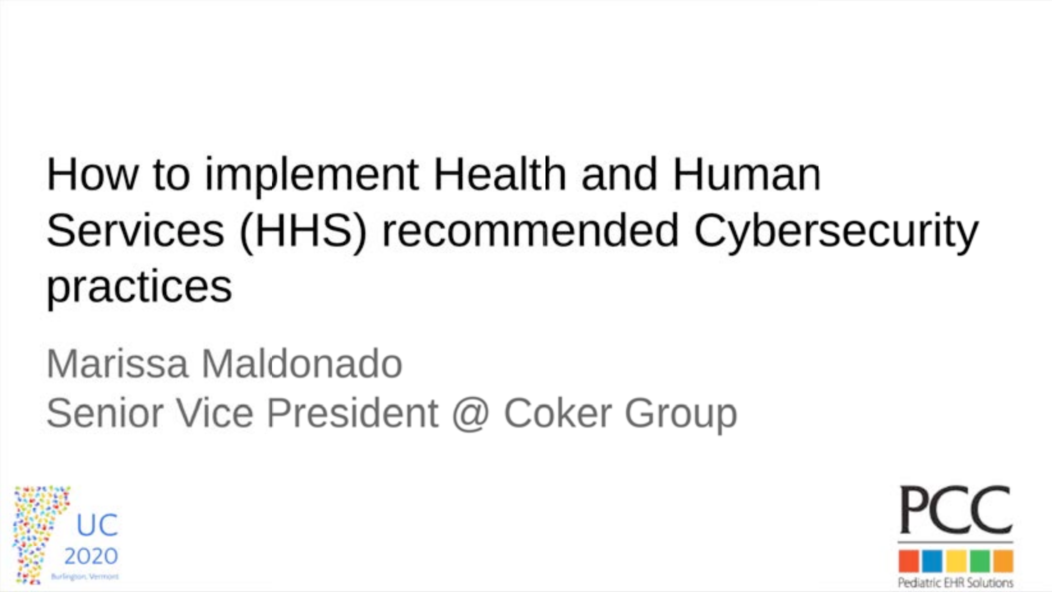

How to implement Health and Human Services (HHS) recommended Cybersecurity practices

Marissa Maldonado
Senior Vice President @ Coker Group

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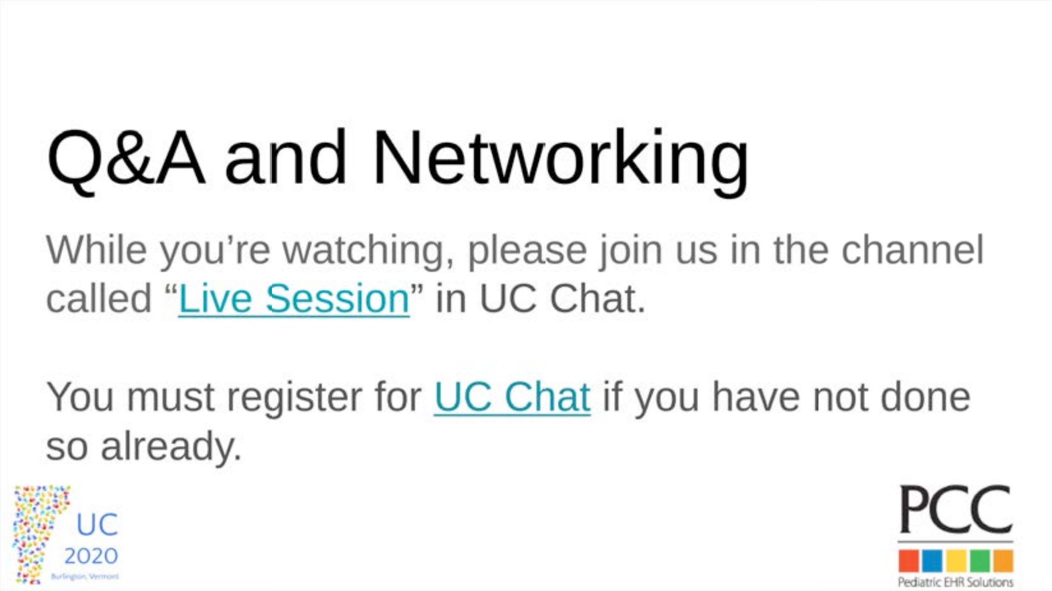

Q&A and Networking

While you're watching, please join us in the channel called "Live Session" in UC Chat.

You must register for UC Chat if you have not done so already.

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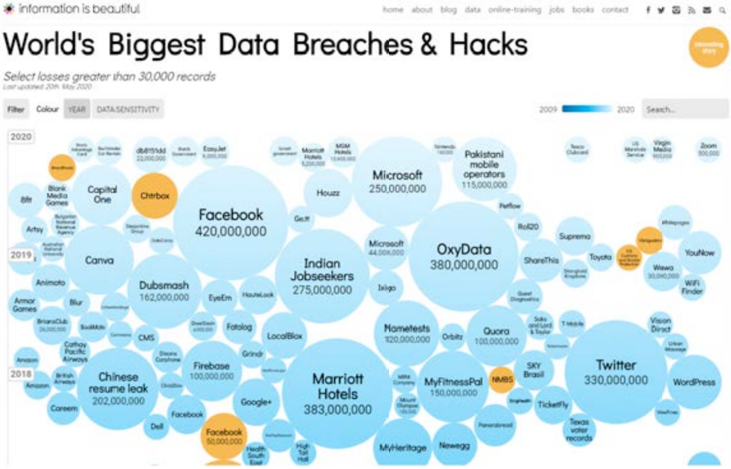
Session Goals

1. Overview of Five Common Threats
2. How to Implement Ten Technical Best Practices
3. Protecting Our Remote Work Force

Information is Beautiful![1]



information is beautiful

home about blog data online-training jobs books contact

World's Biggest Data Breaches & Hacks

Select losses greater than 30,000 records

Last updated 20th May 2020

Filter Colour YEAR DATA SENSITIVITY

2009 2020 Search...

