Introduction
This update covers eHealth Strategy Programmes of work that have been delivered during the year and what is currently in progress.

Integrated Electronic Health and Care Record

Clinical Portal Form Release
Since October 2018, the following forms were released or updated in Clinical Portal.

New:
- Anticipatory Care Plan Summary
- Paediatric Pre-assessment
- Occupational Therapy & Physiotherapy
- Pre-Operative Assessment
- OPAT (Out-patient Parenteral Antimicrobial Therapy) Cellulitis
- CML (Chronic Myeloid Leukaemia)/Pre-SACT (pre-Systemic Anti-Cancer Therapy)
- Dermatology Pre-/Post-operative
- Occupational Therapy/Physiotherapy Dashboard and Burns Assessment

Updates
- Child Protection Notification of Concern
- Child Protection Support/Advice
- Surplus Tissue Authorisation
- Surplus Tissue Alternative Authorisation
- Dermatology Pre-operative Assessment
- Physiotherapy Day Surgery
- Occupational Therapy home Visit Assessment
- CLL (Chronic Lymphocytic Leukaemia) / SLL (Small Lymphocytic Lymphona) / MCL (Mantle Cell Lymphoma) Toxicity Assessment
- Haematology o New Myeloma Toxicity Assessment
- Pharmaceutical Care Plan
- Dermatology Post-operative Assessment
- Occupational Therapy & Physiotherapy Record of Care, Notes, Goals and Treatment
A number of Clinical Portal developments are scheduled to be released over the forthcoming months as part of the continuing development of the EHCR and to support winter planning:

- **Community Pharmacy** – the roll-out of access to an agreed dataset in Clinical Portal for community pharmacy staff will be completed during October 2019. This will further aid Pharmacists to treat minor ailments, independently prescribe in a safer manner and work collaboratively with Acute, Primary Care and Partnership services.

- **GP Summary** – testing is progressing on the integration of a GP summary into Clinical Portal. The summary will include Medications, Encounters, Risks and Warnings (Allergies/ Adverse Reactions, Contra-indications, Smoking Status), Procedures (Immunisations, Operations) and Exam Findings. Testing on live systems will be undertaken in 5 practices during October with full roll-out commencing from end October. This is dependent on national data sharing agreements.

- **HSCP Data Sharing** – East Renfrewshire Council and Inverclyde Council data sharing in Clinical Portal is scheduled to be switched on during October 2019. Work is continuing with Glasgow City Council to provide access to their data. Data sharing in Clinical Portal for West Dunbartonshire and Renfrewshire Councils was switched on in March 2018.

**West of Scotland Beatson Cancer Centre Electronic Health & Care Record**
A programme of work has commenced to support the transition from paper to EHCR in the Beatson West of Scotland Cancer Centre. Workshops are planned over the next month to confirm workflow and capture requirements.

**Electronic Observations**
A proof of concept to test an electronic early warning scoring system used to capture and record patient observations will be piloted in Glasgow Royal Infirmary’s Ward 51 over a three month period. NEWS scoring system is used to monitor deteriorating patients and provide early clinical interventions thereby enhancing patient safety.

**Maternity Services System (BadgerNet)**
Work continues to implement Phase 2 Maternity Services System known as BadgerNet by December 2019. New functionality will include:

- Cardiotocography (CTG)
- Patient access via Patient Portal.
- Ultrasound devices set up to send images to the BadgerNet system
- Enhanced reporting
TrakCare 2018 Upgrade and MR7 Release

NHSGGC Trakcare application went through a major upgrade in March 2019. The T2018 version delivers a suite of new functionality and many benefits to NHSGGC.

A further release (MR7) will go live end of October that will provide additional functionality, ie:

- Frailty Screening Tool
- New Patient Banner
- Score 2 (NEWS) Recording
- BadgerNet MR02 Interfacing
- Active Clinical Notes
- National Early Warning

TrakCare Advance Programme

NHSGGC is working with InterSystems to undertake an evaluation of the clinical and non-clinical use of TrakCare. The survey, circulated at the end of August, complements a wider piece of work that will help NHSGGC take full advantage of TrakCare functionality and, importantly, help to influence the TrakCare product development roadmap. Further details will be circulated over the next few months.

