

#### **Securing the Business of Senior Care**





# SCOUTT TECHNOLOGY GUIDES

Presented by Matt Dryfhout, Founder & CEO Scout Technology Guides

Securing the Business of Senior Care



























































#### Introductions

- Matt Dryfhout, Founder & CEO
- Scout was Founded in 2003 and now has 28 team members and ~55 core clients in the lower mainland that call on us for all their technology support (including Nursecall) and cyber security needs.
- BCCPA Conference Silver sponsor for 8 years.
- We're on a mission to simplify cybersecurity!

# Workshop Agenda

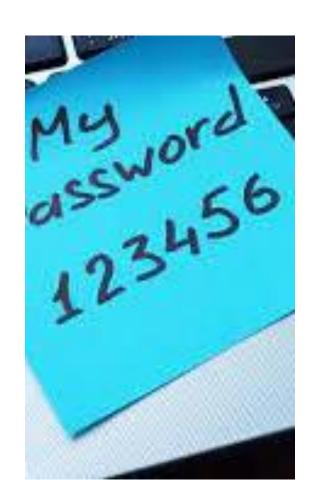
- Understanding Password Evolution
- Identifying Phishing Threats
- Cyber Hygiene in Caregiving
- Reviewing Outbreak Examples paralleled with Health Care





# Let's start with the history of Passwords

- What was a good password?
  - Complexity An upper case letter, lower case letter, number and / or symbol
  - Length minimum of 8 characters, but we strive for at least 12
  - Rotation change it once a year at least, quarterly was recommended
  - Can **not** contain a portion of your name



#### Where that got us:

A data composite of 2 million leaked passwords from 2016.

If you do not enforce a password policy effectively, this is what happens.

https://haveibeenpwned.com

1	123456
2	password
3	12345678
4	qwerty
5	12345
6	123456789
7	football
8	1234
9	1234567
10	baseball
11	welcome
12	1234567890

13	abc123
14	111111
15	1qaz2wsx
16	dragon
17	master
18	monkey
19	letmein
20	login
21	princess
22	qwertyuiop
23	solo
24	passw0rd
25	starwars



# I save all my unique passwords in my browser, isn't that good?

- Browser storage lacks robust encryption compared to dedicated tools.
- Common browsers are frequent targets for cyberattacks.
- Stored passwords can be easily accessed if the device is compromised.

### Password Policy Standards in 2025

Focusing on your primary account (Microsoft 365 or Google)

#### According to Microsoft 365 Guidance (April 2, 2025):

#### Disable forced expiration

Set passwords to **never expire**—shift focus to more effective controls

#### **Emphasize length over complexity**

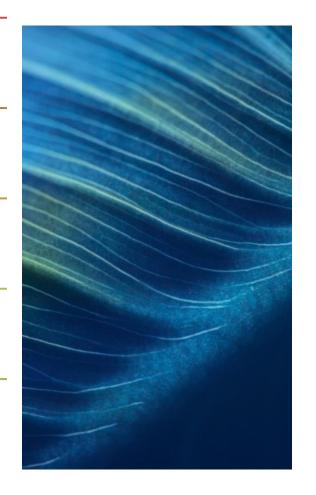
Enforce a minimum of **8 characters**, support up to **64** for passphrases

#### **Mandate MFA**

Use multi-factor authentication as the primary compensating control

#### Change only on compromise

Aligns with NIST SP 800-63B: no arbitrary rotation, reset only if there's evidence of a breach



Source: Password policy recommendations - Microsoft 365 admin | Microsoft Learn

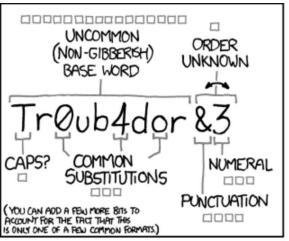
## Introducing Passphrases

 Just because it's hard for you to remember does not mean it is more secure

 Never use the same password everywhere!