[1] http://www.informationisbeautiful.net/visualizations/worlds-biggest-data-breaches-hacks/

Cybersecurity vs Coronavirus

Uptick in attacks? Or protection of Healthcare Cyber Attacks?

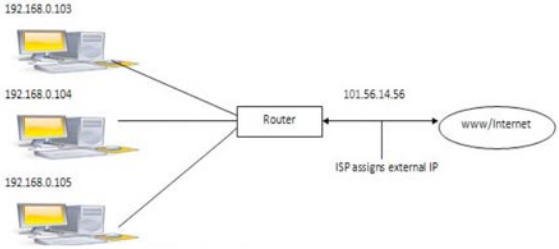
- Increase in aggressive phishing campaigns across the board
- Google has reported an average of 18 million targeted COVID-19 related phishing and malware threats
- Reported increase of “hack-for-hire” firms creating Gmail accounts spoofing World Health Organization (WHO)[2].
- Other organized cybercrime groups, such as DoppelPaymer, have specifically come out to say if a medical or healthcare organization is attacked by mistake, they will provide a free decrypter code[3].

[2] https://www.reuters.com/article/us-health-coronavirus-cyber/google-sees-resurgence-in-state-backed-hacking-phishing-related-to-covid-19-idUSKBN2340CH

[3] https://www.forbes.com/sites/daveywinder/2020/03/19/coronavirus-pandemic-self-preservation-not-altruism-behind-no-more-healthcare-cyber-attacks-during-covid-19-crisis-promise/#462274aa252b

Criminals promising to be nice… why this is hard to enforce…

- Difficult to implement in the real world because of external facing IP addresses. These addresses do no identify a target as a healthcare organization



192.168.0.103

192.168.0.104

192.168.0.105

Router

101.56.14.56

www/Internet

ISP assigns external IP

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Never forget the WannaCry 2017 Ransomware Attack

- Targeted Microsoft Windows operating systems that had not deployed security patch updates.
- Was not a targeted healthcare attack.
- WannaCry crippled the NHS, National Health Services hospitals in England and Scotland.

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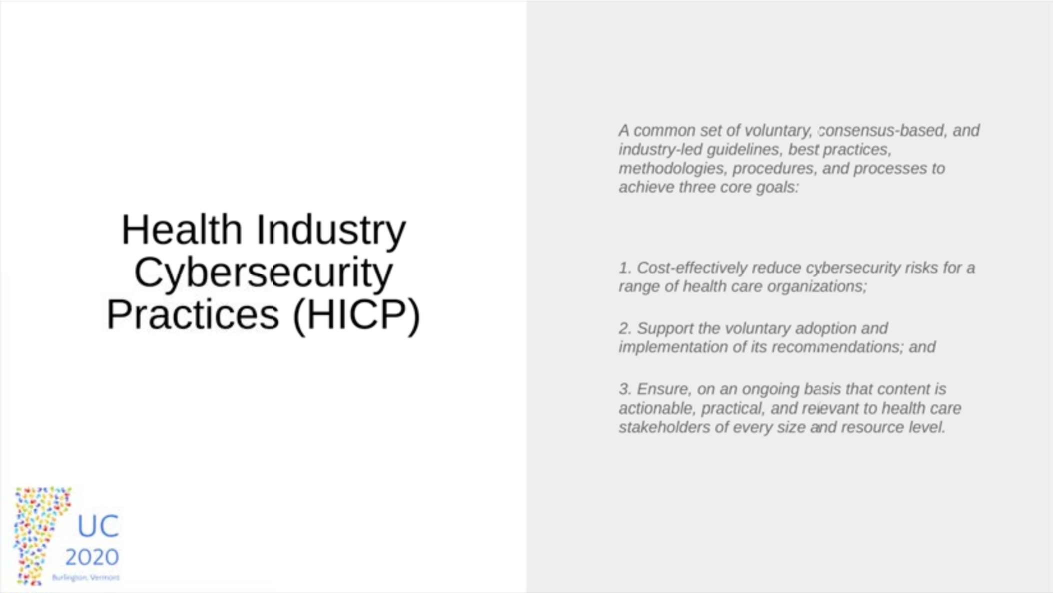
Types of COVID-19 Phishing Campaigns

- Fraudulent emails regarding capitalizing government stimulus packages
- Impersonating government organizations like the World Health Organization asking for donations or installing malware
- Impersonating SBA to gather personal information
- PPE and other medical supply chain emails

Do you stop washing your hands when you are not in the cold/flu season?



