

## **NHS GGC eHealth Recovery Plan**

### **Recommendation**

The eHealth Strategy Board is asked to:

- 1) Note the digital response to COVID19
- 2) Comment and approve the eHealth support for the Board's Recovery Plan
- 3) Comment on the re-prioritised eHealth Delivery Plan for 2020/21

### **Situation**

The eHealth response to COVID-19 has been significant and at scale in order to support clinical services during the pandemic. A number of agreed programmes of work were accelerated and delivered whilst some projects were put on hold in order to create capacity to deliver critical systems and support.

A review of the key programmes in the agreed eHealth Delivery Plan has been completed in order to understand the impact of accelerated projects, impact on projects on hold and also the eHealth Recovery Plan. In addition consideration has been given to how eHealth can sustain and continue to support the Board's recovery plan.

This paper sets out:

1. What has been delivered in relation to digital enablers to support the Covid-19 response since March 2020
2. eHealth support for the GGC Recovery Plan
3. A re-prioritised eHealth Delivery Plan for 2020/21 and projects put on hold

### **Background**

In order to support services during the COVID-19 response a number of projects were accelerated and scaled up. Significant resource from eHealth was deployed to undertake the scale up of multiple projects which are detailed in the section below. Whilst this was underway a number of established programmes of work were put on hold or slowed down to allow resources to focus on the accelerated programmes to support services.

In addition eHealth Operations staff mobilised resources and infrastructure to support the necessary response. This involved developing and implementing new platforms for remote access and a significant resource in order to provide the necessary equipment and system access provisioning.

Business Intelligence teams have developed new Command & Control dashboards and reporting, responding also to Scottish Government daily reporting requirements. Data feeds have been integrated into the eHealth response.

The response was managed through a Gold/Silver/Bronze Command eHealth structure with daily reporting up to the Director of eHealth at the Gold level. The structure diagram is at **Appendix A**.

In order to re-establish the eHealth Delivery Plan and assess the status of projects that were accelerated or put on hold a review of the plan has been undertaken by eHealth senior team, Programme Managers and the eHealth Clinical Leads Group.

## Assessment

### 1. Covid-19 eHealth response - what has been delivered

The eHealth response to support services has been significant. A Command and Control structure was put in place from the initial response and linking to the Board's governance structure. The structure is detailed in **Appendix A**.

A number of workstreams were established in order to programme manage the complex and changing requirements. A summary of what has been delivered in infographic form is attached in **Appendix B**.

Major programmes include:

**Remote Consultations** – Services initiated a range of solutions to ensure that, where possible, outpatient appointments and GP Practice appointments could continue. This included telephone and also use of video using the Attend Anywhere (Near Me) system. All GP Practices were enabled with additional equipment (2 x PCs, dual screens, cameras and headsets) plus set up on the Attend Anywhere system with training and support provided. GP Practice staff were also enabled with ability to use Attend Anywhere to hold patient appointments remotely from home.

A number of Acute specialties made use of previously installed equipment or implementations to scale up their use of video consultations in addition to telephone consultations.

Currently in NHSGGC between 400 – 500 appointments per day are carried out using video technology. This includes GP Practices who have adopted the system at scale and > 90% use the system on a daily basis across all HSCP areas.

A snapshot of usage data is attached in **Appendix C**

**HSCP Covid-19 Hub and Assessment Centres (CACs)** – Installation of infrastructure and extension of TrakCare and Clinical Portal clinical systems to support workflow and patient management. GPs and other administrative staff were trained to use new systems and ongoing support was provided remotely (and remotely on site using Teams) as staff rotation was frequent.

**Enabling Remote Access** – Support for staff working remotely with access to clinical systems and Attend Anywhere was provided. This required now over 4,000 remote access accounts in addition to support for those staff who already had remote access set up taking the remote enabled users to around 12,000 across GG&C. Move from PCs to laptops necessitated over 3,000 laptop devices to be procured, set up and delivered.

All staff were enabled with Microsoft Teams accounts to enable remote on line meetings, instant messaging and 1-1 chat. Teams was used to provide remote support in a number of locations including the CACs.

**Acute Programme** – Additional users and access to TrakCare provisioned and users trained. New ward builds and ICU floor plans and configurations actions in response to Acute Tactical Group requirements. New workbenches and workflow provided in addition to COVID-19 alerting feeding into business intelligence dashboards and reporting.

**Access to EHCR** – A number of existing projects were accelerated in order to provide wider access and additional critical clinical data.

- Introduction of GP Summary data into Clinical Portal was completed (3,506 launches Mar-Apr)

- Wider access to Clinical Portal for Community Pharmacy (588 launches Mar-Apr)
- Addition of NHS Forth Valley to Portal to Portal capability
- Anticipatory Care Plans
- Additional social care access (4,386 launches of social care summary Mar-Apr)

**Testing Programme** – Digital tools to support a complex and integrated staff and household members testing programme have been provided including test referrals and appointment process supported by the Health Records Referral Management Centre (RMC).

The testing programme has expanded to include care homes, asymptomatic testing and now contact tracing. The systems developed have had to change at pace to continue to support these processes including the implementation of increased diagnostic capability.

**Innovations** – The GGC Innovation Governance Group (IGG) approved a number of innovation projects to support the COVID-19 response including:

- Development of an COVID-19 Assessment App for CACs, ED and SATA
- Implementation of VCreate software in ICUs for patient / family contact
- Scale up of COPD remote monitoring

**NHS Louisa Jordan** – The eHealth response to the digital requirements for the NHSLJ involved the extension of the existing clinical systems which currently support patient and clinical pathways in NHSGGC. TrakCare and Clinical Portal were configured to include the new hospital and training and support was provided to the staff during induction on the site. Infrastructure including a new network connection, desktop devices and telephony were provided in addition to mobile imaging with links to PACs.

## **2. eHealth support for the GGC Recovery Plan**

eHealth are feeding in to the Board's Recovery Plan and the various Tactical Groups within the Board governance. Key areas of prioritisation are focussed around remote consultations, community phlebotomy and new pathways, with targets being set by the Board.

In addition the eHealth Clinical Leads Group agreed a range of enablers to support ongoing recovery programme which are summarised below. Clinical informatics and data outputs / reporting for these programmes will be included within the scope.

