

Digital Health and Wellbeing Charter for Yorkshire and The Humber

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Summary: Development of Digital Charter for Yorkshire & the Humber

At the first meeting of the Yorkshire and Humber Digital Care Board, it was agreed for the development of an overarching strategy that would set out ambitions for the region and help to deliver economic and service benefits. Over recent months, work has been undertaken to develop a digital charter for Yorkshire & the Humber (Y&H). This has been achieved through a combination of consultation and open collaboration with the ICS' and STPs.

The foundation of the charter is the Y&H Care Record, which is providing the capability for our systems to speak to each other and for people to manage and contribute to their own care record.

The digital charter seeks to deliver on a number of our joint and most significant ambitions including:

- The acceleration of the delivery of integrated care;
- Underpinning new models of care with innovative technology;
- Differentiating the Y&H region globally, in terms of being the best place for the healthtech sector to grow and thrive, and one of the best places for health data and research;
- Establishing Y&H as the demonstrative case that meets some of the grand challenges of the industrial strategy; notably the challenges of the ageing society, Artificial Intelligence, and data in healthcare.

To help these aspirations become a reality, a number of commitments/principles within the digital charter have been developed. A copy of the charter is attached for your review; the commitments/principles can be found on the final page.

The charter establishes and advocates a "tight-loose" approach to digital transformation, through which common agreed standards and shared capabilities [tightly controlled] will be developed across Y&H, with the delivery of solutions by local system partnerships expected to meet these standards in their local context [with flexibility to adapt which tools and arrangements work, hence "looser" in nature].

The charter strongly advocates, in line with government policy, the use of open standards wherever possible and appropriate. This will position us favourably going forward when trying to attract additional central government funding.

The feedback received so far is that the charter and the standards and approaches therein, can help each of the ICS'/STPs with their own digital strategies and plans. The recommendation and intention is that the charter and its commitments form an integral part of each of the ICS'/STP long term plan submissions, which are due for submission in October.

Which of the themes and/or enablers in the North Yorkshire Joint Health & Wellbeing Strategy are addressed in this paper?

[Please tick as appropriate]

Themes	✓
Connected Communities	✓
Start Well	√
Live Well	√
Age Well	✓
Dying Well	✓
Enablers	
A new relationship with people using services	✓
Workforce	✓
Technology	✓
Economic Prosperity	✓

How does this paper fit with <u>other</u> strategies and plans in place in North Yorkshire?

This paper is intended to work across the Yorkshire and Humber region, there are a number of North Yorkshire strategies which will connect to this broader approach. Those strategies would include the Digital Strategy and the Assistive Technology Strategy. Transformation plans from the ICS/STP areas. The paper also fits with key aspects of the NHS Long Term plan, Department of Health Future of Healthcare: Design Principles, and MHCLG Digital Declaration.

What do you want the Health & Wellbeing Board to do as a result of this paper?

- Endorse the Charter in principle, and provide any additional comments or obstacles to the adoption of this charter.
- Act as advocates for the charter in our respective organisations and provide the necessary sponsorship and support to ensure that it is approved and incorporated into the long term plan submissions over the coming months

Digital Health and Wellbeing Charter for Yorkshire & Humber

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1 Introduction and Document Purpose

- 1.1 Yorkshire and Humber (Y&H) is typical of similar sized regions. It faces the issues of increasing demand on health and social care and reducing resources to support it.
- 1.2 Health and care delivery across Y&H is built on the principle of subsidiarity, recognising the primacy of the health and care partnerships in each of our localities. The strategies of the ICS/STPs are aligned with a common priority, principally the 'left-shift' of health and care, built up from fully integrated neighbourhood services based on the Primary Care Home model¹. This means the needs of one person are addressed by people from multiple organisations acting as one team, whilst empowering the person with tools and support, enabling a better life through connectedness, improved wellbeing, illness prevention and self-care.
- 1.3 The Industrial Strategy sets out four Grand Challenges to put the UK at the forefront of the industries of the future and to help us tackle some of the major challenges facing the modern world. These challenges are:
 - Putting the UK at the forefront of the Artificial intelligence (AI) and data revolution;
 - Ageing society;
 - Clean growth;
 - The future of mobility.
- 1.4 This document proposes that Y&H, due to its strength in informatics, its assets and its open approach to integrated health care records, can take a lead role for the UK, in tackling the issues of the ageing society and in the use of AI and data to transform the health and care system.

