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Health Sector Coordinating Council
Cybersecurity Working Group

Primer for
National Committee on Vital and Health Statistics

July 20, 2022

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Approved for Public Release

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Critical Infrastructure

Systems and assets, whether physical or virtual, so vital to the United States that the[ir] incapacitation or destruction …would have a debilitating impact on security, … economic security, … public health or safety, or any combination of those matters.

§1016(e) of the USA Patriot Act of 2001
(42 U.S.C. §5195c(e))

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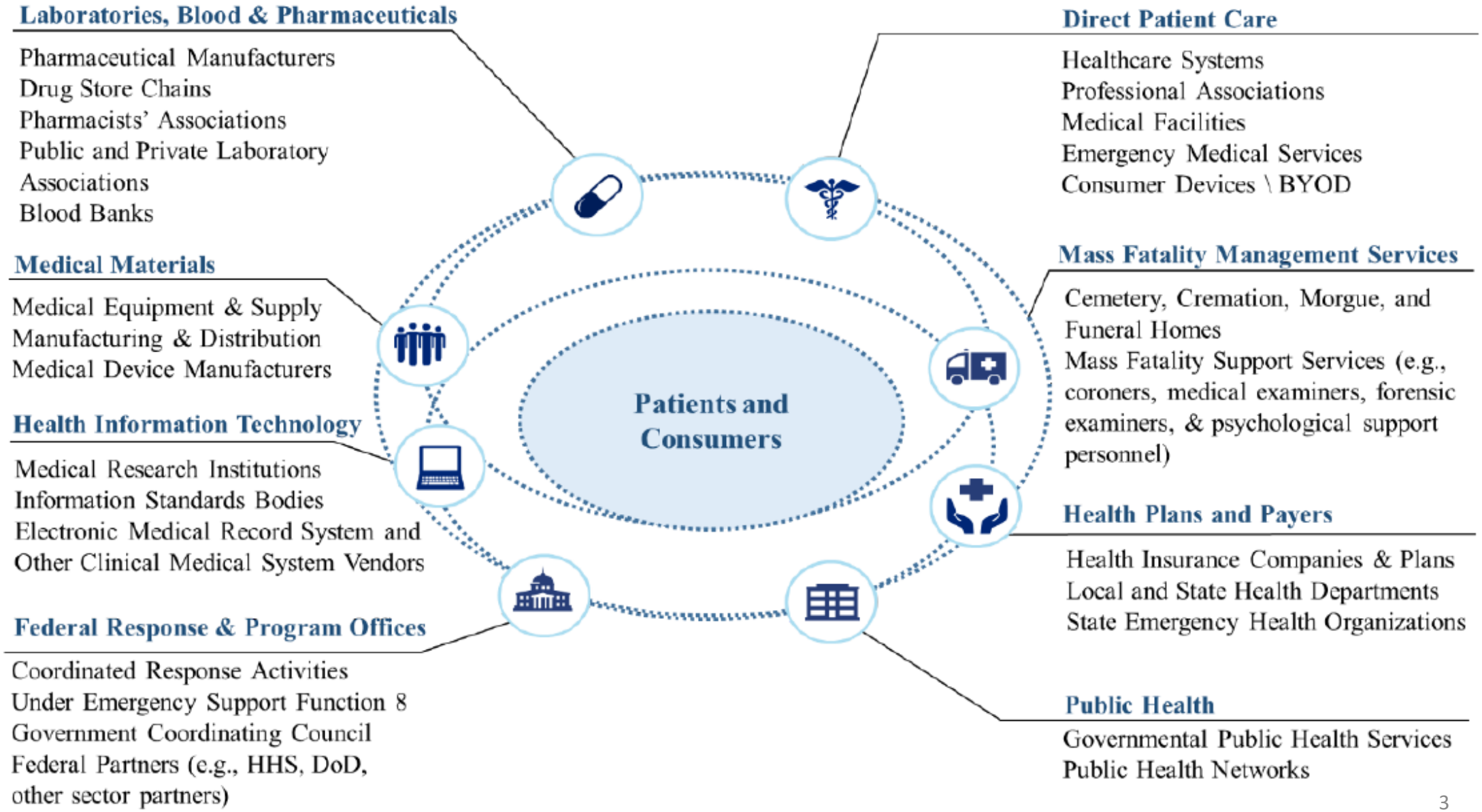
Figure 2 Health Care Ecosystem