### **Remote Consultations**

In addition to ongoing implementation in acute services other areas that will be scaled up as a priority will include:

- More use in Mental Health Services, a programme is underway to support the implementation of this across all community mental health services in GGC
- Interpreter Services
- Ante-Natal and maternity clinics
- Cancer and Cancer MDT
- Optometrists, Dental Practices and Community Pharmacies

The recovery plan across all services will increase use of the Attend Anywhere (Near Me) system further as services are supported to adopt ACRT. There will be a need for more IT equipment in outpatient and clinic areas which can be booked and used on a flexible basis to ensure virtual consultations are booked to the appropriate clinic area.

In addition, Patient Initiated Review (PIR) is being implemented whereby, if routine follow up is not required, selected patients can be discharged with the opportunity to re-engage directly with the service if circumstances change, i.e. there is no requirement to return to the GP for a further referral for the same condition.

PIR will be used in conjunction with virtual consultations therefore if patients do choose to re-engage, they may firstly be assessed virtually if this is clinically appropriate and face to face consultation will only be arranged where absolutely necessary.

### **Virtual Patient Pathways**

The Clinical eHealth Leads Group are working on proposals to add further value to the use of virtual consultations by using technology to support the virtual patient pathway. This will involve:

- Identification of tests and investigations ahead of a virtual clinic appointment and the ability to take the test in the community or patient's home – Community Plebotomy.
- Tracking of investigations and results across services and potentially a range of virtual appointments
- Use of PROMS and PREMS and a range of patient generated information which can be used to enable more virtual care. This would be completed by the patient ahead of the appointment or whilst in the virtual "waiting room"
- Dashboards to support views of cohorts of patients for safety netting purposes

### **Electronic Health & Care Record (EHCR)**

NHS GG&C has an integrated Electronic Health & Care Record (EHCR) which delivers a single patient record. There is extended sharing of information to social care practitioners, General Practitioners and Community Pharmacists. Plans to extend this to Optometrists and Community Dentists are in place for end June 2020. GP Practices across GGC are sharing GP summary data into the EHCR. The EHCR is used extensively on a day to day basis to support patient care across NHSGGC and the WoS region also linking to the NoS EHCR and the EoS is planned.

In NHSGGC there are over 25,000 active system users including acute, GPs, HSCP and other community staff. Approx. 2.25 million patient records were accessed in past year. Access to the NHSGGC Anticipatory Care Plan (ACP) is provided via the EHCR as part of the integrated care record. Use of the ACP has increased during the Covid19 response and will be an important element of the ongoing patient pathway.

The Clinical Assessment Centres (CACs) which have been opened up across GGC have used the EHCR and also the TrakCare patient management system extensively to support assessment of patients and onward referral to ED/SATA or remote monitoring at home. Where infrastructure has been put in place for Covid Hub and CACs, there are opportunities to consider the GP OOH and in hours Urgent Care Hub plans to support drive for non-attendance at ED. There is also potential for the CAC model to be aligned to a community hub going forward.

Ongoing remote monitoring of patients discharged from the CACs and other facilities where they are at risk of deterioration, has been identified as a priority and will be a key part of the recovery plan as set out in the letter from Caroline Lamb Covid-19 Remote monitoring of patients during Response & Recovery. eHealth will be required to support the implementation of the digital tools to support remote monitoring in line with the necessary service models that will be implemented.

### **Remote Working**

12,000 staff are now enabled for remote working, an additional 3000 laptops have been built and implemented and 40,000 staff have access to Microsoft Teams. These enablers and the associated infrastructure provide the capability to consider how services including clinical and corporate operate in the future.

### **HEPMA**

Following conclusion of procurement implementation of HEPMA was due to commence in 2020 across all acute and mental health wards (total 330) plus an additional 115 theatres replacing the paper Kardex and integrating with medicines reconciliation processes already in place. Feedback from Boards who have already implemented HEPMA is that this was key to the management of medicines and prescribing in response to Covid-19. HEPMA will therefore be

prioritised within the GGC eHealth Delivery Plan as part of the Board's recovery plan. Other initiatives relating to prescribing include serial prescribing and ePharmacy.

### **Patient Digital Channels**

The development of a digital platform and patient portal in the WoS in 2018 demonstrated that patients digital channels can provide significant benefits to patients and there are opportunities for efficiency benefits.

The response to COVID-19 has highlighted the need to provide patients with results of their tests and a range of infrastructure has been put in place to support this. There is a need to build on this in order to sustain what has been delivered but also to scale up the scope and capability. Therefore GGC will implement patient digital channels to support ongoing results reporting and appointment notifications in the first instance.

In time this will include the ability to book online appointments with the hospital clinical services, view their digital health & care record and view and manage their schedule of appointments plus access patient information leaflets previously sent on paper in the post.

### **Innovations**

#### Remote Management of COPD Patients

A number of remote care initiatives have been expanded during the past 2 months including the scale up of the NHSGGC COPD platform, allowing remote management of a cohort of patients. The DYNAMIC (digital innovation with remote data management and machine-learned algorithms to integrate care of high-risk COPD) project commenced September 2018, and is scheduled to complete in August 2020. This is a digital health technology catalyst innovation funded by Innovate UK.

#### Patient Centred Visiting – VCreate

Implementation of iPad devices across all wards in NHSGGC has allowed patients to stay in contact with their family. For those patients critically ill in ICU additional tablet devices with VCreate installed were provided under a licence provided by Scottish Government. VCreate is a secure video messaging service, allowing staff to film short messages which can then be securely emailed to a family member.

#### Covid19 Assessment App

NHSGGC have worked with DHI and NES Digital to develop a new Assessment Tool for use in CAC's, ED and SATA. The SBAR styled, structured assessment application can be launched from TrakCare and is currently being rolled out across the CACs and piloted in the EDs and SATAs. This dynamic tool will also feed assessment data into the national data warehouse and TTI process.

#### Extension of Gyne PROMS/PREMS project

The GGC Gynaecological Cancer Service had implemented MyClinical Outcomes for Patient PROMS and PREMS within the services. The system was extended to monitor patients whose surgery has been delayed because of COVID-19, monitor patients with cancers other than ovarian cancer and include new question sets.

### **3. Re-Prioritised eHealth Delivery Plan**

Taking stock of accelerated projects and the need to focus on the eHealth support for the Board's COVID-19 Response the eHealth senior team have worked with the eHealth Clinical Leads to update and prioritise the eHealth Delivery plan. A summary of the re-prioritised plan is at APPENDIX D.

