

Collaborating for Resilience in Healthcare



ANNUAL REPORT 2022

Contents

About ISACs, Health-ISAC, and Members
Welcome from the President and CEO $\ \ldots \ \ldots \ \ldots \ \ldots \ 2$
Message from the Board Chair
An Increasing Global Reach $\ldots \ldots \ldots \ldots \ldots \ldots \ldots 4$
Peer-to-Peer Collaboration
Providing Timely Intelligence
Industry Collaboration, Training & Awareness
Collaborating to Strengthen Critical Infrastructure
Collaborating for Patient Safety
Top Incidents and Vulnerabilities of 2022
Committees and Working Groups
Gathering Top Global Talents to Collaborate and Share 20
The Collaborating for Healthcare Security Message Resounds Throughout Media
$Offering \ Solutions \ for \ Members \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $



ABOUT ISACs

Information Sharing and Analysis Centers (ISACs) are non-profit, mainly private sector, member-driven organizations specific to the critical infrastructure sectors and subsectors. ISACs, established in 1998, help critical infrastructure owners and operators protect their facilities, personnel, and customers from cyber and physical security threats and other hazards. This is accomplished by collecting, analyzing, and disseminating timely actionable threat information to their members and providing members with tools to mitigate risks and enhance resiliency. ISACs have broad reach within their sectors, communicating critical information far and wide to maintain sector-wide situational awareness, and collaborate with each other through the National Council of ISACs.

ABOUT HEALTH-ISAC

Health-ISAC—a non-profit, private sector, member-driven organization—plays an essential role in providing situational awareness around cyber and physical security threats to the Healthcare Sector so that companies can detect, mitigate, and respond to ensure operational resilience. Health-ISAC connects thousands of healthcare security professionals worldwide to share peer insights, real-time alerts, and best practices in a trusted, collaborative environment. As the goto source for timely, actionable, and relevant information, Health-ISAC is a force-multiplier that enables healthcare organizations of all sizes to enhance situation awareness, develop effective mitigation strategies and proactively defend against threats every single day.

ABOUT HEALTH-ISAC'S MEMBERS

Health-ISAC membership connects a diverse body of Healthcare Sector organizations to form one community focused on improving health and saving lives. We are better together!

Globally, Health-ISAC Members include:

Academic Medical Centers	Medical Group Purchasing Organizations
Electronic Health Record System Providers	Medical Material Manufacturers and Distributors
Health Delivery Organizations	Medical Research & Development Centers
Hospice	Pharmaceutical Manufacturers
Insurance Companies	Pharmacies
Laboratories	Radiological Centers
Medical Device Manufacturers	Telehealth Providers

Welcome

from the President and CEO



Denise Anderson President and CEO Health-ISAC

"By collaborating and partnering with each other we unite to become part of the greater whole."

In January of 2023 we introduced our refreshed logo, which included the tagline: *Collaborating for Resilience in Healthcare*. We spent a lot of time coming up with that phrase, and I believe it absolutely says what we do at Health-ISAC.

To collaborate is to partner and to commit to the possibility of producing an outcome greater than would be developed in a silo. Resilience is the capacity to withstand and/or recover quickly. At Health-ISAC we combine resources and information to make sure all of us are able to continue to deliver despite the threats we face. We are stronger and more resilient together.

The chambered nautilus you see on the cover, is an ancient creature that has existed for millions of years. The nautilus forms a spiral; a curved pattern that focuses on a center point and builds a series of circular shapes that revolve around it. In particular, it forms a logarithmic spiral because while the size of the spiral increases as the nautilus grows, the shape stays the same with each added curve. The nesting process allows the nautilus to grow but also be strong and can be repeated into infinity. In fact, the nautilus can withstand oceanic pressures over 2,600 feet in depth. For you math nerds, the nautilus is also the perfect example of the *Fibonacci Series*, a sequence of numbers where the first two numbers add up to the following number. It is also linked to the Golden Ratio, where if you divide a number by the one before it in the *Fibonacci Series*,* you get a ratio of 1.618, which is the perfect balance between addition and multiplication. The Golden Ratio can be seen throughout nature in plants, animals, humans, weather, and the universe. Just like the individual chambers in a nautilus build upon one another or strands combine to become DNA, by collaborating and partnering with each other we unite to become part of the greater whole.

In our 2022 Annual Report you will see how Health-ISAC and the health community continues to collaborate around our unified mission to advance the physical and cyber resilience of global healthcare. Individual organizations coming together for the good of all.

I hope you will enjoy reading about how we collaborated for resilience in healthcare in 2022.

Denise Anderson President and CEO Health-ISAC

Message



Brian D. Cincera Board Chair Health-ISAC

from the Board Chair

2022 marked the shift of the COVID pandemic to endemic in many parts of the world. While higher immunity levels and less lethal variants are welcome news, the healthcare ecosystem continues to bear a heavy burden in meeting the demands of global population health. Ransomware attacks on hospitals and other health delivery organizations have continued to rise since the start of the pandemic, adding strain to an already overburdened ecosystem.

