cybersecurity

Both practiced and regulated healthcare cybersecurity is reflexive, evolving, accessible, documented and implemented for practitioners and patients.

## Secure Design & Implementation

Technology and services across the healthcare ecosystem is a shared and collaborative responsibility.

## C-Suite Ownership

Healthcare C-Suite embraces accountability for cybersecurity as enterprise risk and a technology imperative.

## Cyber Safety Net

Under-resourced health organizations are supported in the form of financial, policy and technical assistance ensuring cyber equity across the ecosystem.

## Cyber Competence

Workforce learning and application is an infrastructure wellness continuum.

## 911 Cyber Civil Defense

Ensures that early warning, incident response and recovery are reflexive, collaborative and always on.

# Leading Practices By the Sector for the Sector

## 2025

- [One the Edge : Cyber Health of Resource-Constrained](#)
- [Cybersecurity Consultative Process Proposal](#)
- [Recommendations for Government Policy and Programs](#)

## 2024

- [Medical Product Manufacturer Cyber Incident Response Playbook](#)
- [Executive Checklist for Incident Response](#)
- [Medical Device and Health IT Joint Security Plan v2 \(JSP2\)](#)
- [Health Industry Cybersecurity Strategic Plan](#)
- [Coordinated Privacy Security Partnerships](#)

## 2023

- [Health Industry Cybersecurity Information Sharing Best Practices](#)
- [Health Industry Cybersecurity Matrix of InfoSharing Organizations](#)
- [Coordinated Healthcare Incident Response Plan](#)
- [Recommended Government Policy & Programs](#)
- [Hospital Cyber Landscape Analysis \(Joint HSCC/HHS\)](#)
- [Prioritized Recognized Cybersecurity Practices](#)
- [Health Industry Cybersecurity Practices 2023 \(Joint\)](#)
- [Cybersecurity for Clinician Video Training Series](#)

## .... 2023

- [Health Industry NIST CSF Implementation Guide \(Joint\)](#)
- [Managing Legacy Technology Security](#)
- [Artificial Intelligence Machine Learning](#)

## 2022

- [Operational Continuity-Cyber Incident Checklist](#)
- [MedTech Vulnerability Communications Toolkit](#)
- [Model Contract-Language for Medtech Cybersecurity](#)

## 2021

- [Securing Telehealth and Telemedicine](#)

## 2020

- [Supply Chain Risk Management](#)
- [Health Sector Return-to-Work Guidance](#)
- [Tactical Crisis Response](#)
- [Protection of Innovation Capital](#)
- [Checklist for Teleworking Surge During COVID-19](#)

## 2019

- [Workforce Guide](#)
- [Medical Device and Health IT Joint Security Plan](#)
- [Health Industry Cybersecurity Practices \(Joint\)](#)



*Link to publications*

# THANK YOU

*For more information, visit  
<https://HealthSectorCouncil.org>*