¹ https://www.england.nhs.uk/new-care-models/pch/

- 1.5 The adoption of this strategy by the Health and Care organisations across Y&H will accelerate the delivery of the developing integrated care pathways, at a local to local or regional basis, enabling people to take greater control of their care (and their information), and providing integrated information about patients to clinicians, enabling them to make better decisions. Together this will significantly improve the health and care outcomes for all of the people of Y&H.
- 1.6 The ultimate aim for pursuing Digital Health and Wellbeing is to bring demonstrable benefits to the citizen or patient and the clinicians and staff who are charged with providing care and keeping people well. Key benefits of this for citizens and patients include:
 - Digital Records allow clinicians to see a patient's complete health and care information in real-time, including any medical charts, past diagnoses, lab results, and treatment, leading to better care and decisions;
 - Structured Digital Records can be made available to patients, carers and other staff to promote self-care and put the user in control;
 - Access to information saves time for patients, carers and clinicians and leads to better care and more timely decisions;
 - More efficient monitoring and management of chronic diseases. A comprehensive record keeps track of patient medications, consultations, specialist reports, x-rays and scans all in one place;
 - Combined data from different sources provides insights that can inform better targeted interventions and commissioning decisions;
 - Combined teams made up of NHS, Council, community and locality organisations working as if one organisations around the needs of people enabled by technology;
 - A reduction in medication errors, which can pose a serious threat to patient safety and contribute to rising healthcare costs.
- 1.7 All our clinicians, carers and health and care professionals' put patient needs first, and want to offer the best quality care possible within the hospital, clinic, long-term care or office setting in which they work. By increasing workflow efficiency, digital health solutions can help our staff maintain their high standards of care in the face of increasing cost and time restrictions. Digital health and wellbeing solutions make it easier to:
 - Efficiently manage workflows and improve care coordination an increasing challenge with an aging population;
 - Track a patient's history, allergies, medications, and past procedures;
 - Better support multiple care providers, regardless of location, to access a patient's details from any appropriate digital device;
 - Communicate with colleagues and specialists in a more timely fashion;
 - Quick and safe transfer of patient and citizen data to other providers of care;
 - Reduce errors that occur from transcription;
 - Increase diagnostic and treatment accuracy by always having access to a patient's complete history and being able to access a wider group of colleagues for advice.

- 1.8 The adoption of Digital Health and Wellbeing solutions and new ways of working brings benefits for everyone:
 - Patients/People, from having a deeper knowledge of their health and wellbeing options, become more confident in their ability to participate in the management of their health, and have more informed discussions with their doctor;
 - Clinicians, from increased efficiency (even factoring in the time invested in learning a new system and mastering new processes and workflows) and improved safety, communication between all health and care stakeholders, including patients, clinics, hospitals, labs, social care, third sector and pharmacies.
- 1.9 Over time, the adoption of new Digital Health and Wellbeing solutions from new entrants in the market, will support the achievement of the population wide outcomes we collectively need to achieve. These outcomes will include the reduction of the occurrence of ill health, the appropriate configuration of health and care services to deliver care and keep people healthier, and progress in tackling the wider determinants of health.
- 1.10 Regions will differentiate globally if they can successfully combine the four inter-related and dependent strategies noted in the diagram below.