A number of projects have been delayed but will be re-instated and this is also shown on the plan. A number of projects have been put on hold while the focus remains on recovery and the

prioritised programmes of work. The list of delayed projects will need to be discussed with services where relevant. Significant projects put on hold include:

#### Integrated Health & Care

- Clinical portal forms/pathways not aligned with GGC Recovery Plan
- Patient Wrist Bands
- TrakCare workbenches and questionnaires not aligned to GGC Recovery Plan
- EMISWeb MH Inpatient Phase 2 unless aligned to the GGC Recover Plan
- EMISWeb clinical templates developments not aligned to GGC Recover Plan
- EMIS Web SCI Store and SCI Gateway integration
- CNIS Replacement
- GP requested ECG reports unless linked to GGC recovery plan
- Neonatal EPR

#### Safer Diagnostics

- IT input into PET RPU – to be reviewed

#### Self Care & Remote Care

- 2 Way patient texting – pending Patient Digital Channels programme
- Self Directed Care Decision Support

#### Technology & Infrastructure

- A number of infrastructure and system upgrade projects in order to prioritise W10 deployments, Telephony Programme and Office 365 Implementations

#### Workforce & Business Systems

- Attendance Management System – QEUH
- Dashboards for PPFM Operational Management
- eLinen Project
- Domestic Quality Module
- Waste Audit System
- Opera Theatre Phase 2 – Materials management / anaesthetics module
- Fire Audit system
- Porterng system replacement

### **Recommendation**

It is recommended that the eHealth Strategy Board:

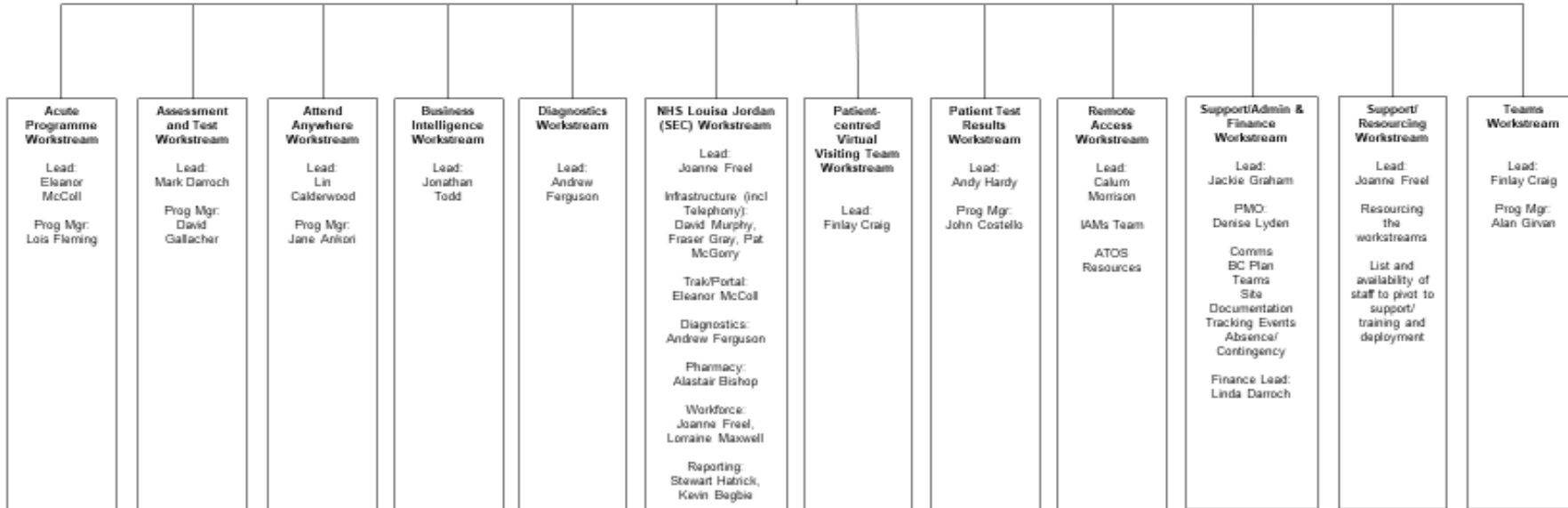
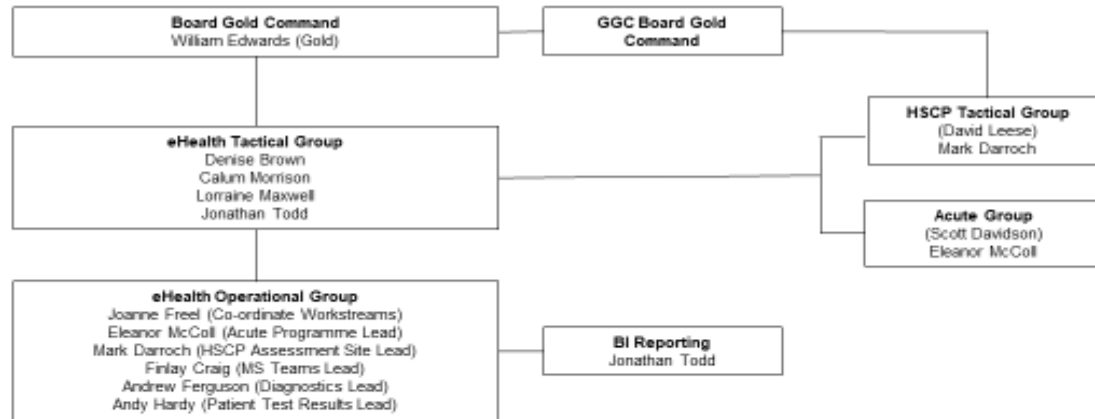
1. Note the digital response to COVID19
2. Comment and approve the eHealth support for the Board's Recovery Plan
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# APPENDIX A – eHealth Command & Control Structure

## eHealth Command and Control

Operations/BAU – Alex Rough  
 Contracts/Apps Support – Jim Rae

**8.30 am Daily Call** (WE, DB, JF)  
**4.00 pm Catch Up** – Room 1.1  
 Workstream Leads/PMs report to Tactical Group and Operational Group  
**Bulletpoint email update to WE** –  
**5.00 pm daily** (JF)