Beyond healthcare, the year started with Russia's invasion of Ukraine. The cyber and physical threats leading up to and since the invasion have included attacks on critical infrastructure inside and outside healthcare. We have also seen a rise in physical threats to healthcare environments with increasing violence and rhetoric on political issues, active shooter incidents at hospitals, geopolitical tensions, and natural disasters like heatwaves and hurricanes.

All these threats put pressure on healthcare organizations to make sure that we are resilient and able to improve health and save lives. That's why collaborating through Health-ISAC is so vital.

Every threat shared by a community member is a win for all.

136 new organizations joined Health-ISAC's trusted sharing community in 2022, where more than 8,100 security professionals connect daily around the globe to contribute threat and vulnerability information, best practices, and mitigation strategies. These collaborations were invaluable for improving the ability of healthcare organizations to defend against all types of operational hazards that could affect patient safety.

I am proud to serve as the Health-ISAC's Board Chair and it is incredibly gratifying to see all the great work performed by everyone in the community. The Board of Directors is deeply engaged with Health-ISAC leadership to ensure we continue to create valuable collaborative scenarios, deliver world-class services to Members, and safeguard the organization's future success.

Please take the time to see all that we have accomplished as a Health-ISAC community over the past year. The organization is in good hands under the executive team's leadership, and I look forward to continuing the journey in 2023 and beyond.

Bran Cuncera

Brian D. Cincera Health-ISAC Board Chair SVP and CISO Pfizer

BOARD OF DIRECTORS

Tarik Rahmanovic Sr. Principal Scientist, AbbVie

Gregory Barnes VP, Global CISO, Amgen

Anahi Santiago CISO, ChristianaCare

Scott Nichols Global Product Security Leader, Danaher

Brad Carvellas VP and CISO, The Guthrie Clinic

TJ Bean Director of CyberSecurity – Information Protection and Security, HCA Healthcare

Roisin Suver AVP, Cyber Threat Intelligence, Humana

Michael McNeil SVP and Global CISO, McKesson

Terence Rice VP, IT Risk Management and CISO, Merck & Co.

Rishi Tripathi CISO, Mount Sinai Health System

Brian D. Cincera SVP and CISO, Pfizer

Dirk de Wit Head of Product Security, Philips

Dr. Adrian M. Mayers VP and CISO, Premera Blue Cross

Sahan Fernando CISO, Rady Children's Hospital

Mike Towers Chief Digital Trust Officer, Takeda

An Increasing Global Reach

SUPPORTING AN ENGAGED COMMUNITY

In 2022, Health-ISAC Member organizations operated in 140 countries, constituting a global reach across 71% of the world. Health-ISAC participated in over 100 media events, spreading the word about collaborating for resilience in healthcare. 136 new Member organizations joined Health-ISAC's community throughout the year, and the 99% retention rate—even higher than last year—shows the value gained from participating in this community.

"We've been considering membership for a bit now. A peer company was recently raving about the value they get out of it, so I wanted to see if this could be a good fit for us."

From a prospect who contacted Membership Development

/ 4

"All the intelligence shared by Health-ISAC and the other members is invaluable. We use information from Health-ISAC to support our presentations to the Board. We even just hired an analyst specifically to be able to start sharing back to the membership."

Feedback during a Member check-in call

Global Member Footprint SWEDEN CANADA NORWAY ESTONIA UNITED KINGDOM DENMARK IRELAND NETHERLANDS POLAND BELGIUM GERMANY UNITED STATES SWITZERLAND FRANCE PORTUGAL 👝 🛑 SPAIN 🛑 ITALY ISRAEL SINGAPORE AUSTRALIA NEW ZEALAND

99% Member

Retention

6,600+

136 New Member Organizations joined Health-ISAC

2022 By The Numbers

<u>52</u>

Speaking events by Health-ISAC's leadership

37 outside speaking events +15 H-ISAC public events

8,100 Security Professionals in the Network Globally

100,000+

People had access to TLP Green & White Bulletins through Health-ISAC including Members, industry partners, and associations.





Ranking On LinkedIn in Post Engagements

for total and new followers (among other ISACs)

Peer-to-Peer Collaboration

One of the greatest values of being a Health-ISAC Member is the ability to connect with other Members on a broad range of topics and discussions. Members collaborate with each other across the globe and represent all facets of the Healthcare Sector. The Member Engagement Team acts as the central hub for Members, connecting them to services, tools, and information they need to engage fully within Health-ISAC's community. Rich, actionable information within this diverse community is shared between peers in daily chat queries, deep dive discussions, shared pain points addressed in working groups, and Member-presented experiences at global events. The Member Engagement Team also helps Members form new working groups to collaborate with peers over new challenges.

"It's been great. One of the best investments we have made"

From a global Biopharmaceuticals organization.

