NHS

Driving a digital future

The Merseyside Digital Roadmap

Appendices

Appendices / Supporting Documents Contents

Appendix 1: ILINKS Programme Board and CIAG Terms of Reference

ILINKS Transformation Programme Board –Terms of Reference (ToR)

Updated March 2016

The ILINKS Transformation Programme is a health economy programme which has a remit to oversee digital developments as part of the Merseyside Local Digital Roadmap footprint. The 6 CCGs within the LDR footprint are:

- Halton CCG
- Knowsley CCG
- Liverpool CCG
- Southport and Formby CCG
- South Sefton CCG
- St Helens CCG

The ultimate aim of the Programme is:

"To make Health and Social Care Information available locally, encompassing all partners; ensuring our focus is centered on the individual person and what our health and social care professionals need to meet their requirements. Our focus is not and should not be on individual organisational silos but how we work and share collaboratively around the individual"

Relationships from a programme perspective, with other neighbouring CCGs and LDR footprints is important, in particular where cross boundary issues are being addressed.

There will be a set of outcomes that the Programme Board will aim to support. These include:

- To enable the delivery of transformational change programmes through joined up informatics solutions
- To ensure information is available for professionals at the point of care with an individual
- To support a move to a paperless health and social care economy
- To ensure system wide leadership and coherence in terms of informatics
- To ensure we maximise existing informatics investment across the economy
- To ensure we have an infrastructure to enable us to 'Act as One'

The ILINKS Transformation Programme Board will oversee the delivery of the ILINKS Transformation Programme. The Programme Board will be responsible for ensuring the delivery of work streams within the Programme.

The ILINKS Programme Board will oversee the delivery of the Local Digital Roadmap as part of the Sustainability and Transformation Plans, reporting into individual CCGs and broader STP governance arrangements.

The Programme Board will be responsible for ensuring informatics related activities can demonstrate measurable benefits relating to the strategic objectives of the CCGs.

Governance of the Programme Board	
To whom is the Group accountable?	For Halton CCG the group will report into the IM&T Working Group. For Knowsley CCG the group will report into the IM&T Working Group.

	For Liverpool CCG, the group will report into the Healthy Liverpool Programme Governance structure. For South Sefton and Southport and Formby CCGs the group will report into the CCG Finance and Resources Group. For St Helens CCG the group will report into the IM&T Working Group. CCG representatives are responsible for the arrangement of reporting into individual organisations.
Clinical Informatics Advisory Group	A Clinical Informatics Advisory Group (CIAG) will be established as part of the Programme Governance. The Chair of this group will be a senior clinician who will sit on the Programme Board. The CIAG will act in an advisory capacity and steer the direction of the overall Programme.
Work Streams	A number of work streams will be set up under the programme. The managerial programme lead will report into the Programme Board against the work streams deliverables as determined by the Board. The Programme Board may co-opt work stream representatives onto the Programme Board as appropriate throughout the lifecycle of the Programme. Work streams will be held to account on delivery against an agreed plan. Interdependencies across work streams will be managed by the Programme Board.
Programme Board Responsibilities	The Programme Board is accountable for delivery of the Programme and oversees progress across all of its Sub-Projects and related activities. The Board will act as the key decision making body for the Programme by: • Producing a Programme Plan • Agreeing a Business Case, Project Brief, Project Initiation Document (PID) for all projects • Reviewing all projects in relation to Benefits to the health economy • Providing formal sign off for all Projects in the Project Portfolio • Advising and directing appropriate governance arrangements for programmes and projects within the work streams • Monitoring progress against a high-level Programme plan • Managing Programme-level risks • Managing Programme-level issues • Managing (inter) dependencies between the Programmes and Projects • Committing or sourcing resources across the Programme to enable the activities to be successfully achieved • Ensuring the vision of the Programme is aligned to Strategic Aims of the CCGs • Ensure delivery of benefits and outcomes • Making recommendations for strategic informatics investment decisions to CCGs

Programme Board Members		
Name	**Role**	**Programme Board Role**
Dr Simon Bowers	Clinical Vice Chair / Informatics Lead, Liverpool CCG	Liverpool CCG SRO, Co-Chair
Dr Rob Caudwell	Governing Body Member / Informatics Lead, Southport and Formby CCG	Southport and Formby CCG SRO, Co-Chair
Julian Hobbs	Deputy Medical Director, Royal Liverpool	Chair, Clinical Informatics Advisory Group
Dr David Wilson	GP, Clinical Lead	Halton CCG
Emma Alcock	IM&T Lead	Halton CCG
Stephen Appleton	Head of Clinical Informatics, Informatics Merseyside	Informatics Merseyside
Jon Devonport	Strategic Systems and Technology Manager, Informatics Merseyside	Informatics Merseyside
Dawn Boyer	Head of Corporate Services	Knowsley CCG
Kate Warriner	Healthy Liverpool Digital Lead / ILINKS Managerial Lead	Managerial Lead for Programme, Liverpool CCG
Carole Hill	Healthy Liverpool Programme Director	Liverpool CCG
Paul Brickwood	Chief Finance Officer	Mid Mersey CCGs
Janet King	Head of Digital Technology	NHS England, North
David Smith	Deputy Chief Finance Officer	SSCCG + S&FCCG
Caroline Lees	Associate Director, Corporate Governance	St Helens CCG

Chairing Arrangements	The Chair will be rotated between CCG Clinical Leads
Quorate	A minimum of half of the total membership must be present for the board meeting to take place. This must include each CCG, the managerial lead or nominated deputies.
Frequency of Meetings	Bi-Monthly
Review	ToR will be reviewed annually by the Programme Board to ensure appropriate membership.
Meeting Administration	The Programme Board will be administered by Informatics Merseyside. Papers will be circulated one week in advance of Board

	meetings, key action points will be circulated within 2 working days of the Programme Board and full minutes will follow within 2 weeks.
Co-opted Programme Board Members	Additional members may be co-opted onto the Programme Board as required, depending on the stage of the programme and it's activities. These members would include: • Neighbouring CCGs • Workstream representatives • Individual organisations • Supplier representatives

ILINKS Clinical Informatics Advisory Group – Terms of Reference (ToR)

Updated March 2016

The ultimate aim of the ILINKS Programme is:

"To make Health and Social Care Information available locally, encompassing all partners; ensuring our focus is centered on the individual person and what our health and social care professionals need to meet their requirements. Our focus is not and should not be on individual organisational silos but how we work and share collaboratively around the individual"

The Programme will support the following outcomes:

- To enable the delivery of transformational change programmes through joined up informatics solutions
- To ensure information is available for professionals at the point of care with an individual
- To support a move to a paperless health and social care economy
- To ensure system wide leadership and coherence in terms of informatics
- To ensure we maximise existing informatics investment across the economy
- To ensure we have an infrastructure to enable us to 'Act as One'

The Clinical Informatics Advisory Group will act as an advisory and steering group to the ILINKS Transformation Programme Board. The group will function as a joint clinical and informatics group, representing the interests of stakeholders throughout the local health and social care economy. They will make recommendations to the Programme Board to initiate informatics initiatives that 'bridge the gaps' to achieve 'joined up care' and to help to support the overall delivery of the economies transformation programmes.

The CIAG will oversee the development and steer the delivery of the Local Digital Roadmaps as part of the Sustainability and Transformation Plans.

They will achieve this through collaborative working, as an economy wide clinical informatics stakeholder group in order to progress the outcomes of the Programme. The activities will concentrate on cross organisational developments that enable us to 'Act as One'.

Governance of the Clinical Informatics Advisory Group	
To whom is the Group accountable ?	The Clinical Informatics Advisory Group will be clinically led. The group will act in an advisory capacity and steer the direction of the overall Programme. The group is ultimately accountable to the Programme Board who will approve major developments. The Chair of the CIAG will sit on the Programme Board.
Responsibilities	CIAG members will work collaboratively but as representatives of their individual organisations, are ultimately responsible to those organisations. Members must not act, or make decisions, in a way which is out of accord with the policies and schemes of delegation of their employers. A member may only act within the powers delegated to them by their employer. The main role of clinical representatives is to identify and clarify the gaps and barriers to effective care (clinical and patient view) within the health economy that informatics could help resolve. The informatics representatives will seek to identify the best fit informatics solutions, or will agree the informatics actions needed to help bridge the gaps and to help resolve the barriers and issues identified The Groups main responsibilities will include: • Contributing to the development and direction of the ILINKS Transformation programme

	• Clinical attendees - Quantifying the gaps and issues preventing the achievement of joined up care that informatics could potentially help to resolve, considering and presenting both the clinical and patient views
	• Informatics attendees - Identifying the best-fit informatics solutions or actions required
	• Working collaboratively, evolving a Programme of Work and associated work streams that may involve:
	  ○ Aligning existing programmes, initiating new projects, developing standards, agreeing common approaches, producing guidance/education materials, proposing/progressing new developments and/or procurements
	  ○ Agreeing success measures for each initiative/work stream and having visibility of progress
	  ○ Providing advice to the Programme Board on progressing major projects or suggested strategic changes
	  ○ Ensuring IG compliance is considered, addressing any IG issues or barriers preventing the flow of information needed to support joined-up care
	It is the responsibility of group members to share information and actions with their nominated deputies.

Clinical Informatics Advisory Group Members		
Name	**Role**	**Clinical Informatics Advisory Group Role**
Julian Hobbs	Interim Medical Director, Royal Liverpool	Chair, Clinical Informatics Advisory Group
David White	Divisional Head of Radiology	Aintree Clinical representative / CCIO
John Speight	Head of IT	Aintree Informatics Representative
Nik Barnes	Consultant Radiologist / Clinical Lead for IM&T	Alder Hey Clinical representative / CCIO
Cathy Fox	Associate Director of Informatics	Alder Hey Informatics Representative
Jonathan Stephens	Director of Finance, Deputy Chief Executive	Alder Hey
Dave Smith	Director of IT	Bridgewater Trust
Tom Poulter	Head of IM&T	Clatterbridge Cancer Centre
David Wilson	GP, Clinical Lead	Halton CCG
Emma Alcock	IM&T Lead	Halton CCG
Stephen Appleton	Head of Clinical Informatics	Informatics Merseyside
Jon Devonport	Strategic Systems Lead	Informatics Merseyside
Dawn Boyer	Head of Corporate Services	Knowsley CCG
Tom Kinloch	GP	Knowsley LMC
Simon Bowers	GP / Vice Clinical Chair / Informatics Governing Body Lead	Liverpool Clinical Commissioning Group Clinical representative
Kate Warriner	Healthy Liverpool Digital Lead / ILINKS Managerial Lead	ILINKS Managerial Lead, Liverpool CCG

Peter Johnstone	Pharmacy Commissioning Lead	Liverpool CCG
Sharon Poll	Nursing Lead	Liverpool CCG
Andy Smith	Head of IT	Liverpool Clinical Laboratories
Jane Mills	Managing Director	Liverpool Clinical Laboratories
Jim Anson	Consultant Microbiologist, Medical Directoy	MD, Liverpool Clinical Laboratories
TBC	Clinical Lead	Liverpool Community Health Clinical representative
Sandra Goulden	IM&T Lead	Liverpool Community Health Informatics Representative
Dani Jones	Locality Lead	Liverpool Community Health
Pauline Brown	IG Lead	Liverpool Community Health
Jim Cuthbert	GP, Chair	Liverpool GP Provider Organisation
Johan Waktare	Consultant Cardiologist / CCIO	Liverpool Heart and Chest Hospital Clinical representative / CCIO
Mark Jackson	Executive Director – Research and Informatics	Liverpool Heart and Chest Hospital Informatics Representative
Mark Hall	Consultant Cardiologist	Liverpool Heart and Chest Hospital Clinical representative
Chris Mimnagh	GP, Director of Strategy	Liverpool Health Partners
Jonny Keville	Head of Performance & Intelligence	Liverpool Local Authority Representative
Rob Barnett	Secretary	Liverpool Local Medical Committee
Derek Parkinson	Consultant	Liverpool Women's Hospital Clinical representative / CCIO
David Walliker	Chief Information Officer / Director of IT	Liverpool Women's Hospital Informatics Representative / Royal Liverpool Informatics Representative
Stephen O'Brian	Consultant Psychiatrist / CCIO	Merseycare Clinical Representative / CCIO
Jim Hughes	Director of Performance and Informatics	Merseycare Informatics Representative
Sarah Barr	Deputy Director of Informatics	Merseycare Trust
Paul Brickwood	Chief Finance Officer	Mid Mersey CCGs
Phil Jennings	AHSN Lead	NWAHSN
Daniel Hallen	Programme Manager	North West Ambulance Service
Mike Fisher	CCIO / Consultant Cardiologist	Royal Liverpool Clinical representative / CCIO
Amanda Penketh	Deputy Director of Information & Patient Access Services	RLBUHT
Wayne Leatherbarrow	Social Care Lead	Sefton Local Authority Representative

Dianne Harrison	Head of Finance & IT	Sefton New Directions
Rob Caudwell	GP / Vice Medical Chair / Informatics Governing Body Lead	Southport and Formby CCG & South Sefton CCG Clinical representative
TBC	TBC	Southport and Ormskirk Trust Clinical representative / CCIO
Matt Connor	Head of IT	Southport and Ormskirk Trust Informatics Representative
Caroline Lees	Associate Director, Corporate Governance	St Helens CCG
Christine Walters	Director of Informatics	St Helens and Knowsley Trust
Jay Carr	Director of Operations and Performance	Urgent Care 24
Kath Jones	GP	Urgent Care 24
Martin Wilson	Consultant Neurologist / Clinical Information Lead	Walton Centre Clinical representative / CCIO
Justin Griffiths	Head of IM&T	Walton Centre Informatics Representative

Quorate	As this group functions as an advisory and steering group to the Programme Board, the membership and numbers may be fluid. It will be regarded as quorate if at least 4 members in addition to the Chair or Vice Chair are present, providing they are able to represent the views of different stakeholders. Both clinical and informatics presence is required.
Frequency of Meetings	The Group will meet quarterly. Additional meetings may be held as required to help drive forward progress, or as requested by the Programme Board. The group may be asked to contribute and shape specific pieces of work by the Programme and its workstreams in between meetings. Various technologies will be utilised to facilitate this interaction.
Review	ToR will be reviewed annually by the Chair and Programme Board.
Meeting Administration	The CIAG will be administered by Informatics Merseyside. Papers will be circulated one week in advance of Board meetings, key action points will be circulated within 2 working days of the CIAG and full minutes will follow within 2 weeks.
Co-opted CIAG Members	Additional members may be co-opted onto the CIAG as required, depending on the stage of the programme and it's activities. These members would include: • Neighboring CCGs • Work stream representatives • Other organisations Papers may be distributed to other colleagues as requested.

