



# **THE STATE HOSPITALS BOARD FOR SCOTLAND**

## **eHEALTH ANNUAL REPORT**

**APRIL 2021 – MARCH 2022**

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## 1. Overview

2021/2022 has again been a demanding year for the Health department. Limitations on the availability of equipment has still been an issue with lead time excessively long due to national supplier delays. This is unfortunately outwith our control and potentially is expected to continue until 2024. Also, the year has been impacted by the war in Ukraine, which has resulted in a heightened awareness of cyber threats to both national and NHS infrastructure due to the UK support for Ukraine. Work is continually ongoing both locally and nationally to reduce the possibility of a successful cyber attack on the NHS, however our suppliers are now being targeted with the national NHS system being the focus of recent fraudulent activities.

Demands on all eHealth departments has increased with a significant burden on the infrastructure teams. Staffing within this team has continued to be an issue with recruitment of temporary posts in the current market being particularly challenging. This is not just a local / TSH issue as other Boards have also been impacted when trying to recruit infrastructure staff. Obtaining additional permanent funding for staff is acknowledged as difficult with national revenue funding pressures, but we are working with the available funding streams in order to mitigate this.

There has been some organisational change put forward for implementation within eHealth – focused on the medical records department with a proposed change to a broader corporate records department with the responsibilities to support all records within the hospital. Changes to the posts within the medical records department are at present going through the agenda for change process with an outcome expected later this year.

Home working is still continuing within the department with staff benefiting from this capability. Reduced office space due to the pandemic has also had an impact on some eHealth staff being onsite but a SWLG has been formed to look at resolving this.

Secure remote access has been critical to supporting home working and continues to be in high demand from all departments with 150 remote access tokens now in use. Mobile phone usage has also grown with 140 mobile phone now managed by the infrastructure team. This number has grown from 45 in use pre-pandemic and is a strong indicator of how the support needed from eHealth has changed over the last year.

There were two very significant projects delivered over the period covered by this report that were supported with major involvement by the eHealth teams. The first is the successful delivery of the upgrade to our electronic patient record system (EPR) Rio, which involved a considerable amount of time and resourcing to take forward – having an impact on a large number of staff onsite for whom training and preparation was a key element of the work required. This upgrade overran slightly in timing due to configuration issues but they were quickly resolved by working closely with the supplier, and, with minimum disruption to their duties, staff are benefiting from the additional capabilities delivered by this upgrade. It is planned to enable additional functionalities of the system over the next year, for which an ongoing project team is in place to prioritise new functionality.

Secondly, the Hospital Electronic Prescribing and Medicines Administration system (HEPMA) implementation was also a key focus for the infrastructure team. Although it was not specifically an eHealth-managed project, there has been significant support needed from this team requiring provision of resource and input throughout.

One national-led project that has now been ongoing for some time and has provided some concern is the national deployment of the Microsoft Office 365 platform. Although this has been delivered in principle, national boards have been unable to take full advantage of what it provides due to various issues. Support for the platform nationally has been missing, with SharePoint being of particular concern to all boards. Other elements are still on hold due to governance concerns but a national group have been formed by NHS Digital Leads in an attempt to resolve this. No timescale has been provided as yet but it is expected that costs may now increase over the period of the contract whether it is fully utilised or not. The eHealth department is still attending national O365 meetings in order to ensure TSH is fully involved and aware of current status, and it is hoped a resolution to all the issues national identified will be resolved in the coming year.

## **2. Information and Business Intelligence Team**

For team resourcing, there was one additional temporary post added to this team last year, which has been critical to the successful delivery of the Rio EPR upgrade and the continuing work developing Tableau dashboards – which has provided significant benefit for a number of Hospital departments.

The team was therefore pivotal in the upgrade to Rio while continuing to improve how TSH data is recorded and analysed by working with a wide range of stakeholders. The support to the upgrade to Rio EPR was then enhanced by the development of new dashboards that, while previously unavailable, can now be accessed from the upgraded version Rio. These include timetable data, BMI, physical activity, PRN and DASA charts. The benefits of this information being available are being promoted by the hospital's clinical quality team, working in conjunction with the information team to highlight the potential uses and benefits of these new features to clinicians ahead of their launch this year.

There is also a number of other new project priorities related to Rio that the team are now working on – while these are still in development they will cover seclusions and IOP, Nursing Specific Nutrition & Physical Health Care Plans, Internal Psychology Referrals, and SRK Recording forms. Work is also underway to introduce an automatically generated CPA document and move the VAT (Variance Analysis Tool) onto Rio.

Additionally, further Tableau dashboards will be developed over the next year to address charts including aggregated figures for PRN, Incidents, Seclusions, Observation levels, Complaints, physical activity, timetables data, Risk Register, Resourcing Issues, and a refresh of all Workforce dashboards.