Health Sector Coordinating Council Origin and Mission

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Health Sector Coordinating Council

- The cross-sector industry coordinating body representing one of 16 critical infrastructure sectors recognized under Presidential Executive Order (PPD-21)
- Serves as an Advisory Committee under a special "Critical Infrastructure Partnership Advisory Council" exemption from Federal Advisory Committee Act public notification requirements, to protect sensitive deliberations with government
- A trust-community partnership convening health providers, companies, non-profits and industry associations across six subsectors
- ***Mission: to identify cyber and physical risks to the security and resiliency of the sector, develop guidance for mitigating those risks, and work with government to facilitate threat preparedness and incident response***
- Focused on longer-term critical infrastructure policy and strategy, complementing the operational activities of the Health Information Sharing and Analysis Center

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HSCC Cybersecurity Working Group

- Largest standing Working Group under the HSCC umbrella
- 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 meet regularly through the year; Full CWG meets twice a year around the country
- Works closely on joint initiatives with:
  - HHS Office of Assistant Secretary for Preparedness and Response
  - HHS Office of the Chief Information Officer
  - Food and Drug Administration

Membership

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CWG Membership by the Numbers

As of June 30, 2022 (changes over previous quarter)

- 318 voting organizational members
  - + 25 members (8.5%)
- 41 non-voting Advisor companies
  - + 11 Advisors (36%)
- 45 Industry Association members
  - + 1 Association member (2%)
- Government organizations include 9 federal agencies, 2 state agencies, 2 city agencies, and 2 Canadian
- Total representing personnel: 763
  - + 69 Member personnel (10%)

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Membership Subsector Distribution

- Direct Patient Care: **39.5%**
- Health Information Technology: **9.25%**
- Health Plans and Payers: **4.75%**
- Mass Fatality and Management Services: **0**
- Medical Materials: **9.5%**
- Laboratories, Blood, Pharmaceuticals: **5.75%**
- Public Health: **4%**
- Cross-sector: **7%**
- Government (Fed, State, County, Local): **10%**
- Advisors: **10.25%**

Governance

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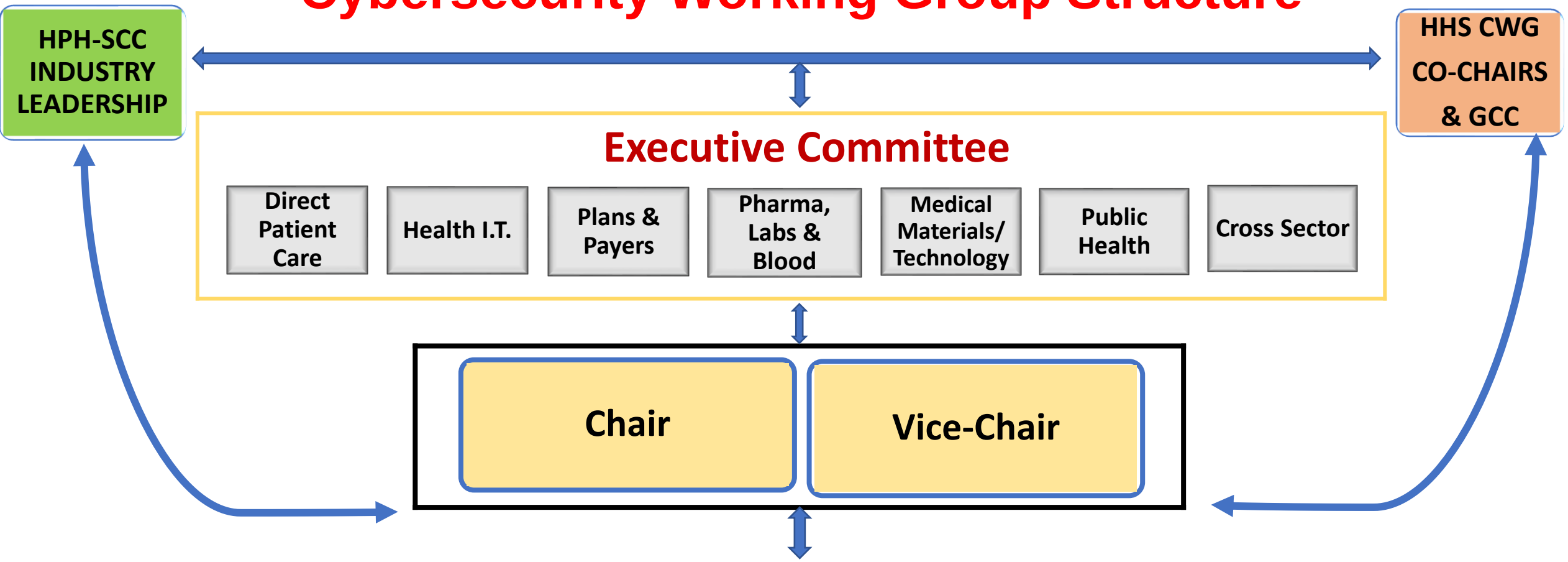
Cybersecurity Working Group Structure



