Bradford District and Craven

Local Digital Roadmap

June 2016

People First – Digital First

Revised Final Version 1.0  
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Key Information

Name of footprint: Bradford District and Craven
STP footprint: sub Bradford District and Craven within West Yorkshire
Nominated lead: Ali Jan Haider (Director of Strategy, Bradford Districts CCG)
Contact details: mobile and alijan.haider@bradford.nhs.uk
Author: Simon Wilson, Head of IT (3 CCGs)  simon.wilson@bradford.nhs.uk   Mob: 07968 424366
Organisations within LDR footprint: Bradford Districts CCG, Bradford City CCG, Airedale, Wharfedale and Craven CCG, Bradford Teaching Hospitals NHS Foundation Trust, Bradford District Care NHS Foundation Trust, Airedale NHS Foundation Trust, City of Bradford Metropolitan District Council, North Yorkshire County Council
# Local Digital Roadmap

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1. Introduction

Since their inception the 3CCGs committed to collaborate and this is recognised as one of our key strengths. The ethos of working in partnership to secure the best possible, integrated and efficient services for citizens in the Bradford District and Craven area has seen us make significant strides forwards over recent years.

We are proud to have a strong track record and a sound basis on which to move our ambitious transformation agenda forwards.

Our digital journey to a fully interoperable electronic health record is at the heart of our planning and we have already made considerable progress via our Integrated Digital Care Record programme and optimisation of SystmOne over many years.

We have visibility on the national stage as an enhanced health in care homes vanguard, providing a single point of access to all aspects of specialist health and care advice through technology and an extended use of telemedicine.

We are using the data we have gathered in a more intelligent way, not only to monitor and manage performance and drive improvements in quality, but also in striving to understand as much about our population as possible to inform new models of care and ways of working. The Right Care data about our services is helping to drive cost reduction opportunities and reduce wastage.

We are already using risk stratification to identify high risk/complex individuals at an early enough stage so that we can put in place coordinated care that is personalised to reduce avoidable admissions, high cost interventions and help people remain independent and in their home for longer.

Our work with the Connected Cities via the cYorkshire initiative also has national visibility and recognition.
1. Introduction

The 3 local provider organisations have engaged to collaborate to ensure handovers of care in strategic areas are safe and appropriate. They are already working towards further digital integration and optimisation by exploiting efficiencies and maintaining patient safety in earnest for a number of years.

Our Local Authority continues to be a key partner the development of new models of care. Our close working with Public Health colleagues and the intelligence to the system that they bring has continued for many years. Our collective drive to close the gap between health and social care continues with particular strides being made in the areas of safeguarding.

The Local Digital Roadmap (LDR) has further advanced this work and supports and aligns to the Sustainability and Transformation Plan (STP). The footprints comprise of three Clinical Commissioning Groups (CCGs), two local authorities and three main NHS providers. Our STP describes the high level activities and timeline that will be required to move the current health and care system towards an Accountable Care System (ACS). At this stage the timeline is indicative and does not reflect that organisations within the system may move at a faster pace than others. This may lead to a twin-track approach to the development of accountable care type entities with which commissioners can contract.

Our Local Digital Roadmap will grow organically alongside the STP to take account of developments in ACS thinking and will remain integral to how the ACS will form and prioritise in 16/17 and 17/18. We have already formed the Digital Bradford 2020 Board that extends beyond our historic boundaries.
1. Introduction

Bradford District and Craven has a large geographic footprint with a capitation in the region of 600 thousand people across 83 constituent GP practices. This incorporates significant deprivation, some affluence, urban, rural and city living. Our population is one of the most diverse nationally and significant health inequalities still exist across the different localities within the district.

Our vision for a Digital Health and Care future reflects locality requirements with clear linkages to business resilience and it addresses our approach to meeting the National Challenges:

- Closing the health and well-being gap
- Driving transformation to close the care and quality gap
- Closing the finance and efficiency gap

At the heart of our Local Digital Roadmap development moving forwards we will adopt an overarching principle of **People First – Digital First**, focussing on delivering a digital landscape that improves the health, care and well being of those we serve.

As a part of our transformation programme we are investing significantly in the use of technology and data as a key enabler to reducing healthcare costs, improving access to care, patient safety, clinical standardisation, clinical transformation and reducing variability.

As it matures our digital roadmap will depict our journey to a fully interoperable electronic health record, which we have already made considerable progress with via our IDCR programme and optimisation of SystmOne over many years. A significant milestone will be achieved this year with BTHFT’s EPR and the Health Information Exchange phase 1 coming online.
1. Introduction

Our Local Digital Roadmap will cover:

- A Five year vision for digital enabled transformation to March 2021
- A capability deployment schedule and trajectory, outlining how, though driving digital maturity, professionals will increasingly operate paper free at the point of care over the next 3 years.
- A delivery plan for a set of universal capabilities, detailing how progress will be made in fully exploiting the existing national digital assets.
- A robust and compliant information sharing approach

Our plans will identify:

- Where we are now
- Where we are going
- Our current level of readiness and our vision of excellence
- An assessment of capacity and capability and our plans to exploit and optimise resources
- Maturity of our System Wider Infrastructure and our desires to exploit new technologies
1. Introduction

We will focus our plans to ensure significant progress is made in the following areas:

- Records, assessments and plans
- Remote Care
- Transfers of care
- Medicines Management and Optimisation
- Orders and results management
- Decision Support
- Asset and resource optimisation
2. Vision: People First – Digital First

We are committed to ensure our vision and supporting strategy will be owned by commissioners, providers and service users.

As the STP matures and governance extends we will ensure LDR links with sub-regional and regional initiatives are tightened. We will also seek to exploit regional networks with a view to utilising resources effectively and we will take particular note of lessons leaned and seek to adopt good practice wherever possible.

Our STP sets out the broader transformational landscape and describes the main themes of our portfolio, which are:

- Promoting self-care and illness prevention and improving the general health and wellbeing of the population of Bradford District and Craven
- Transforming primary and community services and placing people at the centre of their care
- Implementing a 24/7 integrated care system across health and care economy
- Developing and delivering a sustainable system wide model for urgent care
- Developing and implementing a system wide model for delivery of planned care interventions

In support of the above we will build off our existing work to create a fulsome landscape where information is exchanged across heterogeneous information systems spreading across the care continuum using the NHS Number as a Primary Identifier.
2. Vision: People First – Digital First

We will deliver a robust and effective system-wide data analytics infrastructure that effectively supports clinical decision making and performance monitoring and management. We will also ensure that our technology estate is modern and meets the needs of all users.

We are implementing this year phase 1 of a Health Information Exchange which will continue to evolve to integrate health and care data from multiple and disparate clinical, operational, financial systems and provides a view of each individual’s longitudinal record.

We will support a widely used service user portal enabling individuals and their carers and families to better equip them to take ownership of their health and care (includes access to a personal care record).