Figure 1 - Intersection of our ambitions

- 1.11 This document will explain what each of these are and why they are dependent on each other to succeed.
- 1.12 The NHS Long Term Plan (2019) has a specific Chapter <u>Digitally-enabled care will go mainstream across the NHS</u>, coupled with the DHSC policy document <u>The future of healthcare</u>: our vision for digital, data and technology in health and care. These documents focus on getting the basics right: i.e. the underlying digital architecture of the health and care system recognising that the building blocks are critical to the safe and successful use of technology, ensuring that systems communicate with each other and that the right data gets to the right people at the right place at the right time.
- 1.13 The strategy framework detailed within this document will help all across the region to meet and exceed the national aspirations. This can only be achieved with a move to open standards, allowing data to be more easily shared and combined at scale. This will enable a diverse market place of innovative suppliers and new entrants to collaborate and provide personalised digital products that can be combined around the needs of individuals. Our Local Health and Care Record Exemplar (LHCRE) Programme is the starting point for this, which is in stark contrast to many other areas that are adopting major vendor partnerships, tying themselves into particular technologies and hampering their ability to innovate.
- 1.14 This strategy document focuses on the means by which Y&H can become the Best Place for Digital Health and Wellbeing, underpinning new models of care and providing the necessary combined data and open systems (open platform) to enable us to also become the Best Place for HealthTech, Data and Research. The opportunities these represent to the region are detailed within Sections 2 and 3, however the means by which these will be delivered is outside the scope of this document.
- 1.15 This strategy document also articulates the need for:
 - A joined up and focused approach to building a digitally-ready workforce across the system
 - Digitally savvy business and clinical leaders
 - People across Y&H to be digitally included so all can enjoy the benefits
- 1.16 This Strategy Framework articulates a Y&H system wide approach to Digital, Technology, Data and learning that can best enable the necessary transformation of the health and care system, whilst seamlessly helping the Research and HealthTech ecosystems to derive new exportable insights and innovations that will provide many new possibilities for prevention, care and treatment.
- 1.17 Some parts of Y&H are already recognised as centres of excellence in these areas, for example the Leeds Care Record, the Born in Bradford study https://borninbradford.nhs.uk/research/and the Devices for Dignity MedTech innovation. Other examples to be added
- 1.18 We will take a human centred design approach and build on the excellent engagement work already undertaken across the region e.g. Joined Up Yorkshire and Humber. This approach brings together service users/people with professionals and the innovative digital sector to develop new products/services. It starts with a clear definition of the problem, which informs co-production, maximises its adoption and utlimately delivers more sustainable benefits. (See Design Principles Appendix 1)

2 The Opportunity for Best Place for HealthTech²

- 2.1 The region has one of the fastest growing innovative digital technology sectors in the UK, employing 102,000 people and generating £6.6bn for the local economy. This boom is as a result of indigenous business growth and the national/international draw of the region's innovation, entrepreneurship and supportive ecosystem.
- 2.2 The Digital sector combines creative media, data analytics, cyber security, FinTech, telecoms, health and education technologies, and is already transforming global businesses. The region offers an influential ecosystem with a dynamic tech scene and unlimited opportunities for business growth and investment.
- 2.3 Y&H has the largest concentration of health informaticians (22%), medtech and digital health companies in the UK; there are 160 medtech companies in Leeds alone. The regional economic development departments have up to date databases of these digital start-ups and the sectors they operate in and regularly facilitate networking opportunities for the start-ups with each other and academia.
- 2.4 Regional technology innovation hubs and science parks provide creative and experimental environments. These include the Leeds Innovation Centre NEXUS, C4DI in Hull and the Kroto Research Institute (University of Sheffield), the Advanced Wellbeing Research Centre and manufacturing park in Sheffield. Their purpose is to 'connect, collaborate and co-create' both HealthTech and MedTech solutions within their co-working spaces and cross cut into other sectors such as Finance and the Environment. They help companies and innovators ensure their products are safe and can be recommended to clinicians and the public.
- 2.5 Major health IT vendors are also well represented in the region, with key health service patient record providers EMIS and TPP and leading telehealth providers Tunstall and DocAbode UK Ltd all based in Y&H. The digital sector is vibrant and experiencing significant growth, with organisations like SkyBet based here. Leeds is also the largest banking centre in the UK outside of London, making it a significant attractor of talent, further supporting the continued growth of the thriving tech ecosystem.
- 2.6 Y&H already has highly resilient infrastructure in place e.g. IXLeeds, the city region's internet exchange, which links directly to Europe and the USA, and has the capacity to route all of the UK's internet traffic, should London experience an outage. Many data centres utilise this highly resilient infrastructure to ensure their customers can always utilise high speed internet connectivity. The Y&H technology base is strong and has a strong emphasis on user led, human and community centred design in solution development. These capabilities will be important to deliver our strategies.
- 2.7 A joined-up approach to this work across the region will create more high-quality jobs, increase productivity and grow a health market place of new capabilities for the UK and beyond.

² The figures in this section are limited to data we have access to for Leeds. A piece of consultancy has been commissioned to ascertain the baseline for HealthTech across Y&H from which we will update these figures.

