

Local Digital Road Map**Governing Body meeting****5 May 2016**

Author(s)	Victoria McGregor-Riley, Deputy Director for Transformation
Sponsor	Tim Furness, Director of Delivery
Is your report for Approval / Consideration / Noting	
Approval.	
Are there any Resource Implications (including Financial, Staffing etc)?	
Not currently identified.	
Audit Requirement	
Principal Objective: To ensure there is a sustainable, affordable healthcare system in Sheffield.	
Principal Risk: 4.6 Provider development required to deliver new models of care and achieve CCG stated outcomes does not happen	
<u>Equality impact assessment</u>	
EIA (screening) undertaken. This suggested that further assessment of the specific impact on protected groups of any new technology or digital intervention ought to be undertaken when there was more clarity about which interventions were to be implemented. At this stage proposals in relation to new significant innovations are still conceptual. The need to ensure rigorous evaluation of innovations, including impact on health inequalities, will remain a key focus for this workstream.	
<u>PPE Activity</u>	
A series of engagement opportunities with our wider stakeholder community is planned for April-May 2016 to support the identification of Sheffield digital and interoperability priorities. This follows from an engagement event in December 2015. It is further anticipated that engagement will also take place within the remit of the South Yorkshire and Bassetlaw Sustainability and Transformation Plan which has a Digital Healthcare workstream. The development of a Local Digital Roadmap will form an integral part of this workstream.	

Recommendations

Governing Body is asked to:

- Note the progress in the development of the Local Digital Roadmap
- Approve the proposed digital priorities currently identified for primary care and across our wider Sheffield footprint as a result of the recent baseline assessment work
- Approve the proposed sign-off process to support submission of the Local Digital Roadmap by 30th June 2016.

Digital Road Map

Governing Body meeting

5 May 2016

1. Introduction

- 1.1. 'Personalised Health and Care 2020' and 'A Five Year Forward View' have recognised that variable progress has been made to harness the potential of information and technology to help deliver health and care over the last twenty years. In response, NHSE is seeking to reinvigorate momentum for the roll out of digital and technology innovation in the delivery of health and social care.
- 1.2. In Sheffield, all partners recognise that we have not been able to exploit the opportunities offered. The CCG has acknowledged this, and expressed commitment to make progress in its 2016/17 Operational Plan.
- 1.3. A key strategy launched by NHSE in June 2015 was the development of local digital roadmaps (LDRs). These were to provide a clear assessment of current digital maturity and a plan for improvement to achieve a state of 'paper-free at the point of care'. The deadline for submission is 30th June 2016.
- 1.4. CCGs have been expected to undertake a role of system leadership and coordination in the development of the LDRs. Ongoing delivery of agreed LDR milestones will be monitored via commissioner and provider assessment mechanisms.
- 1.5. Initial discussions between commissioner organisations in South Yorkshire and Bassetlaw (SYB) confirmed that each of the five CCGs would submit individual LDRs. However, it was agreed that an overarching narrative would be developed to demonstrate awareness of the increased need for coordination/cooperation of digitisation across SYB. To this end a SYB 'CCG IT Leads' forum was established in January 2016.
- 1.6. Since the launch of the LDR initiative, NHSE has implemented a new planning process for delivery of Sustainability and Transformation Plans (STP). Whilst LDRs were initially launched as a standalone initiative, there has been an increasing recognition that LDRs now form an integral part of the STP processes.
- 1.7. Consequently, the STP for SYB now has a Digital Healthcare Workstream that is regarded as a key enabling workstream. A key priority of this workstream is proposed to be delivery of paper-free at point of care.