Active Task Groups - March 2022

NEW 2022 TASK GROUPS IN GREEN

- FIVE-YEAR PLAN / HCIC TASK FORCE REPORT UPDATE
- INCIDENT RESPONSE / BUSINESS CONTINUITY (IRBC) PLAYBOOK
- WORKFORCE DEVELOPMENT
- OUTREACH & AWARENESS
- MEASUREMENTS
- 405d CYBERSECURITY PRACTICES
- EMERGING TECH CYBERSECURITY
- INTERNATIONAL
- MEDTECH CYBERSECURITY
- MEDTECH VULNERABILITY COMMUNICATIONS
- POLICY
- RISK ASSESSMENT
- SUPPLY CHAIN RISK MANAGEMENT

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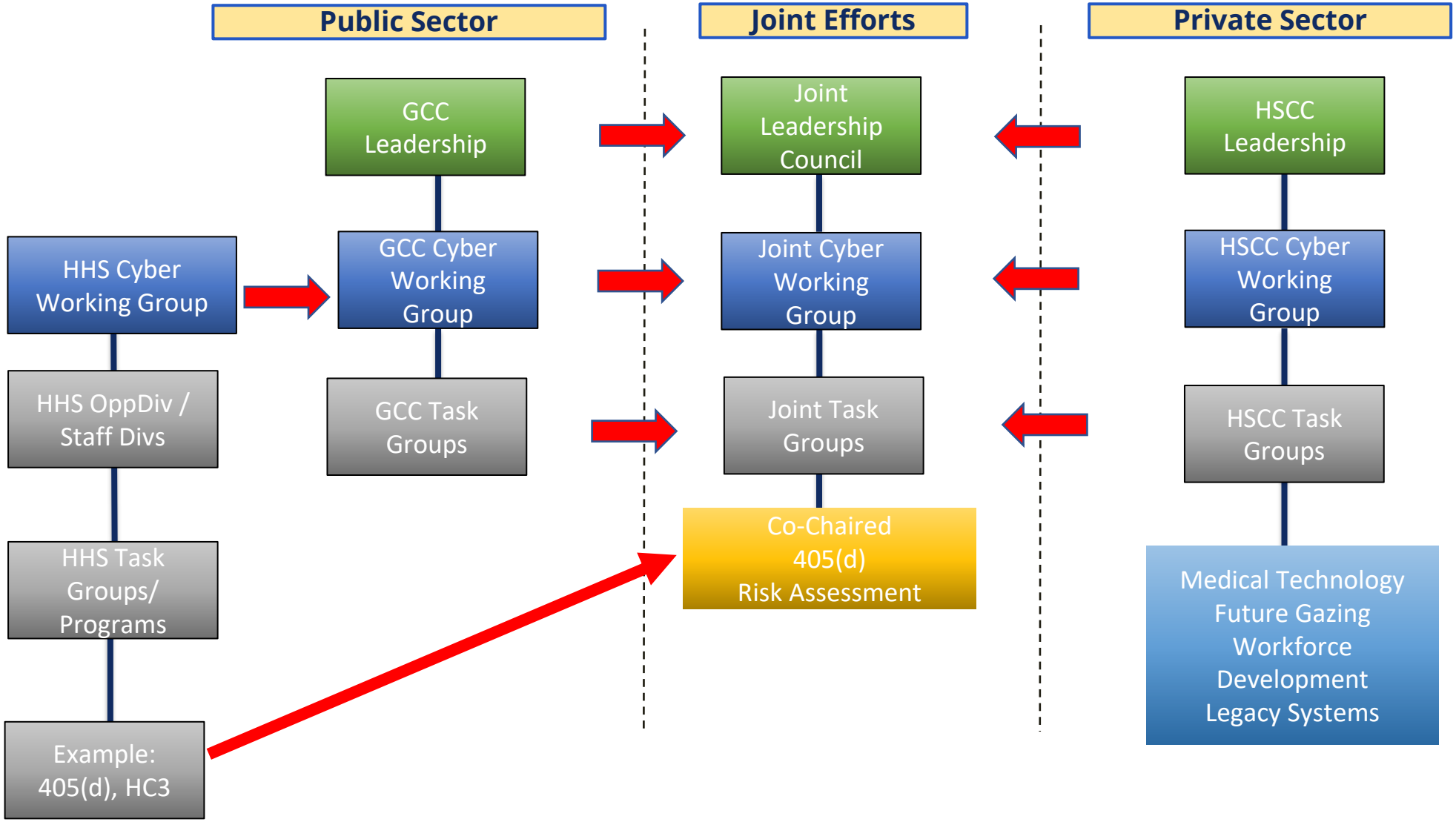
HPH Public & Private Cybersecurity Working Collaboration Structure

The nation's critical infrastructure provides the essential services that underpin American society and serve as the backbone of our nation's economy, security, and health. The Health and Public Health (HPH) Sector is one of 16 critical infrastructures, below represents how government and industry have come together to collaborate, share information, and deliver resources to improve the resiliency of the HPH sector.

The following are Presidential Directives, Laws, and Executive Orders that drive the efforts of the Cybersecurity Working Structure

- **PPD-21**
- **Cybersecurity Act of 2015 Title IV & Section 405 (b) (c) (d)**
- **Cybersecurity Information Sharing Act 2015 – Title I**
- **PL 116-321**
- **NDAA 20**
- **EO 13691**
- **EO 13636**



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2022 Executive Committee

CHAIR: Erik **Decker, AVP - Chief Information Security Officer, Intermountain Healthcare**

VICE CHAIR: Chris Tyberg, Chief Information Security Officer, Abbott

Julian Goldman, MD, Medical Director, Biomedical Engineering, Mass General Brigham

Samantha Jacques, Vice President Corporate Clinical Engineering, McLaren Healthcare

Leslie A. Saxon, MD, Executive Director, USC Center for Body Computing

Janet Scott, Vice President, Business Technology Risk Management and CISO, Organon

Leanne Field, PhD, M.S. Clinical Professor & Founding Director, Public Health Program, The University of Texas at Austin

Denise Anderson, President & CEO, Health Information Sharing & Analysis Center

Michael McNeil, Senior Vice President, Global CISO, McKesson

Marilyn Zigmund Luke, Vice President, America's Health Insurance Plans

Mark Jarrett, Senior Health Advisor, Northwell Health.