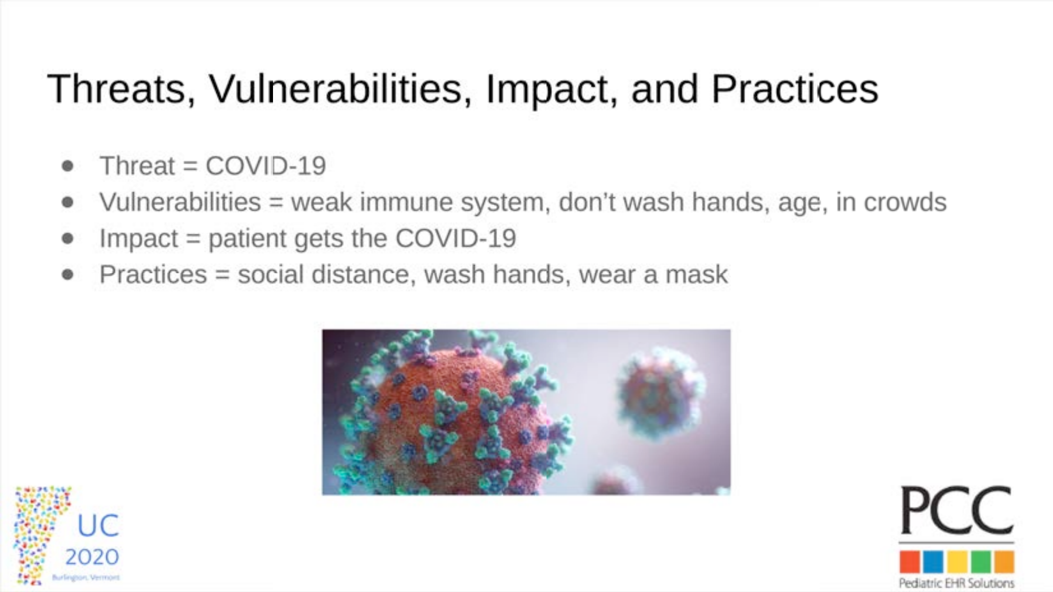
Health Industry Cybersecurity Practices (HICP)

A common set of voluntary, consensus-based, and industry-led guidelines, best practices, methodologies, procedures, and processes to achieve three core goals:

1. Cost-effectively reduce cybersecurity risks for a range of health care organizations;

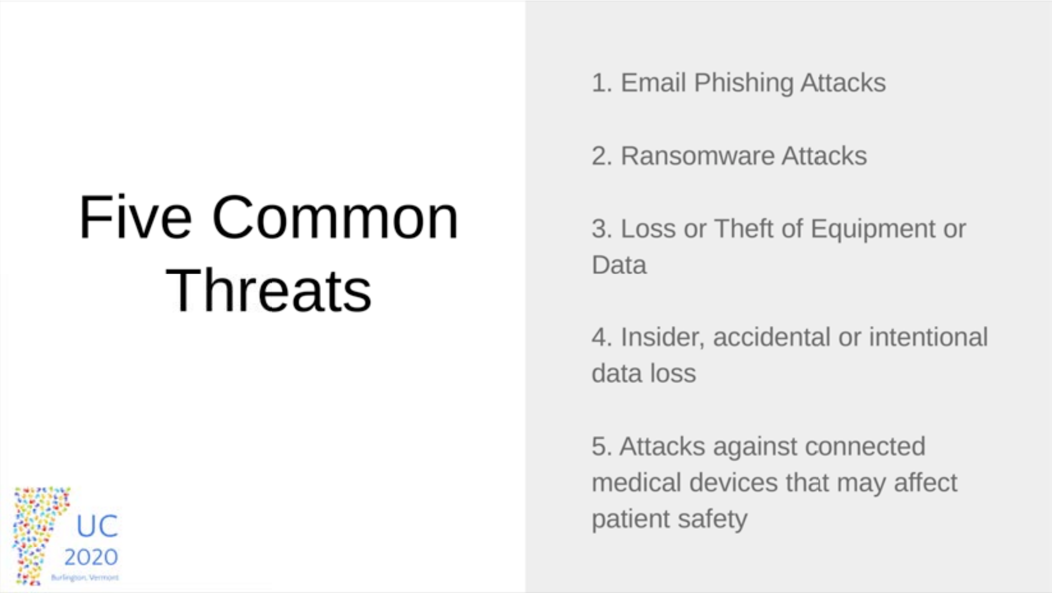
2. Support the voluntary adoption and implementation of its recommendations; and

3. Ensure, on an ongoing basis that content is actionable, practical, and relevant to health care stakeholders of every size and resource level.



Threats, Vulnerabilities, Impact, and Practices

- Threat = COVID-19
- Vulnerabilities = weak immune system, don't wash hands, age, in crowds
- Impact = patient gets the COVID-19
- Practices = social distance, wash hands, wear a mask



Five Common Threats

1. Email Phishing Attacks

2. Ransomware Attacks

3. Loss or Theft of Equipment or Data

4. Insider, accidental or intentional data loss

5. Attacks against connected medical devices that may affect patient safety

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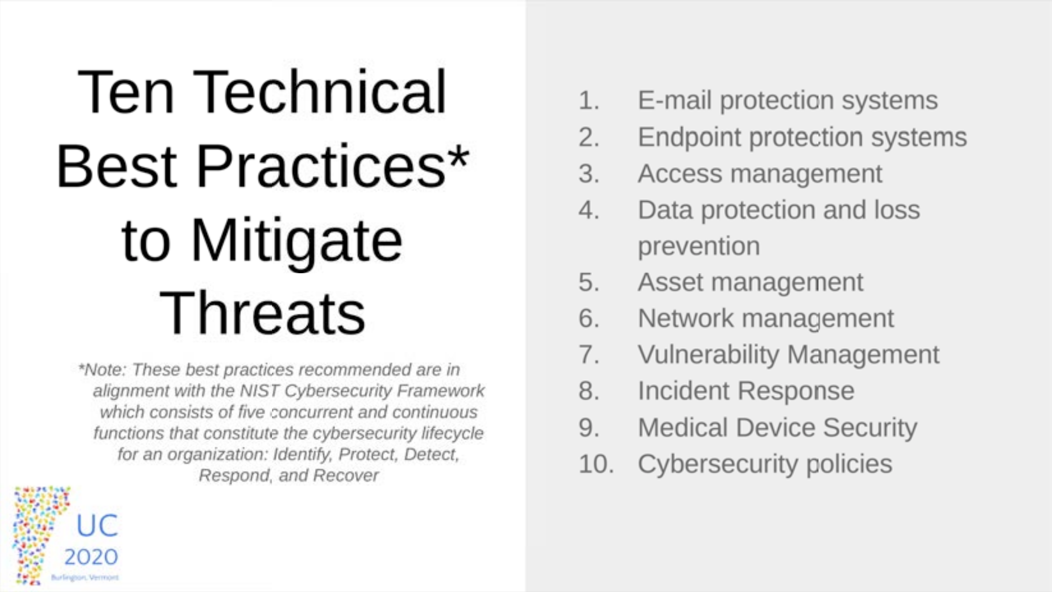

