



ORH Webinar Series

February 27, 2025


Rural Health Cybersecurity: Resources for Resilience

The mission of the Oregon Office of Rural Health is to improve the quality, availability and accessibility of health care for rural Oregonians.

The Oregon Office of Rural Health's vision statement is to serve as a state leader in providing resources, developing innovative strategies and cultivating collaborative partnerships to support Oregon rural communities in achieving optimal health and well-being.



Webinar Logistics

- Audio is muted for all attendees.
- Select to populate the  to populate the chat feature on the bottom right of your screen. Please use either the chat function or raise your hand  on the bottom of your screen to ask your question live.
- Presentation slides and recordings will be posted shortly after the session at: <https://www.ohsu.edu/oregon-office-of-rural-health/resources-and-technical-assistance-cahs>.





Laura Kreofsky, MHA, MBA, PMP, CDH-E is a recognized leader in health care strategy and technology focusing on innovation to accelerate digital transformation for social impact. For over 30 years, she has worked in and with health care delivery organizations with a passion for advancing technology-enabled healthcare in underserved communities.

Today, Laura leads Microsoft Philanthropies work in Rural Health Resiliency that supports building cybersecurity and digital and AI capabilities for rural healthcare providers across the U.S. She is on the Advisory Board of the Oregon Chapter of HIMSS, a founder of the Rural Health Community whose mission is advocacy and affordable technology for rural providers, She has been recognized by Consulting Magazine as a Female Leader in Technology and the University of Minnesota Delta Omega Public Health Honor Society.

Supporting Rural America: Rural Health Resiliency

Laura Kreofsky, MHA, MBA
Director, Rural Health Resiliency
Microsoft Philanthropies
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DATE: February 27, 2025

Microsoft Corporation

Microsoft Philanthropies (CELA)

Tech for Social Impact

Rural Hospital
Resiliency

Campaign &
Election Integrity

Cyber
Disinformation

Pillars of Microsoft's Investments in Rural America

Airband

Broadband Expansion

Tech Spark

Training and Jobs

AI Skilling

Training and Jobs



Rural Health Resiliency

Cybersecurity Program for
Rural Hospitals



Strategic cybersecurity
solutions and services

Rural Health AI Lab
("RHAIL")



AI innovation for
rural health



Did you get “The Letter?”

The Change Healthcare Hack Timeline

Feb '24



Oct '24

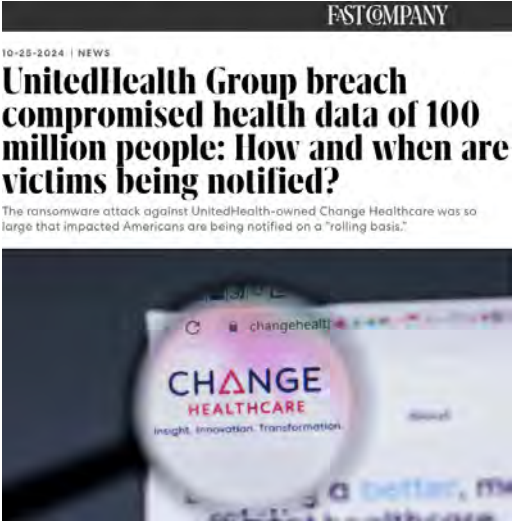


Forever...