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2022 Government Co-Chairs

Suzanne Schwartz
Director
Office of Strategic Partnerships & Technology Innovation
Center for Devices and Radiological Health
U.S. Food and Drug Administration

Julie Chua
Director, GRC Division
HHS Office of the Chief Information Officer

Bob Bastani
Senior Cyber Security Advisor
Security, Intel, and Information Management Division
Office of the Assistant Secretary for Preparedness & Response
U.S. Department of Health and Human Services

Cybersecurity Objectives

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HEALTH CARE INDUSTRY CYBERSECURITY TASK FORCE

June 2017

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 hyper-connectivity 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

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Cybersecurity Objectives

CWG Task Groups formed to implement the

2017 Healthcare Industry Cyber Security Task Force Imperatives:

1. Define and streamline leadership, governance, and expectations for healthcare industry cybersecurity.
2. Increase the security and resilience of medical devices and health IT
3. Develop the healthcare workforce capacity necessary to prioritize and ensure cybersecurity awareness and technical capabilities
4. Increase healthcare industry readiness through improved cybersecurity awareness and education
5. Identify mechanisms to protect R&D efforts and intellectual property from attacks and exposure
6. Improve information sharing of industry threats, risks, and mitigations

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HSCC CYBERSECURITY WORKING GROUP
2019-2022 Guidance Publications

SEE: https://healthsectorcouncil.org/hscc-recommendations/

- May 2022 — Operational Continuity-Cyber Incident Checklist
- April 2022 — MedTech Vulnerability Communications Toolkit (MVCT)
- March 2022 — Model Contract-Language for Medtech Cybersecurity (MC2)
- June 2021 — Letter to President Biden on Healthcare Cybersecurity Strategy
- April 2021 — Health Industry Cybersecurity – Securing Telehealth and Telemedicine
- September 2020 — Health Industry Cybersecurity Supply Chain Risk Management
- June 2020 — Health Sector Return-to-Work (R2W) Guidance
- May 2020 — Health Industry Cybersecurity Tactical Crisis Response
- May 2020 — Health Industry Cybersecurity Protection of Innovation Capital
- March 2020 — Health Industry Cybersecurity Information Sharing Best Practices
- March 2020 — Management Checklist for Teleworking Surge During COVID-19
- October 2019 — Health Industry Cybersecurity Matrix of Information Sharing Organizations
- June 2019 — Health Industry Cybersecurity Workforce Guide
- January 2019 — Medical Device and Health IT Joint Security Plan (JSP)
- January 2019 — Health Industry Cybersecurity Practices (HICP)

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Addressing the Health Care Industry Cybersecurity Task Force Recommendations

HCIC IMPERATIVES	CWG DELIVERABLES	DATE DELIVERED
1. Define and streamline leadership, governance, and expectations for healthcare industry cybersecurity	• Operational Continuity-Cyber Incident Checklist • Health Industry Cybersecurity Supply Chain Risk Management Guide (HIC-SCRiM) • Health Industry Cybersecurity Practices (HICP)	May 2022 September 2020 December 2018
2. Increase the security and resilience of medical devices and health IT	• Medtech Vulnerability Communications Toolkit • Model Contract Language for Medtech Cybersecurity (MC^2) • Health Industry Cybersecurity – Securing Telehealth and Telemedicine (HIC-STAT) • Health Industry Cybersecurity Supply Chain Risk Management Guide (HIC-SCRiM) • Management Checklist for Teleworking Surge During COVID-19 Response • Medical Device and Health I.T. Joint Security Plan (JSP) • Health Industry Cybersecurity Practices (HICP)	April 2022 March 2022 April 2021 September 2020 March 2020 January 2019 December 2018
3. Develop the healthcare workforce capacity necessary to prioritize and ensure cybersecurity awareness and technical capabilities	• Health Industry Cybersecurity Workforce Development Guide (HIC-Workforce)	June 2019

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Addressing the Health Care Industry Cybersecurity Task Force Recommendations