2. Background

Local Digital Roadmap

- 2.1. The National Information Board (NIB) document 'Personalised Health and Care 2020, Using Data and Technology to Transform Outcomes for Patients and Citizens - A framework for action' committed that local health and care economies would, by April 2016:

- produce detailed roadmaps highlighting how, amongst a range of digital service capabilities, they will ensure clinicians in all care settings will be operating without the need to find or complete paper records by 2018; and
- ensure that by 2020 all patient and care records will be digital, real-time and interoperable

2.2. The Five Year Forward View (2015) states ‘the NHS needs to adapt to take advantage of the opportunities that science and technology offer patients, carers and those who serve them’ and ‘We will ...raise our game on health technology – radically improving patients’ experience of interacting with the NHS’.

2.3. This ambition is challenging. Technology and digital health/care innovations have to date generally failed to transform the day-to-day experience of most patients. Our system architecture has historically been organisationally determined rather than user-focused.

2.4. LDRs require us to take a very different approach by accelerating joint working across our Sheffield health and care community to support patient flows across existing organisational boundaries.

2.5. In order to galvanise efforts towards system digital maturity Sheffield city partners held a joint technology workshop on 6th July 2015. This was well attended by technology and information representatives from Sheffield Teaching Hospitals, Sheffield City Council, Sheffield Children’s Hospital, Sheffield Health and Social Care NHS Foundation Trust, NHS England, Yorkshire and Humber Commissioning Support Unit, Primary Care Sheffield and NHS Sheffield CCG (Yorkshire Ambulance Service sent apologies).

2.6. At this event, the importance of securing and accelerating the momentum towards improved digital maturity across Sheffield was understood across all partner organisations. The group also recognised the value of system leadership in promoting this agenda, working across all partners and having a city wide mandate to drive change in order to secure overall success. This was followed by a similar event on 23rd September 2015.

2.7. Outcomes from these events included agreement to establish two groups:

- a) ‘Sheffield Digital Roadmap Development Group’
- b) ‘Sheffield Shared Records Information Governance Steering Group’

These groups have continued to meet on a monthly basis in order to develop a shared LDR including identification of priorities for development and developmental milestones.

Test Bed Status

2.8. As part of its intention to drive interoperability and innovation across health and social care communities NHSE also launched a ‘Test Bed’ programme in March 2015.

2.9. This programme was established to accelerate commercial/public partnerships which both promoted innovation in technology and accelerated implementation at pace and scale to meet the government’s digital ambitions.

2.10. Further information can be found here:

<https://www.england.nhs.uk/ourwork/innovation/test-beds/>

- 2.11. Sheffield City Region was successful in its application for Test Bed status. As well as an investment fund of £1.8m, the 2 year Sheffield City Region Test Bed Programme has subsequently attracted national attention through the senior sponsorship by the Chairman of NHSE (Malcolm Grant). The Test Bed Programme Executive lead sponsor is Sir Andrew Cash (STH).
- 2.12. Local governance arrangements for the Test Bed are currently being established with a focus on implementation of the programme in Sheffield for an initial period of up to 6 months.
- 2.13. There is a clear vision for increased digital maturity across the Sheffield City Region within the Test Bed Programme. Priorities include a focus on self care and self management, vigilance, risk stratification and population data analytics, as well as data sharing (for example in the form of a care coordination centre). The Test Bed promotes a focus on supporting people with one or more long term condition, including those with a serious mental illness.
- 2.14. The work to define existing priorities for which technological and digital innovations may be helpful has been undertaken in collaboration with NHS Sheffield CCG. Consequently, engagement events identified in Appendix A have been collaborative initiatives between the CCG, Sheffield University (as a sponsor) and the Test Bed Programme.
- 2.15. Testbed status provides an opportunity, and some resource, to make accelerated progress in exploiting technology. As such, it is an important delivery vehicle for the objectives and vision expressed in the LDR.