# APPENDIX B – Covid-19 eHealth response





## APPENDIX C – Attend Anywhere Usage Stats

Reporting Period	Total Consultations	Dration - Hrs	Total Providers	Total Callers	Dration - Mins	Ave Time per Consultation (Mins)
01-May	357	90.6	225	356	5436	15
02-May	5	0.4	2	5	26	5
03-May	1	0.1	1	1	4	4
04-May	201	24.6	112	201	1479	7
05-May	505	148.7	322	505	8922	18
06-May	411	130.6	286	411	7836	19
07-May	567	183.4	349	566	11003	19
08-May	416	111.6	250	413	6696	16
09-May	1	0.5	1	1	33	33
10-May	6	2.2	3	6	135	22
11-May	521	136.7	313	518	8202	16
12-May	521	168.2	343	521	10089	19
13-May	551	176.5	336	550	10590	19
14-May	599	200.6	344	597	12033	20
15-May	472	157.2	288	472	9433	20
16-May	4	0.8	3	4	50	13
17-May	6	1.2	2	6	74	12
	<b>5144</b>	<b>1534</b>		<b>5133</b>	<b>92040</b>	<b>18</b>

Reporting Period	Organisational Unit	Total Consultations	Dration - Hrs	Total Providers	Total Callers	Dration - Mins	Ave Time per Consultation (Mins)
01/05/2020 - 17/05/2020	NHS Greater Glasgow and Clyde	235	54	67	233	3259	14
01/05/2020 - 17/05/2020	NHS Greater Glasgow and Clyde "The Prince and Princess of Wales Hospice"	9	5	4	9	315	35
01/05/2020 - 17/05/2020	NHS Greater Glasgow and Clyde AHP Services	374	109	110	373	6567	18
01/05/2020 - 17/05/2020	NHS Greater Glasgow and Clyde General Outpatients	130	44	26	130	2630	20
01/05/2020 - 17/05/2020	NHS Greater Glasgow and Clyde Ophthalmology	2	0	1	2	24	12
01/05/2020 - 17/05/2020	NHS Greater Glasgow and Clyde Prison Service	45	4	7	45	268	6
01/05/2020 - 17/05/2020	NHSGGC Obstetrics Services	45	15	13	45	889	20
01/05/2020 - 17/05/2020	NHSGGC Perinatal Services	27	9	6	27	562	21
01/05/2020 - 17/05/2020	NHSGGC Specialist Children's Services	1144	570	312	1142	34193	30
01/05/2020 - 17/05/2020	NHSGGC Brownlee Service	7	6	2	7	375	54
01/05/2020 - 17/05/2020	NHSGGC Cardiology	34	9	11	34	514	15
01/05/2020 - 17/05/2020	NHSGGC Cleft Lip and Palate Service	22	5	5	22	289	13
01/05/2020 - 17/05/2020	NHSGGC Clinical Research Facility	1	0	1	1	2	2
01/05/2020 - 17/05/2020	NHSGGC Community Nursing	4	0	3	4	26	7
01/05/2020 - 17/05/2020	NHSGGC Diabetes Services	25	14	8	25	864	35
01/05/2020 - 17/05/2020	NHSGGC Dietetic Services	30	13	13	29	778	26
01/05/2020 - 17/05/2020	NHSGGC East Dunbartonshire	37	19	8	37	1149	31
01/05/2020 - 17/05/2020	NHSGGC Geriatric Services	6	1	4	6	75	13
01/05/2020 - 17/05/2020	NHSGGC Maternity Services	1	0	1	1	4	4
01/05/2020 - 17/05/2020	NHSGGC Mental Health Services	414	201	143	414	12059	29
01/05/2020 - 17/05/2020	NHSGGC Neurology Outpatient Services	59	16	16	58	952	16
01/05/2020 - 17/05/2020	NHSGGC Neurosurgery Services	4	1	1	4	40	10
01/05/2020 - 17/05/2020	NHSGGC Occupational Therapy	15	5	11	15	311	21
01/05/2020 - 17/05/2020	NHSGGC Oncology Services	148	37	27	148	2201	15
01/05/2020 - 17/05/2020	NHSGGC Oral Medicine	37	7	6	37	400	11
01/05/2020 - 17/05/2020	NHSGGC Paediatric Services	377	100	60	376	5995	16
01/05/2020 - 17/05/2020	NHSGGC Pain Management Service	1	1	1	1	30	30
01/05/2020 - 17/05/2020	NHSGGC Pharmacists	2	1	2	2	32	16
01/05/2020 - 17/05/2020	NHSGGC Podiatry Service	35	5	3	35	290	8
01/05/2020 - 17/05/2020	NHSGGC Primary Care Services	1631	194	441	1630	11636	7
01/05/2020 - 17/05/2020	NHSGGC Psychiatry Services	7	3	2	7	205	29
01/05/2020 - 17/05/2020	NHSGGC Psychology Services	67	34	29	66	2045	31
01/05/2020 - 17/05/2020	NHSGGC Regional Services	4	2	2	4	150	37
01/05/2020 - 17/05/2020	NHSGGC Respiratory Services	20	4	12	20	243	12
01/05/2020 - 17/05/2020	NHSGGC Rheumatology Services	6	1	3	6	57	10
01/05/2020 - 17/05/2020	NHSGGC Speech & Language Therapy	64	18	22	64	1058	17
01/05/2020 - 17/05/2020	NHSGGC Surgery Services	20	2	5	20	147	7
01/05/2020 - 17/05/2020	NHSGGC WoS Adult Cystic Fibrosis Services	30	13	5	30	772	26
01/05/2020 - 17/05/2020	NHSGGC WoS Genetic Service	14	6	4	14	343	25
01/05/2020 - 17/05/2020	St Margaret of Scotland Hospice Greater Glasgow and Clyde	6	3	2	6	169	28
01/05/2020 - 17/05/2020	Young Onset Dementia Service	5	2	2	5	121	24
		<b>5144</b>	<b>1534</b>	<b>1401</b>	<b>5134</b>	<b>92040</b>	<b>18</b>