Collaboration

- Information
 Sharing Channels
- Continue the Conversation

Access to Tools

- Member Portal
- HITS
- HTIP

News

- Hacking Healthcare
- Announcements
- Monthly Newsletter

"In Europe there are many cyber security sharing communities, although not productive and takes a lot of effort to get running. Health-ISAC has the professional background and technical expertise combined with the experience in running a sharing program."

From a European prospect

Services

Partner
 Programs

Participation

- Working Groups
- Member Meet-ups
- Events
- Webinars

7,000+

People are on the email information sharing channels

2,175

People contributed to conversations on email information sharing channels

186

Conversations around sharing best practices

5,600+

People connect on the secure chat platform

30 Webinars delivered in 2022

/ 6

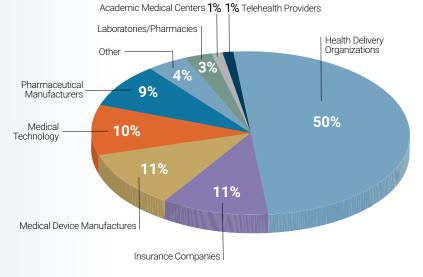
Inaugural Annual Member Satisfaction Survey Health-ISAC achieved a high 77 NPS Score!

In 2022, Members gave feedback on which Membership features they find beneficial. The candid feedback helps Health-ISAC be more attentive to Membership needs and the needs within the healthcare industry. Results showed that Members are very willing to recommend Membership, giving the ISAC a high Net Promoter Score of 77 (for context, that's the same satisfaction rating as customers of Starbucks!).

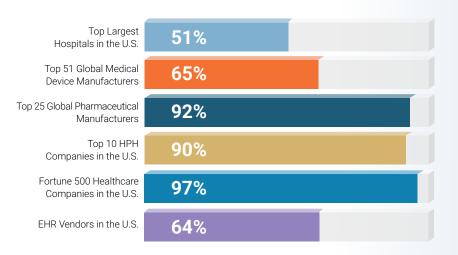
Diverse Membership Composition Across the Healthcare Sector

Health-ISAC connects security professionals within a large range of healthcare organizations, from a single chiropractic office to a global health system, from a medical school to a medical device manufacturer.

"Health-ISAC gives us the structure, the tools, and the capabilities. Membership with the connections made that I continue to leverage are probably THE most valuable asset I have." Member Composition







Leaders in the Industry

Health-ISAC Membership represents different sizes and sections of the Healthcare ecosystem, from <\$1M annual revenue to \$250B in annual revenue. 92% of the top 25 Pharmaceutical Manufacturers and 65% of the top 51 Medical Device Manufacturers in the world are Health-ISAC Members. The more Healthcare Sector organizations that collaborate within Health-ISAC, the more resilient the global Healthcare Sector is.

Providing **Timely Intelligence**

Health-ISAC's Threat Operations Center (TOC) published timely information to Members throughout the year, quickly disseminating actionable cyber and physical threat intelligence Members could act upon. This information included phishing threat intelligence, pre-pubic alerts, targeted alerts, vulnerability & threat bulletins, benchmarking surveys, situational awareness and physical security reports, daily cyber headlines, and webinar discussions for up-to-the-minute updates on current threats. The TOC added "Open Office Hours" accessibility and provided crowdsourced incident overviews for Members to use in executive presentations.



Targeted Alerts

87

5 Cyber Incidents

75%

Of Members connect on HTIP, Health-ISAC's Threat Intelligence Portal



Physical Security Threat and Incident Bulletins

2,551 Member Attendees at the

Monthly Threat Briefings

8 ถึ!

TOC Spotlight and Hot Topics threat and vulnerability webinars presented to Members

"Everyone is open to exchange and talking about what they are trying to solve. It's all about finding solutions together."

From a Spring Americas Summit attendee

• • • • • • • • • • •

84%-

Of Members subscribe to the Physical Security Daily Reports and Alerts

144 🕒

Vulnerability Bulletins to Members

Geopolitical Biweekly Watchlist updates provided to Members

"No matter how well prepared we are, something is going to happen. To beat one of us, you're going to have to beat ALL of us!"

Spring Summit attendee

Q110

197

Finished Intelligence

Reports

SHARED INFORMATION BY THE NUMBERS

51%

Member organizations have adopted the new automated Health-ISAC Indicator Threat Sharing platform (HITS)

2 🔁

Pre-public vulnerability notifications shared with Members from security researchers and technology vendors ^{Shared over} 21,240

Indicators of Compromise (IOCs) shared

24 🖉

Member-initiated best practice surveys

Providing Timely Intelligence

8

MULTIPLE SOURCES OF INFORMATION AND COLLABORATION

Targeted Alerts

áΠo

Health-ISAC's Threat Operations Center (TOC) published 274 Targeted Alerts in 2022 to Member and non-member organizations. Targeted Alerts warn organizations of high risks specific to their network—including things like vulnerable servers, cyber criminals selling access to their networks, stolen intellectual property, and compromised credentials.