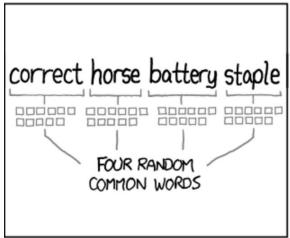


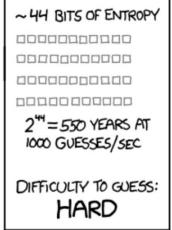
https://xkcd.com/936/

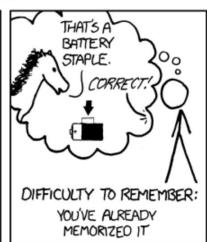




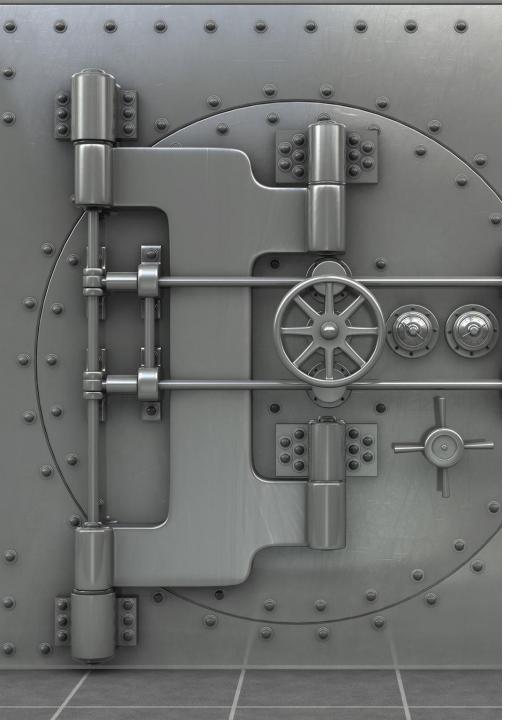








THROUGH 20 YEARS OF EFFORT, WE'VE SUCCESSFULLY TRAINED EVERYONE TO USE PASSWORDS THAT ARE HARD FOR HUMANS TO REMEMBER, BUT EASY FOR COMPUTERS TO GUESS.



# Benefits of Using a Password Manager

- Generates strong, unique passwords for each account.
- Stores all passwords securely in one place which are synchronized across multiple devices
- Automatically fills in login forms to save time.
- Facilitates safe sharing of passwords with trusted users.
- Examples: Lastpass,
   1password, bitwarden



# Understanding Multi-Factor Authentication (MFA)

- MFA adds an extra layer of security beyond passwords.
- In healthcare, think of MFA as wearing a mask for protection.
- Just as masks reduce infection, MFA prevents unauthorized access.
- Users must provide two or more verification factors.
- This method significantly reduces the risk of breaches.

# **Understanding Phishing Tactics**

- Phishing is a major threat to cybersecurity today.
- Bad actors use various tactics to deceive victims.
- Al enhances malicious actors phishing techniques making it harder for human AND spam filter detection.



Phishing examples and quiz coming!



#### For our Amazon Customers:

#### FREE AMAZON PRIME ACCOUNT NOW!

Loyalty pays off! It's time that you upgrade to a Amazon Prime membership, TOTALLY FREE! You must use the special link below to qualify.

#### TO START YOUR FREE PRIME ACCOUNT, CLICK HERE

#### Don't want to receive Amazon specials in the future? Click here to Unsubscribe from our Notifications.

Please note: This e-mail message was sent to Matt@scouttg.com from a notification-only address that cannot accept incoming e-mail. Please do not reply to this message.

Thanks for shopping with us Matt!

Amazon.com



#### **URGENT FINANCIAL NEWS from CNN**

WASHINGTON, D.C.: Financial markets around the world crashed this morning. Analysts say they "haven't seen anything like this" since the Great Depression. This could signal the complete collapse of the U.S. dollar. More on CNN.com

CNN Money Exclusive

Unsubscribe - Report Spam

From: Brown & Booth LLP <Booth@brown-booth-law.com>

Reply-to: Brown & Booth LLP <Booth@brown-booth-law.com>

Subject: RE: Divorce papers

#### Matt

My name is Keith Booth and I am a senior partner at BROWN & BOOTH LLP.

Your spouse has contracted me to prepare the divorce papers.

Here is the first draft, please contact me as soon as possible:

http://www.entwistle-law.com/papers/divorce\_Dryfhout.doc

Thank you

Keith L. Booth

From: Jessica Swanson < jessicas 17@yahoo.mail.com>

Reply-to: Jessica Swanson <jessicas17@yahoo.mail.com>

Subject: Re: My photos

Hi Matt,

I think you may have sent this link to me in error...Are you really sure you want to be sharing these kinds of personal photos with everyone?

--

On Tuesday at 9:50 AM, Matt Dryfhout <Matt@scouttg.com> wrote:

Here are the pics I told you about!

https://www.flickr.com/users/2jd94l2j38/gallery/

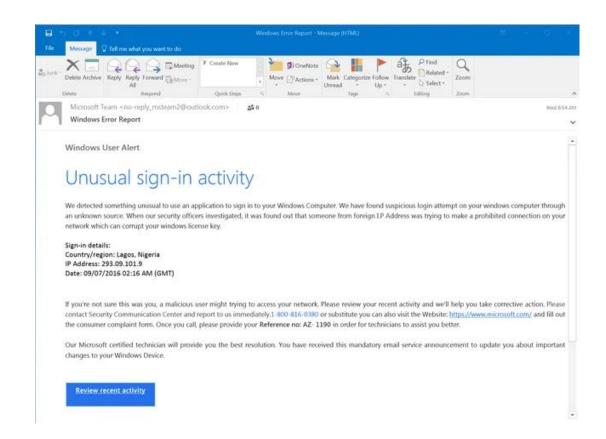
Talk to you soon.