TrakCare Results Sign-off

The uptake of TrakCare results sign-off continues to rise. In September, 32% of Laboratory and Radiology results issued in August have been signed off in TrakCare. This equates to 240,978 results and is a 6% increase from July. Service engagement continues in order to support services adopt this change.

Safer Medicines

HEPMA (Hospital Electronic Prescribing and Medicines Administration)

The procurement process to commission a hospital electronic prescribing and medicine administration application is almost complete. A full business case will be submitted to the Corporate Management Team for approval in November 2019. If approved, implementation will be over an 18 month period starting in 2020.

EDTS (Enhanced Drug Treatment Service)

Work is progressing with the configuration of cornerstone applications to enable the Enhanced Drug Treatment Service to record all data about product acquisition, dispensing, supply, administration and patient pre-and post-injection assessments within one electronic recording system. To-date, critical work has been completed in EMIS Ascribe and EMIS Web and TrakCare Alert build will be completed by 31 October.
Medicines Reconciliation/Immediate Discharge Letters
Implementation of enhancements to Medical Reconciliation/Immediate Discharge Letters were released on 28 September. Enhancements included:

- all users
  - Improvements to Ad Hoc tasks: users will be able to schedule only tasks they can then complete
  - Tasks on deactivated pathways will be automatically closed removing the risk that they are later completed in error.
  - IDL task history now accessible even when IDL pathway is complete

- Nurses are now able to complete the Pharmacy Review Not Required ad hoc task
- For Pharmacy staff - Yes/No column added to printed Dispensing Report for use by Pharmacy technical staff. Search function upgrade to include task date/time which will help with prioritisation of work
- For GPs - Improvements to IDL content and layout

Work is ongoing to prioritise the next list of enhancements.

Safer Diagnostics

Laboratory Information Management System (LIMS) (Telepath) Replacement
The Project Team has been appointed and is working to develop a specification for a new LIMS which will replace the current Telepath system. Communication is being issued to all Health Boards who are participating to nominate representatives to the various discipline-specific subgroups.

Secure Clinical Image Transfer Service
A system to transfer secure clinical images was implemented in August. Before rolling out to clinical services, Medical Illustration Department is completing thorough testing before sign off.

Self-care and Remote Care

Remote Video Consultation
Facilitators have been employed on a short term basis to support services during the set up and go live of Attend Anywhere which provides video tools for patient consultations. As of September, 500 video consultations have been conducted.
Listed below are the services that have been or are in process of being set up to use remote video consultations.

**Live**
- Obstetrics and Gynaecology (RAH to Oban)
- Orthopaedics (cross border)
- WoS Fertility Counselling
- WoS Cleft & Craniofacial
- Spinal Injuries Unit
- Ophthalmology
- Hand Clinic
- Neonatology
- Dietitian – Renal
- Prison service - Greenock
- Barlinnie, Low Moss, Clutha House
- St Margaret of Scotland Hospice
- Renfrewshire HSCP - self referral
- Glasgow City HSCP - Tollcross Medical Centre/ Baillieston Care Home

**In Progress**
- Heart Failure
- Physiotherapy
- Mental Health / Counselling Esteem, Mother and Baby
- Perinatal Mental Health (Leverndale)
- Brownlee Psychological Service
- Dietitian (Paediatric, Oncology, Community)
- Specialist Children’s Services - CAMHS and Forensic CAMHS
- Podiatry Service hosted by
- East Renfrewshire HSCP - Clarkston and Mearns Medical Centers
- Oncology Bone Marrow Transplant Unit

**Planned**
- Obstetrics and Gynaecology (IRH to Dunoon)
- Pain Service
- Psychology
- Care of the Elderly & Stroke
- Physical Disability Rehabilitation Unit
- Palliative Care
- Renfrewshire HSCP
- MSK Ortho / foot protection

- 10.5% of Respiratory and 10.4% of Rheumatology consultations and advice referrals across NHSGGC were conducted via video call.