Member Best Practice Surveys

In 2022, Health-ISAC captured Member feedback in 24 online surveys to help the whole of Membership determine what is state-of-the-art and what would be considered best-practice for a number of operational areas. Survey topics come from the Members and a few examples are listed here:

- Threat Modeling
- Security Risk Assessments
- · Phishing and Security Awareness Campaign
- Armis Zero-Day Vulnerabilities Impacts
- Ukraine Crisis Response
- Security Budget

Monthly Threat Briefing

The TOC hosts and delivers a Monthly Threat Briefing for Health-ISAC Members aided by Members, sponsors, and partners. The monthly sessions cover Current Threat Trends in Healthcare, Cyber Crime, Nation State, Physical Security, Legal & Regulatory Issues, Significant Upcoming Dates and recent Health-ISAC publications.

New Biweekly Geopolitical Watchlist

Health-ISAC's Geopolitical Watchlist, implemented Q4 of 2022, concisely analyzes global healthcare sector issues. The TOC consolidates information from



000

public and closed sources, intelligence, and government partners into this report and shares it with Members. This all-hazards mitigation initiative helps Members to preemptively identify and mitigate global risks, providing a time advantage for business resilience.

"The Daily Physical and Cyber Reports are the first thing I read each day."

From a Member

1. . W.

Global Threat Intelligence

In 2022 Health-ISAC's community of 8,100 global threat intelligence analysts collaborated on topics ranging from assigning tasks to cybersecurity interns, creating templates for software as a medical device, to tracking incident response cases. Some conversations turned into *Continue the Conversation* webinars, such as *Selecting a Cybersecurity Framework* and *Initial Scoping and Implementation of ServiceNow GRC* (Governance, Risk, and Compliance) for Vendor Risk Management.

European TOC Coverage

As part of Health-ISAC's goal toward providing "follow the sun" coverage, the TOC hired an European cyber threat intelligence analyst located in The Netherlands. "Because we were a Member, we found out about a breach with one of our vendors even before the vendor's marketing department knew. By Health-ISAC being so proactive, it allowed the us to protect our systems before anything was compromised. That alone makes the membership pay for itself."

From a Member at a non-profit US healthcare corporation

"Real world examples given in the Monthly Threat Briefings are very helpful; thank you for including them and not just speaking about what they 'may' look like. I belong to a number of orgs—Health-ISAC is the only monthly presentation that I honestly pay attention to!"

From a 2022 Member Survey response

External Collaboration

In 2022, Health-ISAC worked with external partners, including governments and law enforcement agencies around the world, plus industry associations, to improve the security of healthcare delivery and provide the sector with late-breaking threats and incidents. Some of these contributions included:

- Collaborated with Health and Human Services Health Sector Cybersecurity Coordination Center (HC3) to issue two joint security bulletins
- Shared indicators of compromise (IOCs) anonymously with the FBI on ransomware attacking the healthcare sector
- Signed a pledge with AWS, IBM, and 34 other organizations on Cyber Risk Management
- Worked with Microsoft in a court action to disrupt a cybercrime botnet responsible for ransomware attacks against hundreds of hospitals globally
- Provided expert testimony in the US Senate on ways to strengthen cybersecurity in healthcare
- Provided resources on numerous Industry Working Groups to produce best practices, white papers, and tools that are freely available for healthcare security professionals
- Collaborated daily with the American Hospital Association to provide thousands of hospitals with timely information about threats and vulnerabilities, plus ways to mitigate those risks



"We are in awe of the quick response we got when setting up Health-ISAC's Indicator Threat Sharing (HITS). Two analysts hopped on a call to make sure it was set up properly, then gave me a deep dive on all the different feeds that HITS contains. All the intelligence shared by Health-ISAC and the Members is invaluable. We use it to support presentations to the Board."

From a Member

Industry Collaboration, **Training & Awareness**

Health-ISAC provided multiple opportunities for Members to interact and increase resilience in 2022

Training

- At both the Spring and Fall Americas Summits, rising CISO Members learned skills in a two-day Leadership Development course presented by Cisco Secure
- Health-ISAC delivered customized training for a Member's Board of Directors to meet their specific leadership objectives

Webinars

In 2022, Health-ISAC held a variety of webinars to keep Members abreast of current trends. Here are few to spotlight:

- Mandiant Discovers Malware Persistence Within ESXi Hypervisors
- Ukraine-Russia War Outlook: Likely Scenarios and a Decision-Making Framework, featuring Chris Krebs and Alex Stamos, founders of KSG
- Evolution of STIX & TAXII Implementing Standardization to Collectively Protect the Healthcare Sector