Matt



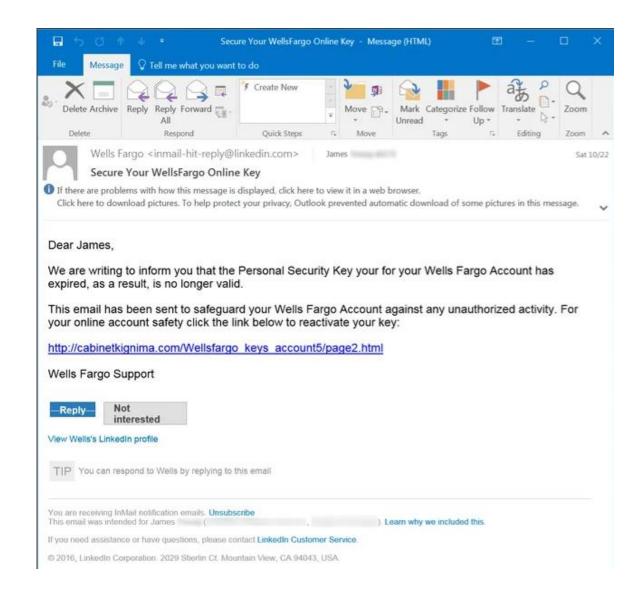
# Phishing Example: Microsoft Security Alert

- Subject: 'Microsoft Account Sign-in Attempt Blocked'
- Body instructs calling a 1-800 number to resolve issues.
- Red Flag: Requests phone call rather than secure portal update.



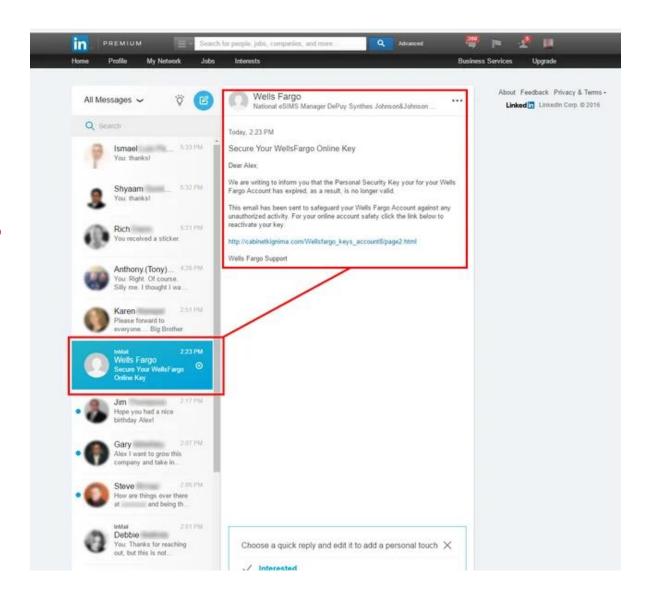
## Phishing Example: Wells Fargo LinkedIn Scam - Part 1

- Use LinkedIn to deliver the message to inbox passing all filters
- Link leads to malicious domain hosting a login form.
- Red Flag: Hover URLs before clicking.



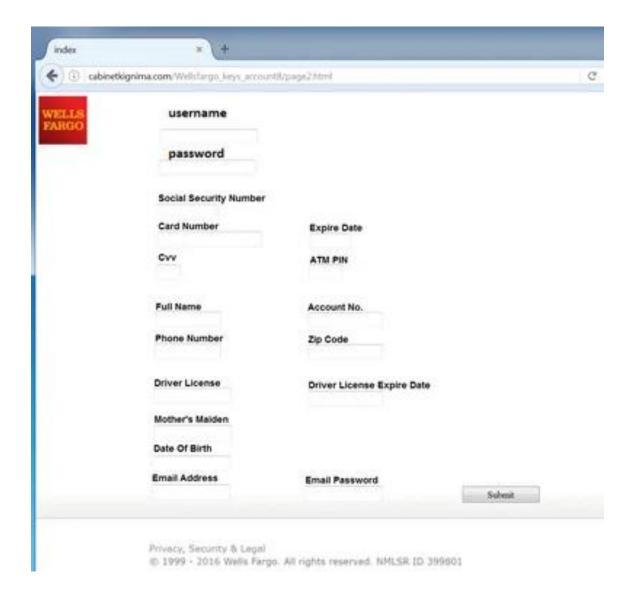
## Phishing Example: Wells Fargo LinkedIn Scam – Part 2

- InMail from fake
   Wells Fargo profile
   with credentials link.
- Link leads to malicious domain hosting a login form.
- Red Flag: Bad actors can use fake accounts in any social networks to suggest credibility