Ten Technical Best Practices* to Mitigate Threats

**Note: These best practices recommended are in alignment with the NIST Cybersecurity Framework which consists of five concurrent and continuous functions that constitute the cybersecurity lifecycle for an organization: Identify, Protect, Detect, Respond, and Recover*

1. E-mail protection systems
2. Endpoint protection systems
3. Access management
4. Data protection and loss prevention
5. Asset management
6. Network management
7. Vulnerability Management
8. Incident Response
9. Medical Device Security
10. Cybersecurity policies

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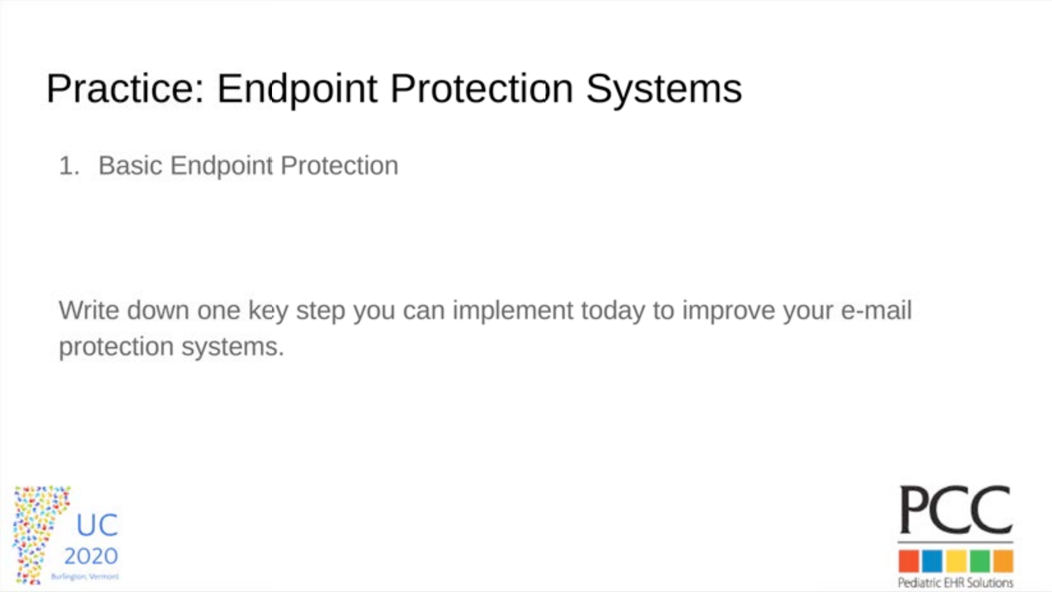
We are going to walk through the Technical Volume 1 which is Cybersecurity Practices for Small Organizations.

How to wash your hands?
Wet hands with water.
Apply soap.
Rub hands palms to palms.
Rub the back of each hands with fingers interlaced.
Rub palms together with fingers interlaced.
Rub with back of fingers to the opposing palms.
Rub each thumb clasped in opposite hands.
Rub the tips of fingers.
Rub each wrist with different hands
Rinse with water.
Dry thoroughly your hands.
Your hands are now clean.

Practice: E-mail Protection Systems

1. E-mail System Configuration
2. Education
3. Phishing Simulation

Write down one key step you can implement today to improve your e-mail protection systems.



Practice: Endpoint Protection Systems

1. Basic Endpoint Protection

Write down one key step you can implement today to improve your e-mail protection systems.

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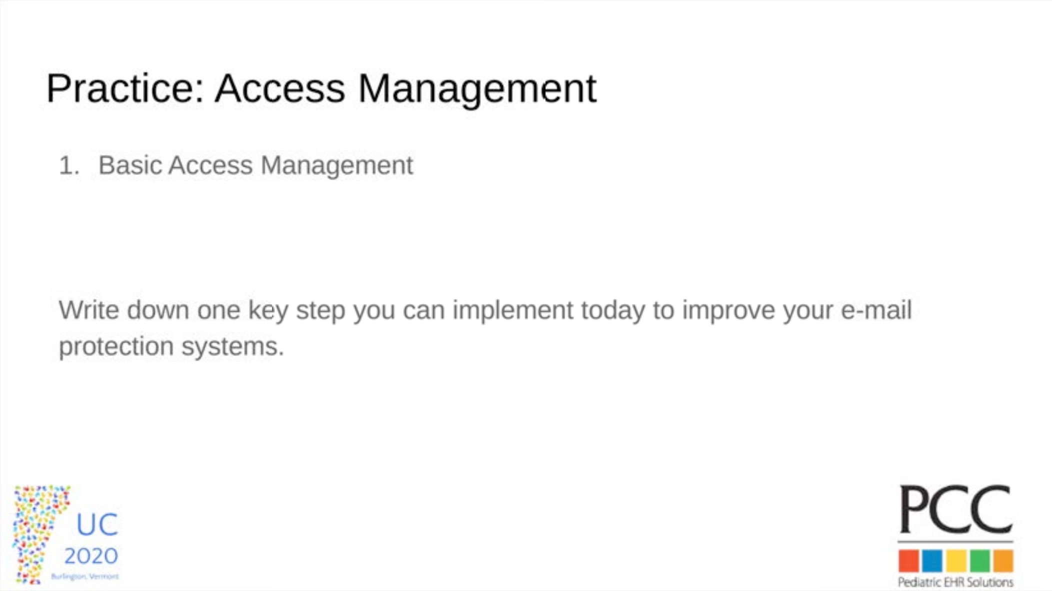

Practice: Access Management

1. Basic Access Management

Write down one key step you can implement today to improve your e-mail protection systems.