A Professional, capable, relevant and co-ordinated Informatics resources (Technology and Intelligence) will work together to deliver a sound platform on which we can:

- support and measure systematic high quality care
- be more proactive and target care appropriately
- better co-ordinate care delivery and maximise resource utilisation
- improve access to specialist expertise
- foster greater person engagement
- analyse system improvement and predictably models
2. Vision: People First – Digital First

As part of our STP planning process we have identified a number of priorities, of which Technology has been identified as a key enabler and serves as a consistent theme throughout:

<table>
<thead>
<tr>
<th>Health and Wellbeing Priorities</th>
<th>Care and Quality Priorities</th>
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<tbody>
<tr>
<td>Obesity / Type 2 Diabetes</td>
<td>Gastro Intestinal</td>
</tr>
<tr>
<td>Cardio Vascular Disease</td>
<td>Endocrine, nutritional and Metabolic disorders</td>
</tr>
<tr>
<td>Cancer (and tumours)</td>
<td>Maternity and Re-productive Health</td>
</tr>
<tr>
<td>Respiratory Disease/System Problems</td>
<td>Urgent and Emergency Care</td>
</tr>
<tr>
<td>Mental Health (Including Learning Disabilities)</td>
<td>Care Homes</td>
</tr>
<tr>
<td></td>
<td>Respiratory Disease/System Problems</td>
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<tr>
<td></td>
<td>Mental Health (Including Learning Disabilities)</td>
</tr>
<tr>
<td>Cross Cutting Themes</td>
<td>Cardio Vascular Disease</td>
</tr>
<tr>
<td>Social, Environmental and Economic Determinants</td>
<td>Trauma and Injuries</td>
</tr>
<tr>
<td>Child and Maternal Health</td>
<td>Neurological System Problems</td>
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<tr>
<td>Healthy Ageing</td>
<td>Genito-urinary</td>
</tr>
<tr>
<td></td>
<td>MSK (excluding Trauma)</td>
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<tr>
<td></td>
<td>Cancer (and tumours)</td>
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<tr>
<td><strong>Enablers</strong>: Workforce, Technology, Estates and Facilities</td>
<td>Patient Experience (access standards and waits)</td>
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<td></td>
<td>Ambulatory Care</td>
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<td>Infection, Prevention and Control</td>
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</table>
2. Vision: People First – Digital First

The delivery of our vision will be influenced by a culture change in the way we commission services to ensure resilience and sustainability and the way people think, work and interact.

Success depends on making the transition to a collective robust commissioner and provider of ICT services, enabling people to take more control of their health and care and acknowledging that professionals collating and sharing quality information is pivotal.

We will incorporate board-level championing and utilise skilled clinical resource, acknowledging that leadership and engagement will be crucial to the success of the culture shift.

Building on the excellent work we have already delivered across the community we will seek to further mature our capability by enhancing our digitally aligned governance framework incorporating board level leadership from all key partners.

Moving forwards we will undertake to review and refresh our Digital Vision and Strategy annually, as a minimum, to ensure it remains relevant and that there is a clear direction of travel, aligned to National Priorities and the additional themes emerging from our Sustainability and Transformation Plan including the journey towards 2 Accountable Care Systems.
2. Vision: People First – Digital First

Supporting people to technologically transform.

Comprehensively addressed in our STP, we acknowledge the need to ensure our local population is educated and empowered to confidently interact with appropriate technologies that support future desires such as improved prevention and access to and use of self care tools. We will work closely with Patient and Public representatives to ensure we provide the right level of support targeted towards those groups and individuals who need it the most.

Having a skilled and suitably trained workforce will be vital in support of our desires to transform the way in which care is delivered and the way we work. Our staff will need to be confident and competent users of technology as they will facilitate take up and adoption at the sharp end by embedding digital tools into workflows across the care continuum. They will be conversant in mobile and agile working technologies and collectively we will be responsible for raising the digital bar as health and care technology develops a more consumeristic base. Importantly our workforce will be cyber secure savvy.

Informatics will be recognised as a key cog in a co-designed, co-created and jointly owned system wide workforce strategy that promotes, attracts, recruits, develops, engages and retains a fit for purpose and diverse health and social care workforce across the ACS.

Professional Informatics talent will be proactively developed with staff training and learning together and having opportunities to access the ongoing development that equips them to flex and work optimally in meeting the personalised, holistic needs of service users that supports new ways of working and self care, e.g. agile/mobile/digital working. Informatics leaders are jointly developed to operate as system leaders; leading from a strong, client focused values base, inspiring collaborative working through engaging staff and encouraging innovation.
2. **Vision: People First – Digital First**

As our STP plans develop and mature we will further consider how digital technology will support closing the care and quality gap, the finance and efficiency gap and the health and well being gap.

We remain entirely focussed on what this means in reality for the people we serve and those we employ:

<table>
<thead>
<tr>
<th>Closing the gaps</th>
<th>Benefit themes</th>
<th>What this means</th>
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<tbody>
<tr>
<td>Care and Quality</td>
<td>access to digital, real-time and comprehensive person information, more effective decisions through synthesising information from a range of sources, clinicians can be alerted promptly to people who are deteriorating or ‘at risk’. Enabling new care models, seven day services and effective triage (for primary care and unscheduled care access)</td>
<td>shared information will improve the chances of people being able to return home sooner and be cared for in their own home. Access to shared information will help everyone understand what has been done previously and what is planned for within a joint care approach.</td>
</tr>
<tr>
<td>Finance and Efficiency</td>
<td>contact time for community-based staff increased through mobile working, unnecessary diagnostics, no access visits or duplicate equipment orders will be avoided, acute productivity improved. Acute sector productivity will be improved.</td>
<td>Reduced costs as people will be seen by the right person, at the right time and won’t attend unnecessary appointments, have fewer unplanned admissions and avoid duplicate tests. This will also increase frontline service capacity and capability.</td>
</tr>
<tr>
<td>Health and Wellbeing</td>
<td>patient-recorded information contributing to self-care across pathways, population health management can be supported through the analysis of data from across the system, take-up of personal health or integrated health and care budgets accelerated through providing digital information and tools to people</td>
<td>People will access their own care record, improving transparency and trust. Moving from a reactive model of care to proactive care model of care centred around the person will improve care outcomes and improve overall well being. Increased access to rehabilitation to support health, well-being and independent living.</td>
</tr>
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</table>
2. Vision: People First – Digital First

Our ongoing Integrated Digital Care Record (IDCR) Programme has made tremendous strides over the last 2 years and has built on the long history of clinical system standardisation and optimisation in the district since 2004.

The programme identified a number of key themes and benefits and these remain valid as we move forwards in our detailed planning and alignment. We will continue to pursue plans to ensure that:

• All clinicians will be able to add and receive real time notifications into care records to give GPs and other professionals advice on specific cases.

• Hospital outpatients will benefit from speedier, more efficient self check-in services and by bringing together different schedules within clinical systems.

• Telemedicine will become a viable and credible solution, enabling care providers to offer virtual face to face care to greater numbers of patients, including those in remote areas.

• Integrated records support the work being done to prevent hospital admission, long term residential care and unnecessary dependence on the health and social care system.

IN A NUTSHELL

SOLUTION: Integrated Digital Care Record

IMPLEMENTATION: Throughout 2014 - ongoing

FUNDING: Matched funding with Safer Hospitals, Safer Wards investment

PATIENT BENEFITS: Improved care coordination and a greatly improved patient experience

STAFF BENEFITS: Reduced administration time, real-time, dynamic care records

ORGANISATIONAL BENEFITS: Improved discharge process between health and social care, improved flexibility and the ability to deliver a long term vision

RESULT: A future proofed technology platform which allows multiple organisations to realise the benefits of an integrated digital care record
2. Vision: People First – Digital First

The Clinicians perspective

The challenge before us is to enable our clinicians to use technology to achieve improved clinical outcomes within the current financial constraints. We must continually challenge ourselves to improve the services to our patients and how we use technology to do this is key.