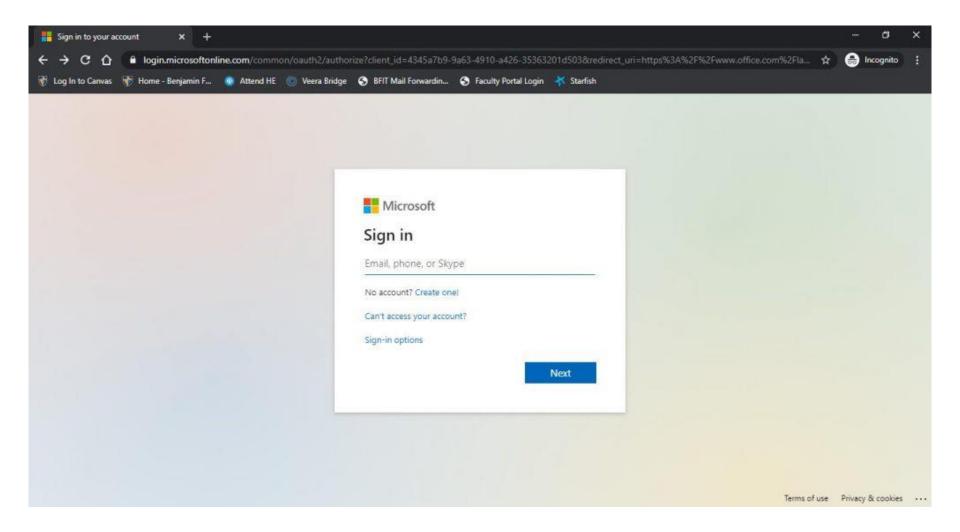


## Phishing Example: Wells Fargo LinkedIn Scam – Part 3

- This is the fake web form that sends results to the bad actor
- The elderly are most vulnerable to these
- Red Flag: URL is not Wellsfargo.com



# Recognize this?



# MFA Cookie Theft in a Nutshell

- Fake login pages mimic real Microsoft login
- User logs in, attacker captures session cookie
- Cookie acts like a key—no password or MFA needed
- Attackers can enter anytime, undetected

# Why It's Dangerous

- MFA appears to block access, but cookie theft bypasses it
- Phishing pages on trusted domains evade filters

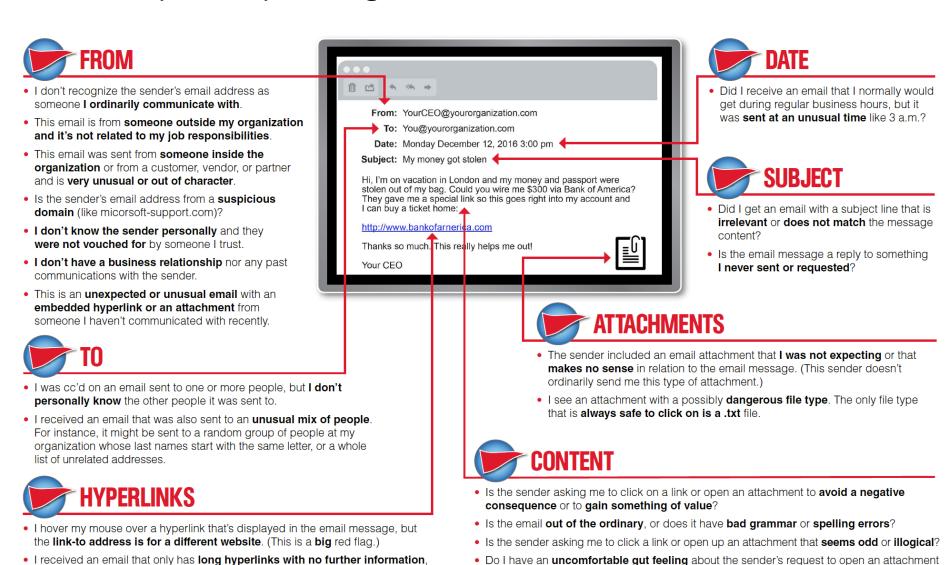
 Tiny URL changes go unnoticed by most users

 Full mailbox access and data theft possible

- Avoid public wifi (like airports) and use phone hotspot instead
- Type the URL yourself instead of clicking links
- Keep browser and OS updated and disable unapproved browser extensions
- Report odd login prompts immediately
- 24/7 Cloud Monitoring is the only defense today to catch this

# Protection Steps

#### How to spot the phishing emails Handout:



 I received an email with a hyperlink that is a misspelling of a known web site. For instance, www.bankofarnerica.com — the "m" is really two characters — "r" and "n."

and the rest of the email is completely blank.

- or click a link?

   Is the email asking me to look at a **compromising or embarrassing picture** of myself or
- Is the email asking me to look at a compromising or embarrassing picture of myself or someone I know?

# Quiz Time

# Phishing or Not?

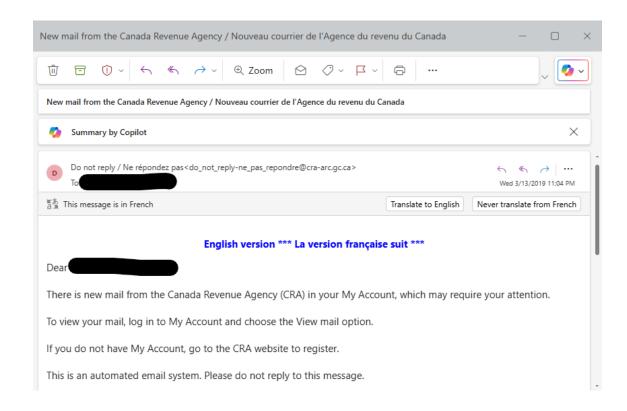
# New mail from the Canada Revenue Agency / Nouveau courrier de l'Agence du revenu du Canada New mail from the Canada Revenue Agency / Nouveau courrier de l'Agence du revenu du Canada Summary by Copilot Do not reply / Ne répondez pas<do\_not\_reply-ne\_pas\_repondre@cra-arc.gc.ca> Wed 3/1 This message is in French Translate to English Never transla English version \*\*\* La version française suit \*\*\* Dear There is new mail from the Canada Revenue Agency (CRA) in your My Account, which may require your atte To view your mail, log in to My Account and choose the View mail option.