July '24



Jan '25



THE HEALTHCARE CYBER LANDSCAPE



TOP 3

INDUSTRY IMPACTED BY
CYBERSECURITY ATTACKS



130%

SURGE IN HOSPITAL
RANSOMWARE ATTACKS IN
PAST YEAR



2,000

CLINICS, HOSPITALS &
HEALTHCARE ORGS HIT BY
CYBER ATTACKS ANNUALLY



70%

OF HEALTHCARE CYBER
ATTACKS ARE ON
SMALLER
ORGANIZATIONS



20%

INCREASE IN MORTALITY
AFTER A CYBER ATTACK



100M

PATIENT RECORDS
AFFECTED IN A SINGLE
DATA BREACH IN 2024



80%+

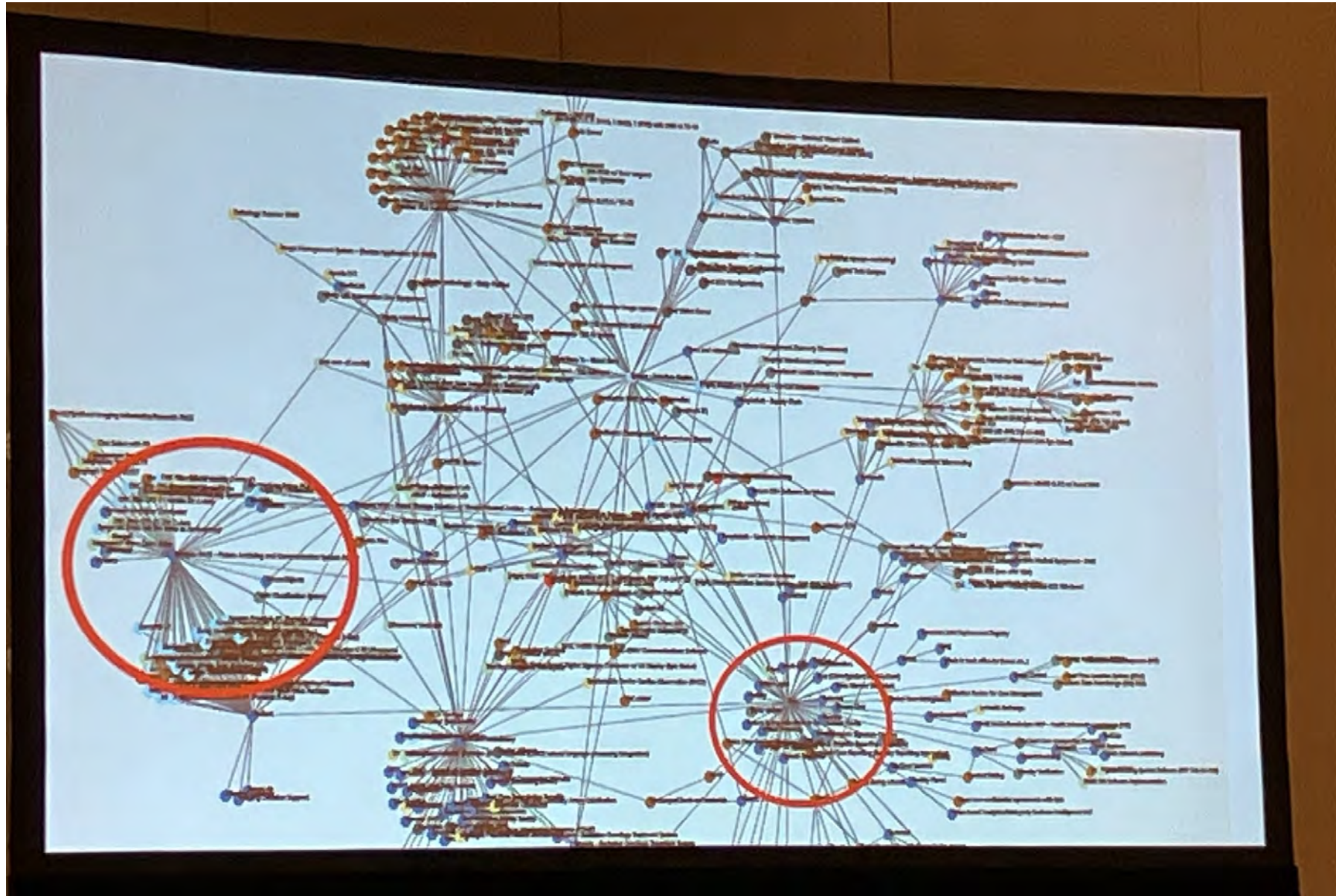
ATTACKS DUE TO
HUMAN ERROR



\$10M

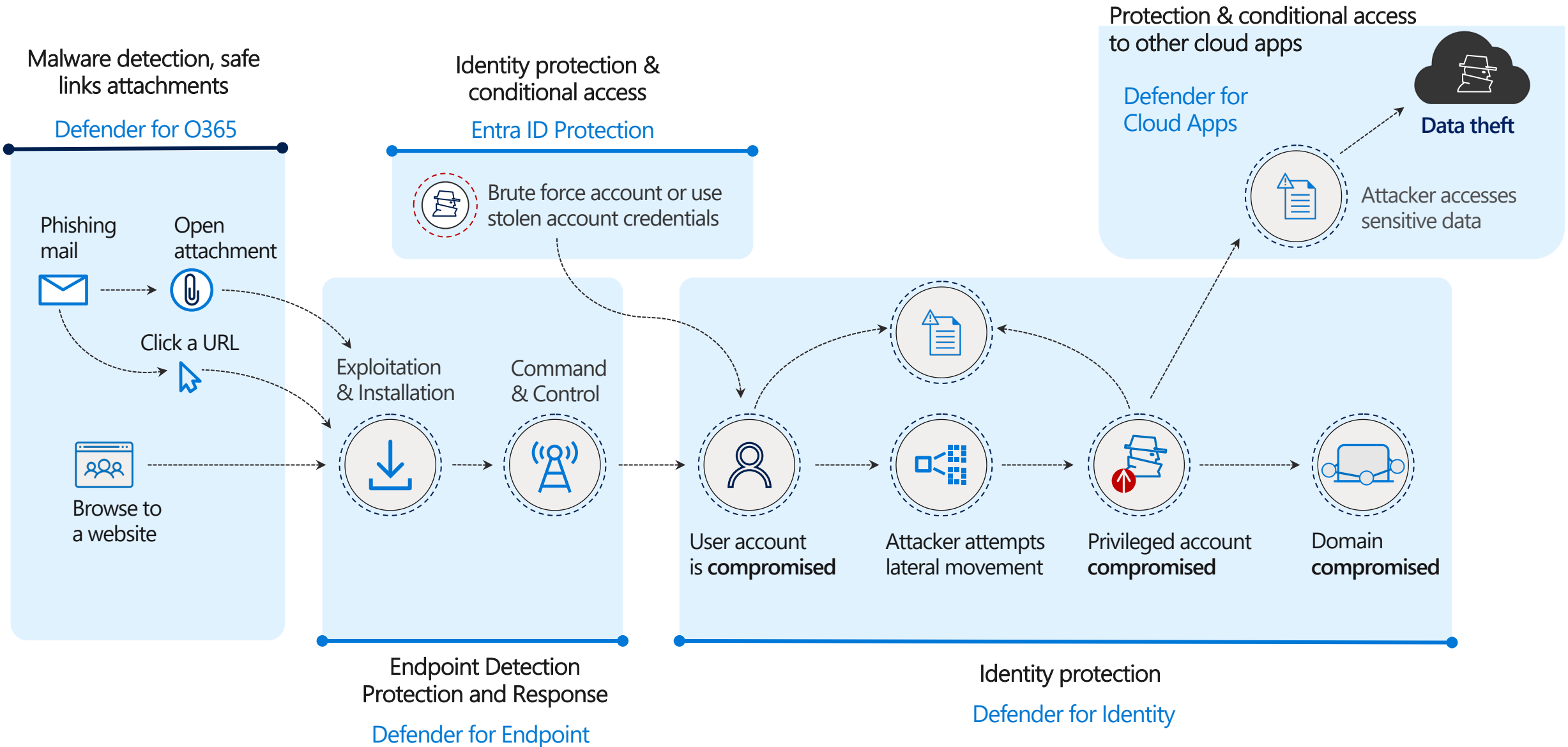
AVG COST OF
HEALTHCARE DATA
BREACHES IN 2024

WHAT COULD POSSIBLY GO WRONG?