HCIC IMPERATIVES	CWG DELIVERABLES	DATE DELIVERED
4. Increase healthcare industry readiness through improved cybersecurity awareness and education	• Operational Continuity-Cyber Incident Checklist • Medtech Vulnerability Communications Toolkit • Health Sector Return to Work Guidance • Health Industry Cybersecurity Tactical Crisis Response Guide • HSCC Multimedia Promotions for National Cyber Security Awareness Month (blogs, podcast, webinars) • HICP, HIC Workforce, HIC-MISO, JSP, HIC-SCRiM	May 2022 April 2022 June 2020 May 2020 October 2019 2019-2020
5. Identify mechanisms to protect R&D efforts and intellectual property from attacks and exposure	• Health Industry Cybersecurity Intellectual Property Protection Guide	May 2020
6. Improve information sharing of industry threats, risks, and mitigations	• Operational Continuity-Cyber Incident Checklist • Health Sector Return to Work Guidance • Health Industry Cybersecurity Tactical Crisis Response Guide • Health Industry Cybersecurity Information Sharing Best Practices • Health Industry Cybersecurity Matrix of Information Sharing Organizations (HIC-MISO)	May 2022 June 2020 May 2020 March 2020 September 2019

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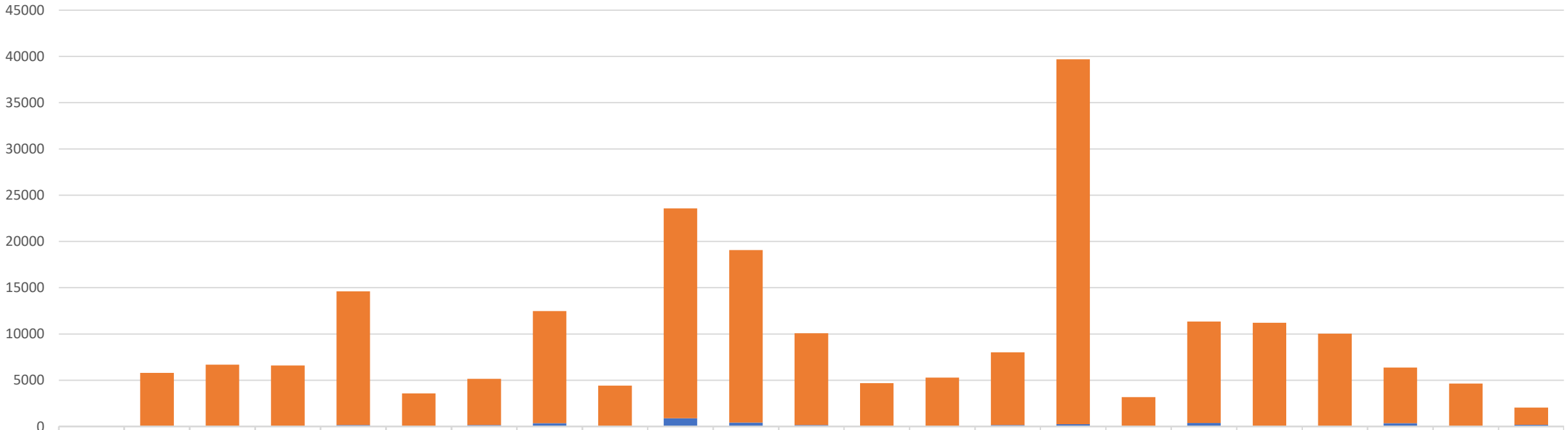
View and Download Statistics of HSCC Recommendations