If you do not have My Account, go to the CRA website to register.

This is an automated email system. Please do not reply to this message.

#### **Not Phishing!**

(email directs user to go to their account without a link and the from is the valid government domain)



#### APR/MAY-2025 Payment Schedule

## Dear amein@

We are pleased to inform you that the payment for your outstanding invoices has been processed and the funds have been transferred to your account.

Please find the payment details below for your reference. Should you have any questions or require further information, feel free to contact us.

APR/MAY-25\_Bank Transfer.xls

amein@
FYI Treat Urgently

View Copy of Bank Transfer

Phishing!
(From
address is a
random fake
domain, the
links are click
bait)

FW: APR / MAY-2025 Payment Transfer Confirmation for Outstanding Invoices Accounts Payable < carmen.tapia@decase.cl > Wed 5/28/2025 9:28 AM APR/MAY-2025 Payment Schedule Dear amein@ We are pleased to inform you that the payment for your outstanding invoices has been processed and the funds have been transferred to your account. Please find the payment details below for your reference. Should you have any questions or require further information, feel free to contact us.. APR/MAY-25 Bank Transfer.xls **FYI Treat Urgently** View Copy of Bank Transfer Accounts Payable 4740 SW 110th Ave,, Davie, FL 33328-3209



#### Payroll Notification - 5/27/2025



Your pay statement for 5/27/2025 is now available.

**Transaction ID: 8438704247** 

Available until: Friday, May 31, 2025

To view your complete pay and benefits details, please click below:

#### VIEW PAY STATEMENT

This is an automated message. Please do not reply to this email.

All rights reserved. © 2025

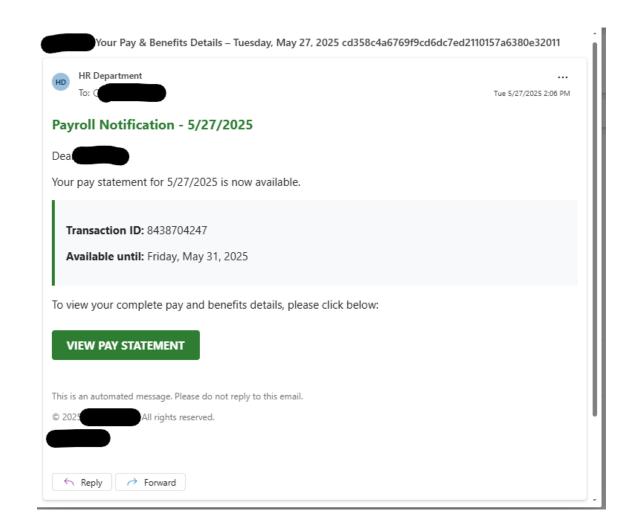


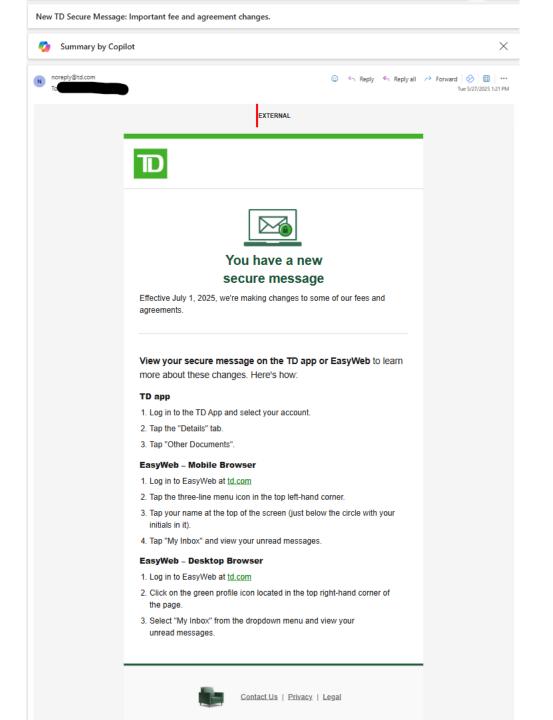


Forward

#### Phishing!

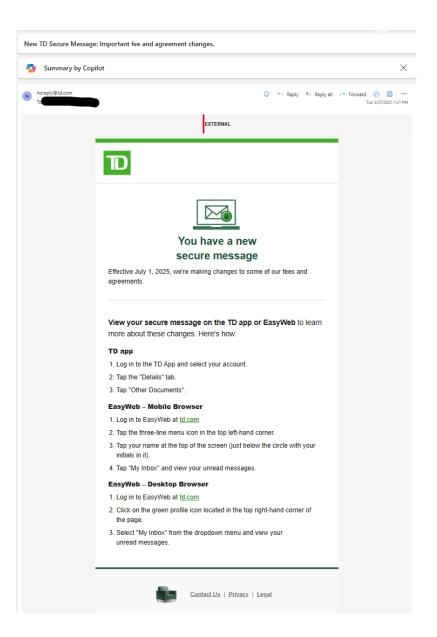
(This is not the way this company would normally receive these types of updates, always confirm with management)