Source: John Riggi, American Hospital Association National Director Cybersecurity and Risk

CYBER ATTACKS HAPPEN...



Cybersecurity is not an “IT Thing”

A 2020 cyberattack on a **large academic health system**, attributed to malicious software embedded in an **email attachment** opened by an **employee**, affected more than **5,000 end-user devices** and 1,300 servers and led to revenue losses of more than **\$63 million**.

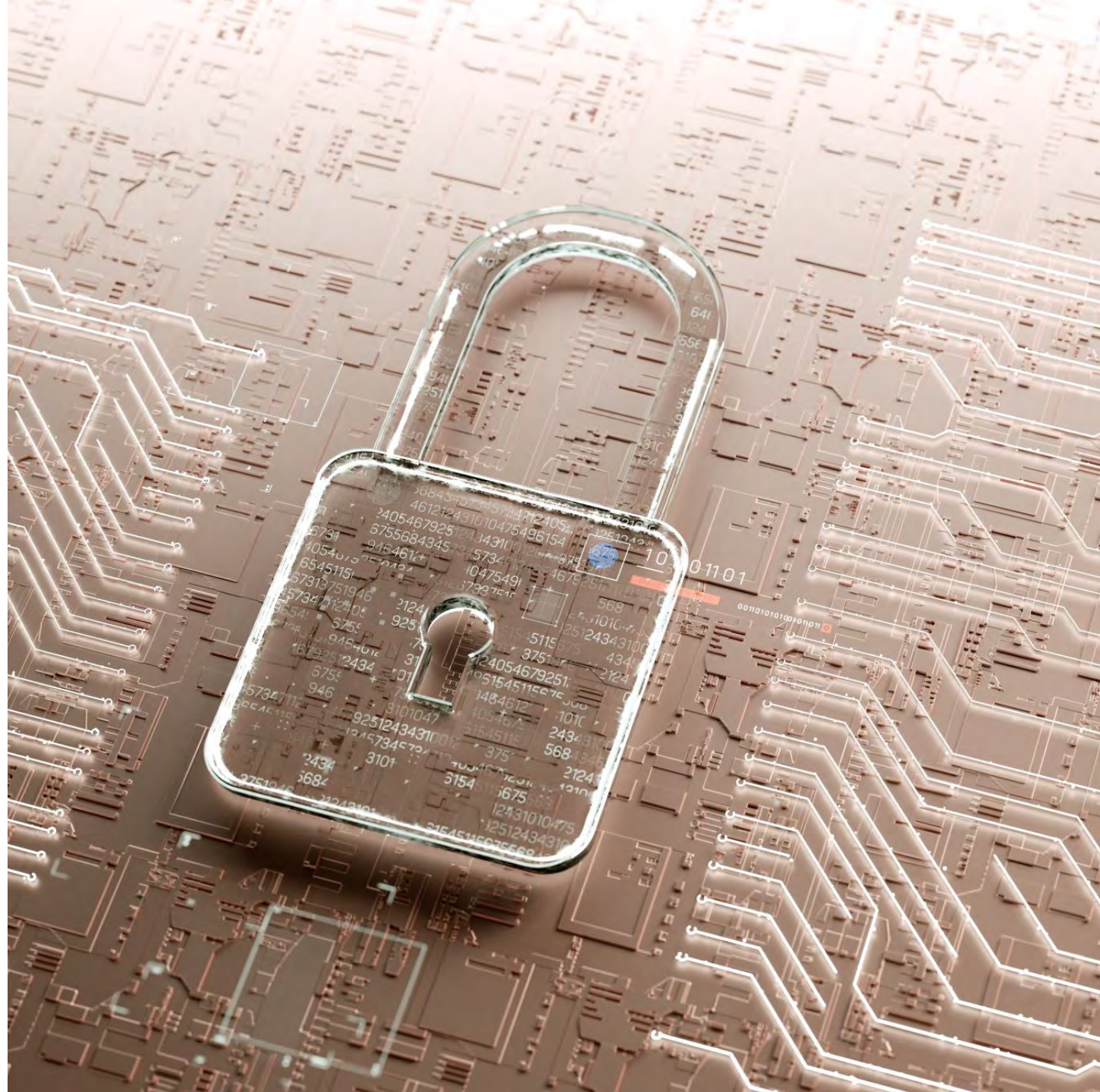
Victims of medical identity theft incur on average costs of **\$13,500** to recover from that theft, according to a study funded by the Institute for Critical Infrastructure Technology

*“At least in part because of **senior management’s** lack of cybersecurity awareness, **many fail to invest or fail to invest appropriately** in cybersecurity infrastructure.”*

“Small and Rural Health Care Providers Must Implement Strong Security Measures To Provide Efficient and Effective Health Care”

“Patients and communities have a critical need for health care providers...to be resilient and remain operational, which depends in part on the cybersecurity of their electronic information systems.”

The “HIPAA Security Rule to Strengthen the Cybersecurity of Electronic Protected Health Information” Notice of Proposed Rule was issued Dec 27, 2024. It was archived from the HHS website in early February 025



(Black & White) Insights from the Proposed Cybersecurity Rule...

1. The use of **antiquated hardware, systems, and software** by hospitals is concerning. 96% of hospital claim using end-of-life operating systems or software with known vulnerabilities, which is inclusive of medical devices
2. Only 49% of hospitals have adequate coverage in **managing risks to supply chain**. These risk rates as the third most important threat among 288 healthcare CISOs
3. Healthcare is rife with Asset Management deficiencies. **39% of hospitals don't have organizational data flows** and communication mapped and only 47% have external systems adequately catalogued

The Microsoft Cybersecurity Program for Rural Health

Microsoft, the **American Hospital Association**, and the **National Rural Health Association**, with support from **The White House** formed an unprecedented partnership committed to improving the security of all rural hospitals across the United States.