Exercises

- Members participated in six preparedness and resiliency exercises focused on the increased potential for attacks impacting both physical and cybersecurity operations
- Health-ISAC Members participated in Cyber Storm VIII, a US national exercise led by the Cybersecurity & Infrastructure Security Agency (CISA). Member representatives and Health-ISAC's planning team provided guidance.
- Health-ISAC conducted its third annual Health & Public Healthcare Sector Hobby Exercise in Washington, DC.
- An incident response exercise element was added to the year's regional workshops
- Health-ISAC conducted two custom exercises for the benefit of members who had the opportunity to test their internal incident response processes
- Health-ISAC also uses exercises internally to test and improve our own cyber response and recovery processes. In 2022, Health-ISAC conducted 10 drills for the Threat Operations Center staff to practice responding to health sector incident impacting scenarios such as widespread ransomware and natural disasters.



was very timely and informative. Very helpful. Outstanding threat brief—thank you! Thank you for the informative session!"

"The Log4j update

Member feedback

Collaborating to **Strengthen Critical Infrastructure**

Health-ISAC led the way in 2022 by expanding collaboration

Working together with Cyware, Health-ISAC created a dedicated ISAC-to-ISAC automated sharing capability. In 2022, this unique tool connected 11 ISACs, an ISAO and three global CERTS to share relevant critical infrastructure information on threats and vulnerabilities.

Health-ISAC collaborated with Auto-ISAC on several efforts including: co-branded alerts, European threat analyst expansion, and co-presenting at external events.

Workshops

Health-ISAC facilitated nine global workshops in Japan, Ireland, England, and the U.S. with topics focusing on:

- Cyber Threat Landscape
- Cybercrime Threats
- Ransomware Case Study
- Supply Chain, IT, and OT Security
- Medical Device Cybersecurity
- Incident Response and Information Sharing

AND
G HEALTHCARE
IREAT LANDSCAPE
nary
ion between Health-ISAC and Booz Allen Hamilton
and may be shared without restriction.
s — be sure to download the full version of the report from ntelligence Portal (HTIP). Contact Membership Services
Ĩ

Inaugural 2022 Threat Landscape Report

The annual Current and Emerging Healthcare Cyber Threat Report summarizes cyber threats across areas like operational technology, supply chain, cybercrime, and nation-state threats. This report also contained predictive trends for the coming year useful for leadership to understand where security investment is needed and help justify security budget needs. "The Hospital case study talk was very informative as it vividly conveyed the hardships faced in the field."

Japan workshop attendee

"Today really filled in a lot of gaps: Learning what the issues are, where the gaps are, and where we can improve communications. What could we be doing better?"

Attendee at the Hobby Exercise

"The security workshop was a great learning opportunity. I especially appreciated the professionally diverse crowd from various organizations. It was an excellent opportunity to learn, network, and participate. Thank you for the invite and time spent with so many individuals working together to help secure their organizations and maintain data integrity along with patient safety. Very valuable event."

From a Regional US workshop attendee

"This is my first Health-ISAC workshop, I really enjoyed it. I would love to attend additional events in EMEA. Great work! Very enjoyable and love the networking elements!"

From a London, England workshop attendee

Collaborating for Patient Safety

MEDICAL DEVICE SECURITY

Health-ISAC is the only organization that brings together Medical Device Manufacturers and Health Delivery Organizations to support the security of Medical Devices within Healthcare, thus supporting patient safety. This collaboration is done through the Medical Device Security Information Sharing Council with 348 participants from 120 organizations, supporting 131 countries around the globe.

"We're now getting more into the medical devices and seeing the challenges from a regulations perspective, and it's been really impactful to hear other organizations talk about their journey."

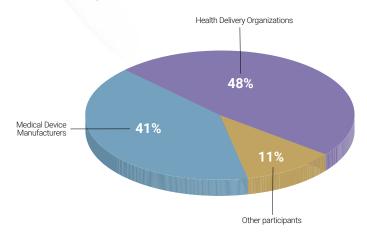
From a Member attending a 2022 Summit



Key Accomplishments in 2022:

- Hired industry expert Phil Englert to lead the global Medical Device Security Program for Health-ISAC
- Coordinated with security researchers on a vulnerability disclosure pre-briefing for Members prior to public disclosure (ACCESS:7 Security vulnerabilities identified in the Axeda agent and Axeda Desktop Server) CyberMDX / Forescout
- · Shared over 30 medical device public advisories
- Moderated two FDA Town Halls at Health-ISAC Summits
- Facilitated 11 global discussion groups with a range of topics from medical device cybersecurity legislation to HDO controls for managing medical device risks to experiences with merger and acquisition activities
- Active contributor on the Software Bill of Materials (SBOM) On Ramps & Adoption Working Group with Cybersecurity & Infrastructure Security Agency (CISA)

Medical Device Security Information Sharing Council Composition





Phil Englert Director of Medical Device Security

Phil Englert has 30+ years technical and operational leadership in the healthcare and life sciences space focused on strategic direction setting, operations improvement, and data & technology enabled business optimization and transformation initiatives. Previous positions include Chief Product Officer at Medsec, Global Leader for Medical Device Technology at Deloitte, Vice President of Operations at Medical Device Innovation, Safety, and Security Consortium and National Director, Technology Operations at Catholic Health Initiatives. "Protecting clinical functionality of medical devices helps ensure the ability to provide safe and effective patient care. Medical Devices also create much of the information upon which healthcare delivery is so reliant. Cybersecurity resilience for the medical device ecosystem is essential to provide healthcare when and where needed. The opportunity to build and expand the understanding of and collaboration within the healthcare community is exciting and necessary."