Sustainability and Transformation Plan

- 2.16. NHSE has also launched a new strategy and planning process for 2016/7. This requires local health and care communities to come together within larger units of planning to develop shared strategic objectives. These are to be published in the form of Sustainability and Transformation Plans (STPs). Place based plans for implementation at a 'lower' level of strategic and operational planning will still be undertaken, coordinated and published by local CCGs.
- 2.17. In SYB, place based submissions will focus on each of the five core CCGs. The SYB STP will focus on five system wide transformation workstreams: Urgent and Emergency care, Elective and Diagnostics, Cancer, Mental Health and Learning Disabilities, and Maternity and Children's services. In addition, there are five cross cutting workstreams:
- Workforce
 - Digital, IT (technology & research),
 - Carter, Procurement and Shared Services
 - Finance and Economic Development
 - Public Sector Reform and the City Region.
- 2.18. A Digital workstream has now been established under the auspices of the SYB STP Programme. This group is to be led by an Executive lead (Andrew Riley, Managing Director of the Yorkshire & Humber Academic Health Science Network (YH AHSN)). The nominated CCG lead is Lesley Smith (Accountable Officer, Barnsley CCG), with senior representation from Sheffield CCG (Victoria McGregor-Riley) and Barnsley CCG (Jade Rose). Clinical leadership is provided by Richard Cullen (GP, Rotherham CCG). Further senior leadership and support

is provided by Professor Wendy Tindale (STH Chief Scientific Officer and Programme Director for Test Bed).

- 2.19. The overarching work of the STP means that there now needs to be further consideration of governance arrangements i.e. future development of the Digital workstream of the STP as a possible Sheffield City Region LDR. This will support integration of the individual plans for each of our 5 SYB CCGs.
- 2.20. It is imperative within such arrangements that whilst we remain able to 'think globally' we can still 'act locally', maintaining a clear focus on delivering local solutions to local challenges and promoting differential investment as necessary in order to achieve improvements in health and wellbeing and reducing health inequalities.

3. Next Steps

Confirming Priorities for Sheffield

- 3.1. A high level update on progress of the LDR against key milestones is given in Appendix A. Final guidance (with supporting templates) has not yet been issued. Until there is clarity on the format and content required, development of the LDR remains aligned to current draft documentation. This focusses on 7 capabilities for operating paperfree at the point of care and 10 universal capabilities (see Appendix B).
- 3.2. An initial draft to map delivery of these capabilities within Sheffield is provided in Appendix C.
- 3.3. An initial LDR baseline assessment of current levels of digital maturity across Sheffield providers (excluding primary care, nursing and care homes) was conducted in January 2016. This assessment indicated that there is a wide variation of maturity across organisations. Sheffield scores, on average, were similar to national baseline averages but there were clear areas for improvement but within and across our city.
- 3.4. As a result of this work, the following were identified as digital maturity priorities for providers within the Sheffield health and care system:
 - Medicines Management and optimisation – including prescribing
 - Transfers of Care – including e-referral and discharge processes
 - Wifi – supporting connectivity across our communities
 - Shared Care Records – accessibility of records across providers and those authorised to view including the patient, carers and families as well as professionals.
- 3.5. Local health and care delivery challenges requiring further digital maturity have also been identified within our 2016/7 Operational Plan for Sheffield. These are:
 - Continuing to support e-advice and consultation
 - Review electronic transfer of tests requests and results across the system.
 - Promoting access to IAPT services through online or apps.
 - Promote local awareness of record sharing (including consent models and opt-out processes) and access to records

- Strengthen existing functionality of e-booking for GP appointments.
- Develop a universal Sheffield Record Sharing Framework that includes common IG standards across the health and care system. This will include processes to audit 'break glass' data accesses and develop effective communications for patients and professionals to encourage sharing for direct care purposes.
- Accelerate electronic health records access for patients.

3.6. In order to support the above it is currently also proposed that application be made through the Primary Care Transformation Funding for financial support for infrastructure projects such as

- spread of wifi access for professional and patients across primary care
- support of data sharing across primary care practices
- provision of mobile devices for professionals (primarily laptops for GPs) to access practice systems remotely.

