

THE STATE HOSPITALS BOARD FOR SCOTLAND

eHEALTH ANNUAL REPORT

2023-2024

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1 Overview

The use of digital technologies continues to expand across many areas of operation within the Hospital, with the resultant significant reliance on the eHealth Department. From the helpdesk officer through to the information and data lead, all areas have seen demands on the department continue to grow.

The teams continue to prioritise projects appropriately and function effectively – working together across disciplines on such as the latest EPR update. Our eHealth infrastructure team provide the technical support for staff while maintaining all our digital information and reporting.

The integration between our EPR (Rio) and Pharmacy's HEPMA system continues to provide real time information on patient medication status. It had been hoped that we would have access to our own HEPMA data for use in our data warehouse, but while several options to achieve this goal have been investigated, further work is needed with support from our host Board (NHS Lothian) before this can be delivered. The varying priorities for eHealth support continue to be managed successfully by the heads of each team.

Home working continues to be the norm for our Project and Information and Data teams, with the availability of hot desking as required and maintaining health and wellbeing for all teams.

With funding continuing to be challenging, it was recently approved to use the funding for fixed term posts to fund permanent roles in support of the resilience of the department. Work is ongoing to review the roles affected (with support from HR and staff-side as relevant). Additionally, as software manufacturers change to subscription licencing, software that – for example – previously had a 5 year life at a cost of £360 per user has now increased in cost to £1,175. It is difficult to find reductions on software, but we continue to work with several licence suppliers to ensure we get the best prices that procurement routes allow.

While there were expectations of a full rollout of Microsoft 365 with new SharePoint site access, again this continues to be a challenge to deliver due to national delays (NSS). We do have significant unseen potential benefits from our M365 subscription such as Microsoft Defender and Advanced Threat Protection, and M365 provides a secure digital workspace for collaboration. Again due to the national position, we have been unable yet to rollout Microsoft's Advanced Data Loss Prevention or Information Protection Sensitivity Labelling and Retention capabilities - guidance being yet to be produced by the M365 ODG, and a date yet to be set for a national rollout.

We have successfully entered the world of Artificial Intelligence (AI) with new systems recently deployed. While uptake to date has been slow as the new technology is learned and understood, we continue to grow the list of available digital solutions that can be utilised and encourage staff where possible.

- Dragon Medical One (DMO) is an AI powered real time dictation system that converts voice to text automatically. This is supported by M365 and helpfully can be used directly with Microsoft word, Outlook and our EPR Rio.
- Smartbox AI is an AI powered document redaction system. This system automates a process that is typically carried out manually by searching for key words within documents. This process is a time consuming and Smartbox AI will significantly reduce the time staff spend on redacting documentation once it has been fully utilised.

The Network Information & Security Directive (NIS) is at the fore front of everything we do. This year's interim NIS submission will be an update on outstanding NIS points from last year's submission, aiming to progress to a compliance over 80% - with the next full review due in 2026.

Cyber security, backup recovery, disaster recovery, and post-recovery system testing have been planned, with the timing of this year's NIS interim management meeting review yet to be scheduled.

2 Information and Business Intelligence Team

The Information and Business Intelligence team continues to improve how TSH data is recorded and analysed, working with a wide range of stakeholders to help embed data in everyday practice.

The team's principle focus has been the development of new bespoke Rio modules. Highlights include Improved Observational Practice, Clinical Service and Psychological Therapies referrals, Grounds Access authorisation, Soft Restraint Kit monitoring, and a full redesign of the CPA process and Variance Analysis Tool. The feedback from clinical staff regarding these areas has been very positive, and the next upgrade (to V24.09) is scheduled to take place in October 2024.

The TSH suite of Tableau dashboards also continues to grow, again to a positive response from staff. Recent developments include new, improved Workforce, Physical Health, Service Leadership, and Incidents dashboards.

Other significant pieces of work in the year have included supporting Excellence in Care, and the rollout of eRostering, plus the regular requirements for decommissioning and replacement of legacy systems.

3 Infrastructure Team

The infrastructure team provide the support for day-to-day problems and incidents along with support for several projects within the hospital. They continued to monitor, maintain, and update the digital infrastructure, equipment and the operating systems relied on. This is a continual part of the work this team undertake while supporting the essential systems used to assist in delivering patient care.

A new remote access solution is currently being tested and is expected to go live in the new year.