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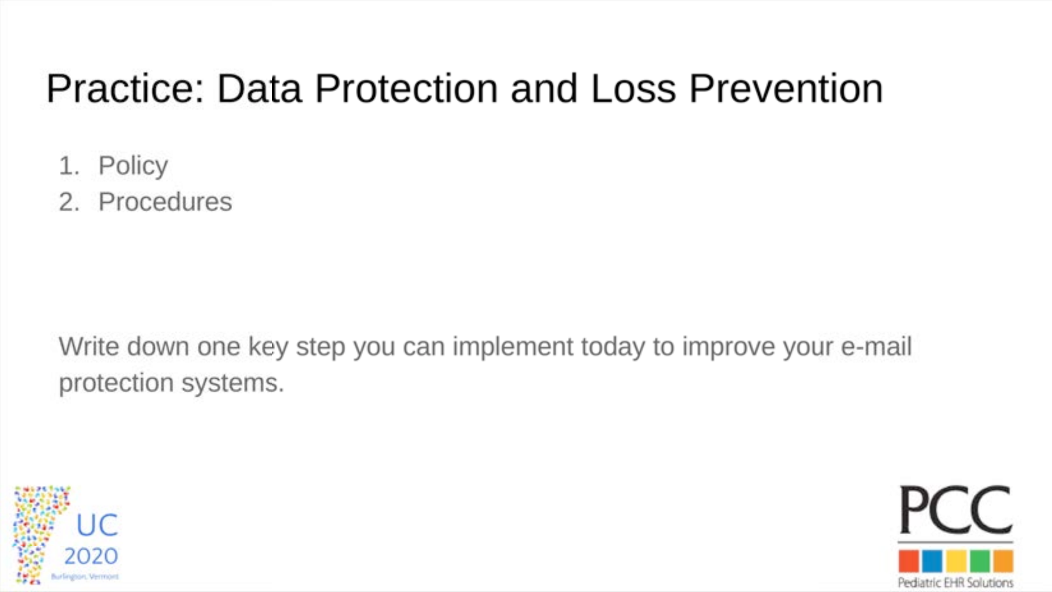

Practice: Data Protection and Loss Prevention

1. Policy
2. Procedures

Write down one key step you can implement today to improve your e-mail protection systems.

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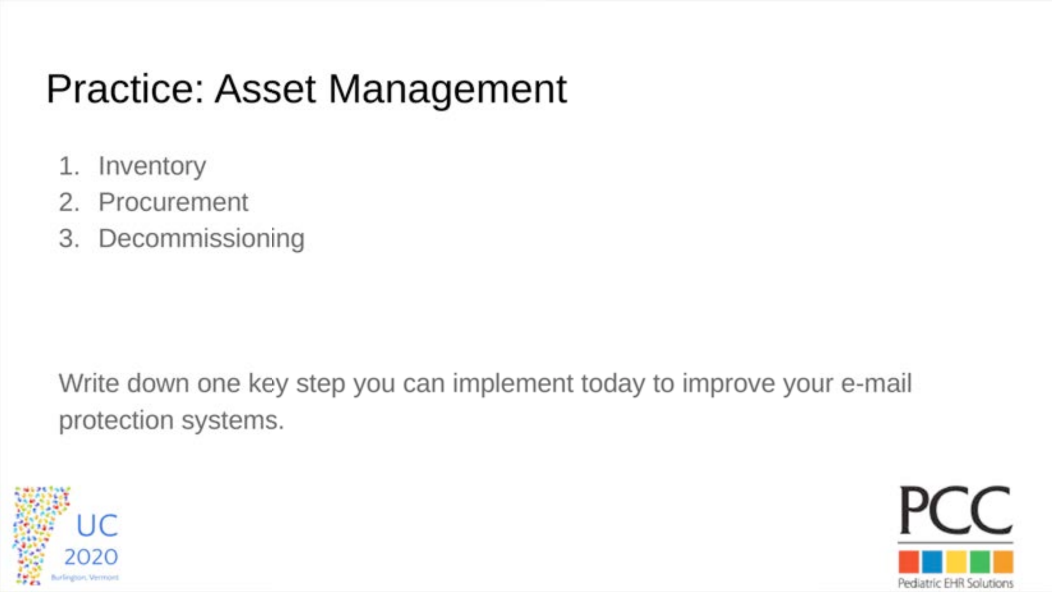

Practice: Asset Management

1. Inventory
2. Procurement
3. Decommissioning

Write down one key step you can implement today to improve your e-mail protection systems.