Assessments



- **Free cybersecurity assessments** to evaluate security risks and identify an action plan to protect the organizations
- Anchored in **health sector best practices** and cyber performance goals

Training



- **Free cybersecurity awareness training** resources for frontline staff to reduce risks and increase vigilance
- Foundational **cyber certification** and resources for IT staff in security and compliance roles

Affordability



- **Nonprofit pricing** for independent Critical Access and Rural Emergency Hospitals
- New licenses of the advanced E5 security product **free for 1 year** for other rural hospitals
- Free **Windows 10 Extended Security Update** (Summer 2025)

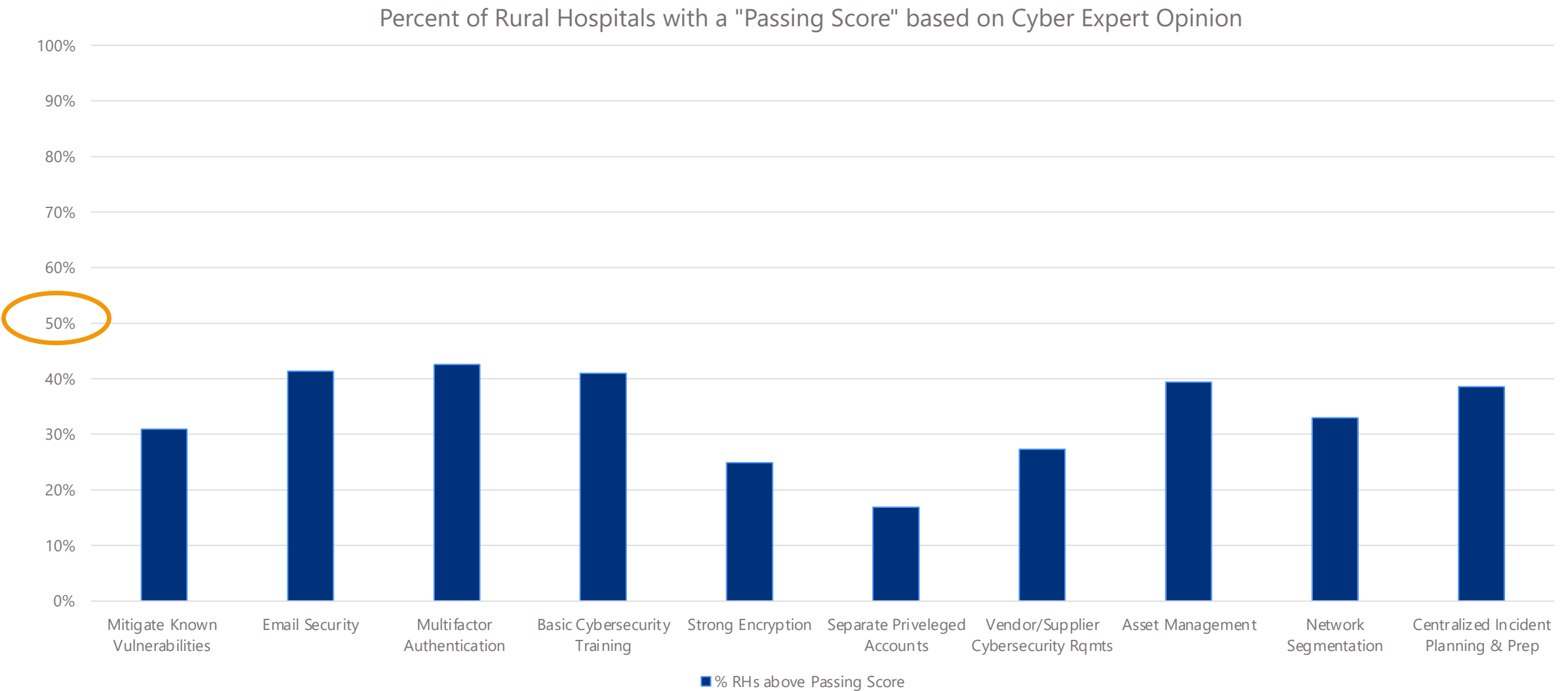
MS PROGRAM: FREE CYBER RISK ASSESSMENT



Roadmap									
Findings	Recommended Activities	FY24		FY25				FY26	
		Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Separating User and Privileged Accounts	Implement the principle of least privilege and separation of duties.								
	Regularly test a plan to validate that privilege elevation processes takes place only when additional access is temporarily needed.								
Pen-Testing	Work with an external penetration testing provider to schedule an annual penetration test to compliment the CISA external vulnerability scanning								
	Document findings from penetration test and address them where possible. When not possible, have asset owner accept risk								
Vendor Auditing	Creating a documented policy of standards and practices for third party vendors, and establish a system to re-evaluate policy								
	Create a vendor notification policy to advise a vendor when their equipment, modality, or software has a vulnerability discovered or is involved in a cybersecurity incident.								
Training and Education	Implement regular training schedule as well as quantifiable training for all employees. Track results and report to IT & hospital management. Observe results after cybersecurity awareness campaigns to see effects								
	Adapt training to specific roles and further develop other methods to reinforce cybersecurity awareness, including posters in strategic places, newsletters								