Appendix 2: ‘Driving a Digital Future, The Merseyside Digital Roadmap’ launch document

NHS

Driving a digital future

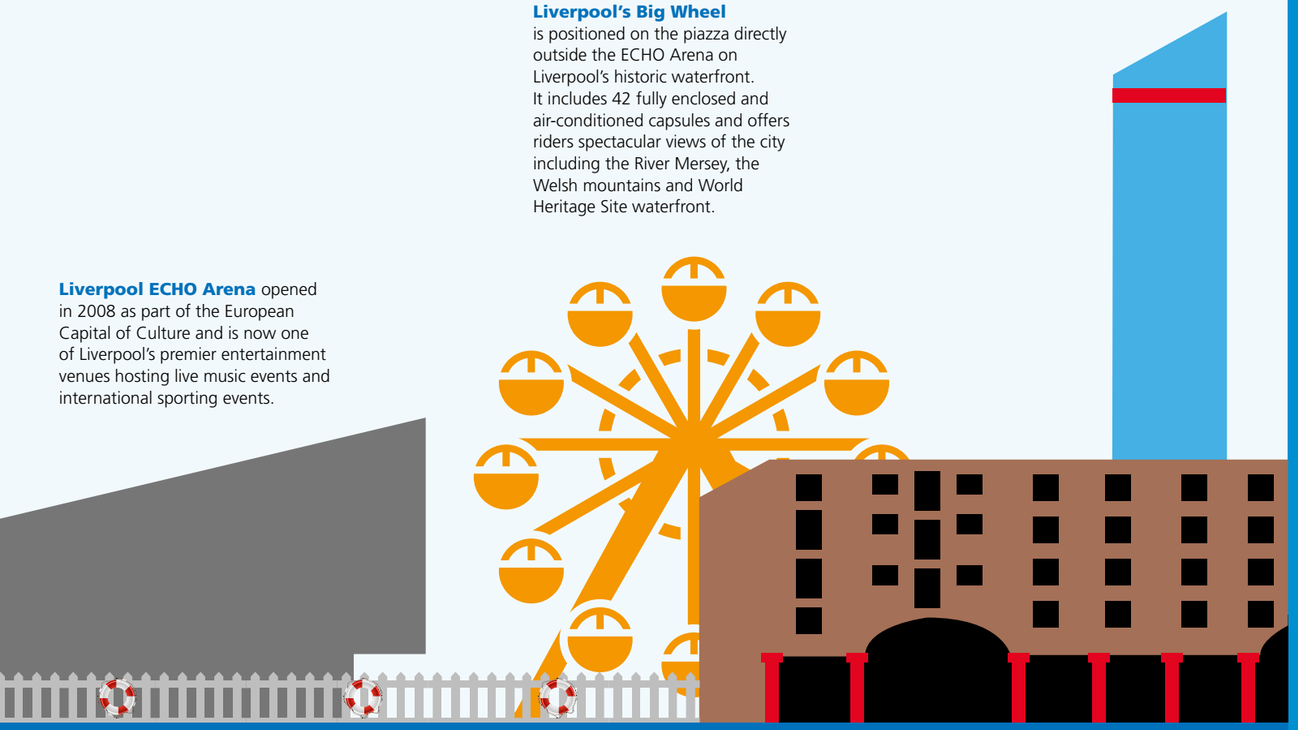
The Merseyside Digital Roadmap

2016 - 2021

Panoramic 34 is set 300 feet above sea level on the 34th floor of the West Tower in Liverpool City Centre and is one of the UK's highest restaurants. This celebrated fine dining restaurant is encapsulated by ceiling to floor windows offering breathtaking 360° views of the iconic River Mersey, city and region beyond.

Liverpool's Big Wheel is positioned on the piazza directly outside the ECHO Arena on Liverpool's historic waterfront. It includes 42 fully enclosed and air-conditioned capsules and offers riders spectacular views of the city including the River Mersey, the Welsh mountains and World Heritage Site waterfront.

Liverpool ECHO Arena opened in 2008 as part of the European Capital of Culture and is now one of Liverpool's premier entertainment venues hosting live music events and international sporting events.



Albert Dock is a complex of dock buildings and warehouses in Liverpool. Designed by Jesse Hartley and Philip Hardwick, it was opened in 1846, and was the first structure in Britain to be built from cast iron, brick and stone, with no structural wood. As a result, it was the first non-combustible warehouse system in the world. It is now home to museums, galleries and a huge range of venues to eat and drink.

The River Mersey is the lifeblood of Liverpool, shaping not just the waterfront contours but the very soul of the city. It stretches for 70 miles from Stockport to Liverpool Bay and for centuries marked the boundary between the historic counties of Lancashire and Cheshire. It gave its name to Merseybeat, the sound of Liverpool bands in the 1960s, and hit single Ferry Cross the Mersey by Gerry and the Pacemakers.

Contents

Driving a digital future

The Merseyside Digital Roadmap

1. Foreword

Merseyside stands out as a leader in digital care and innovation, with clinically led programmes held in high regard nationally and internationally. We have **significant achievements** with **ground breaking results** in information sharing, assistive technology and analytics delivering evidenced based patient outcomes and improved quality of care.

In Merseyside, there is a long established culture of clinical and managerial partnership approach to digital leadership. Our ethos of **'digital clinician'** unites all our staff from the various traditional digital fields around a focus on improving the health and wellbeing of the population we serve. The role of clinical leadership is paramount.

There is consensus that transformational change is necessary across all settings of care, with organisational sovereignty secondary to digital system change. Our digital leaders regularly spend time with their clinical partners shadowing delivery of day to day frontline care. Deference to the frontline experience drives our learning. This ensures that whatever we look to implement in the future is effective for patients and staff.

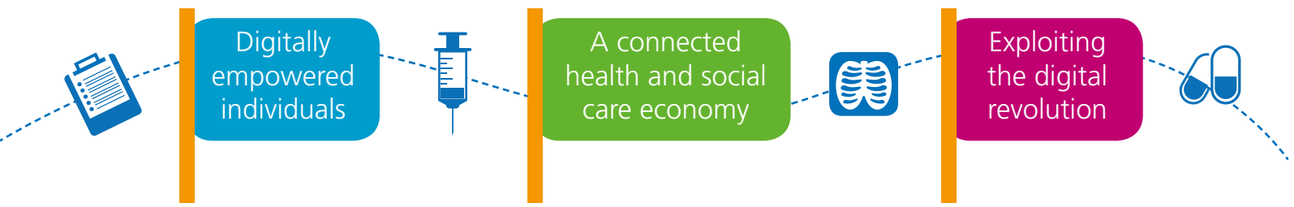
The development of this roadmap exploits the foundations laid over years of collaboration of local commissioners, providers and local authorities. Our digital relationships and leadership approach actively encourages **'digitally disruptive' conversations** and actions to drive forward change and innovation for the future.

In the development of the roadmap, we held a 'Digital Disruption Clinical Summit' where local clinicians, leaders, staff, academia and industry partners **all pledged their support and consensus** for our direction of travel.

Putting our citizens at the heart of everything we do, our aim for 2021 is to enable and empower individuals to take control of their own health and wellbeing.

We envisage a connected health and social care economy where individuals and professionals are supported by integrated systems. This will liberate them to make fully informed choices.

We will deliver three shared digital ambitions:



Through our **'Digital Top 10'**, we will deliver these ambitions and transform the way health and social care services are delivered through a seismic change in the use of digital technology and innovation.

2. Local context

2.1 Merseyside Local Digital Roadmap

The Merseyside Local Digital Roadmap (LDR) Footprint represents the geographical areas of Halton, Knowsley, Liverpool, South Sefton, Southport and Formby and St Helens, with a population of c.1.2 million people.
The Liverpool City region is resurgent, with a fast growing economy and a strong sense of optimism about the future and yet high levels of deprivation remain in parts of the region and people die younger than in other parts of England. Continued regeneration and closing the gap with other areas of the country is dependent on significant improvements in the health of our people.

The Merseyside LDR sits as one of four LDRs in the Cheshire and Merseyside Sustainability and Transformation Plan (STP). The STP is split into three Local Delivery Systems (LDS). The Merseyside LDR in this document spans six CCGs which sit within two of the LDSs within the STP. The LDR footprint does not, however, include all of the CCGs within the LDS footprints with one CCG submitting an individual LDR footprint.

The LDS's are noted below:

1. North Mersey (Liverpool, South Sefton CCGs)
2. The Mid Mersey Alliance (Halton, Knowsley, Southport and Formby, St Helens and Warrington CCGS).

NB Warrington is not part of the Merseyside LDR footprint

Merseyside has one of the most complex health and social care systems outside of London; with multiple providers, including three major adult acute trusts, a renowned children's hospital and real strength in our specialist services.

The commissioning landscape, and the scope of this LDR footprint is represented by six CCG commissioners – NHS Halton CCG, NHS Knowsley CCG, NHS Liverpool CCG, NHS South Sefton CCG, NHS Southport and Formby CCG, NHS St Helens CCG and, five local authorities – Halton, Knowsley, Liverpool, Sefton, St Helens and NHS England Specialised Commissioning.

This plan includes 13 provider trusts:

- Aintree University Hospital NHS Foundation Trust
- Alder Hey Children's NHS Foundation Trust
- Bridgewater Community Healthcare NHS Foundation Trust
- Clatterbridge Cancer Centre NHS Foundation Trust
- Liverpool Community Health
- Liverpool Heart and Chest Hospital NHS Trust
- Liverpool Women's Hospital NHS Trust
- Mersey Care NHS Foundation Trust
- Royal Liverpool and Broadgreen University Hospitals NHS Trust
- Southport and Ormskirk Hospital NHS Trust
- St Helens & Knowsley Teaching Hospitals NHS Trust
- The Walton Centre NHS Foundation Trust
- 5 Boroughs Partnership NHS Foundation Trust

The geographical area of the LDR is highlighted in the map below.

Although not directly included as a provider in this LDR footprint due to them developing a North West Wide approach, the North West Ambulance Service (NWAS) are a key provider in delivery of front line care services to our patients.

The digital ambitions and priorities as outlined in the Local Digital Roadmap have been aligned with the wider STP footprint and are included within the STP submission.

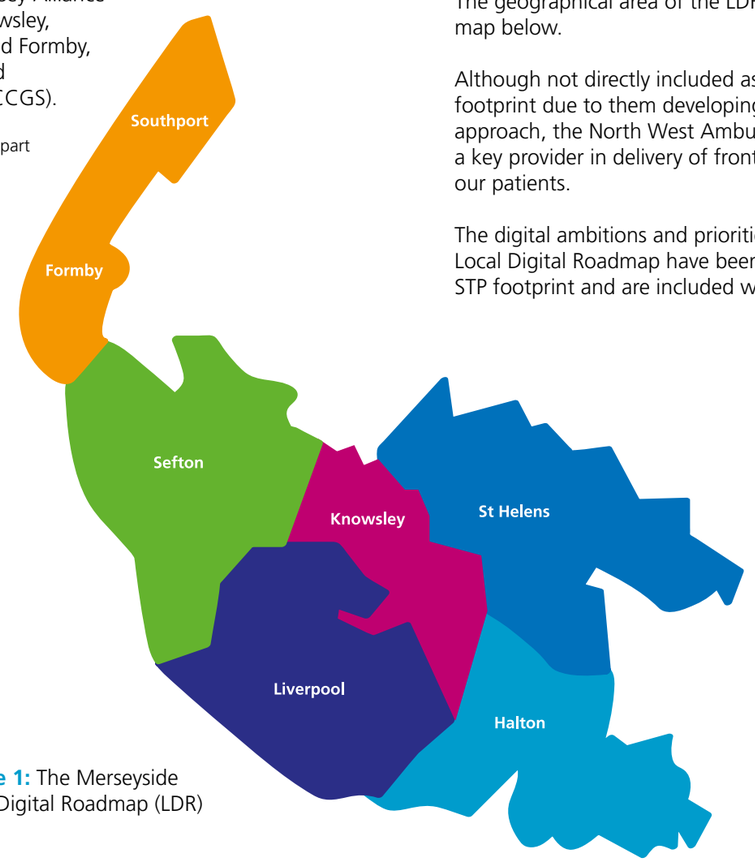


Figure 1: The Merseyside Local Digital Roadmap (LDR)

2.2 North Mersey Local Delivery System

The North Mersey health and social care system has a long track record of collaboration and a shared vision to achieve clinical and financial sustainability. There is strong consensus that transformational change is necessary across all settings of care, with boards putting aside organisational priorities in order to support system change for the benefit of our population. The North Mersey LDS Plan has been shaped through clinical leadership in Healthy Liverpool, the umbrella programme for hospital transformation, further strengthened by strong relationships with our local authorities around prevention and joining up health and social care.