## APPENDIX D – Re-prioritised eHealth Delivery Plan

### Re-prioritised Delivery Plan 2020/21

<b>Clinical Informatics</b>		
Clinical Informatics Workplan	Reduce manual reporting of waiting list targets and compliance, and maximise limited resources	In progress
Unscheduled Care Analytics	Reduce manual reporting of waiting list targets and compliance, and maximise limited resources	Delayed due to COVID
Health Records Operational and Management Reporting	Reduce manual reporting of waiting list targets and compliance, and maximise limited resources	In progress
HSCP Acute Operational and Management Reporting	Improve availability of robust reporting out of current systems	In progress
Maternity System Analytics	Improve availability of robust reporting out of current systems	In progress
National Submission Reports	Development of national submission reports	In progress
Development of Patient Cohorts and Registries	Development of patient cohorts and registries	In progress
Planned and Waiting Times Analytics Reporting and Publication Consolidation	Reduce manual reporting of waiting list targets and compliance, and maximise limited resources	In progress
Screening Programme Analytics	Improve availability of robust reporting out of current systems	Delayed until September
Theatre Systems Analytics	Develop availability of robust reporting out of current system	Delayed until September
<b>Innovations</b>		
iCAIRD	Industrial Centre for Artificial Intelligence Research in Digital Diagnostics – (iCAIRD) programme including implementation of software to support machine learning and artificial intelligence work packages	In Progress
Digital Appointment Communications and Interaction	Introduce digital solution to communicate with patients eg appointment information to patient with option to confirm, rebook and cancel. Reduce number of appointment letters sent by print and post.	Taking stock of where project sits in priority list for obtaining input from key participants during / post COVID-19 crisis.
Dermatology Digital Appointment Service (DDAS) SBRI	NHSGGC and NHS Forth Valley are running an SBRI funded project to pilot a new type of virtual clinic conducted via an offline channel, where repeat patients can submit progress reports (including photos of condition) electronically for assessment by clinician. Interaction with core systems will be made possible through the digital platform.	System adapted to handle other types of appointments remotely during Covid 19 crisis

Paediatric Seizure Asynchronous Video	Provision of an asynchronous video platform to enable patients and patient carers to upload footage of suspected seizure episodes and associated clinical data to aid clinical decision making.	Live initially in paediatrics and then on to adult neurology
Sleep CPAP Innovation	Innovation partnership collaboration NHS GGC and Storm ID to design, develop, implement, iterate and evaluate a digital service model for the remote-management of patients on CPAP therapy in NHS GGC	Delayed due to COVID
AI Modelling - Heart Failure	Developing a Novel 'Artificial Intelligence - Echocardiogram' Innovation Solution for Early Recognition and Avoidance of Hospitalisation in Heart Failure	Project Initiation not yet complete due to Covid work
Trauma App	An Innovate UK project providing a tablet-based application for data collection and clinical support during trauma incidents. Outcome data from incident can be saved into EHCR through the digital platform	Final development of UI screens complete  App repurposed for Covid Assessment
<b>Integrated EHCR</b>		
Access to EHCR Widened to Health and Community and Social Care Networks	Build a shared record accessible by social workers across the 6 HSCPs, community staff and independent contractors, supporting more efficient use of practitioners' time	Roll-out of new roles to Community Dentistry and Optometry; Continued roll-out to NHS24 and SAS
Anticipatory Care Plans	Building a shared record by developing an Anticipatory Care Plan and associated processes to optimise current status information exchange, creating system-wide visibility and improving decision-making.	Roll-out commenced.
Palpitations and Chest Pain legacy applications	Implement cornerstone solution to replace Palpitations, Chest Pain legacy applications	Delayed
Vascular Legacy Application	Replace vascular .Net legacy application with cornerstone applications	New design specification document based on the evaluation and assess clinical Portal and TrakCare delayed due to COVID
Rapid Access Chest Pain legacy application	Implement cornerstone solution to replace Chest Pain legacy application	New design specification document based on the evaluation and assess clinical Portal and TrakCare delayed due to COVID
Cancer Medicines Outcomes Programme (CMOP) Patient Reported Outcome Measures (PROMs) Dashboard	Platform to be embedded within TrakCare, with an icon added in the clinic view against patients who have completed the PROMs App prior to treatment.	Pilot extended and evaluation report will be submitted to CIC
General Surgery legacy application	Scope solution using cornerstone application to replace General Surgery .Net legacy application	Evaluate specification for use of TrakCare Active Clinical Notes delayed due to COVID work
Therapy Outcome Measures (TOMS)	To scope solution using cornerstone application to record Speech and Language Therapy Outcomes	New design specification document based on the evaluation and assess clinical Portal and TrakCare delayed due to COVID work
GISMO Legacy Access Database	Replace system for recording bone densitometry appointments utilising cornerstone application	Part of Clinical Portal Re-platform Phase 2  Scoping to take place for use of TrakCare Active Clinical Notes

Problem Lists	Develop an electronic solution to identify patients with co-morbidities and allergies to improve patient safety and care	Part of Clinical Portal Re-platform Phase 2
Clinical Portal Forms, Pathways, Patient Notes	Replace Acute Services' legacy InfoPath forms and patient notes with Clinical Portal Forms Pathways	A number of forms went live on 20 May. All new requests will be placed on hold unless part of recovery plan.
HSCP Social Care Summary in Clinical Portal	Building a shared record by providing enhanced information sharing to NHSGGC Clinical Portal from the 6 x HSCTs	Now live in 5 HSCTs  GCC/CGI did not have capacity to support project due to Covid-19 response.
BWoSCC EPR Implementation	To develop and implement an electronic health and care record for Beatson West of Scotland Cancer Centre (BWOSCC) that will replace paper based workflows.	Redesign and transition delayed due to COVID work
Acute and Community Respiratory Team Digital Enabled Care	Deliver digital workflow and pathways by improving COPD pathway between Acute and Community Service, improving patient monitoring and reducing avoidable admissions	Respiratory Single Shared Assessment Form in Clinical Portal was due to go live in March but placed on hold following request from service
Replace CPA Legacy Database	Scope solution of using cornerstone applications to replace mental health Care Programme Approach legacy Access database	Progressed final SBAR agreement and build shell of service EMIS Web.  Service sign off and implement live in EMIS Web planned for May 2020
Cancer Waiting Times legacy application	Scope solution of using cornerstone application to replace Cancer Waiting Times .Net legacy application	Delayed due to COVID work
Clinician to Clinician Referrals	Deliver digital workflow and pathways by enabling clinicians to refer electronically using TrakCare and thereby reducing inefficiencies, removing paper internal letters etc	Proposal Paper to be drafted and presented to eHealth SMT/Clinical Leadership Group and Technical Design Group
Replace Heart Failure legacy application	Implement cornerstone solution to replace Heart Failure .Net legacy application with cornerstone application	Continue development of form and Orion development. Planned go live June 2020
TrakCare - ED Scanned Documents	Recreate clinical notes and admission documents used in Emergency Departments on TrakCare	In progress
Electronic Observations	Pilot of eObservations System followed by procurement and implementation	Proof of Concept in Ward 51, GRI concluded. Full business to be drafted
Nursing Documentation	Building a shared record by developing and implementing electronic nursing documentation - My Admission Record and ED Documentation	Delayed due to COVID
Health and Social Care Out of Hours Services	Support the development of an integrated electronic solution which will supported integrated and co-ordinated working of this new service	Currently in development phase
Digital Support for Multi-disciplinary Teams (MDTs)	Building a shared record by improving MDT working and sharing clinical information and recording within the EHCR	Go live planned for Pancreatic cancer and Pynaecology
Bowel Screening Legacy Application	Scope solution of using cornerstone application to replace Bowel Screening .Net legacy application	In progress
EMIS Web - Phlebotomy & Treatment Rooms Services Phase 2	Complete Electronic Health & Care Record for Treatment Room and Phlebotomy Patients. Implement EMIS Web to Phlebotomy & Treatment Rooms Services across Partnerships.	Going live with East Dunbartonshire on 1 June 2020