#### **Not Phishing!**

(the from is from td.com and they are giving directions to login to their portal and only including links for convenience, but you should still hover over them to make sure they re not redirecting to somewhere malicious)



# Cyber Hygiene in Caregiving



Cyber Hygiene Comparisons



Outbreak Examples with parallels demonstrated

1. Passwords and **Toothbrushes** (Protecting Credentials and uthentication Data)

#### **Cyber Hygiene**

Passwords shouldn't be shared, reused or left exposed. They are personal and if shared, can lead to cyber vulnerabilities.

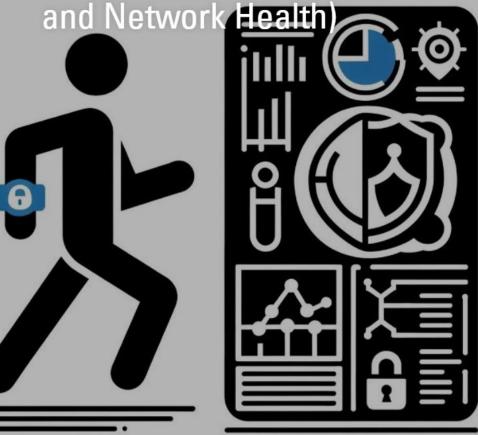
#### Personal Hygiene

You wouldn't share your toothbrush with others due to the germs and potential for illness. You also don't use the same toothbrush forever...

CIS CSC v8 Controls:

5 - Account Management

2. Security Practices and Physical Exercise (Maintaining System



#### **Cyber Hygiene**

Adopting and maintaining regular cybersecurity practices, such as updating systems, reviewing logs, or running vulnerability scans, strengthens the security posture of an organization, making it more resilient against potential cyber threats.

#### **Personal Hygiene**

Engaging in regular physical exercise strengthens the body, increases stamina, and boosts overall health, helping to ward off many diseases.

#### **CIS CSC v8 Controls:**

- 1 Inventory and Control of Enterprise Assets
- 2 Inventory and Control of Software Assets
- 15 Service Provider Management

3. Software **Updating and Hand** Washing Maintaining Software Integrity)

#### Cyber Hygiene

Regularly updating software ensures that known vulnerabilities are patched, preventing cyber infections.

#### **Personal Hygiene**

Regularly washing your hands can help prevent the spread of diseases.

#### CIS CSC v8 Controls:

- 7 Continuous Vulnerability Management
- 12 Network Infrastructure Management

4. Antivirus and Hand Sanitizers (Detecting and Neutralizing



#### Cyber Hygiene

Antivirus & EDR (Endpoint Detection & Response) programs detect and neutralize threats, providing a secondary layer of defense when other measures might fail.

#### **Personal Hygiene**

Hand sanitizers kill bacteria and viruses when soap and water aren't available.

#### **CIS CSC v8 Controls:**

10 - Malware Defenses

5. Phishing and Junk Food (Avoiding DeceptiveThreats)



#### **Cyber Hygiene**

One should be wary of web popups & phishing emails that look legitimate but can harm our digital environment.

#### **Personal Hygiene**

Just like we avoid junk food which might seem tempting but is bad for health.

#### CIS CSC v8 Controls:

9 - Email and Web Browser Protections

6. Multifactor **Authentication and Protective Gear** dding Additional Protection Layers

#### **Cyber Hygiene**

Multifactor authentication is an extra layer of protection, ensuring that even if a password is compromised, there's another barrier in place.

#### **Personal Hygiene**

When doing risky tasks, we wear protective gear like helmets and pads.

CIS CSC v8 Controls:

6 - Access Control Management

# 7. Firewalls and Masks (Establishing Protective Barriers)



#### **Cyber Hygiene**

Firewalls act as barriers, reducing harmful data or unauthorized users from entering a network.

#### **Personal Hygiene**

Wearing a mask can filter out harmful particles and protect from airborne diseases.

#### CIS CSC v8 Controls:

- 4 Secure Configuration of Enterprise Assets and Software
- 13 Network Monitoring & Defense

# 8. Regular Check-ups (Routine Monitoring and Analysis)



#### **Cyber Hygiene**

Regularly auditing and assessing IT environments can identify vulnerabilities before they are exploited.