### **3. Infrastructure Team**

New ways of working have also had a significant impact on the Infrastructure team. Support for Microsoft Office 365 has continued to grow and the team have taken full advantage of the training available as part of the national contract. Recruitment to vacant posts has again been difficult, as experienced nationally, with one post still unfilled after twice going out to advert. We did however manage to appoint a replacement helpdesk officer for a fixed term although delivery of support remains challenging with the o/s post still advertised. The demand for qualified IT staff country wide has had an impact on NHS IT staff recruitment. Fixed term posts have usually provided fully qualified applicants but, with high demand in all sectors, it is not easy to compete with the offer of permanent posts offered elsewhere.

There are significant challenges around support required for Office 365, not made easier by national (NSS) current shortcomings with only one small team in place nationally to support the tenancy and high demand on this service. This impacts on some support calls for O365, but work is ongoing to look at how this can be resolved.

Several projects have been supported by this team over and above the regular and essential upgrades to IT systems used across the hospital. Projects supported by the team included –

- Rio EPR upgrade;
- Patient Learning Centre infrastructure replacement;
- HEPMA;
- Key safe replacement;
- Multiple IT system upgrades

A support level agreement has also now been approved and implemented as the team continued to provide the regular day to day support needed across the hospital.

### **4. Health Records Department**

The department continues to provide significant support for the Information Governance team with Freedom of Information (FOI) and Subject Access Requests (SARS) now provided by the Health Records Department. The need for this support has grown over the year due to the volume of request received under FOIs and SARs. Further detail re the records department is contained in the IG Annual Report.

As noted above, there is planned change to the Health Records Department in the coming year, which will once approved and implemented result in a move from a medical records to a records department. The department will provide support to all staff in relation to the management of documentation throughout the hospital to ensure compliance with the hospitals Corporate Records Policy.

## 5. Information Governance

The workload of the IG team has continued to grow over the last year. This has been supported by medical records staff to ensure timescales for FOIs and SARs are met. SARS have caused significant load on the team with time extensions requested due to the large scale of some requests. National commitments have also increased while inter health board cooperation still continues to be a challenge. As in prior years, a separate Annual Report is presented from the IG team.

## 6 Project Management Team

The Team is made up of a Senior Project Manager (p/t – 3 days per week), a Project Manager (contract to March 2023) and a Project Support Officer (contract to August 2023).

During 2021/22 most of the resources of the Team were focussed on the upgrade to Rio 22, which successfully went live on 8 March 2022. The Project Board asked the Team to remain involved until the next release of a further version (22.07) in July 2022. However, this release was postponed due to the impact of the HEPMA/ADT project. Depending on the HEPMA project, Rio is currently scheduled to move now to v22.11 in November 2022. The Issue Log, Minor Change Requests and management of further new releases has now been handed over to the ongoing monitoring ROAD Group under “business as usual” (BAU). The Project will then be considered finally closed following the successful new release to “live” in November.

Phase 3 of Microsoft 365 is now complete, according to the National 365 Programme Team and Microsoft. This was divided into 5 Projects – Identity Management, Data Discovery, Security and Compliance, Modern Work in Health and Modern Service, with management and the M365 Project Team members engaging with this work. Locally, efforts have focussed on preparatory work in anticipation of the implementation of SharePoint and OneDrive but despite original expectations there is currently no national support available for this going forward.

Nationally, the focus has been on implementing the Identity Management and Security & Compliance project across all boards – with the national team very focussed on negotiating the licensing arrangements with Microsoft, and managing and controlling the number and type of licences across all Boards (for which there are significant national pressures), as well as junior doctor accounts.

The National 365 Programme Manager has issued a number of Programme Close / delivery summary documents authored with Microsoft and encourages Boards to implement these independently as there will now be no national rollout plan. However, the National Service Management Lead has advised that his Team is not currently resourced to support OneDrive and Sharepoint and the National Information Governance Group has expressed the view that boards should not rollout any more elements until Data Protection Impact Assessments (DPIAs) are in place. Board Project Managers have been meeting informally to discuss how to progress M365 in the absence of a national programme/implementation plan, and locally the project team has undertaken a gap analysis and held a meeting of key staff to consider our position and the best way forward for TSH.

In terms of next steps, further implementation is dependent on resources being in place in the National Service Management Team to support SharePoint and OneDrive, and IG requirements being met.

With regard to National Single Instance Finance Tableau Dashboards – these are now ready to rollout – with the specific timing to be confirmed by the Finance Team. All budget holders have been provided with guidance on registering for an LDAP account and how to request access to the dashboards.