3 The Opportunity for Best Place for Research and Insight

- 3.1 Y&H has a strong base of research and innovation capability with ten universities focussed on science, technology, engineering, maths and healthcare including the University of Leeds, University of Sheffield, University of Bradford, University of Huddersfield, University of Hull and York St. John University. There is a richness of specialist centres of expertise that together create a powerful academic and resources ecosystem across the area.
- 3.2 This capability is helping to accelerate greater insights to support population health management, enabling the public to use new digital capabilities to achieve better health and care outcomes.
- 3.3 The region is a hotbed for NHS clinical research studies, with more than 80,000³ participants being given access to new improved treatments4, according to figures from the National Institute for Health Research (NIHR).
- 3.4 In January 2019, Propel@YH, a Y&H digital health accelerator programme, was launched to encourage technological advances and improve patient outcomes. Participating organisations receive:
 - Specialist training and product development support;
 - One-to-one support from individuals with extensive clinical, NHS provider, clinical safety and NHS procurement experience and expertise;
 - Access to expert partners including NHS providers, commissioners, academic organisations and primary care representatives.
- 3.5 With established academic expertise in Engineering, Computer Science and Health Informatics, the regions Universities attract many of the UK's top students. In LIDA (Leeds Institute for Data Analytics), we also have the UK government's biggest single investment in data science. TITCH is the national healthcare technology network, hosted by Sheffield Children's Hospital, dedicated to the development of technology solutions to help improve children's healthcare
- 3.6 The government's recent commitment to fund 50 AI data scientist PHDs at the University of Leeds recognises the strong collaboration between the region's Academia and public sector. https://www.leeds.ac.uk/news/article/4374/phd opportunities to transform healthcare through_ai
- 3.7 Coupled with Best Place for HealthTech, it is recommended that an academic organisation, such as the Y&H Academic Health Science Network, takes the lead in developing a complimentary Strategy Framework for this area. This will support the work with the public to commoditise data, driving sustainability and ensuring public health and NHS benefits are at the heart of our commercial relationships.

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³ 82,909 people took part in research delivered through NHS trusts and Clinical Commissioning Groups from April 2017 to March 2018. This represents an increase of almost 10,000 on the previous year (72,944), according to figures published in the NIHR NHS Research Activity League Table.

3.8 With regards to HealthTech and Research and Insight, the Chief Digital and Information Officer for the City of Leeds has extended a commissioned piece of work from the Leeds City Region to baseline the Health Tech sector across the entire Y&H region. This asks: What does health tech in the region look like — what is our capability, capacity and potential? We are seeking to better understand the nature of the digital health / health tech sector in the region beyond the top line facts and figures and whether we have any genuine areas of distinctive strengths and opportunities? This will enable us to baseline our assets and ensure that all partners are aware of them and able to exploit them; We can support each other in developing new regional capabilities and pursuing / bidding for opportunities.

4 Making Y&H the Best Place for Digital Health and Wellbeing

- 4.1 Becoming the best place for Digital Health and Wellbeing is dependent on Y&H taking an integrated and standards-based approach to the delivery of Digital, Technology and Data. This is the only way of combining data from a heterogeneous set of legacy systems across the region and enabling a market place of Health Tech innovators to develop new products to solve the challenges we face today.
- 4.2 This requires all organisations across the region to adopt the recommendations in this Strategy Framework to developing and commissioning Digital, Technology and Data solutions.
- 4.3 It is recommended that the Y&H Digital Care Board provides the oversight and leadership necessary to ensure all organisations align to this approach.

Where are we now?

- 4.4 Several places within Y&H (e.g. Leeds, South Yorkshire and Bassetlaw) are leading exemplars of digital health and wellbeing open platforms, showing how best to combine information, digital tools and human endeavour from health partners, citizens, academics and innovators to deliver better outcomes, for example the Leeds Data Model, which combines data from different sources across organisations to provide better informed decisions on population health management.
- 4.5 Similarly, pockets of Y&H have created the foundations of a successful and thriving digital ecosystem through the introduction of technology and innovation hubs, which are funded specifically to help the entrepreneurial digital health and wellbeing sector develop new capabilities to enable the "left shift" new combined groups of carers and the public using new digital capabilities to enable them to achieve better health and care outcomes. The Urban Sustainable Development Lab and Co>Space North are good examples of this.
- 4.6 As a result of the region's combinatorial whole system approach to delivering health and wellbeing outcomes, and its ability to convene users, professionals, data and the tech sector to support the coproduction and testing of products, many internationally renowned innovations were first deployed here including:
 - Careview (tackling social isolation);
 - Samsung Activage (H2020 programme helping to reduce medical interventions);
 - Tele-dermatology (enabling images of skin conditions to be sent directly to specialists);
 - EMIS and TPP general practice IT systems.