While we have some excellent out of hospital services, many others are fragmented, lacking integration both within health and across health, social and the voluntary sector. North Mersey has high rates of emergency admissions which would be better treated out of hospital. We have to reduce unplanned hospital care if we are to succeed in our ambition to shift the balance towards a pro-active wellness system rather than a system which predominantly treats illness. We see primary care as the cornerstone of effective community services as it is an essential feature of all cost-effective healthcare systems, delivering improved outcomes at lower cost and with high patient satisfaction. In North Mersey primary care is challenged by increasing demand and we have big variations in quality and capacity. Whilst Liverpool and Knowsley have good provision, with high primary care workforce capacity, South Sefton has one of the lowest levels of primary care workforce per head of population in the country.

North Mersey is the most complex health system outside London, with multiple providers across 7 hospital trusts including; two major adult acute trusts and four high quality specialist trusts including a children's hospital. The case for reconfiguration of hospital services is clear; we have too many providers, too much duplication and even triplication leading to unwarranted variation in the quality of care. To ensure clinical and financial sustainability we must find innovative ways to deliver better services at lower cost to create the financial and workforce capacity to enable a shift of care from acute to community settings. The current configuration of services, set alongside the challenge of delivering 7-day Services, presents significant challenges for the funding, recruitment, retention and training of clinicians across all settings of care. The duplication of many services means that Trusts are competing against each other for scarce staff resources. We have an abundance of and a wide variation in the quality and functionality of NHS estate, despite significant investment, including the new Alder Hey Children's Hospital (£240m), Royal Liverpool University Hospital (£430m), new Mersey Care mental health facilities (£25m), the planned relocation of the Clatterbridge Cancer Centre to the Royal Liverpool campus and the new Trauma Centre on the Aintree Hospital Campus. The current configuration of sites has been developed in a piecemeal way rather than by design.

The two new hospitals, the new Clatterbridge Cancer Centre, along with developments at Aintree and further north within Sefton, need to direct the shape of our hospital infrastructure for the next twenty years or more. North Mersey has a significant concentration of specialist hospital providers that collectively deliver a wide range of services to the value of circa £300 million per year to the city region, the North West and further afield into Wales and the Isle of Man. Working in partnership with NHSE specialist commissioning, our challenge will be to harness this collective strength and ensure these services are supported to develop further as regional centres of excellence.

The North Mersey LDS are looking at 5 key areas by which we will deliver the level of transformational change our system needs:

1. Hospital Service Reconfiguration
2. Demand Management – out of hospital care
3. Population Health
4. Digital First – delivery of our digital roadmap
5. Act as One Sytstem

North Mersey has an existing governance structure, as part of the Healthy Liverpool Programme. All providers and commissioners are members of the Healthy Liverpool Leadership group, which is part of the formal programme governance structure.

Boards have been engaged throughout the process, both formally and informally. There is a plan to engage with boards formally from July 2016.

Healthy Liverpool has directly engaged 20,000 people on plans for Physical Activity, Community Services, Hospital Reconfiguration, Urgent Care and Digital Transformation. The LDS will include an integrated plan for continuous engagement over the next 5 years. Staff engagement is co-ordinated by a system-wide group delivering an integrated plan and single narrative.

There is a North Mersey workforce engagement plan, which is cross-cutting around informing and engaging on all key programmes, as well as containing plans for specific service reconfiguration.

Royal Liver Building is a Grade I listed building in Liverpool, Merseyside. Built in 1911, it is located at the Pier Head and along with the neighbouring Cunard Building and Port of Liverpool Building is one of Liverpool's Three Graces, which line the city's waterfront. It is also part of Liverpool's UNESCO-designated World Heritage Maritime Mercantile City. One of the most recognisable landmarks in the city of Liverpool, the building is home to two fabled Liver Birds that watch over the city and the sea.

2.3 The Alliance Local Delivery System

The Alliance LDS serves approximately 900,000 patients who live to the East and North East of Liverpool in the boroughs of Knowsley, Halton, St Helens, Warrington, West Lancashire and Sefton. The Alliance footprint lies within the Liverpool City Region geography, and its constituent authorities are member of the LCR Combined Authority or Associates.

This population has significant challenges in terms of health and social care, with the following features:

- Fastest growing elderly population (up to 14.4% over 75 growth in the last 5 years and 25% over 85 growth in the next 5 years)
- The second highest per capita elderly population in England – Southport
- The second highest per capita admitting hospital in the North West – St Helens & Knowsley NHS Trust
- High morbidity and mortality (above the Merseyside, Cheshire & Merseyside and England averages)
- Variable health sector estates in hospital and community sectors
- Significant local authority cuts in funding over the last 5 years impacting on services
- Below establishment primary care provision
- Financially challenged trust provider sector

Whilst the organisations of the LDS have newly come together, there is a collective sense of purpose to meet the above challenges in a systematic and co-ordinated way. The three secondary care providers have federated to form a chain of providers to meet the sustainability challenge. Our community and mental health providers are working ever closer together to integrate their care provision with social care. The CCGs and local authorities are working to integrate service responses to these challenges within boroughs. Primary Care which bears the brunt of patient access (95%) is evolving towards federated and locality ways of working with closer integration to community services.

Our plans to focus on out of hospital resilience, secondary care service transformation and re-design and "well being and prevention" will give us the best opportunity to meet the sustainability challenge.

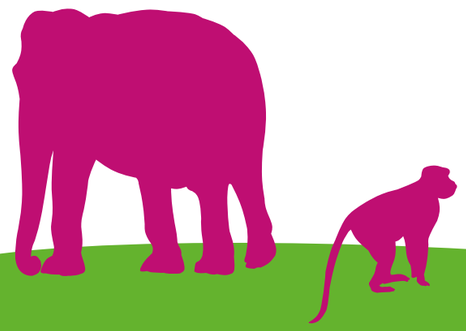
The leadership of organisations within The Alliance have, and will, take an active role within the STP to ensure that our population benefits from the transformation of services needed to allow sustainability.

The Alliance will focus on three key areas of transformation:

1. Out of Hospitals New Models of Care
2. Secondary Care Transformation
3. Wellbeing, Prevention and Self Care

We will integrate services and core terms with a person centered approach. The LDR is key to enable these new models of care.

Knowsley Safari Park is a zoological park and tourist attraction in Knowsley, Merseyside. There is a long history of keeping animals on the Knowsley estate. In the 19th century Edward, the 13th Earl of Derby, kept one of the largest private menageries in the world with 90 species of mammals and 300 species of birds! As part of Knowsley's commitment to conservation, today's keepers are always on hand to talk about the work undertaken to protect the many species at the park, and the daily care that they give the animals.



Dream is located on the prominent summit of the former Sutton Manor Colliery in St.Helens, Merseyside. Commissioned by ex-miners and St.Helens Council, the sculpture reflects the aspirations of the local community, who, far from wanting a mining monument, sought instead a forward-looking piece that would provide a beautiful, inspiring, contemplative space for generations to come.

3. A digital vision for Merseyside

Putting our citizens at the heart of everything we do, our ambition for 2021 is to enable and empower individuals to take control of their own health and wellbeing. In addition, we will ensure our health and social care professionals are equipped with all the digital resources they need to deliver safe, high quality and efficient care.

We envisage a connected health and social care economy where individuals and professionals are supported by integrated systems. This will liberate them to make fully informed choices. This digitally enabled culture allows innovative, efficient, safe and secure interactions.

We will create a permissive environment that facilitates use of both mainstream consumer devices yet nimble enough to adopt ever evolving technologies. This brings genuine self care to our citizens in a way that is convenient, unobtrusive and always co-designed.

We will transform the way health and social care services are delivered through a seismic change in the use of digital technology and innovation.

3.1 Digital ambitions

The Five Year Forward View sets out national challenges in relation to care and quality, health and wellbeing and finance and efficiency.

The Local Digital Roadmap guidance outlines four national digital themes which will contribute towards delivering these challenges:

1. Paper Free at the Point of Care
2. Digitally Enabled Self Care
3. Real Time Analytics at the Point of Care
4. Whole Systems Intelligence to support population health management and effective commissioning, clinical surveillance and research

The Merseyside LDR footprint has three shared digital ambitions for all organisations delivering health and social care services which together meet the national challenge and support the delivery of our STP. These are:

1. **Digitally empowered individuals**
2. **A connected health and social care economy**
3. **Exploiting the digital revolution**

Figure 2 highlights what these ambitions mean and how we will know if we have achieved them by 2021.

Figure 2: Digital ambitions

Digitally Empowered Individuals

- Enable people to utilise digital technologies to manage their own care
- Enable people to take control and work in partnership in relation to their health and wellbeing
- Ensure digital inclusion for all
- Digital skills for workforce and citizens

By 2021 citizens will be able to:

- Interact through a 'digital no wrong door' with their health and care services.
- Have online consultations with their care providers
- Book online appointments.
- Use their choice of device and app to manage their care
- Use assistive technology to manage their care and interact with professionals.
- Access information about their own health and conditions to support them to self care.

By 2021 our workforce will:

- Be digitally skilled with the appropriate technology and culture to enable rather than disable effective working through technology.
- Include professionalised Informatics staff accredited through the Information Skills and Development (ISD) network.

A connected health and social care economy

- Ensure information is available to the right people, in the right place, at the right time.
- Improve care, quality and experience through delivery of paper-free at the point of care.
- Create and deliver an information exchange across health and social care.
- Reduce fragmentation and duplication.
- Eradicate unwarranted variation.
- Enhance care and quality, whilst ensuring greater system efficiency.

By 2021:

- Every health and social care practitioner will have the ability to directly access the information they need, in near real time, wherever it is held, digitally on a 24x7 basis.
- We will have further consolidated and rationalised our Electronic Patient Record systems moving to a direction of a common system for out of hospital care and a common system in our hospitals with interoperability between the two.
- Duplication and paper processes will be removed to make our front line practitioners' job easier rather than harder.
- We will have standardised, structured, digital clinical records across all providers in the pathways of care where it matters most.
- No patient will need to 'repeat' their story.

Exploring the digital revolution

- Exploit the benefits of existing and future technologies
- Move towards 'intelligence led healthcare' by utilising advanced analytics, greater industrial partnership and engaging Information Governance as a structure for safe development rather than a blockage to progress
- Move away from 'off the shelf' technology towards integrated R&D development with academic and industrial partners specifically around assistive technology and sensor development designed to address NHS issues.
- Build on the work of the North West Coast Genomic Medicine Centre to embed and normalise genomic medicine into heath and care services

By 2021:

- Progress towards intelligence led services using a device agnostic intelligence centre to deliver patient telemetry and wider service intelligence allowing care to be delivered in the most efficient and effective manner.
- Standardised predictive analytics tools allowing for the identification of high resource users across the economy and early identification of episodes of care at a patient level.
- Emerging partnerships with the city regions universities allowing the development of increased digital skills through curriculum development for new clinicians and accessible training courses for experienced clinicians.
- Closer working relationships with academia and industry to take advantage of new, cutting edge innovation and expertise.
- Identification of sharing and best practice plus access to funding streams for the City region through links with Europe.
- Work with functional multi-omics pathways to enable advanced therapeutic innovation and enhanced clinical interpretation of whole genome sequencing.

3.2 Digital principles

In order to deliver this future state, the way in which we access, deliver and experience care services will be different. To support new ways of working in a digitally enabled environment, a set of principles have been developed by clinical and digital health and social care stakeholders across the economy. The principles outlined below build upon work undertaken with local economy health and social care organisations and industry partners and are key components to underpin the delivery of our LDR.

The endorsement of these design principles by all health and social care organisations is a key element of the delivery of our digital roadmap. Where appropriate, the principles will be incorporated into the procurement process to ensure that technology commissioned goes beyond the individual requirements of organisations and reflects the broader requirements of the digital roadmap footprint.

These principles sit at a strategic level, with a further level of detail and definition, to support delivery to be developed in line with organisational and economy-wide aspirations.

Figure 3: Digital principles

Person centred	Having the individual at the heart of care they receive, we will design our digital services around our people not around our organisations. People will only have to tell their story once.
Co-design	Digital services of the future are designed by and with the people who will be using those services ensuring an improved user experience for both patient, clinicians and practitioners.
Keep it simple	Simplify, simplify, simplify – create an amazing experience for staff by keeping it simple.
Digital leadership in partnership	Front line clinicians and digital clinicians will work in partnership with one another fostering excellent relationships. Digital leaders will 'walk the walk' with their clinical colleagues to ensure a deep level of understanding of the impact of their work. Relationships with external parties will be developed and commissioned effectively.
Share by default	When appropriate, we will share information by default asking how do we, rather than why can't we. We will sign up to the economy-wide sharing framework and agreement for record access, with options for patients to opt out. To build and sustain trust, we will ensure appropriate safeguards and audit systems are in place to monitor appropriate access to information.
Innovate	Working with industry and academia we will innovate and make best use of cutting edge technology. We will foster a 'bottom up' approach to innovation in the delivery of care.
Rationalise systems and interoperate	We aim to consolidate and rationalise Electronic Patient Record systems to achieve common systems across each care setting. We will seamlessly connect key systems together using a set of interoperability standards, ensuring that information is no more than 2 clicks of a mouse away for individuals giving them an intuitive, joined up service. Any future investment moves us closer to our strategy of reducing our systems in specified settings of care.
Gold standard digital maturity	All information is recorded electronically, consistently and contemporaneously at the point of care giving us a Gold Standard level of Digital Maturity across all health and social care organisations. We will record the data only once, with the correct information first time. We will reduce paper processes and reliance on faxing internally and externally between organisations and services.
Digital inclusion	We will support inclusion so that the digital opportunities are open to all who could benefit.
Digital skills	We will ensure increased digital skills for workforce & citizens to ensure maximum impact, effectiveness and inclusion.
Intelligence led healthcare	We will have an approach to intelligence led healthcare, supporting transformation and new models of care by utilising all appropriate forms of data to understand and predict when care will be needed, how it will be needed and identify those required interventions before the health need arises.