Technology can be used as a vehicle to establishing trust and breaking down barriers between teams. The Shared Clinical Record will be at the heart of this and will allow professionals seamlessly support a patient’s healthcare journey.

Professionals will use technology to ensure that people get the right care in the right place at the right time. Technology will allow us to identify where this is not happening and be able to more easily identify variation and analyse the consequences. The deployment of technology will allow people to choose where and when they get care, with professionals able to validate the quality of the care provided.

Within our area we already have successful outcomes linked to technology, many driven by clinicians – examples include telemedicine, e-consults, electronic discharges and virtual wards.

In the future care will be technology enabled, paperless and driven by the needs of the person rather than the constraints of the individual services.

The care delivery system needs to continue adapting to embrace emerging technologies and allow it’s workforce to move away from the linear route to care delivery and gradual escalation of seniority of clinical opinion and instead delivers the answer to the question the patient is posing much earlier in the pathway.
2. Vision: People First – Digital First

Finally, we are confident that our vision and desires will deliver the 4 key digital proposals for the NHS as laid out by Martha Lane Fox:

- Reaching the ‘furthest first’ – making sure those with the most health and social care needs who are often the least likely to be online, are included first in any new digital tools being used across the NHS.
- Free Wi-fi in every NHS building
- Building the basic digital skills of the NHS workforce to ensure that everyone has the digital skills needed to support people’s health needs.
- An ambitious target that at least 10% of registered patients in each GP practice should be using a digital service such as online appointment booking, repeat prescriptions and access to records by 2017.

At the heart of our Local Digital Roadmap development moving forwards we will adopt an overarching principle of People First – Digital First, focussing on delivering a digital landscape that improves the health, care and well being of those we serve.
The interim Digital Bradford 2020 working membership has formed following a period of re-focussing from what was the Local Health Community Strategic IM&T Board and it’s supporting Programme Operational Group. The Digital Bradford 2020 Board consists of the following key influential leaders from across the district:

<table>
<thead>
<tr>
<th>Name</th>
<th>Role and Organisation</th>
<th>Name</th>
<th>Role and Organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridget Fletcher (Chair) *</td>
<td>CEO, ANHSFT</td>
<td>Cindy Fedell (Vice Chair) *</td>
<td>CIO, BTHFT</td>
</tr>
<tr>
<td>Ali Jan Haider</td>
<td>Director of Strategy, BDCCG</td>
<td>Dr Jim Welford</td>
<td>GPIT Lead, 3 CCGs</td>
</tr>
<tr>
<td>Dr Mutaz Aldawoud *</td>
<td>Clinical IT Board Member, BDCCG</td>
<td>Waheed Hussain</td>
<td>Clinical IT Board Member, BCCCG</td>
</tr>
<tr>
<td>Dr Brendan Kennedy</td>
<td>Clinical IT Board Member, AWCCCG</td>
<td>Tbc</td>
<td>CFO, CCG</td>
</tr>
<tr>
<td>Prof John Wright *</td>
<td>Director, BIHR</td>
<td>Dr Justin Tuggey</td>
<td>CCIO, ANHSFT</td>
</tr>
<tr>
<td>Andrew Copley</td>
<td>Director of Finance, ANHSFT</td>
<td>Dr Andy McElligott</td>
<td>Medical Director, BDCFT</td>
</tr>
<tr>
<td>Dr Paul Southern</td>
<td>Associate Medical Director, BTHFT</td>
<td>David Cawthray</td>
<td>Assistant Director of IT Services, CBMDC</td>
</tr>
<tr>
<td>Dr Liam Sutton</td>
<td>Head of Knowledge Transfer, UoB</td>
<td>Ian Sharp</td>
<td>CEO, DHEZ</td>
</tr>
<tr>
<td>Tbc</td>
<td>VCS Service Lead</td>
<td>Tbc</td>
<td>Patient &amp; Public Liaison Lead</td>
</tr>
<tr>
<td>Dr Shahid Ali</td>
<td>Bradford Care Alliance (Federation)</td>
<td>Dr Andy Parsons</td>
<td>Yordale (Federation)</td>
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Moving forwards a number of those identified above will form an operational Digital Bradford 2020 Programme Group, responsible for carrying out the business of delivering the Local Digital Roadmap and other key supporting initiatives as directed by the DB2020 Board.
3. Leadership and Governance

Digital Bradford 2020 – Developing the Value Proposition

The people of Bradford District and Craven should expect coordinated health and social care is enabled through cohesive technology, leveraging information, and including health research and education. The digital board will drive and coordinate informatics - technology and information - for health and social care partners in the area resulting in advancement in care and outcomes for our population. For example, this work could enable integrated care or a changed model of care.

The contributing organisations within DB2020 have sought the assistance of GE Healthcare consultants to further refine and define our value proposition, which ranges from a simple coordination of technology and information initiatives through service transformation in the patch, it currently states:

<table>
<thead>
<tr>
<th>Integrated application of technology and information to transform health and social care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alignment of work to a common direction</td>
</tr>
<tr>
<td>Coordination of health, social care, health research, and health education informatics - technology and information</td>
</tr>
<tr>
<td>Future-proof informatics investment through roadmap</td>
</tr>
<tr>
<td>Best use of collective resources</td>
</tr>
<tr>
<td>Sustainable venue amid changing environment.</td>
</tr>
</tbody>
</table>

Facilitated by GE Healthcare, the DB2020 partner organisations will carefully work through and refine the value Proposition to ensure a consistent and robust understanding of needs and propositions.

This work is expected to complete by the end of July 2016.
3. Leadership and Governance


Digital Bradford 2020
- Footprint
- Programme
- Local Digital Roadmap
- West Yorkshire Urgent Care Vanguard
- Yorkshire
- North Yorkshire Integrated Care
- National Systems & Services (HSCIC)
- Interoperability & Standards Framework
- Communications and Engagement
- Systems & Infrastructure Optimisation
- Informatics Workforce Education, Training and Development
- Data Sharing & Information Governance
- Digital Innovation

Enablers
- Self-Care & Prevention Board
- Digital Bradford 2020
- Integrated Workforce Board
- Estates Strategic Partnering Board
- Organisation Development
- EHICH Vanguard & Well Bradford

Supporting Themes
- Health & Wellbeing Board
- Integration & Change Board (ST Board)
- PMO
3. Leadership and Governance

Each organisation within the district (the Digital 2020 footprint), as part of it’s corporate compliance, maintains it’s own Risk Registers and risk management protocols. The Risk Registers are consistently used to capture and track items that may pose a risk to that organisation in discharging it’s statutory duties and meeting it’s contractual obligations. Via robust Programme and Project management controls each organisation maintains it’s own IT Risk and Issue log that identifies risks to patient safety and organisational reputation associated with the use and implementation of technology. This in turn feeds into the each organisation’s Risk Register.