- Tollcross Medical Practice conducted its first video consultations with staff and patients at Baillieston Care Home on 8 October. This new service will allow care home staff to telephone the surgery as required and book a video slot. This will reduce GP travel and save time for both GPs and nursing home staff. The service will be evaluated by GPs at the practice and results shared in the coming months.
Primary Care and Contractor Service

Digitising GP Paper Records (Back Scanning)
The Health and Social Care Delivery Plan and the new GP Contract encourages the development of extended multidisciplinary teams working together centred around GP practices. Digitising files supports better ways of working, releasing space for additional clinical services and supporting changes, including bringing services together in one location. Currently, 66 practices have completed, or are in the midst of, back scanning, with some 350,000 files scanned since April 2019.

GP IT Re Provisioning
A National Programme initiative will see the Board’s current 235+ practice hosted GP Clinical Information Systems updated. Following a procurement exercise, three suppliers have been selected onto a National Framework Contract – Vision, Microtest and EMIS.

Detailed evaluation of the new solutions will take place from winter 2020 as they conclude their development phases. NHSGGC and other Boards will commence works at that point. Practice migrations are expected to start mid 2021 with an anticipated 20-24 month implementation phase.

Innovation

Chronic Obstructive Pulmonary Disease (COPD) Dynamic
Patient onboarding has begun for the pilot of the COPD Dynamic remote monitoring service. Initially, this will enable technology for patients to provide responses to a set of clinical questions and access online resources as well as provide readings from ventilators used in the home. The clinical application will aggregate and display the data generated by the patient to allow the clinical team to remotely monitor and prioritise care for patients who need it most.
**Dermatology Virtual Appointment Application**

This application allows patients to have offline appointments by allowing them to submit images and content to clinicians at scheduled times. This is currently in pilot phase and is due to run to the end of the year when evaluation will be assessed.

The system is fully integrated with the Electronic Health and Care Record including TrakCare appointments.

**Patient-reported Outcome Measures (PROMs) and Patient-reported Experience Measures (PREMs) Application for Ovarian Cancer Patients**

A new project has commenced providing an application to record outcomes and experiences for patients to drive future improvements in the patient pathway. The next phase will include integration with the Clinical Portal.

**Workforce and Business Systems**

**Theatre Systems Upgrade**

Implementation of a major upgrade to the theatre systems (Opera) was completed in June 2019. The upgrade involved hardware refresh, redesign and standardisation of business processes and a two stage validation process for theatre operations.

Implementation of Theatre Systems upgrade Phase 2 is planned for June 2020. The upgrade will include new management materials and anaesthetics modules.

**Digital Pathology**

This project is working towards the goal of 100% digitisation of pathology slides. The deployment of the new digital pathology reporting workstations is progressing to plan. It is planned that implementation will complete by 31 March 2020.

**Technology and Infrastructure**

**Telephony Transformation Programme**

The majority of NHSGGC’s estate is using old analogue telephony (PABX & PSTN links). There are plans to phase out analogue telephony by December 2020. NHSGGC’s new hospitals (QEUH/RHC) telephony is already based on newer core technology and has recently been upgraded in terms of resilience and external connectivity.
Migration to the new telephony platform is scalable and will cater for all organisational needs. The technology licenses and underlying technology enables functionality beyond traditional services such as:

- Instant Messaging (chat)
- Real-time presence information
- Video Calling
- Application integration
- Fixed / mobile convergence = pervasive access across users, devices & locations (inside & outside NHSGGC estate)

**Device Replacement Programme**
35,000 devices will be replaced or upgraded over the next three years as part of a rolling investment programme. Proactive Support staff have started rolling out new devices to prioritised areas.

**Windows 10/Office 365**
Plans are progressing to commence the transformation of the PC estate by providing new equipment and also migrating staff to new Office 365. This includes standard software such as Word, Excel and Outlook as well as new functionality to improve collaboration and sharing of information, together with video conferencing and messaging capabilities.

eHealth staff are working with colleagues from Inverclyde Royal Hospital to prepare them for implementation of Windows 10 and Office 365 simultaneously. This involves evaluating any dependencies on old versions of software, and also working with staff to identify files which will be migrated to the new system. First migrations are currently taking place. Alongside this work, work has been undertaken to investigate the use of O365 to support clinical MDT meetings. A prototype of the system has been designed and will be piloted in a number of cancer MDT groups over the coming months.

For more information, please contact pmo@ggc.scot.nhs.uk