IMAGE SOURCE: MORGANFRANKLIN CONSULTING - ALL RIGHTS RESERVED

Cybersecurity Resilience: Across the Board Challenges



MS PROGRAM: FREE TRAINING & PRODUCT DISCOUNTS

The screenshot shows the Microsoft Cybersecurity Program for Rural Hospitals website. At the top, the Microsoft logo is on the left, and a photo of healthcare workers in a training session is on the right. Below the photo, the text 'Cybersecurity is for everyone' is followed by a description: 'Educate everyone in your organization with the cybersecurity awareness resources and training curated by the security experts at Microsoft.' A 'Learn More' button is visible. The main content area is divided into two sections. The first section, 'Ensure frontline workers understand cybersecurity basics', includes a 'Get your team started with the free Microsoft Learn Path, Essential cybersecurity awareness for healthcare staff' link and a list of topics: 'Basic cybersecurity threats, attacks, and mitigations', 'Authentication and authorization in cybersecurity', 'Device-based threats and security controls', 'Application-based threats and how to protect against them', and 'Securing you: Basics and beyond'. The second section, 'Certification and advanced skilling for IT staff', features a 'Earn your free career essentials certificate in cybersecurity' link and a diagram showing a three-step process: 1. Cybersecurity threat landscape, 2. Cybersecurity terminology, and 3. Cybersecurity foundations. The final step leads to 'Advanced skilling' which includes 'Complete additional learning paths' and links to 'Microsoft security documentation' and 'Microsoft 365 security and compliance capabilities'.

Nonprofit Pricing* for Independent CAHs and REHs includes

- MS 365 Business Premium
- MS 365 E3
- MS 365 F3
- Power BI Desktop
- Power BI Pro
- Azure
- Power Apps
- Dynamics



* FQHCs and RHCs are also eligible

All Other Rural Hospitals are Eligible for...

The Microsoft E5 Security add-on, which can be integrated with Microsoft 365 E3 to provide advanced security, threat protection, compliance features, and analytical tools.

The Microsoft Cybersecurity Program for Rural Hospitals: [Program Registration Link](#)

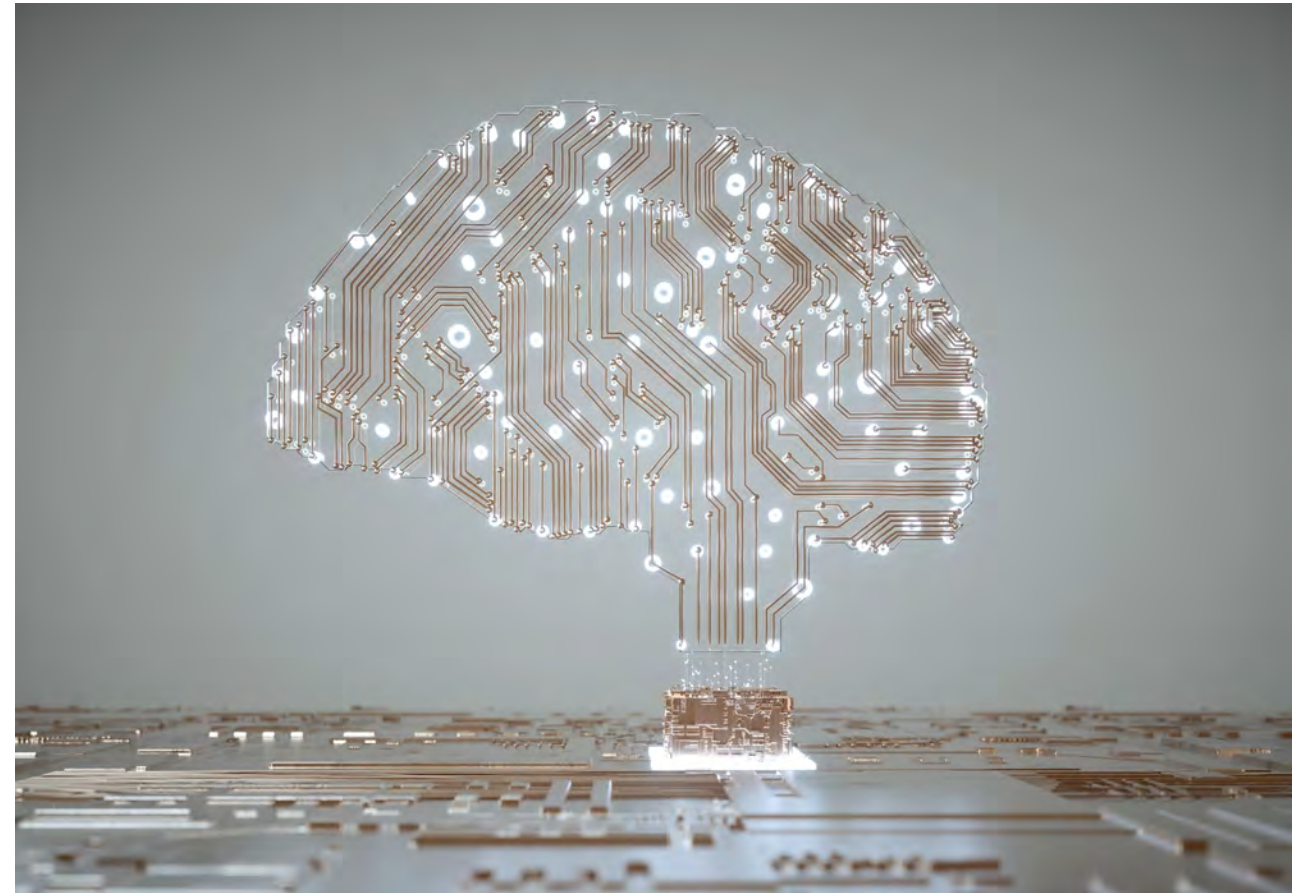


AI in Support of Rural Health



Understanding Generative AI, OpenAI, and Microsoft Copilot

- **Generative AI** “learns” from existing information to create new content.
- **OpenAI and Deepseek** are organizations developing AI models.
- **Microsoft Copilot and ChatGPT** integrate AI to enhance productivity tools



AI is here to stay

- Use of generative AI has nearly doubled in the last six months with **75%** of global knowledge workers using it..... and **46%** of users started using it less than six months ago. (Microsoft and LinkedIn 2024 Work Trend Index)

- Heartland Forward's AI poll across **Alabama, Illinois, Indiana, Louisiana, Michigan, North Dakota, Ohio, Oklahoma and Tennessee** found:
 - 78.5% of respondents believe AI has potential to make a positive difference in health care.
 - The majority of respondents – 64% agree they should receive AI training in the workplace, indicating a willingness to embrace AI through education and training.