- 4.7 The Local Health and Care Record Exemplar (LHCRE) program provides an open systems and open data platform for integration, and a platform upon which these new ecosystems of suppliers can develop new capabilities. The LHCRE aims to provide a combined normalised longitudinal health and care record (and the associated integration) for a population of 5.8M, allowing it to be continually updated and added to from professional records and by people themselves. Not only will this facilitate improved integrated direct care for patients, but it will also enable the application of modern data analysis technologies (such as AI) to create the insight to make more informed decision-making regarding commissioning, prevention and future research. It will create a significant asset for supporting research and knowledge creation. This directly enables the commitments each ICS/STP have made with regards to integrated care and enables all organisations, regardless of digital maturity, to be on-boarded and start delivering the benefits to patients and clinicians.
- 4.8 Y&H is the only region developing a reusable and open capability that will integrate with the full range of heterogeneous health and care systems, enabling organisations to maximise the investments they have already made. This approach is the only one which is truly exportable to other complex systems across the world, without incurring significant licence costs or following a particular vendor's approach.
- 4.9 All of the products underpinning LHCRE are built to common standards, using components that are transferable to different local contexts across the UK and beyond. For example the HELM Person Held Record (PHR), which was developed in Leeds and will be adopted by the Salford Global Digital Exemplar as part of the Manchester LHCRE, is a platform upon which new capabilities can be built and reused elsewhere. Similarly the Y&H LHCRE programme has adopted open platform capabilities that were originally developed by the Worcestershire Health and Care NHS Trust Global Digital Exemplar.
- 4.10 Y&H is also one of the leading regions in joining up often siloed government policies on Digital e.g. The Department for Digital, Culture, Media & Sport, Ministry of Housing, Communities, and Local Government and NHS Digital initiatives on connectivity, housing, digital health and wellbeing are being combined to quickly address the needs of the poorest in Council or Housing Association owned properties.
- 4.11 The <u>Yorkshire and Humber Public Services Network</u> is the largest public sector network services platform project in Europe, with 52 public service organisations utilising a common-standards based secure network service. This replaced the legacy PSN and N3 services, delivering 10% of NHS Digital's HSCN estate and demonstrates the region's ability to collaborate at scale.
- 4.12 Maintaining a high level of public trust through good information governance arrangements and expertise in digital and data ethics feeds product development. There is a Y&H Data Ethics forum that involves leading national experts in this area from academia, industry and government, who are developing new methodologies, models and guides to ensure we use digital and data in an ethical way.

Where do we want to be?

- 4.13 By 2021 we will all have integrated data from across the statutory health and care system via the Yorkshire and Humber Digital Care Record (LHCRE). Data will move seamlessly and securely and used to enable better care of the person in any setting. Localities will be able to determine their own local solutions and interventions, whilst contributing data to and consuming data from the wider region.
- 4.14 People will own their own information and be able to contribute to it through the use of apps and devices enabling the personalisation of medicine and interventions.
- 4.15 We will free data (securely) from locked-in systems and provide a technology platform that enables innovators to use the data and easily develop new integrated products and services. This will provide access to over 5.2M people and the potential for data to flow between people and the systems used by professionals.
- 4.16 We will normalise the data into standard computable format so it is easily accessible and readable by advanced analytics tools such as AI, opening up significant opportunities for new insights. Personalised medicine and care is achievable only as a result of combining data and analytics resources.
- 4.17 We will combine data from multiple sources (across the whole system not just healthcare), enabling teams of data analysts to collaborate and derive new insights, (e.g. predicting the impact of air quality on COPD patients), better informing targeted interventions and commissions for our populations as well as, through more accurate predictive analytics, significantly improve the flow of care through optimally allocating resources across the system.
- 4.18 We will bring together people, professionals, academics and innovators from the technology sector to co-produce solutions using a tested, human centred design approach. This will enable community and locality-based organisations, services and the third sector, to use and interact with these systems, which demonstrably deliver sustainable solutions that meet user needs.
- 4.19 We will embrace the open platform approach, enabling ecosystems of specialist suppliers to deliver personalised solutions, contributing and consuming data with our systems. This will make a marked difference in self-care, prevention and better enable the strengths of local enterprises and community capabilities and support the whole system approach to "Left Shift".
- 4.20 From a Digital, Technology and Data perspective we will remove the traditional concerns about organisational boundaries and control, and adhere to the Digital, Technology and Data Design Principles (Appendix 1) in all investment and development decisions. This will ensure we are continually working towards achieving the vision and goals detailed within this Strategy Framework.
- **4.21** Every organisation across the Health and Care system will have leaders equipped with the necessary digital skills and knowledge to ensure that new care pathways deliver better outcomes, and a digitally skilled workforce.

