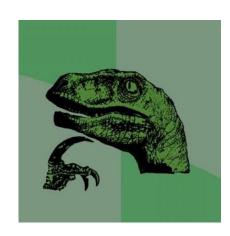




How can we improve Cyber Security Resilience across the NHS and social care?

Paul Barnes, Head of Operations and Engagement – Cybersecurity NHS England Joint Cyber Unit, Digital Policy Unit







Cyber Security in Health and Care - context

- A unified approach for a decentralised sector
- National cyber teams set direction and provide central support
- Supporting technical innovation and development and deployment
 - Economies of scale
 - Share learning
 - Ensure solid minimum level of security across the entire system
- Strategy, policy and standards. Manage systemic cyber risk
- Cyber Security Operations Centre
- Seven regional teams
- Integrated Care Systems (ICS) responsible cyber resilience across their area
- Health and social care organisations are responsible for their own cyber security

Department of Health and Social Care NHS England **Transformation Directorate** JCU CyberOps Regional ICS Local



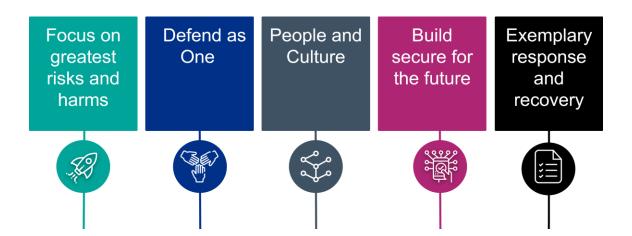


Vision

A health and social care sector that is resilient to cyber-attack, in turn improving the safety of patients and service users.

Approach

Five complementary pillars directing the system's overall approach to cyber resilience.







Cyber Improvement Programme

- Our direct organisational scope includes almost 50,000 organisations, made up of:
 - The NHS (primary/secondary/other);
 - Adult Social Care; and
 - Arms Lengths Bodies
- Deploying cyber security controls and building national and local capabilities
- Broadly the investment falls into three areas:
 - Developing security controls and capabilities
 - Targeted investment at ICS/provider level to reduce cyber risk and develop cyber capabilities
 - Expand the customer scope to reflect risk landscape.





Cyber: Not just about tech

Finance

Visibility of cyber spend across system

Investment proportionate to potential harm

Hospitals needing to replace unsupported systems - and budget needed for this

Clinical

Understanding and articulating length of disruption and impact on patient care

Balancing dual risks of: patient harm and operational impacts of increased security controls/bureaucracy

Potential for patient harm when medical records are deleted by hackers.

Workforce

Understanding, development, and promotion of cyber professionals

Recruitment, retention and re-entry policies for cyber workforce

Unable to recruit to cyber and digital roles (i.e. in ICBs/wider NHS) due to lack of talent

Strategy and Operations

Consistency around local and national cyber strategies

Communicating security focus to increase trust and be clear on risks in innovations

Significant clinical, financial and reputational damage

Commercial

Reflecting cyber standards in contracts – and enforcing

Understanding supply chain dependencies

Vulnerable suppliers being given NHS contracts (inc. access to data, pathways, etc)

Tech

Implementing lifecycle management to prevent legacy tech

Balancing innovation and security

Cyber security policy not keeping pace with innovation e.g. Al, Apps







'Monumental' data breach ex| Hackers who breached casino giants entire Northern Ireland police

By Christian Edwards and Jennifer Hauser, CNN Published 7:03 AM EDT, Wed August 9, 2023





Northern Ireland's Police Federation said the data breach is "potentially calamitous."



MGM, Caesars also hit 3 other firms, Okta says

By Zeba Siddiqui September 19, 2023 2:37 AM GMT+1 - Updated 8 hours ago



An exterior view of MGM Grand hotel and casino, after MGM Resorts shut down some computer systems due to a cyber attack in Las Vegas, Nevada, U.S., September 13, 2023. REUTERS/Bridget Bennett Acquire Licensing Rights [7]



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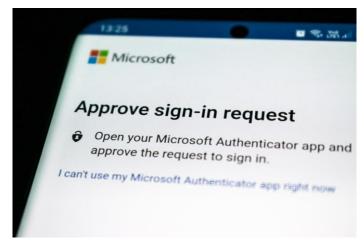


MFA Policy

The policy currently applies to:

- NHS Trusts and Foundation Trusts
- Integrated care boards (ICB)
- Arm's length bodies of the Department of Health and Social Care
- Commissioning Support Units in NHS England
- Operators of Essential Services for the health sector in England



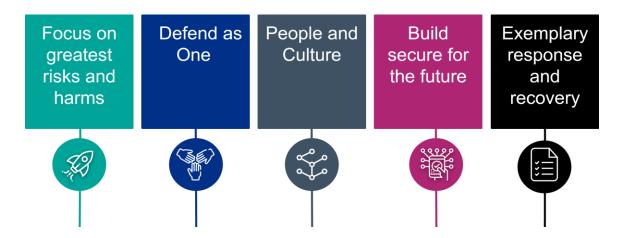






What's next?

- Funding to Integrated Care Boards
- Strategy in a Box for Integrated Care Boards
- Supply chain and other partners
- Better Security Better Care
- Arm's Length Bodies







Thank you

- Cyber security strategy for health and social care: 2023 to 2030 https://www.gov.uk/government/publications/cyber-security-strategy-for-health-and-social-care-2023-to-2030
- MFA Policy
 https://digital.nhs.uk/cyber-and-data-security/guidance-and-assurance/multi-factor-authentication-mfa-policy#:~:text=This%20policy%20will%20ensure%20that,have%20privileged%20access%20to%20systems.
- ISC2 "Certified in Cybersecurity"
 One million free training courses and certification exam https://www.isc2.org/certifications/cc
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