AI in Rural Health

Artificial intelligence supports our decision making and activities

Clinical Services

- **Access to Care:** AI-powered virtual care, remote consults and chronic condition monitoring
- **Decision-Making:** support timely, accurate diagnosis and clinical actions
- **Resource Allocation:** identify high-risk patients, allocate resources and streamline workflows

Administrative Burden

- **Ambient-listening** to ease documentation time
- **Scheduling** of staff, patients, ORs, etc.
- **Billing and coding** accuracy and efficiency
- **Denials Management**
- **Grant** identification and writing



[Image Source: Cleveland Clinic](#)

RHAIL: Fostering AI Innovation for Rural Health

Microsoft launched the **Rural Health AI Innovation Lab** (RHAIL) to collaborate with rural customers in developing innovative AI solutions for rural health's challenges

- The goal is to drive technology advancement, financial performance and address health disparities unique to the patients and communities served by Rural Health
- Use Cases identified and framed by the voice of the customer
- Aligned with Responsible AI practices and principles
- "Low Code/No Code" to build
- Affordable and accessible
 - Tools put on GitHub to access for free

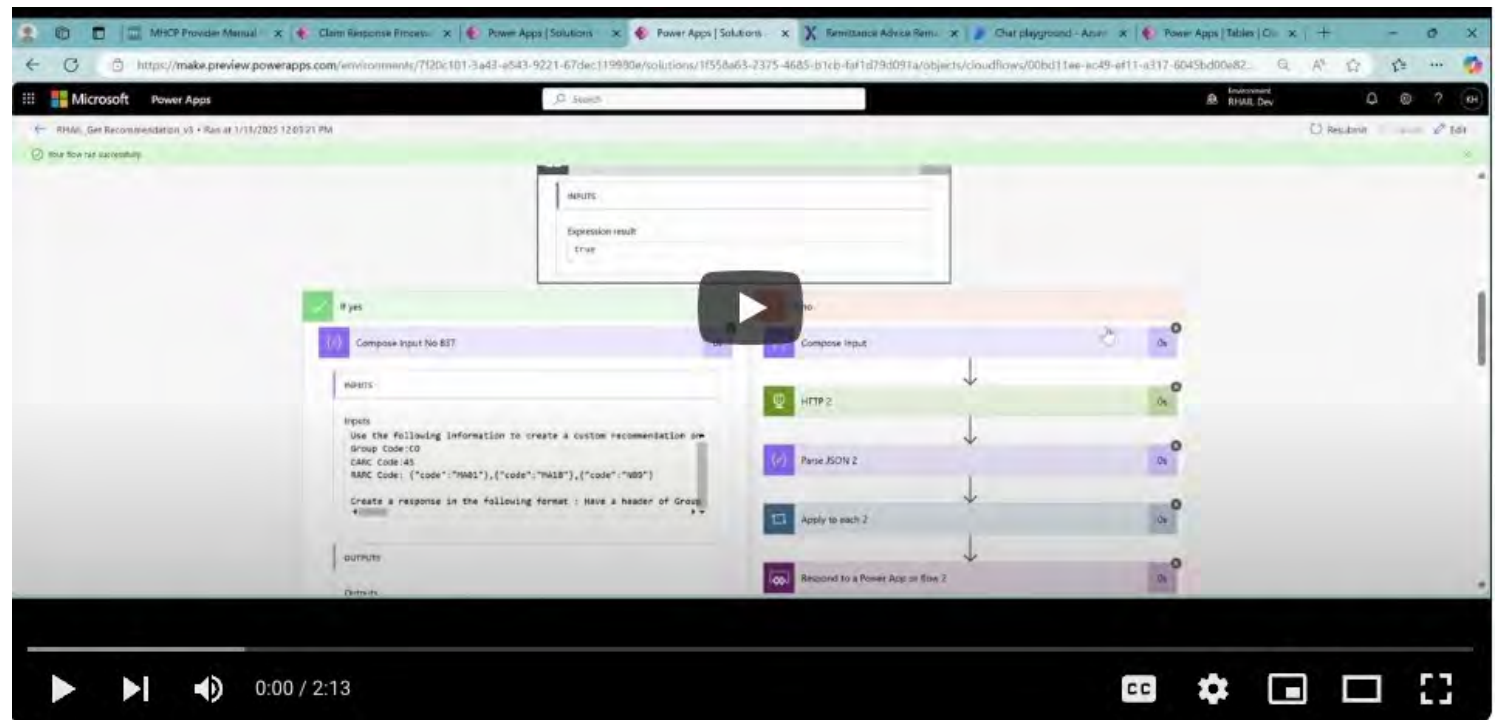


By starting small, we
can have a big impact

RHAIL IN ACTION

The Initial Rural Health AI Cohort aligned on addressing the laborious but critical task of researching and resolving denied Medicare, Medicaid and Commercial Insurance claims

- *Hospitals spend almost \$20B annually appealing denials.*
- *HHS' Office of Inspector General (OIG) found that 75% of care denials were subsequently overturned.*
- *Hospitals are not paid for the costs incurred to navigate the burdensome and resource-intensive process.*



<https://www.youtube.com/watch?v=FkPDbBSOiKQ>

RHAIL #2: The Referral Router Copilot

Outbound referrals for specialized care in rural healthcare systems are disproportionately challenging due to:

- Manual, opaque, and inconsistent processes
- Limited specialist availability
- Logistical constraints
- Insurance complexities
- Poor patient communication mechanisms

Impact: impeded/delayed care, patient outcomes, patient/provider satisfaction, and revenue leakage

The AI-enabled “Referral Router” will address the front-end referral process to:

1. **Improve Patient Care:** Faster access to specialists and better outcomes.
2. **Enhanced Experience:** Simplify and clarify the referral process.
3. **Increase Operational Efficiencies:** Reduce staff burden of scheduling and follow-ups.
4. **Minimize Leakage:** Keep patients within the rural system for ongoing care.