Phil Englert

Top Incidents and Vulnerabilities of 2022

Health-ISAC's Threat Operations Center (TOC) disseminated nearly a thousand Vulnerability, Threat, and Incident bulletins in throughout the year. Below captures a selection of the most prevalent incidents and vulnerabilities during 2022.



1/7/22 **FIN7 Cyber Actors Targeting Businesses** Through USB **Keystroke Injection** Attacks

1/14/22

Health-ISAC

Members Assess

Severing Interfaces

within Ukraine Due

to Recent Attacks



Government-Sponsored MuddyWater Actors **Conducting Malicious Cyber Operations**



2/25/22 **Criminal Actors Exploit Job Recruiting** sites to Target and Recruit Providers for Health Care Fraud Schemes



2/28/22 **Conti Ransomware** Announces Support of Russian Government. **Threatens Retaliation** Against Enemies of Russia

FEBRUARY



3/18/22 Strengthening Cybersecurity of SATCOM Network Providers and Customers



3/23/22

Anonymous Threatens Health-ISAC Members who Continued **Operations in** Russia

MARCH

mware

4/14/22

VMware Workspace ONE Access and VMware Identity Manager Critical **Vulnerabilities**

APRIL



5/9/22

Cyber Actors Perform Reconnaissance of US Critical Infrastructure Networks from **Russia-Based IP** Addresses

MAY



6/3/22 **Zero-Day** Exploitation of Atlassian Confluence

JUNE



JANUARY

In 2022, malicious actors continued to target the global Healthcare Sector through the exploitation of countless vulnerabilities and configuration errors.



8/2/22

Potential Implications of US Speaker of the House Nancy Pelosi visit to Taiwan

RANSON

Reversing Labs

Discovers New

Ransomware Family

Targeting Healthcare

Sector, GwisinLocker

8/5/22

OINT CYBERSECURITY ADVISORY:

North Korean Cyber Actors Use Maul Ransomware to Carget the Healthcare and blic Health Sector

7/6/22

North Korean State-Sponsored Cyber Actors Use Maui Ransomware to Target Healthcare and Public Health Sector

JULY



Roy/Zeon Threat Group Impersonates Health-ISAC Member; using fake invoices to lure victims to malicious call center



9/29/22 Threat Actors Using MFA Fatigue Attack to Defeat Advanced Authentication Methods

SEPTEMBER



10/12/22

Killnet Denial of Service Operators Target Healthcare Sector - Special TLP:AMBER Report



10/21/22 #StopRansomware: Daixin Team (Actively Targeting Healthcare Sector)

OCTOBER

I viewbidAppearil elf-tableView releas Isoper viewbidAppearian Isoaction) revealMenu: (1d): Isolf-sildingViewContro Isolenat

12/22/22

Okta Private Github Repositories Breached, Source Code Leaked

Health-ISAC	1	2022 A	nnual	Report	1	17
i lealui IOAO		ZUZZ A	iniuar	Report		

DECEMBER

NOVEMBER

Committees and Working Groups

The Member community comes together through committees, working groups, and councils to lead and drive solutions for the industry. Work product items include: white papers, creating resource libraries and templates, presenting at events, and networking to share best practices. Members volunteer their time, lending sweat equity to strengthen the global Healthcare Sector. Health-ISAC and its community are thankful for their time and dedication.



Health-ISAC Working Groups

- Cybersecurity Analytics
- Cyber Threat Intelligence Program
 Development
- Cybersecurity Awareness and Training
- Identity and Access Management
- Information Protection
- Information Security Risk Management
- IT Mergers, Acquisitions, Integration, and Divestitures
- Pharma and Supply Chain
- Provider
- Security Architecture
- Security Engineering
- Software Security
- Third Party Risk Governance

"If I run into a challenge at work, I'm involved in one of the working groups and I know that I can reach out and having a sounding board—and get some input on what we're working on."