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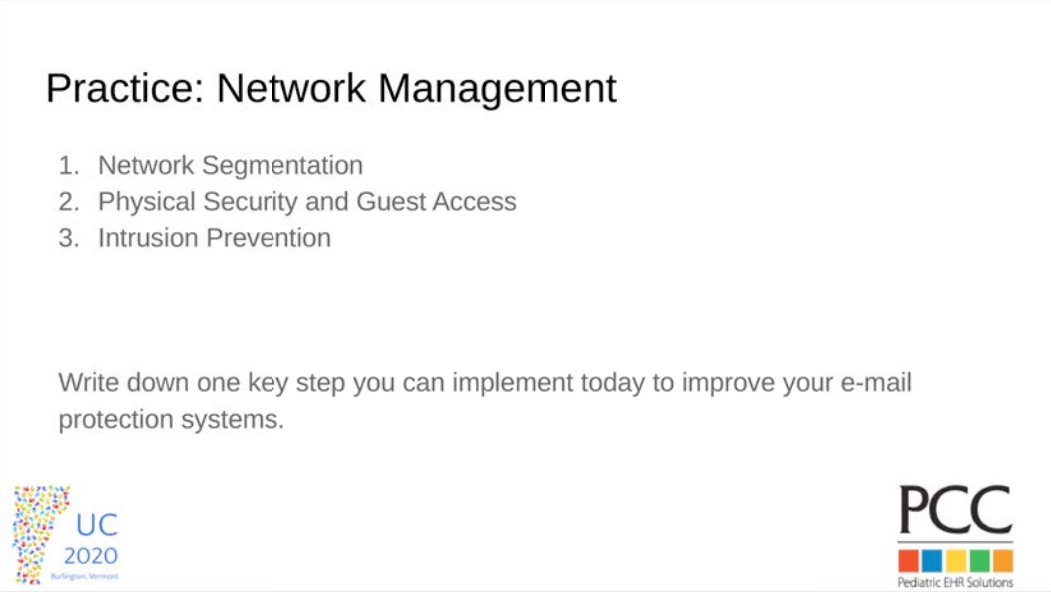
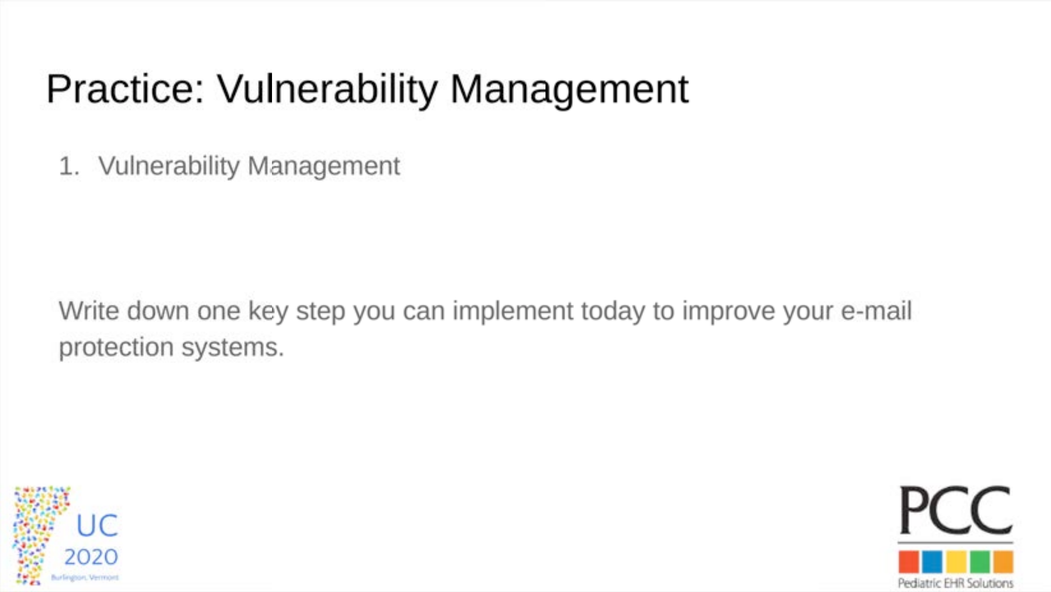


Practice: Network Management

1. Network Segmentation
2. Physical Security and Guest Access
3. Intrusion Prevention

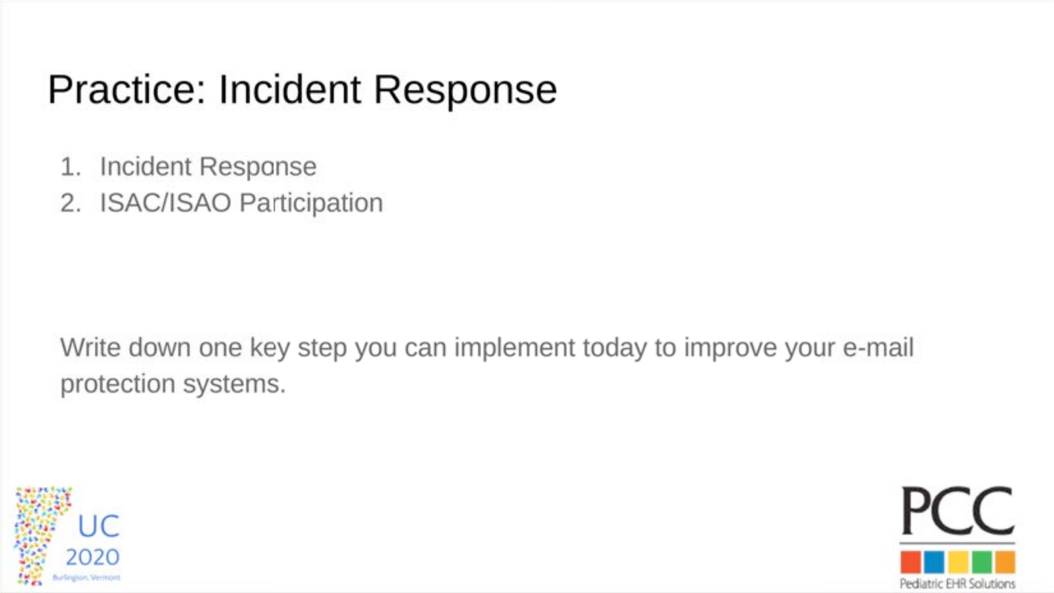
Write down one key step you can implement today to improve your e-mail protection systems.



Practice: Vulnerability Management

1. Vulnerability Management

Write down one key step you can implement today to improve your e-mail protection systems.



Practice: Incident Response

1. Incident Response
2. ISAC/ISAO Participation

Write down one key step you can implement today to improve your e-mail protection systems.