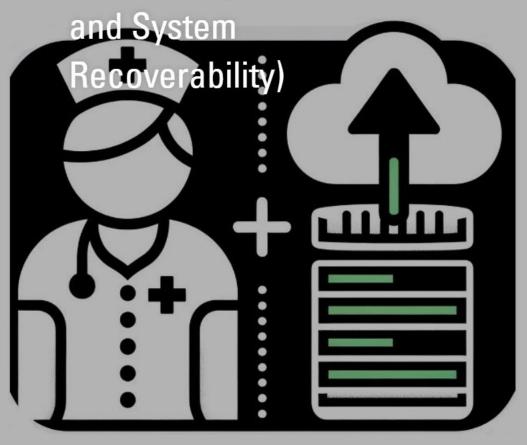
#### **Personal Hygiene**

Regular health check-ups catch potential issues early, ensuring they don't develop into more serious conditions.

#### CIS CSC v8 Controls:

8 - Audit Log Management

9. Backups and Vaccinations
(Preventing Data Loss



#### **Cyber Hygiene**

Backing up data prepares companies to restore information if a cyberattack or data loss occurs.

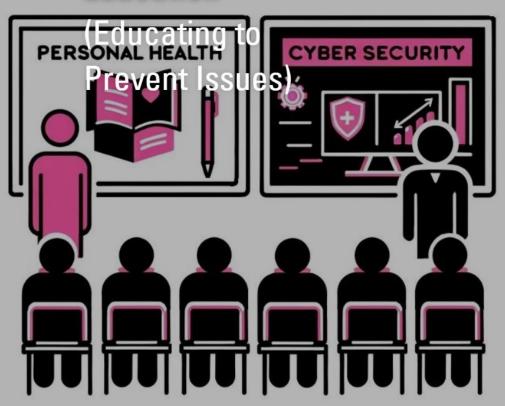
#### Personal Hygiene

Vaccinations prepare your immune system to fight off diseases.

#### CIS CSC v8 Controls:

- 3 Data Protection
- 11 Data Recovery

10. Employee
Training and
Personal Health
Education



#### Cyber Hygiene

Regularly training employees about cyber threats and how to recognize and avoid them ensures they don't accidentally compromise security.

#### **Personal Hygiene**

Educating individuals about health risks and how to maintain good health can reduce illnesses.

#### CIS CSC v8 Controls:

14 - Security Awareness and Skills Training

11. Emergency **Responses and First Aid Kits** (Being prepared for unforesee events and <mark>h</mark>aving a plan to address them

#### Cyber Hygiene

Organizations prepare with incident response strategies, equipped with tools and protocols, to quickly address and learn from cyber incidents.

#### **Personal Hygiene**

Individuals keep first aid kits and emergency plans ready for unexpected physical mishaps, ensuring rapid response to injuries or threats.

\_\_\_\_\_

#### CIS CSC v8 Controls:

17 - Incident Response Management

# 12. PenTesting and Blood Work (Uncover HiddenThreats) \*IG2 Non Essential



#### Cyber Hygiene

While not classified as an Essential Control in the framework, penetration testing can uncover hidden vulnerabilities within an organization's systems, networks, and applications.

#### **Personal Hygiene**

Blood work can identify internal health issues that aren't always visible from the outside.

#### CIS CSC v8 Controls:

18 - Penetration Testing

## Cyber Hygiene in Caregiving



Cyber Hygiene Comparisons



Outbreak Examples with parallels demonstrated

# UnityPoint Health: Patient Zero



• Date: March 14, 2018



• A billing clerk opens a spoofed executive email (Patient Zero).



• Credentials harvested and phishing links sent to colleagues.



Clinical Analogy: Asymptomatic carrier introduces a virus.

# UnityPoint Health: Spread & Delay

- Malware moves laterally through email systems, infecting staff.
- Detection delayed until May 31, 2018;
  1.4M records exposed.

Analogy: Airborne pathogens spreading before detection.

## UnityPoint Health: Containment

 Implemented two-factor authentication and email filters.

Analogy: Digital vaccination and masks to prevent reinfection.

Key Takeaway: Early training & MFA halt spread.

Source: <u>UnityPoint Health agrees</u> to \$2.8M settlement in 2018 data breach case | Fierce Healthcare



• Date: October 2020

### UVM Health: Off-Site Exposure



• On-call nurse opens compromised HOA email on vacation.



 Malware installed (TrickBot/BazarLoader) remains dormant.



Analogy: Clinician bringing home a contagious pathogen.

UVM
Health:
Epidemic
&
Lockdown

- VPN reconnection triggers ransomware outbreak.
- 1,300 servers & 600 apps disabled; procedures halted.

Analogy: ICU overwhelmed by critically ill patients.

# UVM Health: Quarantine & Recovery

 Network lockdown as quarantine measure.

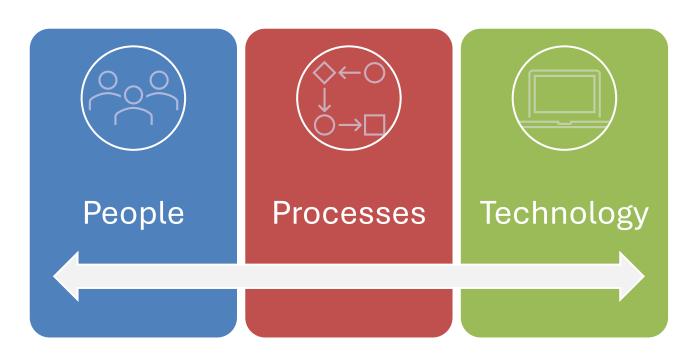
 Restored from backups without paying ransom.