The Project Team also support the Information & Business Intelligence Team with other Tableau work, including the rollout of the SCN Dashboards.

## **7 Additional eHealth Projects 2021/22**

In addition to the projects detailed above, a significant focus for the eHealth team continues to be Digital Inclusion.

Significant consultation with a broad range of staff groups is delivering the requirements of digital solutions that could be used to deliver appropriate levels of inclusion for patients. Evaluation and planning of projects is across short-, medium- and long-term priorities – principally within financial and other resource constraints.

The main aspect of this work currently is a wide-ranging evaluation of systems providing “self-service kiosks” for patient use – for which considerable consultation is now underway towards a future business case to be established.

## **8 Network and Information Systems (NIS)**

The Network and Information Systems (NIS) Regulations came into effect in May 2018 and NHSScotland compliance is a legal requirement. The Scottish Health Competent Authority (SHCA) has a regulatory responsibility for oversight and enforcement of these standards, including the requirement to conduct formal audits to obtain compliance assurance. The findings of the audit are reported against a ‘scorecard’ approach as detailed in the guidance.

The Board is given the opportunity to review the reports and recommendations to enable management responses to be provided against these prior to issuing of the final report, and these prioritised recommendations form the Board’s NIS Action Plan to ensure key elements of the reviews are captured. (It is felt that the scores from reviews to date have been hindered by the external review teams working wholly remotely without site access.)

Our final NIS submission for 2022 was submitted in October and it is expected our score will increase from previous years. This has risen over the last 2 submissions but further support was implemented to ensure all departments were engaged with the process. This required the creation of a working group – meeting regularly to monitor and highlight what individual TSH teams were required to submit in evidence – which also allowed more focussed time to review these details prior to submission.

The NIS audit is not entirely IT focused – with input acknowledged as required from all areas of the hospital where resilience is necessary and is a business factor. While staff resourcing has been a factor in lower scoring from previous audits, additional support is now in place and there is also now broader departmental awareness of obligations.

An update of this year’s audit will be reported in due course when available – the detailed timing of which is not yet known.

## 9 Priority eHealth Projects – 2022/23

Key projects for 2022/23, in addition to the recurring work of the department, include the following –

- *Office 365 additional functionality*  
This additional capability will be to some degree dependant on the implementation of national governance and support.
- *Patient Digital inclusion*  
The range of priorities and potential benefits from patient DI are considerable and, while not a single standalone project, these will continue to be managed through a scheduled program of works as individual priorities and business cases are evaluated.
- *Disaster Recovery Test Plan*  
This will be implemented to support our disaster recovery capabilities and also our NIS compliance.
- *Records Management Plan*  
This will be reviewed to align management of all records to updated national requirements.
- *Wireless Network replacement*  
Our existing wireless network which has been in place for nearly ten years will reach “end of life” in July 2023 and its replacement will be required in order to ensure full support is maintained.

## 10 Cyber Security

The eHealth infrastructure team manage systems that actively and constantly monitor our digital infrastructure. Additional monitoring systems available as part of the M365 procurement are now in place and supplement the local systems already in use.

Microsoft Active Threat Protection (ATP) is a key system that is available as part of the M365 agreement, and as this is a national system it is also monitored by the NHS National Services Cyber Security Operations Centre (CSOC) Team who will notify of any activities of concern. An example of where they have assisted is in blocking malicious websites and identified suspicious email links.

One identified manner in which cyber-criminals could leverage access to our infrastructure is via unpatched computers and software – and this variability is now controlled by the Microsoft InTune system. This is available as part of M365 and will automatically update computers and software with the latest patches from several manufacturers. This system also ensures compliance with NIS requirements and is being rolled out to all TSH devices provided by eHealth.

Staff cyber awareness training is also an effective way of reducing our exposure to a cyber compromise. This is actively and regularly promoted by our IT Security Officer, and there are yearly updates to our LearnPro Cyber security training module. Additional cyber training is being arranged for the eHealth infrastructure team and for executive members of the hospital.



## 11 eHealth Collaborative Working

Collaborative working provides the hospital representation at several national groups – and allows us to “have our say” with the development of NHS services. Representation has continued to grow with the eHealth department continuing to represent the hospital at several national eHealth groups, and work 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 Infrastructure Group,
- National IT Security Group,
- National Board Digital Group,
- West of Scotland Infrastructure Group,
- West of Scotland IT Security Group
- National Office 365 Project Group
- National Tableau User Group
- National Excellence in Care Group
- National Office365 Change Advisory Board
- National Office365 Collaboration Hub
- Scottish Digital Health & Care Group
- National Records Management Group
- National Health Records Management Group
- National Information Governance Group