Each organisation has implemented controls and protocols that govern the following key areas of IT usage and management:

- Data security
- Clinical safety
- Data quality
- Data protection and privacy
- Accessible information standards
- Business continuity and disaster recovery

Moving forwards, as Digital2020 gathers momentum and as our STP plans mature, we will seek to bring this disparate information together and align it fully with our STP desires and our Transformation Programmes within. Where possible and appropriate we will seek to consolidate onto a single set of controls and protocols to ensure consistency and transparency across the district.

The central PMO reporting in to our Integration and Change Board will be at the heart of our ‘system’ Risk and Issue Management. It will maintain full oversight of all the enabling functions including Estates and Workforce and will analyse risks from the individual transformation (delivery) programmes including Planned and Out of Hospital.
4. Information Sharing Approach

The National Information Board’s Interoperability Strategy outlines the importance of sharing information within and across localities through the use of APIs. We expect to receive further information in this regard following the release of the GP Connect initiative shortly.

Information Sharing was a key component of our IDCR Programme and work continues in this space today. We are currently taking stock of our data sharing maturity and will seek to realign our approach and agreements in line with the emerging themes from the development of our ACS. We expect to complete this within 16/17.

We are already engaged in sub-regional initiatives such as the West Yorkshire Urgent and Emergency Care Vanguard, with robust and compliant information sharing being crucial in successful delivery.

We have identified that the approaches to communications and engagement with people in relation to Information Sharing for both the initial and ongoing activities varies across the country. During the next stage of our planning here we will ensure that our approach is not only robust and compliant but wholly relevant to the people of Bradford District and Craven. We are also cognisant of ensuring our approach is simple and easy to understand for those we serve and those we employ.

The next slide highlights our approach to Information Sharing and what we expect to be delivered and by when based on our system/solution deployment trajectory.
4. Information Sharing Approach

Bradford Districts and Craven Information Sharing Approach

- **End 17/18**
  - Transfer of Care from Acute to Social Care
  - Record view across all care settings
  - Enhanced Care Planning
  - Access to all tests and results information
  - Enhanced Transfers of Care via eDischarge
  - Access to GP Record View

- **End 18/19**
  - Transfers of care to all care settings
  - Appointment Management across care settings
  - Workflow Tasking across care settings
  - Medicines Reconciliation
  - Enhanced MDT collaboration
  - Information Sharing in place

- **End 20/21**
  - Patient Self Data uploaded
  - Patient interacting digitally with care professionals
  - SystmOne all Social Care
  - Patient access to GP Record
  - Exploiting & Expanding E-Discharge
  - Remote Video Consultation
  - EMIS and S1 Interop views
  - E-Consults expansion
  - NHS number in all settings

- **Future State**
  - Self-Care Data Exchange
  - Collaboration tools prevent
  - Open APIs from other care settings
  - Real Time Data Analytics
  - Full National Systems Utilisation
  - Patient secure messaging
  - Patient Portal APIs
  - End to end e-ordering and results
  - Reciprocal Wi-Fi
4. Information Sharing Approach

Inter Agency Information Sharing Protocol

Since 2014 a number of organisations across West and South Yorkshire have been working together to agree a common protocol for Information (Data) Sharing; this was recently updated in April 2016. The protocol includes all of the key organisations with our Local Digital footprint and stretches to over 60 across the wider region.

The purpose of the protocol is to:

• provide the basis for an agreement between both local organisations and other associated organisations, to facilitate and govern the effective and efficient sharing of data. Such data sharing is necessary to ensure that individuals, and the population as a whole, can and do receive the care, protection and support they may require.

• identify the purposes for which data may be shared. This document is supported by local operational policies and procedures within each organisation that underpin the secure and confidential sharing of such data

• promote and establish a consistent approach between the organisations to the development and implementation of data sharing agreements and procedures.

A single Data Sharing agreement template is particularly valuable as it provides consistency and transparency for all involved. Moving forwards we expect all organisations that we are about to contract with agree, as a condition of award, to sign this protocol and the associated Data Sharing Agreement/s.
5. Where are we now

We are proud to have a strong track record and a sound basis on which to move our ambitious transformation agenda forwards.

Our digital journey to a fully interoperable electronic health record is at the heart of our planning and we have already made considerable progress via our IDCR programme and optimisation of SystmOne over many years.

We have visibility on the national stage as an enhanced health in care homes vanguard, providing a single point of access to all aspects of specialist health and care advice through technology and an extended use of telemedicine.

We are using the data we have gathered in a more intelligent way, not only to monitor and manage performance and drive improvements in quality, but also in striving to understand as much about our population as possible to inform new models of care and ways of working. The Right Care data about our services is helping to drive cost reduction opportunities and reduce wastage.

We are already using risk stratification to identify high risk/complex individuals at an early enough stage so that we can put in place coordinated care that is personalised to reduce avoidable admissions, high cost interventions and help people remain independent and in their home for longer.

Our work with the Connected Cities via the cYorkshire initiative also has national visibility and recognition.
5. Where are we now

We have an extensive landscape of shared care initiatives already in flight utilising SystmOne at the core. Some of these have been in situ for many years and are already delivering significant benefit and transformation.

Our shared care initiatives and integrated working enabled via the transformational use of technology and systems include:

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<thead>
<tr>
<th>Area</th>
<th>Delivery</th>
<th>Primary Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palliative Care</td>
<td>A single view of end of life care delivery and preferences including access from Hospices</td>
<td>Care and Quality</td>
</tr>
<tr>
<td>Goldline</td>
<td>Supporting single point of contact facility for people with a serious illness or end of life</td>
<td>Care and Quality</td>
</tr>
<tr>
<td>Integrated District Nursing</td>
<td>Working hand in hand with GP Practices and Clinical Teams to support community care</td>
<td>Care and Quality</td>
</tr>
<tr>
<td>Integrated Health Visiting</td>
<td>Supporting early years including full Immunisation and Vaccination records</td>
<td>Care and Quality</td>
</tr>
<tr>
<td>Various GPSI services using S1 Community e.g. MSK, Respiratory</td>
<td>Working hand in hand with GP Practices and Clinical Teams to support the delivery of out of hospital care and expertise. Delivering care close to home.</td>
<td>Care and Quality</td>
</tr>
<tr>
<td>Nephrology</td>
<td>Single shared care record initiative between GP, community and Hospital Teams</td>
<td>Care and Quality</td>
</tr>
<tr>
<td>Telemedicine Hub</td>
<td>Enabling healthcare professionals to provide care and advice from remote locations</td>
<td>Finance and efficiency</td>
</tr>
<tr>
<td>E-Consultations</td>
<td>Avoiding / Optimising Outpatient appointments via virtual advice and guidance</td>
<td>Finance and efficiency</td>
</tr>
<tr>
<td>Virtual Ward</td>
<td>enabling multidisciplinary teams to support older people at home following discharge</td>
<td>Finance and efficiency</td>
</tr>
<tr>
<td>The 2016 HSJ award winning Bradford Health Hearts</td>
<td>Initiatives to reduce the risk of stroke and heart attacks. Utilises shared clinical data to analyse trends, target people and monitor self care initiatives.</td>
<td>Health and well being</td>
</tr>
<tr>
<td>Bradford Beating Diabetes</td>
<td>As BHH above. Initiatives to reduce the number of people with Type2 Diabetes</td>
<td>Health and well being</td>
</tr>
</tbody>
</table>
5. Where are we now

The Integrated Care Record, the success story so far

Please refer to the attached pdf for the NHS England and HSCIC Case Study.