Document Management System for Community	Implement a document management software solution across Adult, Children's and Mental Health Services. This will provide functionality for the production, management and electronic distribution of clinical documentation. The ability to share these to SCI Store, Clinical Portal, EMIS and GP systems.	Phase 1 implementation Adult Rehab Treatment Rooms, Phlebotomy  Phase 2 Mental Health & Children's Services
SCI Gateway - EMIS Web Referrals	Building a shared record by developing and implementing integration between SCI Gateway and EMIS Web, eliminating the requirement to manually upload referrals to the patient's care record	EMIS Web recommence development
Maternity Services Phase 2	To implement cardiotocology scanning and reporting functionality within the Maternity Services system	Work continuing gathering requirements and preparing infrastructure for CTG pilot. This and other components of Phase 2 impacted by Covid 19
Electronic Transfer of GP-requested ECG Reports from Acute Hospital Cardiology Depts Direct to GP Practices	Configuration and Implementation of MUSE-EDT Direct Link Option for ECGs	Delayed
<b>Patient Administration Transformation</b>		
Patient Administration Single Structure	Work with services to transfer admin staff to a single structure on an incremental basis	Reception centralisation Delayed until June 2020
<b>Primary Care and Contractor Services</b>		
GP 2 GP Record Management Transfer Solution	Phase 1 Pilot - will provide a changed process to the deduction and registration activities within GP Practices in Scotland.	NHSGGC rollout completed in April 2020.  Record transfer between NHSGGC and other Boards is delayed due to COVID-19
Child Health System Replacement	To replace existing national Child Health system that will provide enhanced functionality.	Developments progressing  National programme planning being taken forward with current CHI Go Live estimated at Q2 2022 and Phase 2 - Q4 2022
CHI Replacement	To replace existing National CHI system that will have enhanced functionality.	National programme planning being taken forward with current CHI Go Live estimated at Q4 2021 National team taking forward interface developments.
SCI Gateway - New Requests (ACRT)	Contribution to EHCR, secure clinical communications across services, continued use and uptake for SCI Gateway across services	Only progressing new requests as part of ACRT project
Vaccination Transformation Programme	SG/GP contract requirement to transform vaccinations, currently carried out with practice to other NHS and independent contractor groups. GGC is working with National Interim and long term solution sub groups. Long term solution is expected to utilise the new Child Health system, Tranche 4 developments commencing in late 2022. Interim solutions are currently being reviewed which include amendments to the existing Child Health solution. A decision is likely to be made early Q2 2020.	Work put on hold until June 2020 due to COVID
Implementation of SCCRS Primary Hr-HPV testing	To implement national Primary Hr-HPV testing	Delayed due to COVID
National GP IT Re-Provision Programme	National project is underway for a simple and efficient GP IT Re-provisioning exercise to develop a GP IT Framework.	Following a mini tender exercise in late 2019, it is anticipated that migrations will commence Q1 2021 and

		conclude Q1 2023, with approximately 120 practices migrated each year.
GP Medical Records Backscanning	Back scanning of GP Records in GGC HSCP's and upload to Docman System as part of HSCP PCIP Plans. This will create additional clinical workspace within practices and aid information flows through GP2GP and significantly reduce a 2 stage process. Current plan from start of Fin year 2020-21, will see the remaining ~50 practices backscanned.	Work to recommence following COVID
<b>Safer Diagnostics</b>		
Replacement PACS	To replace current PACS system across NHSGGC which has come to end of life.	Work delayed due to COVID
LIMS Replacement	To facilitate effective management of Laboratory result management and replace obsolete system	Progressing with outline Business Case and specification
Clinical Decision Support Radiology Pilot	Implement Medcurrent iRefer CDS, a clinical decision support tool used by clinicians to access a set of evidence-based criteria when ordering imaging examinations. The tool will assist the referring clinician by validating the appropriateness of the requested examination at the time of the order	Project team established
Digital Pathology Implementation	To fully digitise NHSGGC Pathology Service	Planning meeting postponed due to COVID
Radiology Reporting	Implement a range of reporting solutions - Medica, DMC, 4Ways	Medica and 4WAYS implemented in April 2020  DMC testing underway
Clinical Decision Support for iLiver Function Tests	Introduction of Clinical Decision Support pilot for liver function testing	To commence
TrakCare Results Sign Off	To improve efficiency in reporting diagnostic results and enhance patient safety	In progress
Order Comms - Sexual Health and Community	To automate ordering of tests and reporting to improve clinical workflow, efficiency and enhance patient safety	Delayed until August
DRS Scotland Vector Transition and RIS to Optimise Platform	Transition DRS Vector to new platform Optimize system	Testing underway
Image Storage for Advanced Clinical Methods	To set up image storage for advanced clinical imaging techniques	Due to complete in August 2020
<b>Safer Use of Medicines</b>		
HEPMA Implementation	Implement hospital electronic prescribing and medicines administration (HEPMA) system across NHSGGC inpatient areas, replacing paper drug chart.	Targeting pilot late 2020; complete rollout by second half of 2022.
Falsified Medicines Directive	Validate authenticity of medication. Install verification software application and update Pharmacy robots.	Go live in March 2020 was postponed due to COVID. Rescheduled date to be confirmed not achieved.
Statistical Analysis for Antimicrobial Resistance	Install the student-designed software programme on NHSGGC server accessible to Microbiology doctors for testing and pilot project, analysing its impact	Delayed due to COVID
<b>Self-Care and Remote Care</b>		