Key Takeaway: Regular backups & segmentation for recovery.

Source: <u>Statement from UVM</u> <u>Health Network on Cyberattack</u>

## "How secure am I?"

### Cybersecurity is a team sport





## Internal and external success factors

#### Help employees & leaders understand risks

Continuous education

#### **Create a cybersecurity culture**

- Nominate an internal cyber leader
- Normalize incidents

#### Seek out third party expertise

- Skills shortage / expensive to staff internal
- Use to guide or augment approach
- Can include exercises



#### What does good process look like?

- Implement procedures e.g. offboarding, privilege review
- Perform cyber framework assessments
- Mitigation of technical risks vulnerability management
- Document actions taken & residual risk





#### What does good cybersecurity look like?

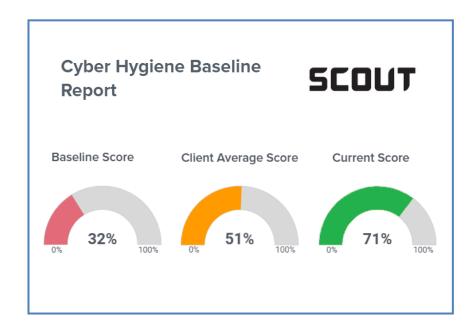
- 24/7 risk management & monitoring
- Early detection & blocking of threats
- Integration with leading cloud services (M365, Google)
- Cyber Hygiene best practices



### Complete visibility with Scout

24/7 Monitoring, Detection, and Response across your full IT environment.

Endpoints + Network + Cloud



# Key Takeaways from the Workshop

- Enhanced understanding of password security.
- Improved identification of phishing threats.
- Increased awareness of cyber hygiene practices.
- Importance of multifactor authentication.



## Healthy Cyber Hygiene Top 10 Staff Action Sheet:

Keep your facility secure by treating cyber hygiene as everyone's responsibility—much like daily handwashing reduces infections. Follow these high-level practices that every team member can adopt to support IT and protect resident data.



1. Use unique passwords

Like assigning each patient a unique ID bracelet to avoid mix-ups

- 2. Use MFA with an authenticator app or token

  Equivalent to requiring both ID badge and fingerprint ID for secure area access
- 3. Think before you click hover over links & avoid unexpected attachments

  Similar to verifying a medication label before administration
- **4.** Report suspicious emails immediately to IT/security

  Just as reporting a patient fall risk prevents further incidents
- 5. Lock your screen when away don't leave workstations open
  Like closing and locking medicine cabinets when not in use
- 6. Notify IT about update prompts or unusual pop-ups
  Similar to informing maintenance when medical equipment displays error codes
- 7. Use only approved channels for sharing sensitive data

  Like using secure hospital pneumatic tubes rather than open corridors
- 8. Close sensitive documents and clear clipboard after use

  Analogous to sanitizing and returning medical instruments after procedures
- 9. Speak up early report odd behavior or login prompts

  Just as alerting a supervisor at first sign of patient distress
- **10.** Know your incident response steps & practice the drill Like participating in regular fire and code blue drills

"Cyber hygiene is a team sport—small, consistent actions by all staff keep our data and residents safe."

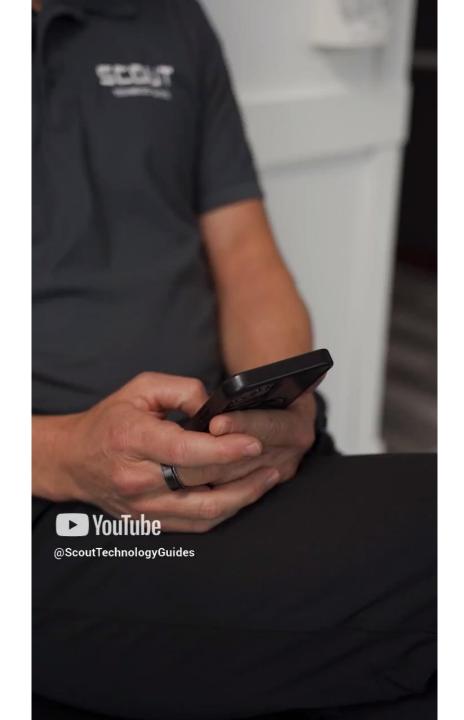
Post this sheet at nurse stations and break rooms to remind everyone: everyday habits make a secure environment.

Scout Cyber Hygiene Tip!

See them all:

Scout
Technology
Guides YouTube







We're on a mission to simplify cybersecurity!

Get your free cyber hygiene assessment here: scouttg.com/services/cyber-hygiene-framework

Thank you for coming!

matt@scouttg.com