*all downloads based on May 2019 installation of download plugin**



	8/24/18 Comments on HHS CMS Stark Law RFI	10/17/18 Comments on HHS ONC EHR Reporting Program RFI	10/26/18 Comments on HHS OIG Anti-Kickback Statute RFI	1/2/19 HICP	6/17/19 Worforce Guide	6/24/19 Comments on HHS ONC Information Blocking RFI	10/9/19 HIC-MISO	10/15/19 HIC-SCRiM V1	12/31/19 Comments on OIG and CMS Companion Proposed Rules RFI	1/28/20 JSP	3/9/20 COVID-19 Checklist	3/11/20 HIC-ISBP	4/10/20 405(d) Cybersecurity Awareness Resource	5/12/20 Safe Teleworking Tips	5/14/20 HIC-PIC	5/18/20 HIC-TCR	6/6/20 R2W Guidance	9/22/20 HIC-SRiM V2	12/14/20 Letter of Support HB 7898	1/3/21 Comments on FDA Vuln Comms Framework	4/18/21 HIC-STAT	6/14/21 Letter to President Biden	3/3/22 MC2
Views	18	5799	6689	6600	14467	3567	5003	12108	4418	22691	18645	9918	4663	5281	7852	39429	3148	10971	11209	10034	6019	4636	1847
Downloads	0	0	4	0	153	3	153	366	6	885	420	159	13	14	169	253	22	370	5	2	347	8	189

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Publications on Deck

- White Paper on Artificial Intelligence Applications and Cyber Risks in Healthcare – Q1 2022
- Health Industry NIST Cybersecurity Framework Implementation Guide – Q2 2022
- Legacy Medical Device Cybersecurity Management Guide – Q2 2022

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Task Groups 2022

NEW Task Groups in Box

- **FIVE-YEAR PLAN / HCIC TASK FORCE UPDATE**
  - Update the Health Care Industry Task Force (HCIC) recommendations as a five-year plan reflecting emerging threat scenarios in a rapidly evolving healthcare system
- **INCIDENT RESPONSE BUSINESS CONTINUITY PLAYBOOK**
  - Develop a healthcare cyber incident response and business continuity plan aligned with existing physical incident response protocols.
- **MEASUREMENT**
  - Measurement Task Group with scope TBD: e.g., a) measurement methodology; b) measure sector adoption of cybersecurity frameworks such as NIST CSF, HSCC HICP; c), measuring sector-wide security performance; and/or d) measuring patient impact from a cyber event.
- **OUTREACH & AWARENESS**
  - Focused, resourced and creative attention on leveraging government, industry associations and other stakeholders to build national health sector awareness and adoption of HSCC cybersecurity resources, NIST CSF, etc.
- **MEDTECH CYBERSECURITY JOINT SECURITY PLAN UPDATE (JSP2)**
  - First published in January 2019, the Medical Device and Health IT Joint Security Plan will be updated to reflect ongoing developments in medical device security and to integrate subsequent work products soon to be published on legacy device security, model cybersecurity contract language for medical technology, and vulnerability communications standardization
- **MEDTECH VULNERABILITY COMMUNICATIONS**
  - Provide guidance to differing stakeholders (MDMs, HDO's, clinicians, patients) on preparing, receiving and acting on medical device vulnerabilities. First publication pending on patient awareness. Second version on HDO preparedness.
- **405(d) – HEALTH INDUSTRY CYBERSECURITY PRACTICES**
  - Joint Industry/HHS Task Group (from §405(d) of the Cybersecurity Act of 2015) created the HICP (Health Industry Cybersecurity Practices) and is developing supporting collateral material and timely cyber events, marketing and partnerships
- **EMERGING TECHNOLOGY CYBERSECURITY**
  - Assess emerging technologies used in healthcare may present cybersecurity risks. First publication pending on artificial intelligence. Next assessment on how to protect/encrypt systems, data and identity against malicious use of quantum computing
- **SUPPLY CHAIN**
  - Results of pending survey on critical supplier risk management will inform subsequent development of related best practices.
- **RISK ASSESSMENT**
  - Finalized NIST Cyber Framework Implementation guide; under review by HHS for co-branding
- **INTERNATIONAL**
  - Hosting webinars on health-cyber international coordination
- **WORKFORCE DEVELOPMENT**
  - Preparing series of cybersecurity training videos for clinicians and healthcare students; Reviewing potential production companies for cost and outside funding opportunities
- **POLICY**
  - Activates as needed for policy proposals and response

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HEALTH SECTOR COORDINATING COUNCIL
Joint Cybersecurity Working Group

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