Through this Y&H will firmly establish itself nationally to deliver the best health and wellbeing outcomes and create scalable, industry leading solutions in the key national priority areas such as data driven AI.

5 What do we need to do?

- Pockets of Y&H have already achieved the Digital, Technology and Data maturity necessary to underpin new models of care and meet the challenges of 21st Century healthcare. These approaches could be transferred and applied to different contexts across the region. Organisations should seek and adopt innovations that have been developed elsewhere and standardise and share that which they develop so that it can be adopted elsewhere.
- 5.2 The LHCRE program will provide a solid Y&H-wide open platform foundation that all parties across the region must integrate with, build upon and exploit. This capability must be re-used for local to local or cross region integration.
- 5.3 We know that one size doesn't fit all, but by developing common building blocks our places, partnerships and organisations will be able to build services and citizen based solutions quickly, flexibly and cost effectively. This more open and flexible market will unlock our full potential for innovation. Our ambition requires both a cultural and technological shift and we've agreed five principles to help us achieve this that will be adopted by all partners that sign up to this charter. (These will be supported by more detailed Digital Design Principles that we will get all of our technology leaders to adhere to (see Appendix 1)).:
 - 1. We will go further to redesign our services, pathways and solutions around the needs of the people using them. This means continuing to prioritise people and user needs above professional, organisational and technological silos;
 - 2. We will "fix our plumbing" to break our dependence on inflexible and expensive technology that doesn't join up effectively. This means insisting on modular building blocks for IT we rely on, and open standards to give a common structure to the data we create. This opens up the opportunity for new innovations to be seamlessly adopted quickly and cost effectively;
 - 3. We will design safe, secure and useful ways of sharing information to build trust amongst our partners and citizens/patients to better support the most vulnerable members of our communities, and to target our resources more effectively;
 - 4. We will demonstrate digital leadership, creating the conditions for genuine system change to happen. Our clinical, professional and service leaders will become digitally savvy and lead the change;
 - 5. We will embed an open culture that values, incentivises and expects digital ways of working from every member of our workforce. This means working in the open wherever we can, sharing our plans and experience, working with other organisations, and reusing good practice.

Links: These design principles are an amalgam of the design principles in the DHSC policy document The future of healthcare: our vision for digital, data and technology in health and care; the NHS Digital Standards and Technology Framework and the Government Digital Service and MHCLG Local Digital Declaration.

- 5.4 The Digital Design Principles for technologists (see Appendix 1) provides clear requirements and the methods that need to be incorporated into all future Digital, Technology and Data investments and developments made by all organisations across the region. This includes methods for working with patients and people to understand the problems and co-produce solutions to those.
- 5.5 As agreed in the LHCRE bid, a Y&H Digital Team will be recruited to provide the necessary technical capacity and capability to support organisations and places across Y&H in commissioning and developing local Digital, Technology and Data solutions that will adhere to the design principles and become part of the whole. This team will also catalogue and maintain shared capabilities and will assist organisations in adopting them. They will also capture, simplify and standardise any leading developments undertaken in localities so that they can be shared across the region. This team will, with the assistance of digital sector partners, help organisations integrate with and exploit shared regional and local capabilities. The initial costs and scope of this team, specifically to maintain and develop the LHCRE products, have been submitted to the Y&H Care Record Delivery Board.
- This will enable Y&H to lead the way with regards to architecting technology at the system level, whilst enabling different delivery approaches and solutions in different local contexts.
- 5.7 This approach will deliver digitally enabled new models of care where diverse ranges of organisations, working differently in different places, can work as one, around the needs and wants of individuals. This strategy and the LHCRE program offers wider opportunities for sharing e.g. Regional PACS and pathology systems.