ETA Fall 2025

Where are **YOU** on AI Adoption?

- Use of genAI has nearly doubled in the last six months
 - **75%** of global knowledge workers use it
 - **46% of users started using it less than six months ago**
- **76%** of people say they need AI skills to remain competitive in the job market.
- **79%** say AI skills will broaden their job opportunities.
- In six months, the use of LinkedIn courses to build AI aptitude spiked **160%** among non-technical professionals
- **60 – 75% of heartland residents think employers should teach them AI skills, per Heartland Forward**

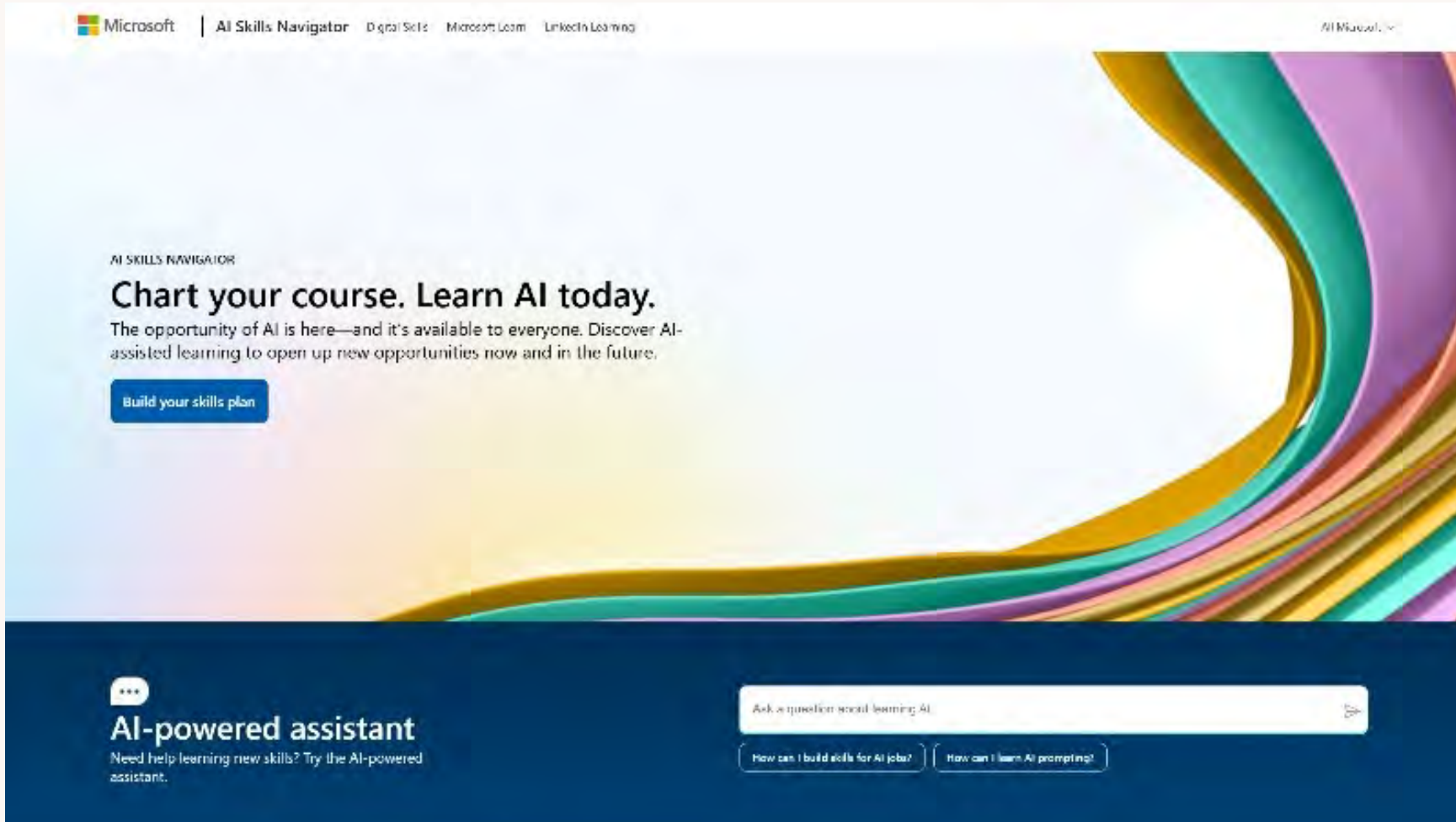
If you do only One Thing after today's session



YOUR
Expanding opportunity with AI skills

Aka.ms/AISkillsNavigator

AI Skills Navigator landing page

- 1 New AI-powered assistant helps learners find their best path to AI skills
- 2 Assessment to find the right starting point
- 3 Access breadth of learning pathways



 **AI-powered assistant** 

Build your skills plan
Tell us a little about yourself to get personalized resources.
02:20 PM

How are you hoping to leverage AI?