Funding through this scheme will be based on consistency of prioritisation within the STP and place based plans.

3.7. Engagement across our Sheffield community has also identified the following design priorities for inclusion in our LDR:

- Technology solutions need to be designed to address identified clinical issues
- Simple technology solutions can often work well; all solutions need to be evaluated
- Training, education and support for patients, citizens as well as health professionals in the use of technology to support adoption and spread
- Sharing of data using the NHS number as the common unifying identifier.

(See Appendix D for further detail).

Alignment of Priorities for the SYB STP

3.8. We anticipate that the Digital Chapter within the STP will, in effect, represent a shared SYB Local Digital Roadmap. The Chapter will emerge within the governance arrangements of the STP.

3.9. Current local mechanisms for development of a Sheffield LDR will be the responsibility of the Sheffield Transformation Board; with the established Digital Roadmap Development Group acting as a working group for identification and design of key delivery milestones which conform to LDR Guidance.

3.10. Early development of the STP Digital Chapter identifies three elements of a future vision for digital maturity across the patch:

- Citizen and Patient Empowerment
- System integration and operational efficiency
- Strategic decision support

These elements are consistent with the identified priorities for Sheffield and the Test Bed Programme.

3.11. Below is a diagrammatical representation of the proposed 'minimum to radical' digital priorities to be addressed within the STP.

	Minimum (place-based deliverable)	Stretch	Radical
1	Increase use of digital technology in managing individuals health, wellbeing and lifestyle.	Advocate digital technology for increased physical activity, reducing the estimated £9bn health costs caused by inactivity.	Extend the range of biometric monitors and integrate data into digital health record with early warning health alerts.
2	Increase self-care for people with LTC reducing demand for traditional care and hospital services.	Eliminate up to 30% of OP attendances through self-care, remote monitoring of biometrics and self-performed testing.	Most people with LTC manage their care digitally with minimal hospital attendance.
3	Implement an integrated digital health record, paper free at the point of care where information is captured once only.	Bring forward implementation of DHR to 2017 and include social care record.	Implement cloud based digital health records held and managed by the patient who gives access permission.
4	Improve quality, patient experience and operational efficiency by increasing the integration and reliability of existing digital systems.	Establish a single SY&B patient facing integrated digital back and middle office NHS & Social Care administration systems.	Learn how other service sectors have used digital technologies to improve the way consumers experience services.
5	Establish a coordinated data analytics to improve real-time decision support, risk stratification and population health planning.	Use big data analytics to risk stratify the population in real time to personalise services and reduce health inequalities.	Use data from multiple sources to anticipate disease prevalence and reduce premature/avoidable deaths.

4. Delivery Risks

4.1. It is fully recognised that the STP Digital Chapter needs to encompass and be fully aligned with individual place based plans and respective LDRs. This includes alignment of priorities as well as timescales for delivery across the five CCGs. Test Bed innovation development and evaluation must also be fully incorporated.

4.2. There is undoubtedly further need for wider stakeholder engagement across the SYB as well as our local health and care community. Further engagement work within Sheffield localities is planned for May which will include patient and community based organisations to support local determination of digital priorities. The Digital Workstream will be considering its engagement plan within the remit of the overall STP engagement strategy.

4.3. The output from this work must feed into any final LDR and STP Chapter. However, given the timeframe for completion of the LDR and STP (30th June 2016) combined with the fact that LDR guidance still remains to be issued to CCGs, it is suggested that formal organisational sign-off be delegated by Governing Body to the Accountable Officer. A briefing on the final submission can be presented to Governing Body at its next available meeting.

6. Recommendations

Governing Body is asked to:

- Note the progress in the development of the Sheffield Local Digital Roadmap
- Approve the proposed digital priorities currently identified for Sheffield as a result of recent baseline assessment work and engagement events. These will be supplemented by further outputs from planned engagement events in May whereby local patient and citizens and community based groups can engage more fully.
- Approve the proposed sign-off process to support submission of the Local Digital Roadmap by 30th June 2016.