Management of the organisation's M365 accounts has created additional volume of calls for the IT Helpdesk – and, as staff numbers have increased, the effective management of the scope of our M365 licences is crucial to mitigate additional licence costs.

Significant projects delivered by this team have included:

- Windows Defender products (Sever and Unmanaged devices)
- Upgrade to Virtual environment software
- Upgrade of Backup system software
- Upgrade of storage software
- Replacement of the Core Network switches (ongoing in-year)
- Replacement of the Organisation's edge firewalls (ongoing in-year)
- Proof of concept of NetSupport for PLC
- Upgrade to RiO
- Assisting with national projects
- Replacement the wireless network (ongoing in-year)
- Testing of national phishing simulation exercises
- Phase 1 of the Ricoh Multi-Function Device replacement (Phase 2 now started)
- Assisting national cyber security incidents and alerts while remaining vigilant to local incidents and alerts.

The team continue to provide essential and regular day to day support – critical to the organisation both onsite and remotely.

4 Project Management

The Project Team delivered a successful Digital Inclusion workshop in October 2023, which resulted in the publication of a fully costed Patient Digital Inclusion Roadmap. However, as discussed at Board level, this project is now unfortunately on hold due to a lack of funding under the national financial pressures.

National programme work continues, with much of the work undertaken this year being behind the scenes for the Microsoft 365 programme including security baseline, unmanaged devices, Teams cleanup and preparatory work for SharePoint online.

Other projects supported by the team this year have included:

- Phase 1 of Ricoh Multi-Function Device Replacement delivered, phase 2 being scheduled for October.
- Replacement of Video Visiting system with NearMe completed.
- Pilot of Dragon Medical One to replace Winscribe Digital Dictation, due to be completed in November.
- Pilot of Net Support software for Patient Learning Network in progress.
- Metacompliance refresh completed.
- Upgrade of Rio EPR to 24.09 is underway and expected to be completed in October 2024.
- Wireless Network Replacement, first stage complete in Harris and plan in preparation for rollout across site.

The Project Management Team continue to support colleagues through the Project Approval Process, maintain the Project Register and manage the Rio Oversight and Development Group (ROAD).

5 Key eHealth Project achievements 2023-2024

These include:

- Upgrade of remote access systems
- ServiceNow helpdesk
- Disaster Recovery Test plans
- Microsoft 365 additional functionalities
- Wireless Network Installation
- Core Network switch replacement
- Dragon Medical One Dictation system
- Patient Learning Centre Netsupport system
- Deployment of Windows Defender for Server and Unmanaged Devices
- TSH suite of Tableau dashboards
- New functionality in Rio EPR – CPA processes moved to EPR, and overall Rio upgrades
- Testing of the national phishing simulation product
- Successful submission of NIS reporting requirements

6 Cyber Security

The second incantation of the NIS audit process takes place in October 2024. The State Hospital did well in this assessment compared to our first year but there were some areas of improvement that we still need to meet before the next full review in 2026. Plans to achieve this were agreed, are underway, and will be delivered over the next two years.

Cyber security continues to be recognised as a high risk and concern for all Boards, with significant focus for the eHealth department and the hospital overall. All Staff have a responsibility to work safely in the digital world, but testing on recent guidance on email phishing revealed some lack of awareness when a test email phishing campaign was carried out. This will be followed up with further testing and raising of awareness, and education for staff is recognised as being key to reducing our cyber risks and exposure – with an ongoing focus on how we best share this information across the hospital.

As staff are aware, we were unfortunately impacted by the cyber-attack on NHS D&G. While D&G have now shared some of the lessons learned and they have been assessed against the cyber security provisions in place at the State Hospital, some concerns were presented to CMT with recommendations on how these items can best be addressed to mitigate risk. It was agreed that a simulated cyber attack should be carried out to test the hospital's digital resilience plans – and this is being planned for early 2025

7 eHealth Collaborative Working

Collaborative working has continued to be prevalent, and is an ongoing development. The eHealth department represents the hospital at several national eHealth groups, and works where possible with other National or Territorial Boards. We continue to have sight of national programs and projects within NHS Scotland, and benefit from national solutions wherever practical and applicable.

The groups on which State Hospital eHealth staff are represented include:

- eHealth Leads Group
- National Information Leads Group
- National Infrastructure Group
- National IT Security Group
- National Board Digital Group
- West of Scotland Infrastructure Group
- West of Scotland IT Security Group
- 365 Project Group
- M365 Renegotiation Team