IN A NUTSHELL

SOLUTION:
Integrated Digital Care Record

IMPLEMENTATION:
Throughout 2014 - ongoing

FUNDING:
Matched Funding with Safer Hospitals, Safer Wards investment

PATIENT BENEFITS:
Improved care coordination and a greatly improved patient experience

STAFF BENEFITS:
Reduced administration time, real-time, dynamic care records

ORGANISATIONAL BENEFITS:
Improved discharge process between health and social care, improved flexibility and the ability to deliver a long term vision

RESULT:
A future proofed technology platform which allows multiple organisations to realise the benefits of an integrated digital care record
5. Where are we now

We are also engaged a number of sub-regional and regional collaborative initiatives including:

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Scope</th>
</tr>
</thead>
</table>
| West Yorkshire Urgent Care Vanguard            | Linking GP Out of Hours services with other Urgent and Emergency Care providers.  
Yorkshire Ambulance Service will develop a stronger focus on becoming a mobile treatment service delivering care at peoples’ homes.  
Mental health service providers will work with West Yorkshire Police to deliver major service change which will see rapid crisis response through emergency response control centres and ‘street triage’. |
| cYorkshire                                    | The aim of this programme is to demonstrate the feasibility and utility of linked health data between cities across Yorkshire. It will provide a shared platform for developing and testing innovative approaches to improve health and well being, utilising cross -regional collaboration to produce learning health systems through data linkages. (please see subsequent slides) |
| Regional Imaging Collaborative for Yorkshire   | Established to provide a proven, affordable enterprise imaging management solution for the Yorkshire and Humber Region. It will, as a minimum, replace the existing radiology PACS and will enable the transformation of service delivery to enhance care delivery and patient experience. |
| North Yorkshire Integrated Care Programme      | North Yorkshire County Council is part of our STP footprint, primarily delivering services to rural communities in the Craven area of our patch.  
A North Yorkshire Integrated Care Programme Board was established in 2015. It will enable a co-ordinated implementation of the Informatics initiatives and projects supporting integrated care within the local health and care community. Engagement will build in 2016/17 to ensure full alignment with the developing STP. |
5. Where are we now

Connected Yorkshire (cYorkshire)
Building a digital community across Yorkshire and Humber

Aims and objectives
The aim of this programme is to demonstrate the feasibility and utility of linked health data between cities across Yorkshire. We will provide a shared platform for developing and testing innovative approaches to improve health and wellbeing. We will utilise cross-regional collaboration to produce learning health systems through data linking in our connected health region. We propose to establish cYorkshire – a region-wide digital community programme covering over five million people.

Objectives:
- To develop a regional informatics platform that unites the five Yorkshire cities in harnessing the potential of the health informatics revolution
- To test different models for data access and sharing across institutions to share the lessons of success (and of failure) in developing learning health systems within and across five different cities
- To put patients and communities at the centre of decision-making on data linking and data sharing
- To establish and host innovative methodologies in linking data across health, education and social services to inform and transform delivery of healthcare
- To build regional capacity in health informatics as a driver for growth in health and wealth
- To work closely with the other North of England Connected Health Cities to identify and share good practice

Outcomes:
- A regional connected network of experts in health informatics
- A Community for co-production in data sharing, data linkage and co-ordinated data analysis
- Exemplar projects demonstrating how data linkage can both inform and redesign care pathways of care to improve efficiency, promote effectiveness and deliver enhanced intervention
- Capacity development in clinical and academic workforces
- Enhanced relationships with industry partners and new or improved products for medical informatics that facilitate pathway redesign
5. Where are we now

Regional Imaging Collaborative for Yorkshire (RICY)

Our Vision

“To provide a proven, affordable enterprise imaging management solution for the Yorkshire & Humber region, which as a minimum replaces existing radiology PACS and which may also include RIS and/or other imaging solutions. The solution will enable the transformation of service delivery – enhancing care and patient experience.”

Progress to Date

- Collaborative formally established in autumn 2016- sponsored by WYAAT
- Involvement of nine acute Trusts from across the region
- Active participation in procurement activities with contracts to be awarded during 2016
- Service Transformation programme being established to complement technology programme
- Close working relationships formed with the Working Together Programme, EMRAD and Eastern Radiology Imaging Collaborative (ERIC)
5. Where are we now

There are a number of Business Intelligence Tools and data sources used by the CCG to inform better clinical commissioning. Some are new (*) and many others have been in use for some time.

They include:

<table>
<thead>
<tr>
<th>Tool</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr Foster Practice and Provider Monitor *</td>
<td>an analytical tool to explore and benchmark hospital admissions to identify and quantify ways to reduce costs and improve outcomes.</td>
</tr>
<tr>
<td>Dr Foster Mortality Comparator *</td>
<td>The detail behind mortality indicators: Summary Hospital-level Mortality Indicators (SHMI) and Hospital Standardised Mortality Ratios (HSMR).</td>
</tr>
<tr>
<td>Dr Foster Care Quality Tracker *</td>
<td>a high-level early warning dashboard displaying the Care Quality Commission’s Intelligent Monitoring indicators for providers.</td>
</tr>
<tr>
<td>Dr Foster Trust View *</td>
<td>a performance dashboard providing key indicators of quality and efficiency for hospital providers and sites.</td>
</tr>
<tr>
<td>Ssentif *</td>
<td>a web based tool allowing benchmarking of health and social care and other public sector data. Based on nationally available datasets.</td>
</tr>
<tr>
<td>Risk Stratification</td>
<td>designed in-house by NHS in Bradford using combined predictive model algorithm. Uses primary care and SUS data.</td>
</tr>
<tr>
<td>Various Web Based tools and Data Sources</td>
<td>Includes: Quality Surveillance, Mortality Surveillance Report, Commissioning for value pathway on a page, Primary Care Web Tool, Intelligent Monitoring Reports, Commissioning for value intermediate care pathways, Budget monitoring, SPOT tool, atlas of ambition, atlas of variation, Mortality surveillance reports. Other sources include various survey results e.g. PC, IP, OP, A&amp;E, and via reports from national organisations.</td>
</tr>
</tbody>
</table>
5. Where are we now

The 3 main providers have access to data and solutions that deliver information which enables them to drive clinical performance in order to improve care and deliver financial savings.

All organisations are in the process of migrating from the Dr Foster solution to the one provided by the NHS, developed by University Hospitals Birmingham NHS Foundation Trust. The solution is refereed to as HED, Healthcare Evaluation Data.

The HED analytics suite allows healthcare organisations to utilise analytics which harness HES (Hospital Episode Statistics) national inpatient and outpatient and ONS (Office of National Statistics) Mortality data sets. In addition to the English national data sets we now also perform benchmarking using international data, including the US honor roll and Australian inpatient datasets.

HED has been developed by NHS Clinical and Finance Analysts, with clinical engagement. The System incorporates multiple data sets to enable national and international benchmarking across “contextual indicators” in order to identify & prioritise areas requiring focus.

Data Sources include: HES Inpatient, HPA Data, HES Outpatient, HRG Tariff, HES A&E, NPSA, ONS Mortality, Workforce, VTE Risk Assessment, International Data.
5. Where are we now

BiB is a long term study of a cohort of 13,500 children, born at Bradford Royal Infirmary between March 2007 and December 2010, whose health is being tracked from pregnancy through childhood and into adult life.