3.3 How will it feel different for our population and professionals?

People

The examples below centred on some key case studies and demonstrate how the above statements will translate into reality and feel different for our public. The case studies include an example(s) of a Long Term Condition management and an example of self care. Both are key in terms of patient buy in, literacy and investment in the future.

Meet Joe

Joe is a 63 year old man who is a diabetic and has COPD. Joe is taken into hospital one evening due to increased shortness of breath. He has recently been seen by his GP who has been treating Joe's chest infection. Joe gives consent for AED staff at The Royal Liverpool University Hospital NHS Trust to see vital information contained within his shared record. This enabled the care team to manage Joe's presenting symptoms in a more timely manner, whilst mitigating any possible clinical risks. Once Joe's health improved, the wider care team at the hospital were able to manage a safe early discharge by utilising telehealth patient telemetry. In addition to the key professionals involved in Joe's care package who can access Joe's Shared Care Plans, the health technology hub monitor Joe's vital signs specific to his condition and provide triage when needed. The data from the system can then be shared with the wider care team if Joe needs any further support. This enabled a collaborative approach across all of Joe's care providers, improving coordination of care and communication across the care team and reducing the number of times information is repeated and duplicated. Most importantly, Joe feels safe and in control. He is supported by technology providing professional support when it is needed and video education about his condition to help him self-care and manage his condition well, to stay independent and enjoy life.

Meet Dawn

Dawn is a 27 year old mother of two who is using technology to track and share aspects of her physical health information. After returning to work following maternity leave, Dawn set herself a goal of increasing her physical activity. Small changes such as walking instead of taking the car, using the stairs instead of the escalator made her feel much healthier. Dawn found that using her smart phone to record and track her weight, calories and step count helped her keep up momentum and stick to her new regime. This information now forms part of Dawn's Person Health Record, and is stored alongside her emergency health information. Should Dawn wish, her PHR can be shared with health and social care professionals seamlessly.

Professionals

With the implementation of the digital services model supporting new models of care through the wider system transformation across Merseyside, the way in which our professionals operate will be transformed by using and having access to digital technologies. The below brings this to life.

Meet Graham, Sarah and David

Graham, Sarah and David are professionals working in one of our Neighbourhood Teams. Graham is a Social Worker, Sarah a District Nurse and David is a GP. Being able to share records within the team has enabled them to care for patients differently and in a much more joined up way. The shared record and use of a consolidated EMIS system, has become a dynamic care plan aiding communications, preventing duplication, working in a joined up way and supporting a much more efficient patient journey. Everyone involved in the care of an individual can see EVERYTHING they need to make their contribution.

Meet Phil

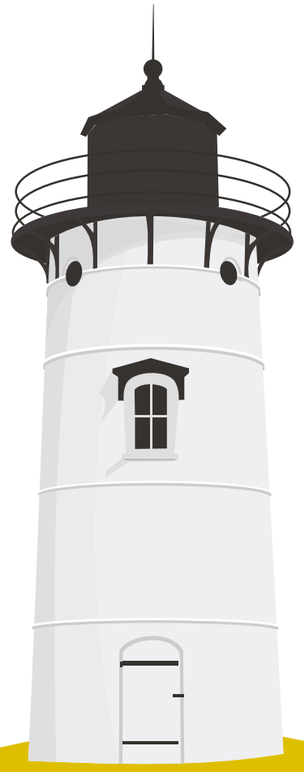
Phil is a Doctor working in the Emergency Department in the new Royal. As part of the single service, City-wide delivery for hospital services, and to maintain his clinical skills, he rotates his shifts between the Royal and Aintree which are approximately 6 miles apart. With the new IT systems in place, he can see a complete picture of his patients' medical and social care records at the click of a button. This allows him to ensure that he is aware of any key preferences which are particularly important in urgent care including information about resuscitation, mental capacity and end of life wishes.

4. The digital baseline in Merseyside

4.1 Key achievements to date

Historically in terms of digital strategies and approaches, the North Mersey and Mid Mersey systems have worked as independent health and social care economies. The process of digital development has been going on for many years. 2015/16 has offered an opportunity for a significant leap forward in terms of collaboration, cooperation and level of ambition. The development of the LDR has brought the two economies together with the alignment of vision and strategy to develop a combined approach and roadmap.

In 2013, engagement took place with stakeholders across the economy and in 2014 the iLINKS strategy was launched. iLINKS is a shared strategy and programme across our LDR footprint whereby we aim to deliver information to all health and social care professionals at the point of care. One of the first priorities as part of the stakeholder work that was undertaken was for us to 'tackle the Information Governance' issues that prevent clinicians from having access to the information they need to treat an individual at the point of care.



Hale Head Lighthouse is located in the southernmost point in Lancashire. A lighthouse was established here in 1838; the original octagonal structure was superseded by a taller cylindrical tower in 1906.

We now have an overarching information sharing framework which has been signed by all organisations in the local health and social care economy. In addition, we have a single information sharing agreement which spans all of the organisations in this LDR. This means that we have a solid and robust foundation to build on.

In terms of clinical systems and levels of digital maturity in each area, our care settings and providers are at varying stages and levels.

Community Based Services (primary care, community, mental health, social care) have mixed levels of digital maturity across the LDR footprint. Primary care services have high levels of digital maturity and have largely consolidated onto a common clinical information system. There are high levels of digital maturity for community and mental health services and the adoption of a common clinical information system, which interoperates with primary care, for a significant area of the LDR footprint but challenges in other parts of the footprint. Similarly a common system for social care is in use for some but not all of the footprint. The direction of travel pan Merseyside is to exploit funding and other opportunities to further this approach through rationalisation and interoperability of systems.

From a hospitals perspective, there is an unnecessary variation in digital maturity with a significant amount of hospital based clinical notes at the point of care captured on paper. Diagnostics are captured digitally and some specialist Trusts have advanced electronic patient record systems. There are 7 different strategic clinical systems in use across 9 providers with limited interoperability across our hospital settings. Through a recently completed joint procurement of an Electronic Patient Record (EPR) with three of those providers, it is planned to reduce the number of different systems in use. Our aspiration, subject to securing funding, is to extend this approach across the footprint.

This provides us with a unique opportunity to have a direction of travel to implement an integrated EPR across our hospital providers that seamlessly links with community and social care. The single EPR will allow for a locally responsive NHS able to provide value for the public in its widest sense both economically and politically.

Digital services locally have been at the leading edge for several years (see figure 4 for key achievements to date).

Figure 4: Key achievements to date

World leading scaling up of electronic patient record sharing, with **over 8.5 million shared records accessed** creating a seamless process and invaluable experience with no data losses or complaints.

130,000 Merseyside patients currently enabled to book online appointments with their GP surgery.

Across Merseyside an average of **76% of repeat prescriptions are sent online** between patients, GP practices and community pharmacies.

Joined up health and social care **economy wide iLINKS strategy**.

Unique, large scale collaboration of information sharing involving **164 stakeholder organisations** across the LDR footprint.

One of the largest deployments of telehealth in a single health economy in Europe (3000 patients).

Advanced risk based evaluation methodologies designed to identify the impact of technology, showing telehealth services reducing emergency admissions and associated cost by 22%-32%.

Technology on prescription by GPs.

Leading 'Person Held Record' systems currently being used as a test system with NHS England, HSCIC and the Government Digital Service to design online identity verification for patient record access at scale.

Award winning 'Smarthouse' technology demonstrators in the City to provide the public with access to health and care technology in a familiar setting.

50 digital hubs for free access to the internet and volunteer support 'digital champions' to train those wishing to access the internet.

An NHS led 'e-health cluster' with local SME digital companies supported to work with the NHS, its procurement systems and to support innovation.

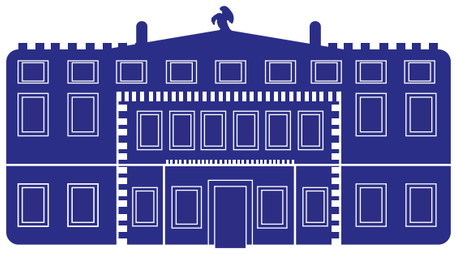
A common PACS system across Cheshire and Merseyside providers with a global worklist that enables seamless and secure digital image sharing across the region.

A shared instance of a radiology information system across the Cheshire and Merseyside region.

A joint Electronic Patient Record procurement across 3 hospital Trusts.

Rationalisation of Primary Care and significant proportion of community based services onto a single clinical system.

Liverpool City Region's eHealth Cluster Ltd is the **only SME-led eHealth Cluster in the UK** delivering a new model for providing practical support to the digital and care industry through collaborative working.



Knowsley Hall is a stately home near Liverpool in the Metropolitan Borough of Knowsley, Merseyside. Since 1953 it has been designated a Grade II* listed building, and is the ancestral home of the Stanley family, the Earls of Derby. The hall is surrounded by 2,500 acres of parkland, which contains Knowsley Safari Park and is now used for functions such as corporate events, conferences and weddings.

Table 1: Digital maturity assessments

Capability group	National Average	Average scores across providers: Baseline Score (Feb 16)	Target (end 16/17)	Target (end 17/18)	Target (end 18/19)
Records, assessments and plans	44	52.6	64.4	75.0	87.0
Transfers of care	49	55	64.7	76.9	86.8
Orders and results management	52	59.8	64.3	77.7	84.0
Medicines management and optimisation	29	42.5	59.3	73.9	84.8
Decision support	36	42.4	50.8	65.9	81.2
Remote care	33	32	44.3	60.2	74.4
Asset and resource optimisation	42	37.9	53.0	68.1	79.7

4.2 Current initiatives

Across the Merseyside LDR footprint, we are working towards the reduction of the use of paper and faxes at the point of care. Whilst our goal is to be paperfree at the point of care, it is important to ensure that this is delivered in a meaningful way that adds value and provides benefits to the delivery of care. Paper free is a means to an end, not the end itself.

Current initiatives are detailed overleaf in figure 5. The list is not exhaustive:

4.3 Digital maturity assessments

Across the Merseyside LDR, providers of care have completed and submitted both national and local digital maturity assessments.

4.3.1 National digital maturity assessments

National digital maturity assessments have been undertaken by providers against a range of nationally defined capability groups. Table 1 above gives an average of the national baseline score of the 13 providers within this LDR footprint. It also demonstrates how we perform against national average and sets out our trajectory over the next three years. The maximum achievement score is 100.

Our baseline position for the national digital maturity assessments sets us higher than the national average with a number of digitally mature provider organisations. It is important to note that the assessments were subjective as a self assessment and provide a view of orgnisational readiness, as opposed to a reflection of how our front line clinicians use digital technology on a daily basis.

At the time of writing, national digital maturity assessment results for primary care and social care were not available, however they are a core part of our digital strategy and roadmap delivery.

4.3.2 Local digital maturity assessments

In addition to the national digital maturity assessments, we have undertaken a local digital maturity assessment of all providers. The intention of the local assessment was to understand the totality of our current readiness to share information through our information sharing framework.

It has given us a reflection on the current levels of information captured digitally across our providers as a whole, and given us an indication of each organisation's capability to share information.

As a health and social care economy, we have high levels of digital maturity with a significant amount of information captured digitally in the following areas:

- Admission, Discharge and Transfer Information
- Alerts and Flags
- All tests
- Appointments / Diary Events
- Care Package Information
- Demographics
- Diagnoses
- Discharge Plan
- E-Correspondence
- Elective Admission
- Estimated Length of Stay
- Expected Date of Discharge
- Full Diagnostic Record
- Full Primary Care Record
- Medications
- Routine tests

Figure 5: Current initiatives

- >> An economy-wide approach to information sharing through iLINKS.
- >> Implementation of the information sharing framework to all providers.
- >> The interoperability of our current and future systems.
- >> Development of systems in community settings to enable new models of care to be delivered effectively.
- >> Procurement and implementation of hospital EPR.
- >> Upscaling of Telehealth and near patient telemetry systems across the economy.
- >> Implementation of new digital technologies in primary care to support new ways of working and 7/7 services.
- >> Digital inclusion support networks and internet access hubs.
- >> European-wide professional digital skills development.
- >> Consolidated infrastructure programme.
- >> Use of CCG contracts and CQUIN to commission digital care as part of provider contracts.
- >> Standardisation of clinical records across all providers with structured, consistent work on codes and interoperability between systems.
- >> A 'digital no wrong door' approach for our patients.
- >> Engagement with the North West ISD Network for Digital Leadership networking and professionalism of informatics staff and accreditation of organisations.
- >> Exploration of video, online and future digital e-consultation tools.
- >> Implementation of mobile technology for primary care
- >> Further rationalisation of community services onto a common clinical system (subject to funding).
- >> Implementation of voice recognition for primary care and (subject to funding) across community services.
- >> Advanced analytics programme to predict future healthcare resource requirements and patient level episodes of care.
- >> Development of national pilot for online identity verification and access to records supported by self-care applications.
- >> Development of state of the art sensors for advanced diagnostics and patient monitoring.

We have medium levels in the following areas with a portion of information captured digitally, although not always in a structured and coded way, often with handwritten records scanned into scanning systems:

- Allergies
- Care Plans
- Full Community and Mental Health Record
- Health Status Prompts
- Significant past & current events

We have low levels in the following areas with the majority of information captured solely on paper:

- Full hospital record
- Hospital Care Plans
- Who else is involved in my care

This analysis demonstrates that we have key areas where our readiness to mobilise information across different organisations and settings is high, however there are building blocks and developments required over the next 3-5 years to improve this as an economy. There are areas of good practice across some organisations however we need to invest in staff and technologies to mainstream this as the norm.

Our aspirations are to improve outcomes for our population through increased levels of digital maturity in the future.