Active Clinical Referral Triage	Utilise available resources and clinic space to best effect, improving clinical pathways, ensuring consultant time is used effectively. Improving patient's experience, meaning only patients who require to attend secondary care are invited, promoting self-help and involving patients in their own health care.	Work recommenced following short delay due to COVID
Remote Consultations - HSCPs and Primary Care	To implement Attend Anywhere across HSCPs to support remote consultations within primary care services and mental health services and Acute outpatients	Roll out completed for GPs. Partially completed Community Services (Optometrists, Pharmacists, Dentists and Care Homes).
Remote Consultations - Acute and Advice Referrals	To offer choice and convenience to patients maximise workforce capacity and outpatient clinic utilisation. A number of specialties have provided remote consultations. This will be increased through oversight from Acute Directors.	Rolled out across antenatal services; respiratory To progress roll out to gynaecology, respiratory
Remote Consultations - Argyll and Bute	Cross-Board Attend Anywhere Dermatology and Respiratory Pathways with Argyll and Bute	Delayed due to COVID
<b>Technology and Infrastructure</b>		
Production Infrastructure Programme	The procurement and implementation of a replacement Infrastructure platform. This platform will be consolidated within QEUH and RHC computer rooms, resulting in the closure of several older rooms and the migration of 100's of systems onto the platform.	Migrations from legacy GRI and WWH VMWare environments completed
Office 365 Implementation	Implementation of Office 365 across NHSGGC	0365 Teams roll out across NHSGGC. Migratration for NHS.net to 0365 has commenced and will be completed by September 2020
Microsoft Digital Transformation	Replace end of life systems in line with W10	Roll out has commenced
Virtual Desktop Infrastructure - Scoping, Tender and Refresh	Replace the Virtual Desktop Infrastructure hardware. The aim is to create an infrastructure that can be fully utilised across both data centre rooms at QEUH and have a DR site at WWH, so will therefore need to be re-designed, re-tendered and replaced	Complete in April 2020
Re-platform of Legacy .NET Applications	To re-platform .Net legacy applications: Cancer Waiting Times; CNIS; Heart Failure; Bowel Screening; General and Vascular Surgery; Palpitations; Rapid Access Chest Pain; Therapy Outcomes Measures Systems; GISMO	Delayed until July 2020
Blood Pressure Database (part of Clinical Portal Forms programme)	Building a shared record by developing an Anticipatory Care Plan and associated processes to optimise current status information exchange, creating system-wide visibility and improving decision-making	Clinical Portal Blood Pressure Forms Go Live date with service for review
DMZ Hardware Refresh	The current NHSGGC DMZ (De-Militarised Zone) is not resilient and this project aims to install and configure a duplicate environment that will have all the virtual servers replicated so that in the event of an outage, services will remain up and running	
Server Request for GDH Intra Oral Scanners	GDH recently purchased a new intra-oral scanner to back up 1tb of images to purchase Codiagnosics9 and upgrade PCs to run software	Delayed

Device Replacement	Ensuring organisational stability by planned replacement of devices across NHSGGC wide estate (including GP estate)	Priority
NHSGGC Weight Management Service replacement application	To scope options of using cornerstone applications to replace existing Weight Management application	Design Phase and build in Cornerstone Apps
Telecomms System Improvement Plan	Digitally enabled telecoms, sustainable and supportable infrastructure and cost efficiencies	Progress slowed down due to COVID – now recommenced
Ophthalmology Medical Device Refresh	Replacement of specific obsolete medical devices in Ophthalmology Departments across NHSGGC	Work delayed due to COVID
CEPAS/ Chemocare	Upgrade Adult and Children's Chemocare to V6	Project plan submitted to Programme Board
Pharmacy Ascribe Upgrade	Upgrade of the Pharmacy Ascribe System across NHSGGC	To be reviewed in line with HEPMA programme
Genetics PASS Upgrade from v3 to v4	Upgrade to v4 of the PASS system and deploy subsequent release	Testing underway
IV Consumables Replacement	Replace current fleet of volumetric infusion and syringe pumps, with the launch of new drug library software. These pumps will have wifi connectivity or the ability to contact via an Ethernet cable to the NHS network. Currently in Neuro Inst, ICU, these pumps are interfaced to patient information system. The new make of pumps have to be connected, this may be required in other ICUs in future.	Delayed due to COVID
<b>Workforce and Business Systems</b>		
Catering System Replacement	To implement national Catering System (Menupick)	Completed in April 2020
Excellence in Care	Provide dashboard allow nursing staff to view Excellence in Care indicators from Datix recording. Provide Data Capture system to allow the recording and outcome of national and local	Due to complete January 2021
Donor Milk Bank Tracking System	The Scotland-wide Donor Milk Bank Service uses Tissue Trace to label, track and manage donor milk stock. The system requires modernisation/ development for the management of all aspects of milk donation from registering donors to the release of donor milk, including the tracking of all milk and preventing the release of milk not cleared for use.	
Datix System replacment	Procurement and Replacement of the Datix Incident Management System.	Tender issued – now national project
Anaesthetics eRoster System	Commissioning and Implementation of an eRostering system for Anaesthetics	Tenders to be reviewed
National eRostering	Specification and evaluation of a National Roster System in conjunction with National Procurement.	Delayed due to COVID
National Telematic System	To implement National Telematics System across the Board's transport fleet to improve logistics, reduce insurance/accident claims and fuel costs	To commence
New Dental Clinical System into Acute dental sites	Implement Dental Clinical system into Acute Dental sites	To review responses to ITT



Speech Recognition Pilot	To implement pilot for 8 users in Riverside CMHT and 4 users in Glasgow Dental Hospital	Delayed due to COVID
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### Projects on hold