The information collected from the BiB families is being used to find the causes of common childhood illnesses and to explore the mental and social development of this new generation.

By recruiting pregnant women, their partners and their newborn babies to the cohort, this study offers the potential to:

- assess the determinants of childhood and adult disease
- assess the impact of migration
- explore the influences of pregnancy and childbirth on subsequent health
- generate and test hypotheses that have the potential to improve health for some of the most disadvantaged within our society.

The Bradford community provides a unique setting for a birth cohort study exploring the determinants of childhood and adult disease because of its diversity of population and high levels of ill-health.

Despite these challenges there is a great optimism in the city about the potential to create a better and healthier place to live and work. The people of Bradford have long shown an ability to think imaginatively and to work together for their community. This is a city where there have already been excellent examples of the health service, local government, and community groups working together.
5. Where are we now

BiB works closely with Health and Education staff who play a huge part in the work of Born in Bradford.

BiB relies on the collection of routine measures by paediatricians, midwives, school nurses, GPs and health visitors who all have an important role to play in helping to record high quality data for us to follow up.


Further information on the study information is available at: [http://www.borninbradford.nhs.uk/research-scientific/cohort-study/](http://www.borninbradford.nhs.uk/research-scientific/cohort-study/)

Examples of what BiB has found include:

- unearthed a link between a healthy dose of nature and the positive wellbeing of mums-to-be, showed a beneficial relationship between green space and depressive symptoms in pregnant women. The key finding revealed that while 33.5 per cent of women reported at least one severe depressive symptom during pregnancy, those living in the greenest areas of Bradford were around 20 per cent less likely to report feeling depressed.

- Sedentary behaviour (sitting or reclining) has been shown to adversely affect children’s health, independent of the amount of physical activity that they do. Prolonged sedentary behaviour in children is associated with obesity, high blood pressure, high cholesterol, poor glucose control, lower fitness, poorer cognitive development and poorer academic achievement. Changes in our environment and lifestyle have resulted in children not only becoming less active, but also spending unnecessarily long periods of time sitting, particularly in the classroom.

- Exposure to common air pollutants and traffic during pregnancy significantly increases the risk of restricted foetal growth, even at levels well below those stipulated in current European Union (EU) air-quality directives. The researchers estimate that for every increase of 5 micrograms per cubic metre (5µg/m³) in exposure to fine particulate matter during pregnancy, found in for example traffic fumes and industrial air pollutants, the risk of low birthweight at term rises by 18%.
6. Where we are going

As our STP plans develop and mature we will further consider how digital technology will support closing the care and quality gap, the finance and efficiency gap and the health and well being gap.

The matrix below highlights our desires for our journey ahead towards 2020. It clearly identifies how the main technology enablers will contribute towards closing the respective gaps. The following pages add further context.

A synopsis of this is provided below:

<table>
<thead>
<tr>
<th>Closing the gaps</th>
<th>Example Approaches</th>
<th>Linked Benefit themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care and Quality</td>
<td>Information Sharing, expanded e-Discharge, NHS Number in all settings, end to end e-Ordering and Results, Health Information Exchange, Remote Video Consultations, Risk Stratification, Map of Medicine, cYorkshire and SystmOne Social Care</td>
<td>access to digital, real-time and comprehensive patient information, more effective decisions through synthesising information from a range of sources, clinicians can be alerted promptly to people who are deteriorating or ‘at risk’</td>
</tr>
<tr>
<td>Finance and Efficiency</td>
<td>Reciprocal Wi-Fi, Information Sharing, Collaboration tools, NHS Number in all settings, end to end e-Ordering, Health Information Exchange, Full National Systems Utilisation, E-Consults, Remote Video Consultation, Open APIs, e-rostering, GS1 adoption including asset tracking and stock management.</td>
<td>contact time for community-based staff increased through mobile working, unnecessary diagnostics, no access visits or duplicate equipment orders will be avoided, acute productivity improved.</td>
</tr>
<tr>
<td>Health and Wellbeing</td>
<td>Self Care Data Exchange, Patient Secure Messaging, Patient Portal / Patient Online, Remote Video Consultations, Risk Stratification, Map of Medicine, cYorkshire, E-Consults</td>
<td>patient-recorded information contributing to self-care across pathways, population health management can be supported through the analysis of data from across the system, take-up of personal health or integrated health and care budgets accelerated through providing digital information and tools to patients</td>
</tr>
</tbody>
</table>
6. Where we are going

Building on the work we have already delivered to date we will further enhance our ‘Whole System’ intelligence to support population health management and effective commissioning, clinical surveillance and research. We will optimise the use of our Business Intelligence Tools that are further enhanced by the cYorkshire initiative which includes the ability to predictively model and test emerging care models.

We will continue to pursue enhanced Real-time data analytics at point of care to support excellence in care delivery.

We will investigate how take up of personal health or integrated health and care budgets can be accelerated through providing digital information and tools for people.

We acknowledge key enablers to assist us in delivering the vision include:

• digital inclusion (equality and diversity)
• digital literacy of our workforce
• Digital literacy of those we serve
• the crucial role of CIOs and CCIOs

We aim to collaborate to deliver an effective mobile working infrastructure to enable professionals to work in all care settings, in peoples homes, in residential homes and other key community buildings.

We will seek to ensure professionals across organisational boundaries are able to collaborate including the use of instant messaging, video conferencing, presence and screen sharing via enterprise class collaboration tools. We understand that the proposed Health and Social Care Network (HSCN - N4) will be a significant enabler for this in the future.
6. Where we are going

Informatics System Capability Schematic 2016-2021

2017
- Information Sharing in place
- Exploiting & Expanding E-Discharge

2018
- Remote Video Consultation
- Nursing Home record access
- NHS number in all settings

2019
- Collaboration tools prevalent
- SystmOne Adult Social Care
- Patient access to GP Record

2020
- Real Time Data Analytics
- SystmOne all Social Care
- E-Consults expansion

2021
- Patient Portal APIs
- Full National Systems Utilisation
- Health Information Exchange
- EMIS and S1 Interop views
- Access to GP Record View

Future State
- Reciprocal Wi-Fi
- End to end e-ordering and results
- Open APIs from other care settings
- Patient secure messaging
6. Where we are going

In addition to providing a paper free record at the point of care we have identified a number of additional Digital initiatives which we are confident will serve to build a better digital future for the people we serve and employ. They include:

<table>
<thead>
<tr>
<th>Digital Initiative</th>
<th>What this means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reciprocal ‘corporate’ wi-fi in strategic NHS and Council buildings</td>
<td>Allows the free movement of ‘care’ staff anywhere with the H&amp;SC estate. Staff will be able to log on to their desktop from any location using a mobile device (e.g. laptop, tablet or smartphone)</td>
</tr>
<tr>
<td>Free wi-fi access (to the internet) from NHS and Council buildings</td>
<td>People will be able to access internet based resources pertinent to their health and well being. It will also serve to strengthen engagement via the targeting of relevant campaigns and will be used to promote self care and well being initiatives.</td>
</tr>
<tr>
<td>Free wi-fi across the district</td>
<td>An aspirational desire to provide fee wi-fi for all. We intend to engage with industry solution providers including mobile providers covering the district with a view to enhance coverage and explore free public wi-fi opportunities in strategic centres e.g. Bradford Millennium Park, Keighley Town Centre, Westfield Shopping Centre, Sports &amp; Leisure Centres, Main Public Parks, Transport hubs including Interchange and Foster Square and Keighley Bus &amp; Rail Stations.</td>
</tr>
<tr>
<td>Collaboration Tools (including Presence, Video Calls/Conferencing, instant messaging, screen sharing)</td>
<td>Care professionals will be able to more easily ‘collaborate’ virtually as opposed to travelling across the district to single meeting locations. MDT Teams will be able to operate more efficiently and during times of crisis when decisions are needed to be made more quickly. Presence is seen as an important enabler of this.</td>
</tr>
<tr>
<td>Digital Futures including Digital Primary Care</td>
<td>Working closely with the University of Bradford, DHEZ and other Digital Futurists from across the region Digitisation is driving change at an exponential rate and we want to be better at seeing the future. We will seek to examine the powerful digital forces that are likely to re-shaping the world over the next 5-10 years and not just over the next 3-5. We believe this will help us in our planning and better anticipate the risks we need to avoid. There are a number of solutions emerging into the market place here and now that facilitate different models of service delivery. These include apps supporting virtual / remote GP consultations (enabled via smartphones, tablets etc), virtual specialist consultations (same as GP) and enhanced multi-facet health monitoring and automatic escalation.</td>
</tr>
</tbody>
</table>
6. Where we are going

Working in partnership with The Digital Health Enterprise Zone and the University of Bradford.

http://www.dhez.org/about/  http://www.bradford.ac.uk/external/

DHEZ will connect people, health and care services, businesses and universities (including the University of Bradford) to create the future of care together. It aims to improve the health and social care of people across the world by enabling the rapid design, adoption and diffusion of technological care innovations. DHEZ will cement the international reputation of Leeds City Region as the best place in the UK to innovate in technology-enabled care, and to develop the health and care workforce of the future.

DHEZ will bring its community's innovations to millions of people by 2018 - stimulating job creation, driving innovation and generating investment and funding in the regional health economy. We will make a significant contribution to the NHS meeting the challenge of a £30 billion funding gap, as predicted for 2020.

The University of Bradford is to offer an Informatics Post Graduate course, aimed at front line staff, from Autumn 2016.

Close working relationships with the other Digital Bradford 2020 partners will ensure DHEZ and the University of Bradford have ready access to care, healthcare and informatics professionals across the district. Conversely, Health and Social Care commissioners and providers will seek advice, guidance, intelligence and assistance from industry experts and academics alike.

We are very encouraged by the work we have already undertaken and excited by the possible opportunities that will open up as we move forwards on our ambitious journey,
7. Readiness

Our general assessment of our overall state of readiness is good, with pockets of excellence. A synopsis of the results of the Digital Maturity Self Assessments conducted in February 2016 are on the adjoining slides.

We are have particularly strong Strategic Alignment with each organisation having a clearly defined digital strategy aligned to corporate and clinical objectives. Via the work of Digital Bradford 2020 we will be bringing all together to form a single LDR wide Informatics Strategy. Digital is already a key component of each organisation’s Board level discussions and Chief Executives and Medical Directors are active exponents.

Leadership is generally mature and experienced but not as strong as it could be. Only Bradford Teaching Hospitals NHS Foundation Trust has Board Level representation from the Informatics profession and the challenge remains for all other organisations to consider how best informatics is represented at board level.

Resourcing is generally good although there is a mixed economy across the LDP footprint with some in-house staff employed bolstered by the use of agency and contractor staff, often project based but not in all cases. In GP Primary care 99% of Informatics resources are contracted out to a private Health Consortium.

Governance is strong and growing stronger as collaboration matures. The remit of the Digital Bradford 2020 is wide and encompasses the production and maintenance of this Local Digital Roadmap. Chairship is provided by the Chief Executive of Airedale NHS Foundation Trusts and supported by the CIO from Bradford Teaching NHS Foundation Trust who sits on the Trust Board.

There is some work to complete to ensure the overall approach to Information Governance remains robust and this will be a key focus of the Digital Bradford 2020 Board via the creation of the Data Sharing and Information Governance Working Group who will be responsible for assurance and compliance.
7. Readiness

The synopsis of the results of the Digital Maturity Self Assessments conducted in February 2016 are on the adjoining slides.

The colour key for reference is as follows:

- Disagree Completely
- Somewhat Disagree
- Neither Agree nor Disagree
- Mostly Agree
- Agree Completely
- Don't Know
- N/A
- Unanswered
7. Readiness

Bradford District Care NHS Foundation Trust

**Strategic Alignment**
- Governance

**Leadership**
- Information Governance

**Resourcing**
- Orders and Results Management
- Remote and Assistive Care
- Enabling Infrastructure

**Medicines Management and Optimisation**
- Transfers of Care
- Decision Support

**Records, Assessments and Plans**
- Standards

**Asset and Resource Optimisation**
- Infrastructure

Digital Maturity Self Assessment Synopsis
7. Readiness

Our combined main provider capability trajectory is as follows:

<table>
<thead>
<tr>
<th>Capability group</th>
<th>Baseline score (Feb 16)</th>
<th>Target (end 16/17)</th>
<th>Target (end 17/18)</th>
<th>Target (end 18/19)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Records, assessments and plans</td>
<td>51.0</td>
<td>81.7</td>
<td>93.3</td>
<td>98.3</td>
</tr>
<tr>
<td>Transfers of care</td>
<td>65.7</td>
<td>95.0</td>
<td>96.7</td>
<td>98.3</td>
</tr>
<tr>
<td>Orders and results management</td>
<td>46.7</td>
<td>85.0</td>
<td>92.5</td>
<td>97.5</td>
</tr>
<tr>
<td>Medicines management and optimisation</td>
<td>39.3</td>
<td>70.0</td>
<td>90.0</td>
<td>97.5</td>
</tr>
<tr>
<td>Decision support</td>
<td>54.3</td>
<td>90.0</td>
<td>95.0</td>
<td>97.5</td>
</tr>
<tr>
<td>Remote care</td>
<td>50.3</td>
<td>65.0</td>
<td>70.0</td>
<td>97.5</td>
</tr>
<tr>
<td>Asset and resource optimisation</td>
<td>55.0</td>
<td>90.0</td>
<td>93.3</td>
<td>96.7</td>
</tr>
</tbody>
</table>

Note:
BDCFT are undertaking a clinical systems review in the summer of 2016. Their choice of system moving into 17/18 and 18/19 will very much determine the level of capability they are to enable and exploit. By the time of the next iteration of this LDR BDCFT will have made a decision and these plans will be Reflective.
Local Digital Roadmap

8. Capacity and Capability

Comprehensively addressed in our STP, we acknowledge the need to ensure our local population is educated and empowered to confidently interact with appropriate technologies that support future desires such as improved prevention and access to and use of self care tools. We will work closely with Patient and Public representatives to ensure we provide the right level of support targeted towards those groups and individuals who need it the most.