We want individuals to be healthier for longer, empowered and have ownership of their own life. Through an increase in digital maturity, we expect to see an improvement in patient care and experience, an increase in efficiency, quality and safety.

Our ambitions in relation to our digital maturity will enable us to truly see integration of health and social care information that will vastly improve communication between professionals and significantly reduce costs.

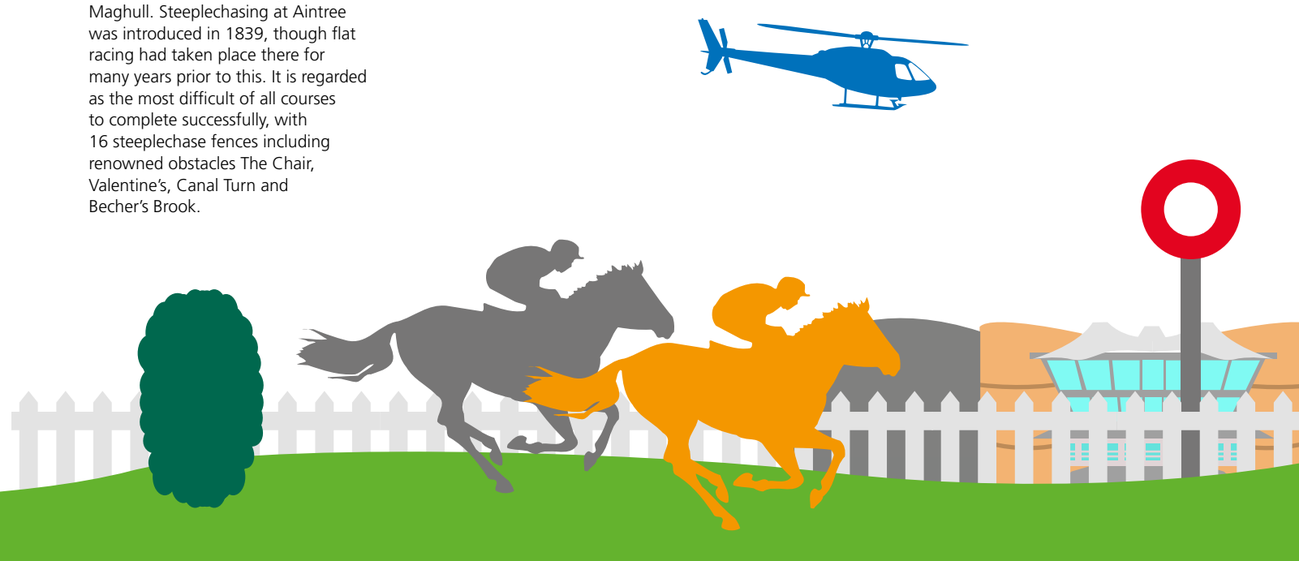
Increasing our levels of digital maturity in the future will enable us to remove paper, where is is not needed and eradicate the use of fax machines in our local services.

We will use local commissioning and contracting processes to continue to develop and drive up local digital maturity with providers.

Our rate limiting factors in this area include:

- Culture change
- Plethora of systems in use that do not talk to one another
- Pace of change required from industry and suppliers to meet local requirements ahead of challenging timeframes
- Traditional approaches to security and governance often disabling rather than enabling change
- Challenging financial climate
- IT systems that are not designed or accessible in an intuitive and user friendly enough way for clinicians working in hospital and community settings of care
- Potential disincentives for industry partners for open access and joint working

Aintree Racecourse in North Liverpool is home of the Grand National steeplechase, one of the most famous races in the world. Prior to the event being held at Aintree, the race was run in the nearby district of Maghull. Steeplechasing at Aintree was introduced in 1839, though flat racing had taken place there for many years prior to this. It is regarded as the most difficult of all courses to complete successfully, with 16 steeplechase fences including renowned obstacles The Chair, Valentine's, Canal Turn and Becher's Brook.



5. Our readiness to deliver

5.1 Leadership

Merseyside LDR is a complex health and social care economy, with it's plurality of organisations and stakeholders. However, there is a **long established culture** of clinical and managerial partnership approach to digital leadership. Our ethos of **'digital clinician'** unites all our staff from the various traditional digital fields around a focus on improving the health and wellbeing of the population we serve. The role of **clinical leadership is paramount**. Each organisation has a clinical digital leader either at Governing Body level at CCGs or Board/Senior Management level in providers.

We have a collaborative and transformational approach between local commissioners and providers. There is also a strong consensus that **transformational change** is necessary across all settings of care, with organisational sovereignty secondary to digital system change. This is further strengthened by strong and innovative working relationships with local authorities around the prevention agenda and integrating of health and social care.
Our digital relationships and leadership style actively encourage **'digitally disruptive'** conversations and actions to drive forward change and innovation for the future.

Clinical leadership in our digital work is a **major strength** in Merseyside. Both at economy level and internally within individual organisations, our clinicians are **extremely engaged** and lead our digital initiatives both strategically and operationally. We believe that the deep level of cohesive clinical leadership that has been developed and achieved is **unique** in any economy. This provides assurance that we have capacity and capability to deliver real transformational change to improve patient and citizen experience together with the quality and safety they require.

This body of individuals who represent a large part of the Caldicott guardian network have worked to produce a **robust sharing agreement** with meaningful audit which fulfils the requirements of Caldicott 2 and maximises the potential benefits of an economy wide electronic patient record. They have a wide range of skills in clinical governance, IT and patient safety able to address and manage the risks of implementation. Developing our LDR has given a remarkable opportunity and given an importance around collaboration of identified priorities, where sharing of best practice can take place at pace and scale.

In terms of clinical leadership and engagement, our core digital principle is **co-design**. Our digital leaders regularly spend time with their clinical partners shadowing delivery of day to day frontline care. Deference to the frontline experience drives our learning. This ensures that whatever we look to implement in the future, it is effective for all users.

5.2 Governance

We have well established joint digital governance arrangements throughout the health and social care economy, both in terms of geography and themes through our ILINKS Programme. Within this governance we have a Programme Board which is made up of the constituent CCGs and NHS England with a remit to oversee delivery of our digital strategy. The Programme Board reports into the individual CCGs and provides an annual update to the relevant Health and Wellbeing Boards.

Sitting alongside the Programme Board is a Clinical Informatics Advisory Group (CIAG). The CIAG is attended by both clinical and managerial digital leaders from all providers, CCGs, Academic Health Science Network and links to academia through Liverpool Health Partners. The group is vibrant and active and is fundamental in shaping up key pieces of work across the economy.

Risk management is undertaken through the iLINKS Programme Board and CIAG. Risks are shared with both groups and are regularly reviewed through the programme reporting arrangements. A detailed section on risks is included in section 10 of this document.

Sub Groups of the CIAG are convened as required with a smaller number of attendees to develop specific pieces of work.

A key principle of our governance is that all groups are clinically led and clinically chaired with managerial support working in partnership. This culture and approach has fostered strong relationships and partnership working with colleagues across the economy.

The terms of reference of the Programme Board and CIAG have recently been reviewed and amended to reflect the development and delivery of the LDR moving forward. The terms of reference are included at Appendix 1.

5.3 Change management

In order to achieve success, effective leadership, support and business change is essential. Our approach includes specialist expertise in supporting clinical programmes and service redesign, understanding key operational processes and how technology can play an enabling role.

Clinical and business change activities include a requirement for an effective benefits management process to support implementation to ensure that the measurement and reporting of benefits is undertaken to the levels of quality required by the iLINKS Programme Board.

The process to be undertaken to develop a robust benefits realisation management structure is as follows:

- Engagement will take place with each organisation to determine the most appropriate internal structure for identification and management of the benefits. This may align with structures associated with existing change projects or may require a new group to be formed.
- Any chosen structure will take into account the model and timeframes for implementation and deployment across the various settings of care.
- The Programme Team will be tasked with working with clinicians and practitioners to oversee the agreed benefits management structure to ensure that specific benefits plans are developed and managed.

Once the structure has been established, the clinical informatics and business change approach for the various groups will be based upon the following principles and ultimately be captured in a Benefits Realisation Plan which will:

- Document the benefits in more detail with clear and well defined baselines. These should be documented in a Benefit Profile for each benefit or combined into a single document known as a Benefits Register (which contains details about all the benefits). Each benefit must also have a benefit owner who is responsible for the realisation of the benefit.
- Quantify both cash releasing and non-cash releasing benefits and set clear targets and action plans for delivery (using specialist financial support where necessary).
- Set clear timescales for the measurement and delivery of each benefit.
- Assign clinical and managerial responsibility for the delivery of benefits to named individuals.
- Undertake regular benefits review to assess performance against baseline and predicted values.
- Monitor qualitative and quantitative benefit performance at the Programme Team and Programme Board level to provide assurance that the benefits will be delivered as a result of this programme.

It should be recognised that benefits identification and realisation is a continuous process. The benefits identified in the strategy will need to be further developed throughout the lifecycle of the programme.

5.4 'The Digital Top 10'

In order to deliver the four national themes and our three local digital ambitions, in partnership with all stakeholders, we have developed a 'Digital Top 10'. These are broad approaches and programme delivery areas which we will adopt to deliver both national and local challenges.
Please refer to figure 6 for a definition of the 'Digtial Top 10'.
An outline programme plan can be found in table 2 overleaf.

5.5 16/17 plans

Throughout 2016/17, linked to our 'Digital Top 10', our programmes of work are broadly summarised below.
Due to the sheer scale of this LDR, this is not intended to be exhaustive but focuses on areas that sit across the economy as a whole or impact on multiple organisations. Individual organisations will have their internal plans to further increase their levels of digital maturity and move towards operating in a paper free environment.

Figure 6: 'The Digital Top 10'

1. Joint Governance & Clinical / Managerial Digital Leadership Partnerships: working together as one health and social care economy through joint governance and collaborative working with strong continued clinical leadership.

2. All organisations commitment and pledge to the LDR digital principles: all local health and social care organisations signing up to the principles as set out as part of our vision for digitally enabled transformation.

3. Delivery of our Information Sharing Framework: implementation, at pace and scale, of the single information sharing framework and agreement to all health and social care practitioners.

4. Digital maturity transformation of all health and social care providers including primary care: increased digital maturity of all providers adoption and use of digital technologies and standardised records at the point of care.

5. Interoperability programme: joining up of key systems in use across our economy to support achievement of the information sharing framework.

6. Digital No Wrong Door: a means by which patients can interact digitally and online with their health and social care services.

7. Single Adult Acute Electronic Patient Record: a direction of travel towards a common EPR in Adult Acute hospital services.

8. Consolidated Infrastructure: joining together of our infrastructure, where it makes sense to do so to enable staff to work across multiple sites and patients to interact with services easily.

9. Significant Upscaling of Assistive Technology: delivery of health technology in peoples' homes to support them to stay well at home.

10. Advanced Analytics Collaborative: a joint approach to maximise the potential benefits of predictive analytics.

Table 2: 'The Digital Top 10' outline programme plan

Digital Top 10	2016/17	2017/18	2018/19	2019/20	2020/21
Joint Governance and Clinical / Managerial Digital Leadership Partnerships	√				
All organisations commitment and pledge to the LDR digital principles	√				
Delivery of our Information Sharing Framework					
Digital Maturity transformation of all health and social care providers including primary care					
Interoperability Programme					
Digital No Wrong Door					
Single Adult Acute Electronic Patient Record					
Consolidated Infrastructure					
Significant Upscaling of Assistive Technology					
Advanced Analytics Collaborative					

Table 3: 'The Digital Top 10' programmes of work

Digital Top 10	16/17 Activities	Date for completion
Joint governance and clinical / managerial digital leadership partnerships	Establish joint governance. Establish joint ways of working. Launch of LDR to 600 stakeholders at local iLINKS Conference - launch document included at Appendix 2.	Completed April 16 Autumn 16 July 16
All organisations commitment and pledge to the LDR digital principles	Joint Digital Clinical / Managerial Leadership forum Commitment and pledge across all health and social care organisations in the footprint to the LDR digital principles	Completed April 16 September 16
Delivery of our Information Sharing Framework	Launch of patient communications complete - Patient communications included at Appendix 3. Mobilisitaion of priority areas in provider organisations using technical capabilities achieved through the interoperability programme. Delivery of single sharing agreement. Implementation of economy wide e-learning package. Implement proactive audit.	June 2016 Significant progress by April 17 Winter 16 Winter 16 Winter16
Digital maturity transformation of all health and social care providers including primary care	Maximisation of existing EPR and clinical systems to facilitate joint team working in community and single service teams in hospitals. Develop provider system optimisation plans to meet digital maturity trajectory ambitions. Agree Implementation plans at the Digital Leadership Forum. Building on current Digital Maturity CQUINS for 16/17, adopt a common for all providers / CCGs in the LDR footprint for 17/18.	Improvement in national and local digital maturity for all providers by April 17
Interoperability programme	Ramping up our interoperability programme with the main principle suppliers in the local health and social care economy. Deliver point to point interoperability between EMIS and provider organisations to support the mobilisation of the iLINKS Tiered Sharing Model. Develop the Information Exchange Enterprise architecture blueprint for Merseyside.	Significant progress by April 17 April 17 Winter 16
Digital no wrong door	Multi agency approach to 'no wrong door' access to common health and social care services supported by advanced digital technologies including online identity verification. Implementation of Citizen ID Project.	Scope and approach understood by April 17
Single adult acute electronic patient record	Implementation planning for the deployment of a single hospital EPR spanning multiple hospital providers.	Plans to be agreed by Winter 16
Consolidated infrastructure	Identification of areas for consolidated infrastructure across the footprint.	April 17
Significant upscaling of assistive technology	Telehealth procurement and implementation.	Autumn 2016
Advanced analytics collaborative	Advanced analytics collaborative between commissioners and providers to leverage predictive intelligence on resource usage and patient interaction with services.	Group to be established Winter 16

5.6 Delivery model

Delivery of digital services across the LDR footprint is varied. A significant number of providers have in-house support services and a number of other organisations have their services provided through a shared service model. Within the LDR footprint, there are two shared services delivering services to a range of organisations.