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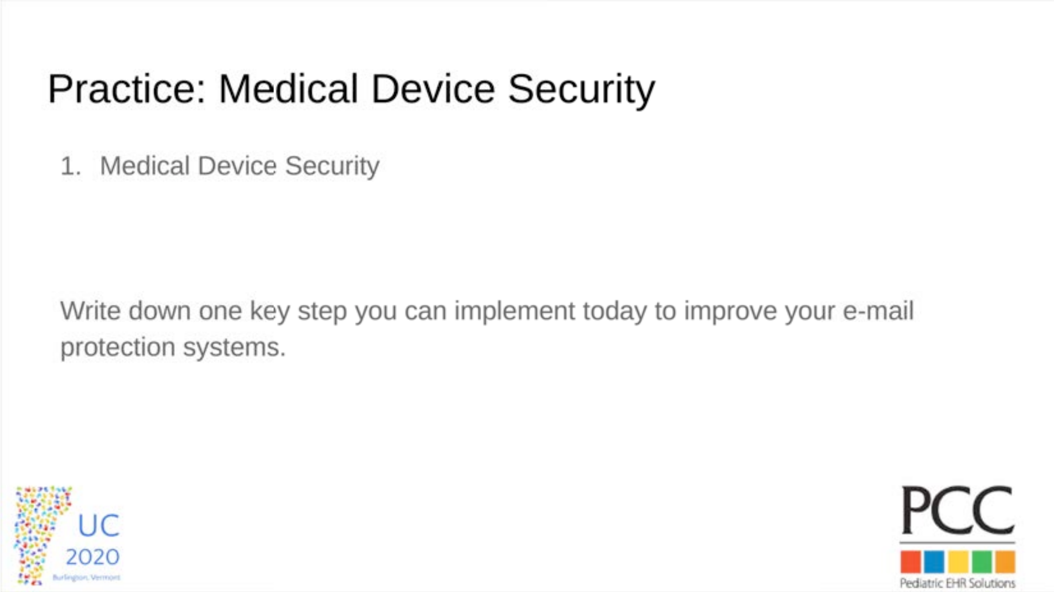

Practice: Medical Device Security

1. Medical Device Security

Write down one key step you can implement today to improve your e-mail protection systems.

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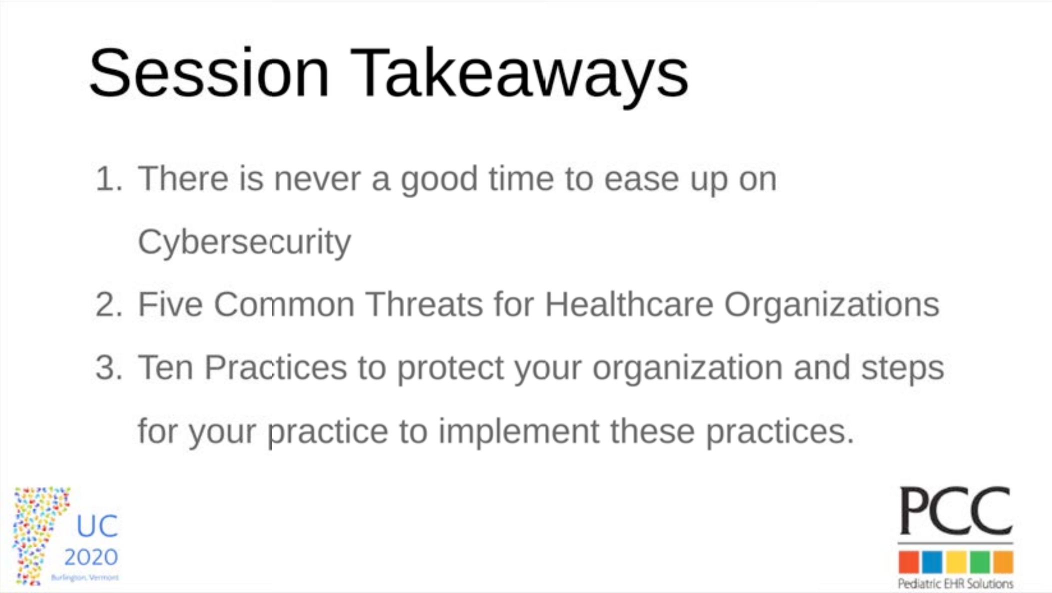
Practice: Cybersecurity Policies

1. Policies

Write down one key step you can implement today to improve your e-mail protection systems.

Remote Work Force



Session Takeaways

1. There is never a good time to ease up on Cybersecurity
2. Five Common Threats for Healthcare Organizations
3. Ten Practices to protect your organization and steps for your practice to implement these practices.