Having a skilled and suitably trained workforce will be vital in support of our desires to transform the way in which care is delivered and the way we work. Our staff will need to be confident and competent users of technology as they will facilitate take up and adoption at the sharp end by embedding digital tools into workflows across the care continuum. They will be conversant in mobile and agile working technologies and collectively we will be responsible for raising the digital bar as health and care technology develops a more consumeristic base. Importantly our workforce will be cyber secure savvy.

Informatics will be recognised as a key cog in a co-designed, co-created and jointly owned system wide workforce strategy that promotes, attracts, recruits, develops, engages and retains a fit for purpose and diverse health and social care workforce across the ACS.

Professional Informatics talent will be proactively developed with staff training and learning together and having opportunities to access the ongoing development that equips them to flex and work optimally in meeting the personalised, holistic needs of service users that supports new ways of working and self care, e.g. agile/mobile/digital working.

Informatics leaders are jointly developed to operate as system leaders; leading from a strong, client focused values base, inspiring collaborative working through engaging staff and encouraging innovation.
8. Capacity and Capability

**Health and Care Informatics** is about the acquiring, storing, retrieving and using of health and care information to foster better collaboration among a person’s various health and care providers.

Health and Care Informatics staff will play a critical role in the transformation of health and care as defined in our STP. As part of our next stage planning we will undertake a full capacity and skills audit of all Informatics staff directly employed across the footprint.

Here in Bradford District and Craven we recognise that ‘Informatics’ is a particular skill set and are cognisant of our need to enhance and build a professional and respected informatics workforce for the future capable of meeting the emerging needs of our ACS.

In support of this The University of Bradford is to offer an Informatics Post Graduate course, aimed at front line staff, from Autumn 2016. Furthermore, we will look to work closely with colleagues in HSCIC Leeds, given their geographic proximity, to foster working partnerships and skills transfer.

We aim to share resources to not only deliver the programme of work set out within the LDR but to create an environment where skills and knowledge is shared with a view to raising the baseline informatics skillset across the district.

In support of the skills audit we will undertake to engage with the Northern, Yorkshire and Humberside Directors of Informatics Forum (NHYDIF) Workforce Skills Development Network. With a membership of over 40 Informatics Leaders from across the wider region, the NHYDIF forum is very well regarded by all and continues to thrive today. Similarly, in support of the IG agenda, we have identified the NHYDIF IG Sub-Group as a valuable additional point of reference.
9. Optimisation

Optimisation of systems and the exploitation of investments already made has been at the heart of our technological progress over recent years as demonstrated via our IDCR Programme.

We have visibility on the national stage as an enhanced health in care homes vanguard, providing a single point of access to all aspects of specialist health and care advice through technology and an extended use of telemedicine.

We acknowledge the need to build on our successes by optimising such technologies further and wider into more care settings and as determined by our developing ACS.

Sweating the excellent assets we already have will be vitally important particularly in contributing towards closing the finance and efficiency gap.

Our holistic plans for optimisation are yet to be agreed but are likely to include the following key areas:

<table>
<thead>
<tr>
<th>Networks including wi-fi</th>
<th>Utilisation of server infrastructure / storage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement and purchasing frameworks</td>
<td>Optimising licence utilisation</td>
</tr>
<tr>
<td>IG expertise and IG Toolkit compliance</td>
<td>Standardised Clinical Coding</td>
</tr>
<tr>
<td>Product Specialism, Consultancy and Training</td>
<td>Programme and Project Management</td>
</tr>
</tbody>
</table>
9. Optimisation

We will create a Digital Innovation Group that is made up of senior Clinical leaders from across the district, technology futurists, leaders and partners from the DHEZ, academic colleagues from the University of Bradford, representatives of the people we serve and our strategic suppliers.

As well as pursuing the optimisation agenda they will come together to lead on all Digital Innovation initiatives with the remit to respond to how, when and where people want their health care services delivered.

In addition to the Digital Innovation Group we commit to maintain and enhance our existing user group network which included the SystmOne Optimisation Group and the Infrastructure Resilience Group.
10. Finance

Financial investment is often at the cornerstone of IT transformation, investing in new technologies and capabilities to realise benefits in future months and years.

We acknowledge the need to further mature our governance arrangements to oversee and assure the development of robust local business cases. This will serve to unlock national investment that will significantly help us move our STP forwards.

We recognise the various sources of external funding which include:

- £1.3bn via the Driving Digital Maturity Investment Fund (£900m Rev, £400m Capital over 5 years)
- £1bn Estates and Technology Fund (annual capital investment programme)
- £tbc Sustainability and Transformation Fund (details to be released)

Local IT budgets are as follows:

<table>
<thead>
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<td>Subject to business case</td>
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<td>varies</td>
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<td>BCCCG</td>
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<td>Totals</td>
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<td>27,759</td>
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11. Next Steps

Our LDR will develop organically alongside and integrated with our STP and the development of our ACS. We will seek to improve and enhance it on a rolling basis with the next major iteration planned for the Autumn 2016.

We will ensure future versions will address gaps to include:

- Enhanced engagement with North Yorkshire County Council
- Smaller providers (including AQPs)
- Bradford Community Interest Company
- Enhanced inclusion of GP Federations
- Ongoing developments in STP and ACS detail
- Alignment with the Children’s’ Digital Health Strategy,
- Alignment with the Strategy for Nursing, Midwifery and Care Staff
- Alignment with the 16-18 GPIT Operating Model
- Alignment with the Data Quality Strategy
- Alignment with Caldicott 2
- Utilising National Lessons Learned and Best Practice

Further information regarding the content of this submission can be obtained from simon.wilson@bradford.nhs.uk
# 12. Annexes (LDR Templates)

<table>
<thead>
<tr>
<th>Annex</th>
<th>Description</th>
<th>Attachment</th>
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<tbody>
<tr>
<td>1</td>
<td>Checklist for Submission</td>
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<tr>
<td>2</td>
<td>Capability Deployment Schedule</td>
<td><a href="#">Microsoft Excel Macro-Enabled Worksheet</a></td>
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<tr>
<td>3</td>
<td>Capability Trajectory (Secondary Care)</td>
<td><a href="#">Microsoft Excel Worksheet</a></td>
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<tr>
<td>4</td>
<td>Universal Capabilities</td>
<td><a href="#">Microsoft Word Document</a></td>
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<td>5</td>
<td>Information Sharing Approach</td>
<td><a href="#">Microsoft PowerPoint Presentation</a></td>
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### 13. Glossary

<table>
<thead>
<tr>
<th>ACS</th>
<th>Accountable Care System</th>
<th>AWC</th>
<th>Airedale, Wharfedale and Craven</th>
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<tbody>
<tr>
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<td>Airedale NHS Foundation Trust</td>
<td>API</td>
<td>Application Programming Interface</td>
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<td>Any qualified provider</td>
<td>BC</td>
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<td>CBMDC</td>
<td>City of Bradford Metropolitan District Council</td>
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<td>Chief Clinical Information Officer</td>
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<td>Chief Information Officer</td>
<td>DHEZ</td>
<td>Digital Health Enterprise Zone</td>
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<tr>
<td>EPR</td>
<td>Electronic Patient Record</td>
<td>HED</td>
<td>Healthcare evaluation Data</td>
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<td>Health and Social Care Information Centre</td>
<td>HSCN</td>
<td>Health and Social Care Network</td>
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<td>IDCR</td>
<td>Integrated Digital Care Record</td>
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<td>Information Governance</td>
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