<b>Clinical Informatics</b>		
Health Records Operational and Management Reporting	Reduce manual reporting of waiting list targets and compliance, and maximise limited resources	On hold
Unscheduled Care Analytics		On hold
Screening Programme Analytics		Delayed until September
Theatre System Analytics		Delayed until September
Sentinel Upgrade	Proposal to upgrade the Spacelabs Healthcare "Sentinel" system and associated medical devices	On hold
<b>Integrated Health &amp; Care Record</b>		
Clinical Portal Forms, Pathways, Patient Notes - new requests not part of recovery plan	Building a shared record by replacing InfoPath forms and key legacy patients notes	On hold
Printed Patient Wrist Bands from TrakCare	Extending roll-out of printed patient wristbands to acute sites	On hold
TrakCare Workbenches and Questionnaires	Deliver digital workflow and pathways by improving collaborative working and workflow, and improving patient safety	On hold except for requests arising from recovery plan
EMIS Web - Mental Health Inpatient Phase 2	To scope deliverables for Mental Health in-patient activity – implementation to in-patient staff to record electronically instead of the paper record (scope being determined); assessment documentation recorded electronically; patient review processes; prescribing and administration management (community and in-patient); script printing from EMIS Web to replace EMS PCS (Addictions Service); care plans developed electronically; Order Comms; EDT data quality and KPIs work; SCI Gateway mobile app; business continuity; SCI Store	On hold except for requests arising from recovery plan
EMIS Web - Mental Health Act Development	Deliver digital workflow and pathways by progressing outstanding and new developments in the Mental Health Act module in EMIS Web and by producing reports	On hold
EMIS Web - Revised Universal Pathway - Phase 2	Building a shared record by aligning the national initiative with the EMIS Web developments. Previously using the assessments module and moving to clinical templates (additional functionality)	On hold
EMIS Web - Updating patient demographic info from SCI store to EMIS Web	SCI-MPI – updating patient demographic information from SCI Store to EMIS We	On hold
Renfrewshire Dementia Tablet Technologies	To use technology to provide life story work, reminiscence and reality orientation therapies to in-patients with moderate to severe dementia	On hold
CNIS Replacement	Building a shared record by developing and implementing a replacement for CNIS across the District Nursing service within NHSGGC. EMIS Web has been selected to provide a comprehensive EPR for Children's, Community and Mental Health services. Allowing for seamless data sharing between	On hold

	services and EMIS PCS and integrations with other clinical applications such as SCI Gateway and Clinical Portal	
Electronic Transfer of GP-requested ECG Reports from Acute Hospital Cardiology Depts Direct to GP Practices	Configuration and implementation of MUSE-EDT Direct Link Option for ECGs	On hold
Neo-natal EPR		On hold
<b>Safer Diagnostics</b>		
IT Provision Review within PET RPU	PET RPU to introduce a LIMS and all laboratory equipment to be networked. To achieve these aims, dialogue with NHS IT experts to be established and a joint route map for changes required to be prepared	On hold
<b>Safer Use of Medicines</b>		
Technical Evaluation - Pharmacy Contract Management Pilot		On hold
<b>Self Care and Remote Care</b>		
NHSGGC and Glasgow Life Partnership to Support People Living with Dementia and their Carers	NHSGGC Library Network will provide technology that can be use in the hospital and provide knowledge of health needs and facilitate safe, supportive interaction with patients	On hold
Self-Directed Care Decision Support	Develop a business case for delivery of decision support for the implementation of self-directed care, for both the public and social care staff	On hold
Two-way patient texting service	Improve communication between patients and the Referral Management Centre teams; expand on technology currently available to allow text messages to be interactive; work with suppliers to enable the technology	On hold
<b>Technology and Infrastructure</b>		
Software-defined Wide Area Network	PoC for Software-defined Wide Area Networking is to test the SilverPeak SDWAN kit that has been purchased. The PoC will be set up in a SWAN GP surgery and in the GRI Macewan Server Room. The POPC will only be available in the SWAN-connected practices	On hold
HSCP Integration Work	Implement CISCO ISE within identified sites. This will allow partner org devices to access network resources from guest network. Printing solutions are also included	On hold
App v6 Server		On hold
Replacement of Nutritional Analysis Tool	Replacement for the current N4P Nutritional Tool. This is a national project	On hold
Replacement of Occupational Health System	Replacement for the COHORT, need to do market testing and complete a full tendering process	On hold
Airview Software Launch - Children's Sleep Services	Setup and trial of the Airview software delivered by Resmed, already used within Adult services. This software will bring the ability to remotely monitor patients at home using Non-Invasive Ventilation (NIV). The focus of the trial will be for patients who use NIV for conditions relating to sleep disordered breathing.	On hold

Encore Anywhere	Networking of Espion systems so data is backed up to and managed on an NHS IT server	On hold
QPulse Upgrade	To upgrade the core application to v6.8	On hold
Visual Electrophysiology Equipment Networking	Networking of ESP on systems to data is backed up to and managed on an NHS IT server	On hold
Visual Electrophysiology System	Access to the NHS IT network for back-up and Windows 10 updates	On hold
XLTEK Document Interface to SCI Store	Implement the interface between XLTEK and SCI Store	On hold
Server Storage for Paediatric Bronchoscopy and Endoscopy Videos	To scope requirements for server storage for Paediatrics and Endoscopy videos	On hold
Topcon ImageNet Upgrade	Upgrade of the Topcon ImageNet application in NHSGGC to version 1.26	On hold
Echo report interface to SCI Store	Reports from both GE and Philips Cardiac Ultrasound scanners to be electronically uploaded to Clinical Portal	On hold
Optical Coherence Tomography (OCT) Image Transfer	To network OCT machine to allow the electronic transfer of images from the INS at the QEUH to the Ophthalmology Dept at GGH. Recommended that the images collected by the OCT machine be backed up and stored on a virtual server	On hold
<b>West of Scotland Digital Programme</b>		
WoS Ophthalmology Service Review	Referrals from Optometry to Ophthalmology, discharge, outcome and follow up information back to referring Optometrist from Ophthalmologist; advice only messages with attached images between Optometry and Ophthalmology; use of EPR systems within Ophthalmology; electronic communication between Optometrist, Ophthalmologist and GP for patient shared care	On hold
<b>Workforce &amp; Business</b>		
Attendance Management system - QEUH (PPFM)	Explore options for installing employee attendance management system in QEUH	On hold
Dashboards to Support PPFM Operational Management	To provide an environment whereby reports can be easily generated for the day-to-day business, weekly management summary, KPI and benchmarking reports. Potential solution via Microstrategy. Phase 1 – Portering Service - Reporting	On hold
eLinen Project	Implement the electronic linen system	On hold
Domestic Quality Module	Replacement for domestic monitoring tool	On hold
Waste Hold Audit System	Procurement of a system to electronically capture and manage audits taken from waste holds at all NHSGGC sites	On hold
Opera Theatre Systems Upgrade Phase 2	Phase 2 scope to be finalised. Indications are Materials Management and Anaesthetics system	On hold
Monthly Fire Audit System	Creation/procurement of a system for fire audits that will generate reminders when fire audits are due, highlight which departments are failing to complete audits, reduce the manual processes involved, saving time and labour costs, link to the FM First system so that any fault automatically generate a ticket on FM First	On hold

Business Classification Scheme	To plan and implement Business Classification scheme for the management of records and information across NHSGGC	On hold
Portering System Replacement	Use of national system within NHSGGC to be decided by PPFM Director following clarification of national funding contribution and assessment of ongoing costs for NHSGGC	On hold