Member Summit attendee

Health-ISAC Committees

- Business Resilience
- Identity
- Threat Intelligence

Health-ISAC Councils

- European
- Medical Device Security Information Sharing

Health-ISAC New Working Groups in 2022

- Diversity and Inclusion
- Pharma and Healthcare Insider Threat
- Purple Team
- Regional Tensions
- Social and Political Risks to Healthcare

"We had the privilege to sponsor the Summit and facilitate the launch of the Supply Chain Security Framework which is now available for Health-ISAC Members. This would not have been possible without the leadership of the Supply Chain Security working group"

Working group mention from a Summit vendor

Learn more about Working Groups: https://h-isac.org/committees-working-groups/

Gathering Top Global Talents to Collaborate and Share

HEALTH-ISAC GLOBAL SUMMITS

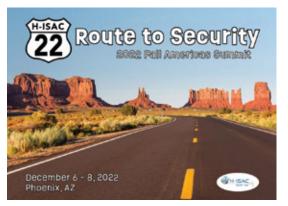
Health-ISAC held three Summits in 2022: in Portugal and on both coasts of the United States. Health-ISAC Summits are 'must attend' events full of informative sessions often led by Members, and provide numerous networking opportunities. Countries represented at 2022 Summits

"Had a great time joining with industry peers in Algarve in the Health-ISAC European Summit, the right place for any organization on the Health Sector for learning and sharing."

Member: Pedro Gomes







MAY

Spring Americas: *Ohana Village; We're All in this Together*

Over 550 attendees from 35 different states and 13 different countries came together in Orlando Florida. Everyone, from attendees to speakers, to sponsors, was talking about how great and important it was to be face-to-face again.

OCTOBER Autumn European: Casting the Security Net

This 2022 Summit was held in Vilamoura, Algarve, Portugal where 98 European security peers from 17 countries exchanged solutions to common challenges, becoming stronger together. The Summit launched with Health-ISAC European Council's guarterly meeting.

DECEMBER Fall Americas: Route to Security

Phoenix, Arizona was the final destination for 600 healthcare security professionals from 27 US states and 12 countries. 80 speakers shared over 30 hours of educational sessions.

Professional Development video recorded from Spring Americas Summit attendees: https://youtu.be/T2Y2Qshz-qM



"I met inspiring professionals and sat in many insightful sessions about Shared Responsibility, Business Resilience, and more. I'm grateful to Health-ISAC for these opportunities to share information, connect, and productively improve the health industry together. I learned so much in such a short amount of time."

Member: Barbee Mooneyhan

88 Member Presentations

delivered

ANNUAL MEMBER AWARDS

The Routhy Award went to Terry Rice, with Merk & Co

The Routhy award was created in 2018 to honor first Chairman of the Board, Jim Routh, and is awarded yearly to honor other influential forces within healthcare and the information security profession.

The Hero Award went to Santiago Holly, with GE Healthcare

The Hero award recognizes one Member each year who represents excellence in information sharing. The event was two days partiality and discussions, and community demonstrating

"The event was two days packed with engaged talks and discussions, and networking in a thriving community demonstrating that collaboration and sharing is a key element in improving cybersecurity in the Healthcare space for the benefit of patients. Big thank you to the Health-ISAC team to create the appropriate environment!"

Member: Dr. Hans-Martin

Global Attendees

content

hours

The **Collaborating for Healthcare Security** Message Resounds Throughout Media

In 2022, Health-ISAC spoke at 53 events around the world, spreading awareness in the healthcare sector that no organization needs to face physical and cyber security defense alone. Media channels reached out to Health-ISAC for numerous quotes and information throughout the year, appearing in 52 articles from 24 different publications.

Health-ISAC Subject Matter Experts Speak About Healthcare Security

Key staff spoke in North America, Canada, Ireland, and Hong Kong, and led sessions at Health-ISAC Summits in Portugal, Japan, and North America. Podcasts also provided direct audiences for Health-ISAC to share information throughout 2022.

HIMSS 亚

- What's Next in 2022 for Cybersecurity?
- What Keeps Cybersecurity Professionals Up at Night?



 Insider Scoop: Tackling Insider Threats



 Podcast Episode 9: A Cyber Journey from National Security to Finance to Healthcare



• Where Health Information Meets Innovation



- Evolving Cyber and Privacy Risks in a COVID-19 World
- Closing keynote: Scoping the Cyberthreat Landscape in Healthcare

Other Speaking Listings Include:

- ViVE Powered by CHIME + HLT: Addressing Healthcare Security as a Patient Safety Risk
- RSA panel Securing Medical Devices: When Cyber Really Is a Life and Death Issue
- Healthcare Info Security podcast: *How Health-ISAC is Tracking Russia-Ukraine Cyberthreats*
- iSMG podcast: How the Healthcare Sector is Battling Top Threats
- US Senate Committee on Health, Education, Labor, and Pensions: Expert testimony in full Committee hearing on Cybersecurity in the Health and Education Sectors

MEDIA MENTIONS, ARTICLES, AND BLOGS

During a year with increasing threats to healthcare, Health-ISAC provided insights to news media channels seeking acumen on the security needs of the health industry.