Opportunities clearly exist for digital delivery and support services to collaborate, streamline and make improvements to better support shared care across the footprint and ultimately to improve patient outcomes and experience.

5.7 Sources of investment

To ensure that 'paper-free at the point of care' is a deliverable outcome, the Merseyside LDR focusses on funding the drivers of efficiency and service improvement that result in paper free, as these activities are either currently funded, can be aligned with current spend or can attract other sources of funding.

The table below indicates known, anticipated and target sources of funding, some of which is naturally forecasted where reinvestment of expected efficiency gains are anticipated.

Table 4: Investment sources

Digital Top 10 initiatives	Funding Type	Funding Source
Joint governance/ leadership	Known	Local provision funded through BAU activity & CQUIN investment.
Sharing framework	Known/ anticipated	Combination of known support from trusts and development funds from National Driving Digital Maturity Investment Fund, STP and local efficiency gains.
Digital maturity	Known/ Anticipated	Local provision funded through BAU activity & CQUIN investment; National Driving Digital Maturity Investment Fund and Estates and Technology Transformation Fund.
Interoperability	Known/ anticipated/ target	Interoperability activity on a smaller scale is funded locally via GPIT, DDMI and Estates and Technology Transformation Fund.
Digital no wrong door	Known/ target	Combination of some localised activity supported by de-risk targeted funding from other sources (innovation/ESIF etc) and Estates and Technology Transformation Fund.
Electronic patient record	Known/ anticipated	Currently known for phase one providers. Future phase providers based on local investment, STP and National Driving Digital Maturity Investment Fund
Assistive technology	Known/ target	Local funding supported by innovation funding from multiple sources. Upscaling investment via Estates and Technology and National Driving Digital Maturity Investment Fund.
Consolidated infrastructure	Known/ target	Combination of known support from trusts and development funds from National Driving Digital Maturity Investment Fund, Estates and Transformation Fund and local efficiency gains.
Advanced analytics	Known/ target	Local funding supported by innovation funding from multiple sources.

The approach to resourcing activity is determined by the requirement for sustainability balanced against

risk and interdependencies of other elements of the health economy. Fundamental requirements such as electronic patient records require sustainable funding sources whereas innovative development may attract external, time limited funding in order to de-risk the initial development. The Merseyside digital footprint is sufficiently mature in this respect to balance the resourcing equation.

Outlined below are the high level activity and resource type table and the detailed funding estimate providing forecasted investment amounts for the 2016/17 to 2020/21 period.

The growing economical challenges across all public services will require an innovative approach to attract resources and funding to support the delivery of the Local Digital Roadmap. Therefore the Merseyside economy must seek synergies with a broader range of programmes and transformation initiatives, in order to align delivery of shared outcomes and maximise funding and make efficiencies. Collaborating across a broader programme set, we will endeavour to utilise and support the delivery of transformational change programmes through strategic alignment. Such programmes are vanguards, Connected Health Cities, 100,000 Genomes Project, Northern Health Sciences Alliance and PACS.

6. Paper free at the point of care... or is it?

6.1 Paperfree at the point of care - what do we really mean?

'Paperfree at the Point of Care' by 2020 is a **national NHS ambition**. This is an ambition which we wholeheartedly share within the Merseyside LDR footprint. Our work with front line teams and digital clinicians has led us to a better understanding of what we really mean by 'paperfree at the point of care'. If we simply digitise the systems, paper and processes that we currently have in place, there is a risk that we 'hit the target and miss the point'.

The point is that our strategic aim is to improve the quality, safety and patient experience by **eliminating paper processes** and records that cause inefficiency and delays in care.

Achievement of this goal across Merseyside is predicated on the knowledge and understanding gained through **driving change at the point of care** and listening to those front line staff responsible for that delivery. Based on this, our paper free transformation will be centred on improving care by providing the right tools, information and technology at the front line.

Scanning in handwritten records and faxing information around our health and social care economy are an approach of the past in Merseyside. Initially we may journey into **"paper light"** if clinically justifiable risks to our aims are identified. Equally, we won't allow or avoid challenging any clinical intransigence that delays improvement in patient care.

By doing this, we focus on the aim which all trusts, services and staff unite to achieve: better patient care. Paper free becomes a natural by-product of this process.

When talking about paper free at the point of care, we define this as:

- Empowerment of patients to access records and support their own decision making
- Electronic access to information for practitioners with ease of use, access and ability to share to make the care of patients easier, faster and more efficient
- Enablement of patient interaction with clinicians
- Removal of duplication and fragmentation in care via ruthless standardisation of pathways
- Interoperability of systems to support sharing of structured records
- Information displayed succinctly in a unified format

6.2 Paperfree at the point of care national capability groups

Within the national digital maturity assessments and LDR guidance, there are 7 paperfree at the point of care groups of capabilities as noted below:

1. Records, Assessments and Plans: ability to record patient/client/service user information in a structured electronic format which can be shared
2. Transfers of Care: facilitate the transfer of a patients care between health and social care settings in an electronic form
3. Orders and Results Management: ability to electronically order diagnostic tests for an individual with results being reported to the requestor in an electronic format
4. Medicines Management and Optimisation: utilising capabilities to safely and effectively prescribe and dispense medications through the use of technology
5. Decision Support: providing health and social care professionals with access to the information they need at the point of care (both patient level and professional evidence based resources) with capability to alert based upon risk
6. Remote Care: provide patients with the ability to remotely access their records, book appointments and take control of their care via the use of technology
7. Asset and Resource Optimisation: utilising technology to support to manage the effective use of resources (e.g. Staff, bed status, assets)

6.3 Current local provider analysis by capability group

Table 5 opposite demonstrates a summary of all providers in the Merseyside LDR footprint and their baseline level of digital maturity by capability grouping in accordance with the national digital maturity self assessments as at February 2016. The maximum achievement score is 100.

Although primary care and social care are fundamental component parts of the LDR, at the time of writing, the national digital maturity assessment results for those settings of care were not available and are therefore not included in this section of the LDR.

6.4 Planned capability deployment trajectory

The tables overleaf demonstrate the planned trajectory for providers over the next three years to demonstrate an increase in digital maturity levels. A number of our providers are working towards Healthcare Information and Management Systems Society (HIMMS) Levels 6 and 7 digital maturity which supports our economy wide approach to local, national and international digital maturity aspirations.

NB: Liverpool Community Health as a provider is currently in a process with NHS Improvement whereby the organisation will transact to another provider or providers in 2017. Therefore, digital maturity trajectory may change over time when a new provider or providers are in place.

Table 5: Baseline - February 2016

Provider	Records Assessments & Plans	Transfers of Care	Orders and Results Management	Meds Man	Decision Support	Remote Care	Asset & Resource Optimisation
Aintree University Hospital NHS Foundation Trust	59	87	88	66	43	17	60
Alder Hey Children's NHS Foundation Trust	49	53	65	57	50	50	45
Bridgewater Community Healthcare NHS Foundation Trust	64	53	47	43	61	50	0
Clatterbridge Cancer Centre NHS Foundation Trust	64	No Score	50	72	33	25	15
Liverpool Community Health	18	6	No Score	10	No Score	No Score	No Score
Liverpool Heart and Chest Hospital NHS Trust	67	88	94	63	63	42	60
Liverpool Women's Hospital NHS Trust	68	74	71	69	44	33	65
Mersey Care NHS Foundation Trust	65	35	19	7	11	42	15
Royal Liverpool and Broadgreen University Hospitals NHS Trust	51	84	93	74	67	33	60
Southport and Ormskirk Hospital NHS Trust	49	74	30	24	63	17	45
St Helens & Knowsley Teaching Hospitals NHS Trust	31	34	70	7	3	25	15
The Walton Centre NHS Foundation Trust	62	57	63	54	60	50	65
5 Boroughs Partnership NHS Foundation Trust	37	15	27	6	11	0	10
Provider Average	**53**	**55**	**60**	**42**	**42**	**32**	**38**

Table 6: Provider Trajectory - 2016/2017

Provider	Records Assessments & Plans	Transfers of Care	Orders and Results Management	Meds Man	Decision Support	Remote Care	Asset & Resource Optimisation
Aintree University Hospital NHS Foundation Trust	59	87	88	66	43	17	60
Alder Hey Children's NHS Foundation Trust	67	60	80	72	55	62	68
Bridgewater Community Healthcare NHS Foundation Trust	70	60	60	43	61	50	15
Clatterbridge Cancer Centre NHS Foundation Trust	75	50	75	80	50	50	80
Liverpool Community Health	36	29	8	32	40	43	30
Liverpool Heart and Chest Hospital NHS Trust	71	90	95	70	66	47	75
Liverpool Women's Hospital NHS Trust	72	79	78	77	47	36	71
Mersey Care NHS Foundation Trust	70	40	25	20	20	54	20
Royal Liverpool and Broadgreen University Hospitals NHS Trust	60	87	95	74	75	40	60
Southport and Ormskirk Hospital NHS Trust	49	80	40	24	63	20	55
St Helens & Knowsley Teaching Hospitals NHS Trust	67	88	90	76	69	42	65
The Walton Centre NHS Foundation Trust	80	60	75	54	60	65	75
5 Boroughs Partnership NHS Foundation Trust	51	55	27	6	22	10	15
Provider Average	**63.6**	**66.5**	**64.3**	**53.4**	**51.6**	**41.2**	**53.0**

Table 7: Provider Trajectory - 2017/2018

Provider	Records Assessments & Plans	Transfers of Care	Orders and Results Management	Meds Man	Decision Support	Remote Care	Asset & Resource Optimisation
Aintree University Hospital NHS Foundation Trust	65	90	91	75	50	40	60
Alder Hey Children's NHS Foundation Trust	82	80	92	84	73	85	83
Bridgewater Community Healthcare NHS Foundation Trust	80	75	75	65	65	60	45
Clatterbridge Cancer Centre NHS Foundation Trust	90	75	90	90	75	75	90
Liverpool Community Health	38	31	9	33	42	44	32
Liverpool Heart and Chest Hospital NHS Trust	80	93	95	75	70	60	80
Liverpool Women's Hospital NHS Trust	80	83	84	83	53	40	78
Mersey Care NHS Foundation Trust	90	75	80	75	75	84	65
Royal Liverpool and Broadgreen University Hospitals NHS Trust	70	90	97	85	90	54	65
Southport and Ormskirk Hospital NHS Trust	60	100	100	80	75	40	80
St Helens & Knowsley Teaching Hospitals NHS Trust	74	88	90	79	75	52	72
The Walton Centre NHS Foundation Trust	90	80	80	80	100	90	90
5 Boroughs Partnership NHS Foundation Trust	68	74	27	42	42	32	45
Provider Average	**74.4**	**79.5**	**79.1**	**75.2**	**68.1**	**58.2**	**68.1**

Table 8: Provider Trajectory - 2018/2019

Provider	Records Assessments & Plans	Transfers of Care	Orders and Results Management	Meds Man	Decision Support	Remote Care	Asset & Resource Optimisation
Aintree University Hospital NHS Foundation Trust	80	95	95	85	85	75	75
Alder Hey Children's NHS Foundation Trust	98	95	99	97	97	98	97
Bridgewater Community Healthcare NHS Foundation Trust	90	90	90	85	70	70	60
Clatterbridge Cancer Centre NHS Foundation Trust	100	100	100	100	100	100	100
Liverpool Community Health	40	32	9	34	44	44	33
Liverpool Heart and Chest Hospital NHS Trust	95	96	97	88	85	75	95
Liverpool Women's Hospital NHS Trust	97	88	90	89	60	44	86
Mersey Care NHS Foundation Trust	98	90	90	90	90	94	75
Royal Liverpool and Broadgreen University Hospitals NHS Trust	85	95	100	95	100	70	75
Southport and Ormskirk Hospital NHS Trust	100	100	100	100	100	100	100
St Helens & Knowsley Teaching Hospitals NHS Trust	78	92	95	82	80	63	80
The Walton Centre NHS Foundation Trust	100	90	100	95	100	100	100
5 Boroughs Partnership NHS Foundation Trust	68	74	45	90	67	50	60
Provider Average	**86.8**	**87.5**	**85.4**	**86.9**	**82.9**	**75.6**	**79.7**

6.5 Capability deployment schedule

The capabilities and outcomes we ultimately expect to achieve, mapped against the national capability groups over the next three years are:

- All Health and Social Care Professionals have access to the information they need at the point of care by 2017/18 (Records, Assessments and Plans; Transfers of Care).
- All Health and Social Care Professionals record clinical information in a consistent way, digitally, at the point of care (community, hospital) by 2018/19 (Records, Assessments and Plans; Transfers of Care; Remote Care; Asset and Resource Optimisation).
- All clinical correspondence between professionals caring for patients is sent digitally and integrated into core clinical systems by 2017/18 (Records, Assessments and Plans; Transfers of Care; Orders and Results Management).
- Community Care teams can work as a team around individuals they are caring for with technology that "just works" by 2017/18 (Records, Assessments and Plans; Transfers of Care; Medicines Management and Optimisation; Remote Care; Asset and Resource Optimisation).
- Individuals interact with their care services digitally should they choose to by 2018/19 (Records, Assessments and Plans).
- Acute clinicians have early warning of patients that are deteriorating by 2018/19 (Decision Support).
- All Clinicians can order diagnostic test electronically and view share diagnostics results around a patient by 2016/17 (Records, Assessments and Plans; Transfers of Care; Orders and Results Management).
- Single Service Teams have a single EPR to operate as a team by 2018/19 (Records, Assessments and Plans; Transfers of Care; Medicines Management and Optimisation; Remote Care; Asset and Resource Optimisation).

