

Slide 1



This presentation provides an overview of the Victorian Auditor-General's report *Security of Patients' Hospital Data*.

Overview



Public hospitals use information and communications technology (ICT) to deliver healthcare and to capture and store patient information


Health services need to manage the risk of cyber attack, which could steal patient information and disable health services' ICT systems

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Public hospitals are increasingly using information and communications technology (ICT) to deliver healthcare and to capture and store patient information.

Digital records are valuable in improving patient care, however, health services need to manage the risk of a cybersecurity breach, which could steal patient information and disable health services' ICT systems, preventing staff from accessing patient information.

What we looked at



We assessed whether health services are taking effective steps to protect patient data

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In this audit, we assessed whether health services are taking effective steps to protect patient data.

Who we looked at


Health services	Departments
<ul style="list-style-type: none">• Barwon Health• Royal Children's Hospital• Royal Victorian Eye and Ear Hospital	<p>Department of Health and Human Services (DHHS) areas:</p> <ul style="list-style-type: none">• Digital Health• Health Technology Solutions

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We audited Barwon Health, the Royal Children's Hospital and the Royal Victorian Eye and Ear Hospital.

We also examined two different areas of the Department of Health and Human Services (DHHS)—their Digital Health branch and Health Technology Solutions—and how they are supporting health services.

What we found



- DHHS's Digital Health branch has developed common, health service specific cybersecurity standards**
- Health services have not fully implemented needed security measures**
- Health service staff have low security awareness**

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DHHS's Digital Health branch has filled an important gap in the sector by developing common, health service specific cybersecurity standards and acting as the central point for advice and support.

While Digital Health has developed a clear roadmap to improve security across the sector, health services' have not fully implemented the security measures necessary to protect patient data.

Our testing identified key weaknesses in health services' approach to data security, particularly in relation to staff awareness and network monitoring.

Cybersecurity at DHHS's Digital Health branch



DHHS's Digital Health branch is supporting health services to improve cybersecurity


Health services identify barriers to fully implementing security controls

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DHHS's Digital Health branch works to improve cybersecurity in the sector by developing guidance materials, running awareness and training sessions, and funding ICT infrastructure upgrades.

We found that DHHS's Digital Health branch has completed an effective program of work to improve health services' approach to data security. However, health services identify key barriers to fully implementing the controls, such as lack of cybersecurity staff and insufficient resources for ICT projects.

Effectiveness of data security in health services



- Health services are responsible for their cybersecurity
- All audited health services vulnerable to cyberattacks
- Most audited health services do not train staff in data security

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While DHHS has developed a clear roadmap to improve cybersecurity, ultimately it is the responsibility of health services to implement those improvements.

We conducted scenario-based penetration testing at the audited health services and found that all were vulnerable to attacks that could steal or alter patient data. Key weaknesses include inadequate user access controls, weak passwords and limited monitoring to detect suspicious behavior on their ICT network.

Additionally, we found that most audited health services do not train staff to recognise suspicious behaviour, or to practice basic security such as locking computers, not clicking on suspicious links, or protecting their security access passes.

Health Technology Solutions and vendor management



Health Technology Solutions has not fully implemented Digital Health's cybersecurity controls

Lack of health service oversight of vendor security management creates risks of security breaches

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Health services typically store their patient data in applications hosted and secured by third party vendors. However, health services remain responsible for protecting patient data and ensuring that vendors fulfil their security responsibilities. Health Technology Solutions is the key provider of outsourced ICT business systems to Victorian health services.


Despite being part of DHHS, Health Technology Solutions has made no progress in implementing Digital Health's cybersecurity controls since they were introduced in March 2017 and has similar security weaknesses to Victorian health services.

We also found issues with vendor management at two audited health services. At one health service, we gained access to patient data in a system managed by a third-party vendor. At another, we found confusion around whether the responsibility for data security sat with the third party or the hospital.

Recommendations

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Recommendations
for DHHS

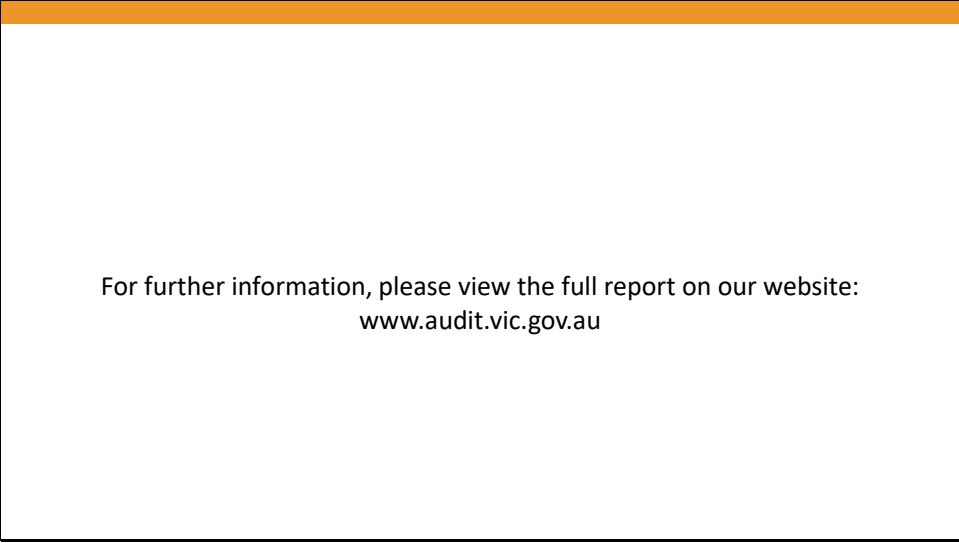
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Recommendations
for health
services


DHHS is committed to
working with Victorian
health services to
acquit these
recommendations

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We made eight recommendations for DHHS around continuing support for the Digital Health cybersecurity program and nine recommendations for health services.

DHHS has committed to working with Victorian health services to acquit these recommendations.



For further information, please view the full report on our website:
www.audit.vic.gov.au

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