[I want to use AI to boost my productivity.](#)

[I want to build AI solutions or leverage its power to solve complex problems.](#)

[I want to harness AI to drive business transformation.](#)

[I want to train others to leverage AI.](#)


02:20 PM

To learn AI prompting, you can follow these steps and utilize the resources available:

1. Start with the Basics:
 - Learn the core concepts of Artificial Intelligence and generative AI functionality. This will provide a solid foundation for understanding how AI prompting works.
2. Explore Generative AI Tools:
 - Familiarize yourself with currently available generative AI tools and their impacts. This includes understanding the ethical considerations when using these tools.

AI-generated content may be incorrect

Ask a question.

0/2000 



RESOURCES



Rural Health Resiliency Webinar Series

A Free Webinar Series to help rural health (IT) Leaders learn and develop new skills



The Rural Health Cyber Landscape

March 19, 1:00 PM–1:40 PM ET



Best Practices in Identity and Access Management using Microsoft Entra ID

June 11 1:00 PM–1:40 PM ET



Supporting Rural Health through AI Innovation

September 10, 1:00 PM–1:40 PM ET



Next level innovation for rural health: A CIO's real-world example

April 9, 1:00 PM–1:40 PM ET



What I learned from my CAH's Cyber-attack: Best Practices in Incident Response

July 9, 1:00 PM–1:40 PM ET



Security Transformation is Cloud Transformation

October 8, 1:00 PM–1:40 PM ET



Understanding the security features of Microsoft Business Premium, E3, and E5

May 14 1:00 PM–1:40 PM ET



Best Practices in Endpoint Management using Microsoft Intune

August 13, 1:00 PM–1:40 PM ET

**Register for the
series [here!](#)**

(The Rural Health Community

BACKGROUND:

The national **Rural Health IT Community** is a dedicated forum for Rural Health IT leaders to connect, share solutions, best practices and drive innovation for rural health. It was founded in fall of 2024 by rural health CIOs, CHIME - the digital health leaders association - Microsoft and Nordic Consulting.

OBJECTIVES:

- ✓ **Advocate as a voice to the private and public sector** in support of technology needs of rural healthcare
- ✓ Provide access to, and/or establish innovative programs and **cost-effective solutions** for rural health.
- ✓ **Foster relationships and collaboration** among rural health IT teams.

JOIN THE [RURAL HEALTH IT COMMUNITY HERE](#)

- ✓ It's free to join/be a member
- ✓ The reg. list will only be used to inform members of upcoming events.

Rural Health Resources

- [Microsoft Cybersecurity Program for Rural Hospitals](#) – register here for access the Assessment, Training and Licensing Offers.
 - [Nonprofit Offers Registration](#)
 - [Cyber Awareness Education](#)
 - [Cyber Essentials Certification Course](#)
- Rural Cyber Webinar Series: *Coming Soon. Register above to be informed of topics and schedule*
- Join the national [Rural Health IT Community](#)

Contact the Microsoft Rural Health Team
with questions or feedback: MRHTP@Microsoft.com

AI Resources

Users/Staff



LinkedIn Learning offers pathways to for those using generative AI in their jobs and daily lives

- [LinkedIn Generative AI Pathway](#)
- [LinkedIn Productivity with GenAI Learning Pathway](#)
- [Digital Skills Compass](#)
- [LinkedIn CoPilot for Productivity Pathway](#)
- [AI fluency content](#)

Organizational Leaders



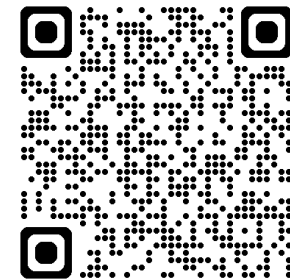
LinkedIn Learning supports decision makers responsible for managing adoption of generative AI and integrating it into workflows

- [LinkedIn AI for Organizational Leaders Learning Pathway](#)
- [LinkedIn AI for Managers Learning Pathway](#)
- [Learn AI collection for business leaders](#)

AI Learning Hub



The Microsoft AI Learning Hub offers curated learning journeys to support business and technical staff in building AI skills.





Appendix



Feature	Microsoft 365 E3	Microsoft 365 E5
Information Protection & Governance	Yes	Yes
Universal Print	Yes	Yes
Microsoft Defender for Endpoint Plan 1	Yes	Yes
Microsoft Defender for Office 365 Plan 1	Yes	Yes
Microsoft Defender for Identity	Yes	Yes
Microsoft Defender for Cloud Apps	Yes	Yes
Customer Lockbox	No	Yes
Defender for IoT - Enterprise IoT Security	No	Yes
Immersive spaces for Teams	No	Yes
Information Protection and Governance Analytics - Premium	No	Yes
Microsoft Defender Application Guard for Office	No	Yes
Machine Learning-Based Classification	No	Yes
Microsoft Endpoint DLP	No	Yes
Microsoft Insider Risk Management	No	Yes
Safe Documents	No	Yes
Microsoft Defender for Endpoint Plan 2	No	Yes
Microsoft Defender for Office 365 Plan 2	No	Yes
Microsoft Defender for Identity Plan 2	No	Yes
Microsoft Defender for Cloud Apps Plan 2	No	Yes
Microsoft Defender for Endpoint	No	Yes
Microsoft Defender for Office 365	No	Yes



ORH Announcements

Next ORH Biweekly Policy Update Meeting | March 7 | 12:00 p.m. ([Register here](#))

Next Community Conversations | May 23 | 12:00 p.m.
ORH's New Rural Health Resource Hub ([Register here](#))

Rural Population Health Incubator Grants | Applications due April 11, 2025
([More information here](#))

May 19-21, Seaside, OR | 2nd Annual Forum on Rural Population Health & Health Equity
([Register here](#))

October 1-3, Bend, OR | 42nd Annual Oregon Rural Health Conference
([More information here](#))

Thank you!

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