6.6 How do we plan to get there?

Across the Merseyside LDR and the North Mersey and Alliance LDS footprints, providers are at different starting points of digital maturity, deployment of systems and adoption of technologies at the point of care.

Our **'Digital Top 10'** frame the headline areas of how we plan to deliver our trajectory, with particular reference to '**Digital Maturity Transformation** of all health and social providers including primary care', '**Interoperability**' and the '**Single Adult Acute Electronic Patient Record**'.

6.6.1 Electronic Patient Records and Interoperability

High quality electronic patient records are a key component to our digital ambitions for both empowered individuals and a connected health and social care economy. There is **huge imbalance in what is digitally captured** as clinical records across providers / settings / sectors.

In our hospitals, there is also huge variation in the procurement and implementation of EPR systems. Our strategic aim is to have a **common EPR** for all Adult Acute services, **seamlessly linked** with Children's Acute services, Community based services and social care. This is seen as a key enabler for providing safe, efficient, flexible, patient-centered and cost effective care.

As well as providing the single hospital patient record, the EPR system will **collate clinical functions** currently delivered in disparate systems into a single system. Further to this, the EPR system will deliver new functionality such as clinical decision support, patient alerts, clinically coded documentation determined at the point of data entry, real time reporting, and patient record sharing with Primary Care.

In our community settings, we have consolidated onto a **single system supplier** across a significant part of the footprint area. Our strategic aim is to build on this further over the next three years to drive up digital maturity in out of hospital based care and provide further foundations to deliver high quality patient care.

This approach within our hospitals and community will not only enable the levels of digital maturity in our economy to thrive but it will deliver the level of service transformation articulated through our STP and support our digital ambition to truly **exploit the digital revolution**.

Our plan is to **close the gap in variability** and achieve equality across all our providers' digital capabilities. This will be attained using the following objectives:

- Information across all providers to be recorded in a consistent, structured and coded way with a ruthlessly standardised set of consistent clinical forms/templates to be used across all providers of care
- Clinical systems designed in such a way for staff to collect the information easily with digital glue to join up organisations
- Process change in providers to read and write into electronic health records contemporaneously
- Further reduce the variation in EPRs and implement a single EPR system across a number of our hospital providers
- Further exploit current systems in out of hospital settings
- Enable sharing through true interoperability of systems across settings and pathways of care

6.6.2 Digital maturity transformation of all health and social care providers

Lead commissioners for each provider organisation will have sight of their digital maturity plans and supporting investment proposals to provide assurance both that plans are deliverable and aligned with the principles of this LDR. Work will be undertaken to align trajectories through contractual requirements and maximise CQUIN opportunities in the future.

There are detailed plans for all 13 providers within this LDR, by capability group, our significant current and planned initiatives to **drive up our levels of digital maturity** and achieve paper free are outlined below mapped with the capabilities we expect to achieve.

As required through the LDR guidance, a detailed capability deployment schedule and capability deployment trajectory are included in Appendices 3 and 4.

Through delivering our ambitions, the future will feel very different for our staff and citizens. Our effectiveness will be measured in patient safety, improved quality and outcomes and a better patient experience. Like all truly embedded digital transformations, it will become **invisible to the user** as this becomes simply the way we conduct healthcare.

1. Records, assessments and plans

Current Initiatives	Planned Initiatives
Out of Hospital • EMIS rationalisation across Primary Care • EMIS rationalisation across Community • Patient online approach In Hospital • Individual Trust Digital Strategies • Joint EPR procurement • Digitisation of clinical notes • Enhancement of current processes and systems in some providers Cross Health and Social Care Economy • Single instance of ICE to facilitate diagnostics sharing	Out of Hospital • RiO Implementation in Merseycare & 5BPT • Further EMIS rollout in Community Services • Standardised templates across Community Care In Hospital • Single EPR implementation • StH&K Trust PAS , Ordercomms and A&E system replacement • EPACCS pan Merseyside • Standardised templates across Hospitals Cross Health and Social Care Economy • Common PACS system reprocurement • Interoperability Programme
Outcomes / Capabilities • All Health and Social Care Professionals have access to the information they need at the point of care by 2017/18 • All Health and Social Care Professionals record clinical information in a consistent way, digitally, at the point of care (community, hospital) by 2018/19 • All clinical correspondence between professionals caring for patients is sent digitally and integrated into core clinical systems by 2017/18 • Community Care teams can work as a team around individuals they are caring for with technology that "just works" by 2017/18 • Individuals interact with their care services digitally should they choose to by 2018/19 • All Clinicians can order diagnostic test electronically and view share diagnostics results around a patient by 2016/17 • Single Service Teams have a single EPR to operate as a team by 2018/19	

2. Transfers of care

Current Initiatives	Planned Initiatives
Out of Hospital • EDS consumption process optimisation (EMIS Workflow enhancements) • Managed referrals from Primary Care into Community Care Teams • Maximisation of GP2GP transfer In Hospital • EDS from Secondary care into Primary Care Cross Health and Social Care Economy • E-Referrals from Primary Care into Secondary Care	Out of Hospital • Uplift in e-referrals usage • Electronic Referrals from Primary Care into Local Authority • Electronic Referrals from Community into Local Authority In Hospital • Move to Structured CDA from Providers (Transfer of Care Spec) • Electronic workflows and structured clinical data capture Cross Health and Social Care Economy • Unify messaging hub approach across Merseyside • EDS from Secondary care into Council • EDS from Secondary care into Community • Electronic Referrals from Secondary care into Community Care Teams • Interoperability Programme
Outcomes / Capabilities • All Health and Social Care Professionals have access to the information they need at the point of care by 2017/18 • All Health and Social Care Professionals record clinical information in a consistent way, digitally, at the point of care (community, hospital) by 2018/19 • All clinical correspondence between professionals caring for patients is sent digitally and integrated into core clinical systems by 2017/18 • Community Care teams can work as a team around individuals they are caring for with technology that "just works" by 2017/18 • Individuals interact with their care services digitally should they choose to by 2018/19 • All Clinicians can order diagnostic test electronically and view share diagnostics results around a patient by 2016/17 • Single Service Teams have a single EPR to operate as a team by 2018/19	

3. Orders and results management

Current Initiatives	Planned Initiatives
Out of Hospital • Use of ICE to request and review diagnostic tests across all providers In Hospital • Unified access to diagnostic tests across Hospitals • PACS imaging across Cheshire and Merseyside • Digital order comms extensively used in some providers Cross Health and Social Care Economy • Single information sharing agreement	Out of Hospital • Widespread adoption in community & out of hospital teams In Hospital • PACS reprocurement • Cardiology Imaging incorporation into PACS model • Digital oder comms fully deployed for all providers Cross Health and Social Care Economy • Single approach to diagnostics information sharing through single instance of ICE
Outcomes / Capabilities • All clinical correspondence between professionals caring for patients is sent digitally and integrated into core clinical systems by 2017/18 • All Clinicians can order diagnostic test electronically and view share diagnostics results around a patient by 2016/17	

4. Medicines management and optimisation

Current Initiatives	Planned Initiatives
Out of Hospital • Primary Care Medicines Management – utilisation of digital tools to support prescribing In Hospital • EPMA rolled out across Hospital Trusts • Medicines and allergies reconciliation through information sharing • All systematic anti-cancer treatment for cancer patients in the footprint are prescribed electronically	Out of Hospital • EPMA rollout in Merseycare • MMT access to Shared records In Hospital • Sharing Framework rollout across Secondary Care (GP Medication) • Pharmacy Teams access to shared record • EPMA in use in all areas of all providers • Continued achievement of 100% compliance with National Chemotherapy Advisory Group and cancer peer review measures for prescribing of complex chemotherapt treatment protocols
Outcomes / Capabilities • Community Care teams can work as a team around individuals they are caring for with technology that "just works" by 2017/18 • Single Service Teams have a single EPR to operate as a team by 2018/19	

5. Decision support

Current Initiatives	Planned Initiatives
Out of Hospital • Maximisation of primary care protocols and concepts embedded in clinical systems In Hospital • Clinical observations captured digitally • Electronic early warning system • Sepsis and critical illness alerting Cross Health and Social Care Economy • Child Protection Information included in national summary care record	Out of Hospital • Further Maximisation of primary care protocols and concepts embedded in clinical systems In Hospital • Clinical Observations integrated into electronic patient record systems • Joint EPR deployment including decision support software Cross Health and Social Care Economy • Child Protection Information included in national summary care record • Integrated 'lab in a bag' • Better use of technology to support multi site and multi organisational pathways
Outcomes / Capabilities • Acute clinicians have early warning of patients that are deteriorating by 2018/19	

6. Remote care

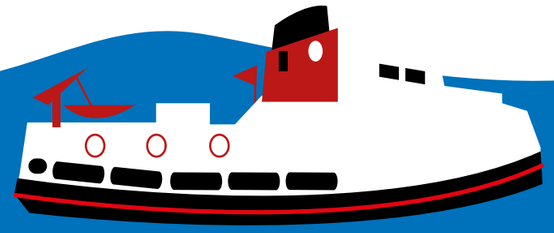
Current Initiatives	Planned Initiatives
Out of Hospital • Telehealth deployment • Telecare deployment • EMIS Mobile In Hospital • Mobile working for provider clinicians • Virtual clinics in limited specialty areas	Out of Hospital • Upscaling assistive technology to increase patient adoption and wider disease pathways • Use of video and online consultations In Hospital • Virtual consultations with patients • Virtual clinical in broader clinical areas
Outcomes / Capabilities • All Health and Social Care Professionals record clinical information in a consistent way, digitally, at the point of care (community, hospital) by 2018/19 • Community Care teams can work as a team around individuals they are caring for with technology that "just works" by 2017/18 • Single Service Teams have a single EPR to operate as a team by 2018/19	

7. Asset and resource optimisation

Current Initiatives	Planned Initiatives
In Hospital • Patient flow tracking • E-Staff rostering • Use of white boards to manage patient state	In Hospital • Patient flow tracking • Location of clinical assets • E-Staff rostering • Unified order sets on admission
Outcomes / Capabilities • All Health and Social Care Professionals record clinical information in a consistent way, digitally, at the point of care • Community Care teams can work as a team around individuals they are caring for with technology that "just works" by 2017/18 • Single Service Teams have a single EPR to operate as a team by 2018/19	

Pickerings Pasture is a Local Nature Reserve in Widnes, Merseyside. It has acres of wildflower meadows and wide views across the River Mersey. Until the 1950s the area was a salt marsh, grazed by cattle and home to wading birds and estuary plants. For the next 30 years however, the site was used as an industrial and household waste tip and a mountain of refuse built up on the salt marsh. The land was reclaimed in the 80's by Halton Borough Council and is now a haven for wildlife and holder of the Green Flag Award.

The Silver Jubilee Bridge crosses the River Mersey and the Manchester Ship Canal at Runcorn Gap between Runcorn and Widnes in Halton, Merseyside. It is a through arch bridge with a main arch span of 1,082 feet (330 m). It was opened in 1961 as a replacement for the Widnes-Runcorn Transporter Bridge, and was initially known simply as the Runcorn Bridge or Runcorn–Widnes Bridge. In 1975–77 it was widened, after which it was given its official name in honour of the Queen's Silver Jubilee.



The Mersey Ferry is a ferry service operating on the River Mersey between Liverpool and Birkenhead/Wallasey on the Wirral Peninsula. Ferries have been used on this route since at least the 12th century, and continue to be a popular and iconic means of transport in Mersyeside for both local people and visitors.

7. Universal Capabilities

As part of the national LDR guidance, there are ten digital universal capabilities where local health and social care systems are expected to make progress over a two-year period. The universal capabilities are:

A. Professionals across care settings can access GP-held information on GP-prescribed medications, patient allergies and adverse reactions.

B. Clinicians in urgent and emergency care settings can access key GP-held information for those patients previously identified by GPs as most likely to present (in U&EC).

C. Patients can access their GP record.

D. GPs can refer electronically to secondary care.

E. GPs receive timely electronic discharge summaries from secondary care.

F. Social care receive timely electronic Assessment, Discharge and Withdrawal Notices from acute care.

G. Clinicians in unscheduled care settings can access child protection information with social care professionals notified accordingly.

H. Professionals across care settings made aware of end-of-life preference information.

I. GPs and community pharmacists can utilise electronic prescriptions.

J. Patients can book appointments and order repeat prescriptions from their GP practice.

7.1 Universal Capability Themes

For the purposes of local planning and implementation, the universal capabilities have been aligned to three headline areas which include Shared Electronic Patient Records, E-Communications and Online Patient Services. The mappings of the universal capabilities into these themes are noted in table 9 below.

This section of the LDR will outline our baseline and ambitions grouped by theme. A detailed plan for each individual universal capability is included at appendix 6.

7.1.1 Shared Electronic Patient Records

CCGs and providers within the Merseyside LDR have a strong track record of information sharing. Whilst it is acknowledged that there are different starting points, all organisations in the footprint have an agreed information sharing framework and are moving towards a single information sharing agreement in 2016 to share information about our patients where it is needed. This is a core component part of our digital aim for a connected health and social care economy.

The content of this information sharing framework is outlined in detail in section 8 of this roadmap document. The agreement includes all of the information noted in the universal capabilities mapped to the information sharing theme for all local health and social care professionals in Merseyside. It also includes information outside of the content of the universal capabilities requirements.

Shared Electronic Patient Records Baseline (Covering Universal Capabilities A, B, G, H)

Across Merseyside, our local shared record is used extensively in North Mersey and the national Summary Care Record (SCR) is used in pockets.

At a minimum, the content of the shared record is patient diagnoses, medications, allergies, health status, who else is involved in my care, and appointments and diary events.