- 6 Best Place for Digital Ready Leaders, Workforce and People.
- As has been the case in other industries, Digital will disrupt the traditional clinical and business models and underpin new sustainable models of care. This disruption can't happen through the Chief Digital and Information Officers (CDIO) alone. It requires changes to business and clinical strategies, led by digitally skilled and knowledgeable business and clinical leaders, to ensure they take full advantage of new digital technologies to improve existing models of care for the benefit of patients and citizens.
- 6.2 These individuals need to understand the potential Digital, Technology and Data can have on their services; connecting people and technology, driving process change and supporting new operating models.
- 6.3 It is recognised that many business and clinical leaders in the public sector need development in this area. Therefore, it is proposed that a key aspect of the head of the digital or technology profession in organisations going forward is to become accomplished digital mentors, working with the support of partners (e.g. Academia and the Digital Sector), to develop our business and clinical leaders to enable them to bring digital to the core of their delivery models.
- 6.4 This approach is based in the first instance in creating effective mentors who can do this and having a model to work to.
- 6.5 This work will implement and build upon the recommendations of the recent <u>Topol Review</u> to bring in capabilities that are focused on how digital can disrupt and change the current model of healthcare to one which is more focused on better outcomes. There is an opportunity for Y&H to be the UK leaders in this area of work.
- 6.6 Further to this, there are proven and emerging models for this coming out of some the world's leading universities, including the Boston University Questrom School of Business (BUQ), which is an outstanding exemplar of business leader development.
- As an example a Digital Benchmark has been created by Professor Venkat Venkatraman (BUQ) in conjunction with the Savannah Group and PA Consulting Group which sets out to assess the extent to which traditional UK businesses are prepared for the opportunities and threats presented by digital disruption. This type of tool could be used to assess the status / maturity of our system.
- 6.8 Establish a 100% digital Yorkshire programme, working with the Good Things Foundation (Sheffield) to address Digital inclusion. This will be done by working with community organisations and groups across the region's places to increase their capability, capacity and confidence with regards to delivering digital inclusion. It is these community and locality-based organisations who directly engage with the most needy and excluded people and will address the problem in their contexts.
- 6.9 Work with universities and colleges to ensure training and education courses in health and social care provide the appropriate digital training, ensuring those coming into the health and social care sphere can use the technology they are provided with

7 Our Commitments

- 7.1 This strategy and approach is underpinned by a "tight"/"loose" approach, where region-wide common standards and shared components are managed centrally, with solutions and services delivered locally, based on the local context.
- 7.2 To deliver this vision we require all organisations to commit to the following:

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- 1. We will commit to our key clinical, business and professional leaders being developed and mentored to understand how digital, technology and data can be applied to enable new models of care;
- 2. We will support the ambition for our workforce being able to effectively use technology and data to do their jobs better;
- 3. We will support the implementation of a 100% Digital Inclusion Yorkshire & Humber Programme with the ambition that all our citizens will be digitally included;
- 4. The LHCRE program will seek to establish and gain funding for a permanent Yorkshire and Humber Digital Service and associated team to maintain, develop and assure the shared regional capabilities. If established this team will provide support to progress the aims of this charter. Further we will commit as a region to look for opportunities to create centres of excellence and shared services that can be utilised across the region.
- 5. We will commit to integrate with, build upon and exploit the Yorkshire and Humber Care Record (LHCRE) integration capability and approach for all system to system integrations, both locally and regionally;
- 6. We will adopt the design principles noted in 5.3 and ensure our technologists adhere to the supporting nationally set Digital Design Principles (Appendix 1) for all Digital, Technology and Data developments and investments which are aligned to those set by DoH, NHSD, GDS and MHCLG. This will ensure that future integration of data across places is seamless;
- 7. In line with the principles of subsidiarity, each ICS/STP will drive engagement and implementation in their areas, with support from the YHDT;
- 8. We will consistently incorporate the key parts of this strategy into our NHS long term plan submissions by October 2019;
- 9. The YHAHSN, working closely with the YHDT, will take a lead role to determine how the *Best Place for HealthTech* and *Best Place for Health Data and Research* strategies will be progressed.

As well as delivering digitally enabled change across the Health and Care system, by doing these things we have the opportunity to differentiate Y&H from other regions by enabling the creation of a new healthtech ecosystem of suppliers and innovators based on open platforms, improving outcomes for our population and delivering exportable solutions that can be used in other places.