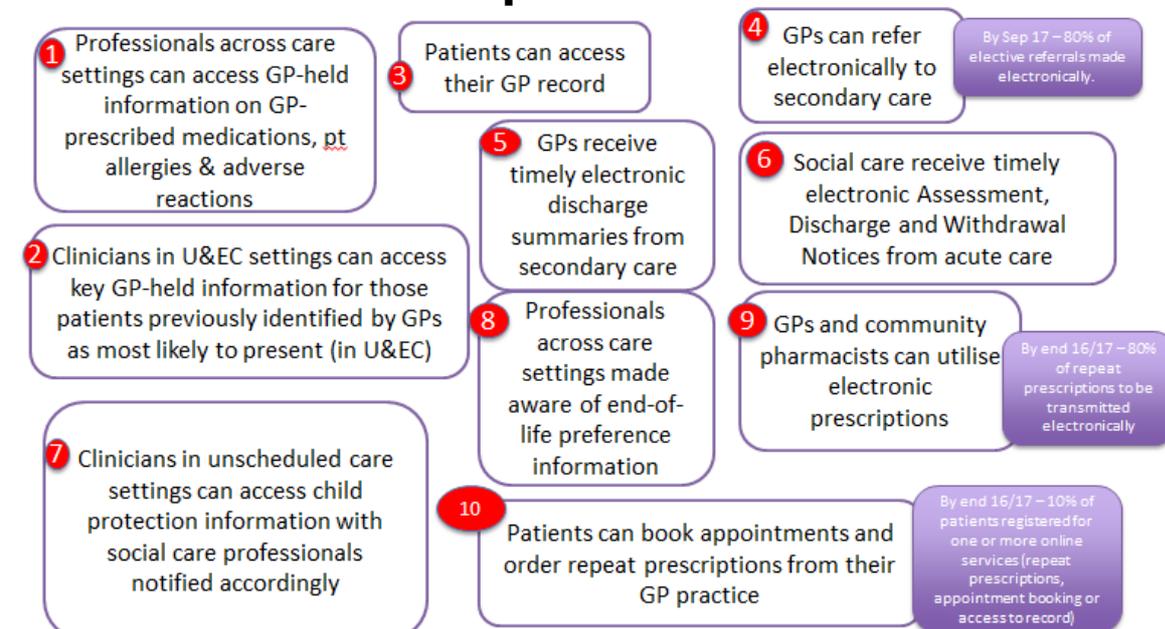
Victoria McGregor Riley

Deputy Director for Transformation

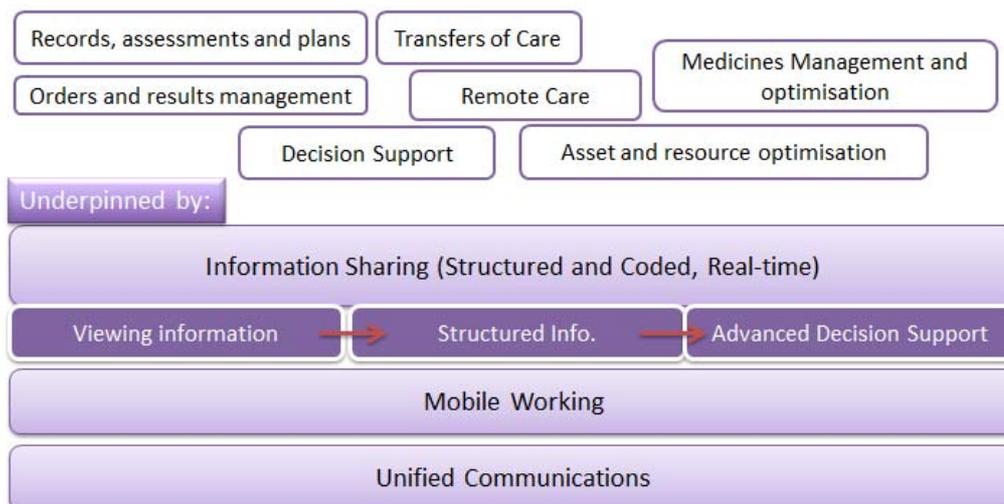
25 April 2016

Sheffield Local Digital Roadmap Progress		
DATE	ACTION	Achievement
6th July 2015	Sheffield City Joint Technology Workshop	Engagement from multiple stakeholders
September to October 2015	Local Agreement to determine the footprint and governance of LDR	Agreed at Citywide Digital Workshop 23/09/2015
23rd September 2015	Sheffield City Joint Technology Workshop	Engagement from multiple stakeholders
30th October 2015	Submission of footprint and governance templates	Submitted 20/10/2015
Early November 2015	Digital maturity self-assessment questionnaire and guidance issued	
9th December 2015	Engagement event: Service Transformation and new Technologies	Engagement from multiple stakeholders
November 2015 to January 2016	Digital maturity self-assessment questionnaire returns received	Submitted by all providers by 30/01/16
January 2016 to April 2016	Development of LDRs	In progress
21st March 2016	Draft LDR Guidance issued providing proposed guidance for LDRs	In progress
5th April 2016	Shaping the future of technology-enabled health and care for the Sheffield City Region Engagement event: Defining Priorities for Digital Maturity	Engagement from multiple stakeholders (see Appendix D)
22nd April 2016	NHSE request for Baseline assessment of Primary Care digital maturity for completion 29/03/2016	In progress
12th May 2016 (x2)	Shaping the future of technology-enabled health and care for the Sheffield City Region Engagement events: Priorities challenges and solutions	In progress
June 2016	Engagement Events pending	In progress
30th June 2016	Submission Deadline	In progress

Delivery Plan for 10 Universal Capabilities



Capability Deployment Schedule: 7 Capabilities for operating PF@PoC



Developing a capability deployment schedule

	2016/7	2017/8	2018/9	2019/20	
Records, assessments and plans	<p>1. Professionals across care settings can access GP-held information on GP-prescribed medications, pt allergies & adverse reactions: via access to SCR</p> <p>2. STH (incl. U&EC) access to GP patient details portal/MIG including Risk Stratification</p> <p>3. Patient on-line access to all GP systems</p>	<p>2. SOH/SHSC (incl. U&EC) access to GP patient details via MIG viewer</p> <p>Options appraisal for shared clinical portal across SYB</p> <p>Procurement (?) phase shared clinical portal across SYB</p>	<p>8. Professionals across care settings made aware of end-of-life preference information via SCR+/My Coordinated Care or Citywide integrated digital care record.