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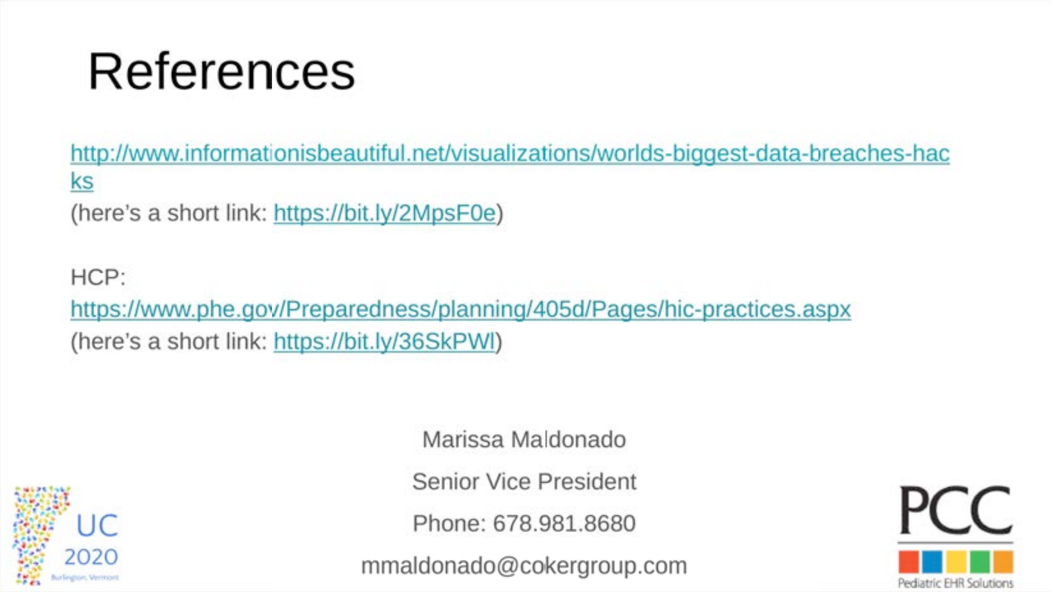

References

http://www.informationisbeautiful.net/visualizations/worlds-biggest-data-breaches-hacks
(here's a short link: https://bit.ly/2MpsF0e)

HCP:
https://www.phe.gov/Preparedness/planning/405d/Pages/hic-practices.aspx
(here's a short link: https://bit.ly/36SkPWl)

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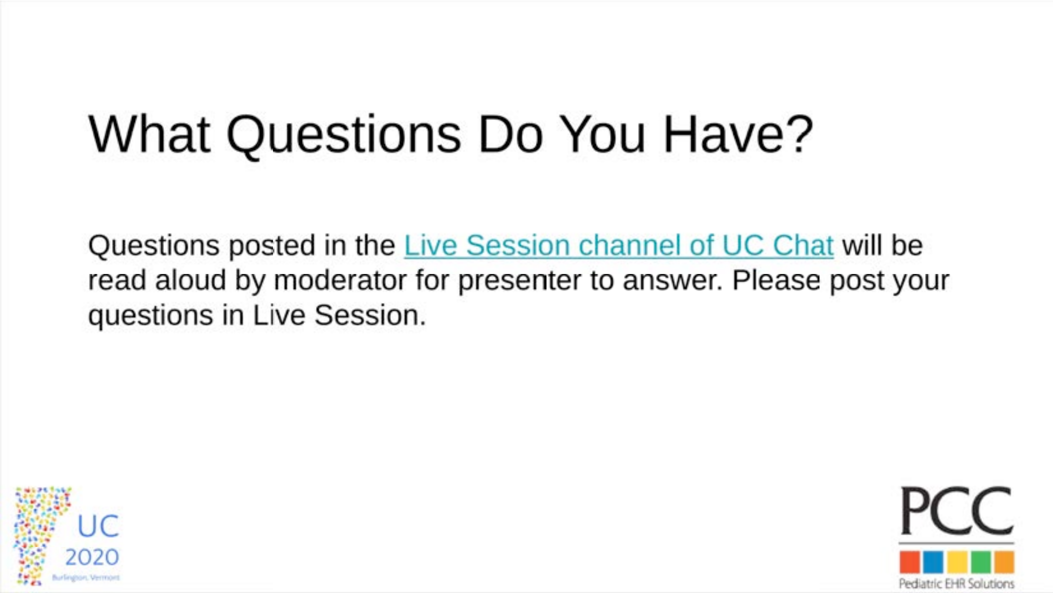

What Questions Do You Have?

Questions posted in the Live Session channel of UC Chat will be read aloud by moderator for presenter to answer. Please post your questions in Live Session.

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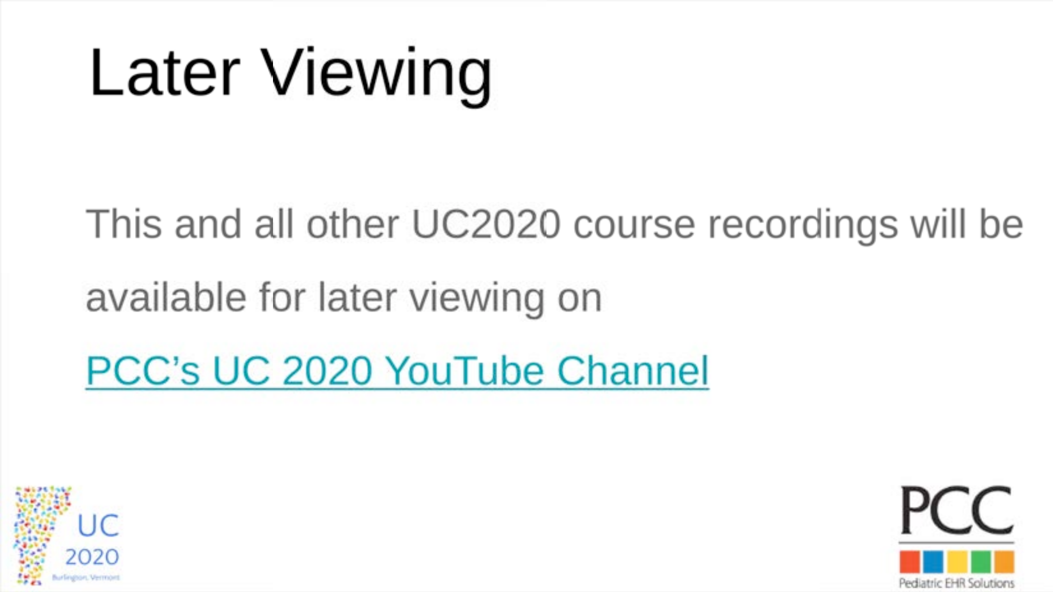

Later Viewing

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