The Washington Post

• Washington Post Cybersecurity 202 newsletter: An 'Unprecedented' Hospital System Hack Disrupts Healthcare Services

HEALTHCAR PINFO SECURITY®

- Russian APTs: Why Stakes Are So High For Healthcare Sector
- How the Senate's Cyber Bill Could Affect Health Sector
- Russia-Ukraine War: *Threats Facing the Healthcare Sector*



 The Hill: Lawmakers push for improved cybersecurity in health sector amid growing cyber threats

HEALTH IT SECURITY

- Common Types of Social Engineering, Phishing Attacks in Healthcare
- Experts Say Medical Device Security Trending in Right Direction
- Health-ISAC, Microsoft, 30+ Others Sign Cyber risk Pledge

THE WALL STREET JOURNAL.

• Code Dark: Children's Hospital Strives to Minimize Impact of Hacks



• Cyber Threats to Health, Education Sectors Increase with Ransomware, Limited Security Resources



• US Officials Prepare for Potential Russian Cyberattacks as Ukraine Standoff Continues

KrebsonSecurity

• Conti's Ransomware Toll on the Healthcare Industry



- How to Move the Healthcare Cybersecurity Posture Through a Patient-Safety Lens?
- Not Another NotPetya

Other Media Listings Include:

- Industrial Cyber: Frequent Ransomware Attacks in Healthcare and Public Health Sectors Elevate Security Threats to OT/ IoT Environments
- Healthcare InfoSecurity: Top Cybersecurity Challenges Facing Healthcare Providers
- Microsoft blog: Notorious Cybercrime Botnet Disrupted
- PEW: Ransomware Attacks on Hospitals Put Patients at Risk
- CyberScoop (by Tim Starks), FBI, CISA, Treasury: North Korean Hackers Taking Aim at Health Care with Maui Ransomware
- Healthcare InfoSecurity: Assessing the Security Risks of Emerging Tech in Healthcare

Offering Solutions for Members

Health-ISAC engages with vetted service providers committed to the mission of increasing Healthcare Sector resiliency against all hazards. This unique, solution-based community provides Members with exclusive cost-effective security solutions, offers Members valuable opportunities to evaluate security services with less risk, and expands Member security awareness.

"Mastercard is proud of our association with Health-ISAC... It's about thinking big, bringing in different perspectives and moving fast. It's about taking ownership, setting high standards, and then consistently delivering. Together, we build for the future, not just for today. As perfectly demonstrated in Portugal at the European Summit in October, Health-ISAC provides a unique setting for all Members to learn and strive for improvement in our collective practices and we look forward to remaining an active part of this valuable community"

Steve Brown, Director Cyber Resilience, Cyber & Intelligence Solutions – Europe

AMBASSADOR PROGRAM

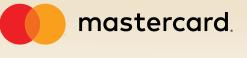
The Ambassador program was created to amplify and accelerate adoption of the simple message that by expanding a community for the sharing of threats, incidents, and best practices, we create a more secure and resilient healthcare sector.

Health-ISAC's Ambassador program partners with recognized global brands to reach worldwide healthcare security audiences.

Mastercard onboarded as the inaugural Ambassador in 2021, aligning to this mission through its RiskRecon platform to mitigate risk for global healthcare operators.

Google became the second Ambassador in 2022 to rise above commercial interests and amplify Health-ISAC's mission objective to help improve safety and security for patients around the world.

Learn more about the Ambassador Program: https://h-isac.org/ambassador/



Google

"Partnering with Health-ISAC just makes sense. We share a common vision that building a safe and reliable health ecosystem is our collective responsibility and keeps with values of respecting and protecting each other. This partnership should inspire other organizations with skills and capabilities that can contribute to these outcomes to join us"

Phil Venables, CISO, Google Cloud

COMMUNITY SERVICES

Community Services providers offer their services to Health-ISAC Members at reduced fees, or in some cases, at no-cost. They are vested stakeholders who willingly share their expertise across the entire Health-ISAC community. By providing unique solutions to Members, Community Service Providers increase resiliency for all Members across the healthcare ecosphere, regardless of resource depth.

Learn more about Community Services: https://h-isac.org/community-services/





quado



♦flare

GREYNOISE INTELLIGENCE



Security Scorecard



SecurityRisk





Health-ISAC, Inc. 226 North Nova Road, Suite 391 Ormond Beach, Florida 32174

Drève Richelle 161 M Box 57 1410 Waterloo, Belgium

Health-ISAC.org

Health-ISAC's mission is to empower trusted relationships in the global healthcare industry to prevent, detect, and respond to cybersecurity and physical security events so that Members can focus on improving health and saving lives.

DON'T MISS THE UPCOMING 2023 SUMMITS

APAC March 21 – 23 Singapore Spring Americas May 9 - 11 Tampa, FL European October 17–19 Dubrovnik, Croatia

Fall Americas November 27 – December 1 San Antonio, TX

Joining Health-ISAC as a Member strengthens not only your own organization, but also increases the resiliency of the global Healthcare Sector. To discover more, send an email to CONTACT@h-isac.org