</p>	<p>Implementation of integrated clinical and social care record via single data portal</p> <p>Care Coordination Centre operational for initial pilot phase</p>	
Transfers of care	<p>5. Electronic discharge summaries for 100% STH/SHSC/SOH pts</p>	<p>4. Electronic referrals increased from 60/70% to STH to 80% by March 2017</p> <p>Structured data for ToC using national templates</p>	<p>4. Electronic referrals to all SYB Trust at >80% March 2018</p>	<p>6. Social care receive timely electronic Assessment, Discharge and Withdrawal Notices from acute care</p>	<p>7. Clinicians in unscheduled care settings can access child protection information with social care professionals notified accordingly</p>
Orders and results management	<p>ICE ?</p> <p>10. By end 16/17 – 10% of patients registered for one or more online services (repeat prescriptions, appointment booking or access to record)</p>				
Medicines management and optimisation	<p>Implementation of central Prescription Order Line</p>	<p>9. 80% GPs and community pharmacists can utilise electronic prescriptions by end 16/17</p> <p>Access of primary care systems in community pharmacies</p>			
Decision support	<p>Review of health apps to support locally determined priorities</p>	<p>Medeanalytics pilot to support web based access to risk stratification of all patients</p> <p>Evaluation of medeanalytics risk stratification</p> <p>Implementation of apps (evaluation included)</p>	<p>Procurement of integrated practice reporting tool</p>		
Remote (and assistive) care		<p>Extension of mobile working for GPs (lap tops and mobile devices and wifi) 30% 75% 95%</p> <p>Review and implementation of wearables and remote devices for patients</p> <p>Review and Implementation of tele-consultation (e.g. Skype) for defined patient cohorts</p>			
Asset and resource optimisation	<p>Implemented Patients Online</p> <p>Explore use of SCR+ for specific patient cohorts</p> <p>Increased take up of PHBs</p>	<p>Extend use of E-Referrals</p>	<p>Explore use of SCR+ for specific patient cohorts</p>		

ENGAGEMENT WORKSHOP 5th April 2016

SUMMARY FEEDBACK

During the workshop, we asked attendees to identify their priorities and challenges for innovation and technology in Sheffield. Under each of the four key headings below, we have provided a summary of the key themes emerging from this workshop that will be used to inform the Digital Transformation Strategy.

Leadership & Culture	Technical Enablers
1. We need to demonstrate the right behaviours for this to be a success: Empower service users as leaders; be brave, and don't stifle!	1. Reliable connectivity, mobile working and software compatibility that are standardised across all the Sheffield region. This is a high priority for getting the basics right before trying anything new.
2. Develop a working culture that supports independent and collaborative thinking and provide a creative environment that reduces organisational boundaries.	2. Any technical enablers will need a system and tools that are agreed at all levels with a degree of flexibility. The system should be able to use the NHS number as the key identifier. An understanding of existing software and tools will make technology transformation easier.
3. A succinct description of objectives and aims, with a shared vision and ambition will give the structure we need for a successful strategy.	3. Trial known approaches such as video consultation / telehealth and texting patients, which will also need behavioural change at the core.
4. Working together with front line leaders will give a true representation of the 'real world'.	4. Innovative approaches that are multifaceted and do not target multiple conditions. Any technology should be durable and future proofed.

Characteristics and capacity for scale and spread	Creating Pull and Demand
1. There will be a natural adoption curve – if we get our solutions right, people will get behind what we are doing and there will be gathering momentum. However the caveat to this was we must understand our citizens – different patient / citizen cohorts will have different needs and different digital capability. Segmentation and understanding our clients is a priority, e.g. via – market research.	1. We need to identify a real problem to focus on and really understand what it is we're working toward with any technology used. We should also identify technology that is capable of being evaluated; proven effectiveness
2. We need clarity about the drivers – what are the real clinical issues? Only then can we identify the potential benefits, and then secure support from stakeholders. Clarifying the clinical "ask" is a high priority – with input from professionals and service users.	2. Target the right group of patients with technology. For example, those who are already tech savvy, those who are well most of the time or trial in children's health where children can teach the parents.
3. There was strong consensus that where initiatives have been piloted elsewhere, and no safety issues have emerged, we should not need to pilot again, but roll out across the city, learning as we go. This should be a quick win.	3. Ensure that technology is easy to use, there is choice and that any technology chosen is sustainable both commercially and practically. This is a key factor into the success of technology being adopted.
4. Organisational buy-in can't be a loose commitment, it needs to be stitched into governance and delivery structures to ensure progress happens – otherwise, change won't happen! This will require co-operation across organisational boundaries as well as within organisations. It's a high priority for the city and will need to feed into the "Roadmap".	4. Promotion of the technology needs to be right; raise awareness of the possibilities and advantages by creating a positive narrative, giving the stamp of quality technology should have when launched.
5. The technology needs to be easy, attractive, and intuitive. This needs to form part of our "ask" of the innovators.	