Table 9: Mapping universal capabilities against themes

Theme	UC No	Universal Capability Definition
Shared Electronic Patient Records	A	Professionals across care settings can access GP-held information on GP-prescribed medications, patient allergies and adverse reactions
	B	Clinicians in urgent and emergency care settings can access key GP-held information for those patients previously identified by GPs as most likely to present (in U&EC)
	G	Clinicians in unscheduled care settings can access child protection information with social care professionals notified accordingly
	H	Professionals across care settings made aware of end-of-life preference information
E-communications	D	GPs can refer electronically to secondary care
	E	GPs receive timely electronic discharge summaries from secondary care
	F	Social care receive timely electronic Assessment, Discharge and Withdrawal Notices from acute care
	I	GPs and community pharmacists can utilise electronic prescriptions
Online Patient Services	C	Patients can access their GP record
	J	Patients can book appointments and order repeat prescriptions from their GP practice

The content of the local shared record is compliant with the expectations set out in universal capabilities A, B and H. At a maximum the full GP record is shared with front line staff working in local community teams working collaboratively around our patients.

Our local shared record is used extensively in Liverpool, South Sefton and Southport & Formby CCGs with over 8.4 million records accessed to date. Plans are in place to further develop the local shared record pan Merseyside so that all patients in the LDR footprint have this level of sharing to facilitate their care.

Staff accessing the shared record are broadly working across urgent and emergency care settings and community care teams. Information which is shared includes patients' end-of-life preference information.

Baseline adoption figures by CCG, including patient opt out rates are outlined in table 10 below.

Ambitions

Moving forward, we have significant ambitions in this area.

By 17/18, the mobilisation of our information sharing framework and delivery of our interoperability programme of work will see every single health and social care practitioner having access to the information they need, through our shared record and, where digital maturity permits, through their native clinical or social care system. With effect from 18/19 we will ensure that our information sharing framework and interoperability standards are built into the implementation of new systems from the outset.

This will include the full coded primary care record into all settings of care for those practitioners with a role that requires them to have access to it. This includes urgent and emergency and end of life care as priority areas as set out in the national universal capability requirements.

The approach to the delivery of the shared patient record can be categorised into the phases outlined below:

- Phase 0 - Direct log-on to systems for health and social care staff (e.g. SCR).
- Phase 1A - Connect, using each organisation's main strategic system, as digital maturity permits, to an embedded view of data from another system held on a separate tab (e.g. EMIS CRV).
- Phase 1B - A message sent from hospital to primary or community systems using HL7 message standards.\ Phase 2 - Connect, using each organisation's main strategic system, as digital maturity permits to a single view of all other information held outside your strategic system (e.g. Portal view).
- Phase 3 - Access a fully integrated rendered record, via the organisation's strategic systems (e.g HIE) (Delivery by 2021).

In relation to the Child Health Protection Information, 4 of our 5 local authorities are compliant with this requirement, with the final to be live by September 2016. This information will be available to services that require it through 16/17 and 17/18.

7.1.2 E-Communications

A corner stone of our digital ambition in relation to a connected health and social care economy is to improve the timeliness and quality of e-communications between different settings of care. We plan to achieve this through a number of ways, including the e-communications of key clinical messages, in a coded and structured way, linked to front line staffs main clinical systems.

The areas in scope of the portfolio include, but are not limited to, E-Discharge Summaries, E-Referrals, messaging between Acute Trusts and Social Care to support safe and timely discharge and Electronic messaging between primary care and others, including E-Prescribing.

Table 10: Baseline adoption figures by CCG

CCG	Local Shared Record Usage	Patient Opt out of Local Shared Record	Number of Staff accessing Local Shared Record	SCR record views 15/16	% of GP Practice Upload to National SCR	Patient Opt out of National SCR
Halton	0	n/a	0	66,135	100%	2.1%
Knowsley	0	n/a	0		96.77%	2.25%
St Helens	0	n/a	0		97.22%	2.00%
Liverpool	8,531,854	0.18%	4525	50,844	100%	2.26%
South Sefton		0.33%			100%	0.78%
Southport and Formby					100%	

Table 11: Baseline adoption figures by CCG

CCG	Messaging Hubs E-communication usage 2015/16	% of discharge summaries delivered electronically to GP Practice within 24 hours
Halton	44,893	88.2%
Knowsley	99,571	88.3%
Liverpool	249,984	88.60%
South Sefton	79,968	
Southport and Formby	62,832	
St Helens	139,070	88.4%

E-Discharge Summaries (Universal Capability E)

In relation to E-Discharge summaries, e-communication of discharge summaries within 24 hours of discharge is a core component of provider contracts.

To achieve this objective, we have a number of technologies in use across Merseyside. In the North Mersey footprint, we have a messaging hub with 7 providers and 135 GP practices connected. In Mid Mersey we have a messaging hub and document management system with 1 provider and 81 GP practices connected. Both technologies are used in the main to communicate inpatient, outpatient, and Emergency Care discharge summaries from secondary to primary care.

A local minimum dataset has been in place since 2010. This complies with the Academy of Medical Royal Colleges Headings and is a core part of provider contract requirements.

The table above outlines the usage figures of the e-communications technologies.

Moving forward, through the LDR, our ambition for 16/17 is to unify our approach pan Merseyside and consolidate onto a single technology approach for all providers and GP practices. We aim to connect our local technologies with other LDR footprints, in particular for specialist providers to be able to send clinical notifications for patients registered in other areas of the wider region.

We aim for all providers to move to generating structured transfer of care communications using the Transfer of Care Clinical Document Architecture (CDA) messaging standard.

By 2017/18, our aim is for 80% of paper in the communication of discharges and outpatients notifications to be removed with all communications undertaken digitally and linked into core clinical systems. The anticipated benefit from moving towards a structured, coded mechanism of discharge summary transfer are:

- Improved patient care through the timely availability of consistent information at the point of use due to greater interoperability between systems.
- Increased patient safety through the availability of complete, accurate and timely information and reduction in transcription errors.
- Reduction in the risk of missing or inappropriate critical clinical information.
- Reduction in costs by removing the administrative burden of re-keying / scanning information (and maintenance of paper records).

E-Referral (Universal Capability D)

Our aim for E-Referrals is for every referral to be created and transferred electronically. Every patient will be presented with information to support their choice of provider and appointment date & time.

Our referrals sent from primary to secondary care utilise the national E-Referrals system and functionality. Our current baseline is included in the table below:

Our ambitions for e-referrals are for:

- 80% of referrals to be made electronically by 16/17 and 85% by 17/18.
- Increase in the number of directly bookable slots across all providers.
- Adoption of NHS Digital Transfer of Care CDA message specification by 17/18.

Table 12: Baseline adoption figures by CCG

CCG	Messaging Hubs E-communication usage 2015/16
Halton	28%
Knowsley	49%
Liverpool	64%
South Sefton	28%
Southport and Formby	41%
St Helens	53%
Total	**43.8%**

E-Communications between Acute Trusts and Social Care (Universal Capability F)

Our aim for e-communications between Acute Trusts and Social care is to enable the sharing of hospital admission and discharge information to replace assessment notifications (previously known as Section 2 Notification) and Social Care Discharge Notification (previously known as a Section 5 Notification). This ambition will:

- Improve capability and capacity in primary care, community care and social care
- Support closer working with the Community Care Team and hospital teams to plan for discharge, with people discharged as soon as it is safe to do so.
- Effective and cohesive reablement arrangements will be introduced, with timely assessment and deployment of community equipment and a single integrated health and social care community reablement team in place to support people to remain in their home.

The ambition will be met via the implementation of a message exchange facility to allow details of hospital admissions and discharges to be shared electronically between Hospital and Adult Social Care system.

The solution will replace Assessment (Section 2) and discharge (Section 5) forms being faxed by hospital wards to hospital social work teams and then manually recorded into system. Instead this functionality will be embedded seamlessly within the Adult Social Care System and, where appropriate, integrated directly into existing workflow processes.

Electronic Prescribing between GP practices and Community Pharmacies (Universal Capability I)

Our aim for e-prescribing between GP practices and community pharmacies are for all prescriptions to be sent digitally using the national Electronic Prescribing Service (EPS) system.

Our baseline in this area is below:

Our ambitions for e-prescribing are for:

- 80% of prescriptions to be sent electronically by 16/17 and 90% by 17/18.
- Working with medicines management colleagies, increase the uptake of repeat dispensing.

Table 13: Baseline of electronic prescribing between GP practices and community pharmacies

CCG	% of practices signed up to EPS	Average usage of Electronic Prescribing of those practices that are enabled	Average usage of repeat dispensing
Halton	94%	59.2%	0.52%
Knowsley	96%	64%	2.41%
Liverpool	100%	70%	1.65%
South Sefton	52%	71%	0.67%
Southport and Formby	100%	86%	2.00%
St Helens	100%	64%	1.26%

7.1.3 Online Patient Services

Our digital aim of empowering our citizens includes interacting with services through a 'digital no wrong door'. This includes a number of aspirational areas including online consultations, use of assistive technology and other future innovations in health and care services.

From a primary care perspective, the digital no wrong door approach will include patients being able to digitally interact with their GP practice to access their GP records, book online appointments and book repeat prescriptions through their choice of device or app.

Online Appointments and Prescription Requests (Universal Capability J)

Phase one of our digital no wrong door approach includes patients being able to book appointments and order repeat prescriptions online. We have made progress in this area, our current baseline as at February 16 can be found in table 14 overleaf.

Our ambitions in relation to this are:

- By 16/17 to demonstrate a 10% increase in patient activation and by 17/18 to demonstrate a further 10% increase.
- By 17/18 to facilitate access through our local digital no wrong door approach.
- By 17/18, to allow patients to be seen in a timely manner, should they wish to book appointments digitally, an increase in the percentage of GP appointments to be available for booking online.

Table 14: Baseline of online appointments and prescription requests

CCG	% of GP practices signed up for patients to electronically book or cancel an appointment	% of Patients enabled to electronically book or cancel an appointment	% of GP practices signed up for patients to request prescriptions online	% of Patients enabled to request prescriptions online
Halton	100%	9.9%	100%	9.3%
Knowsley	100%	6.1%	96.8%	6.1%
Liverpool	100%	9.1%	100%	9.0%
South Sefton	100%	11.8%	96.8%	11.4%
Southport and Formby	100%	11.7%	100%	11.7%
St Helens	100%	14.5%	100%	12.8%

Patients accessing their primary care record online (Universal Capability C)

Our aim in relation to patients accessing their GP record online is to ensure that patients who choose to, or would benefit from having access to their online record have this in place. Links to pathway and long term condition transformation workstreams understanding the potential of this in self care management are key.

Our baseline in this area as at February 16 is demonstrated in table 15 below.

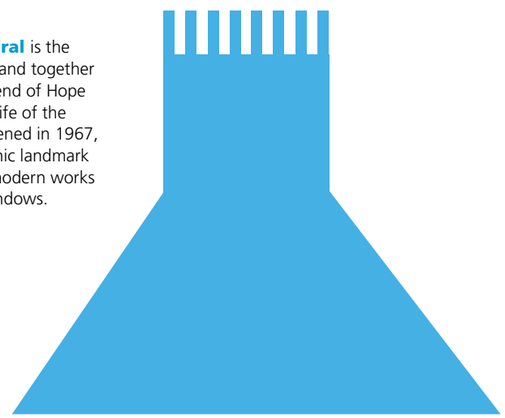
Our ambitions in relation to this are:

- By 16/17 to demonstrate a 10% increase in patient activation and by 17/18 to demonstrate a further 10% increase.
- By 17/18 to facilitate access through our local digital no wrong door approach.

Table 15: Baseline of patients accessing their primary care record online

CCG	% of GP practices signed up to give patients access to their online primary care record	% of Patients enabled to access their online primary care record
Halton	53%	0.1%
Knowsley	58%	0.0%
Liverpool	69%	0.3%
South Sefton	81%	0.0%
Southport and Formby	68%	0.0%
St Helens	72%	0.2%

Liverpool Metropolitan Cathedral is the largest Catholic cathedral in England and together with its sister Cathedral at the other end of Hope Street plays an important part in the life of the City of Liverpool and Merseyside. Opened in 1967, the Metropolitan Cathedral is an iconic landmark boasting a modern, circular design, modern works of art and glorious multi-coloured windows.



8. Merseyside's Approach to Information Sharing

8.1 Information Sharing Framework and Agreement

A robust approach in relation to Information Governance, Audit and Identity are essential foundations to enable the digital ambitions within our LDR, in particular in relation to information sharing in a safe and secure way.

Over the Merseyside health and social care economy, significant collaborative work spanning over 20 organisations has been undertaken to develop a scaled information sharing framework. From a risk and safeguarding perspective, the framework is based upon a number of key principles which are summarised below:

Role/Service Based Access: Levels of access to information will be based on roles or service profiles

Consent and Opt Out: Information shared is facilitated only when an individual has given consent to do. An individual holds the right to 'opt out' to all or parts of their personal information being shared

Proactive Audit: The framework will result in a significant increase in information being shared, therefore there is a significant safety and security need to assure that only those that require access to data, are able to access it

Exclusions: There are a number of exclusions which will not be included within the sharing model, unless explicitly stated due to legal/statutory requirements and sensitivity concerns

Mandatory Training: All staff will be expected to undertake mandatory training

Monitoring and Evaluation: Ongoing monitoring and evaluation of both the model and its effectiveness will be undertaken

Patient and Public Engagement: Patients and members of the public will be given an opportunity to consult, debate and inform the approach to sharing for the role purposes of providing care

With the principles in place, the Information Sharing Framework is based on a number of segments, professional groups/roles and service areas. The segments are broken down into a number of tiers with information starting at lower levels of sharing and building upwards.

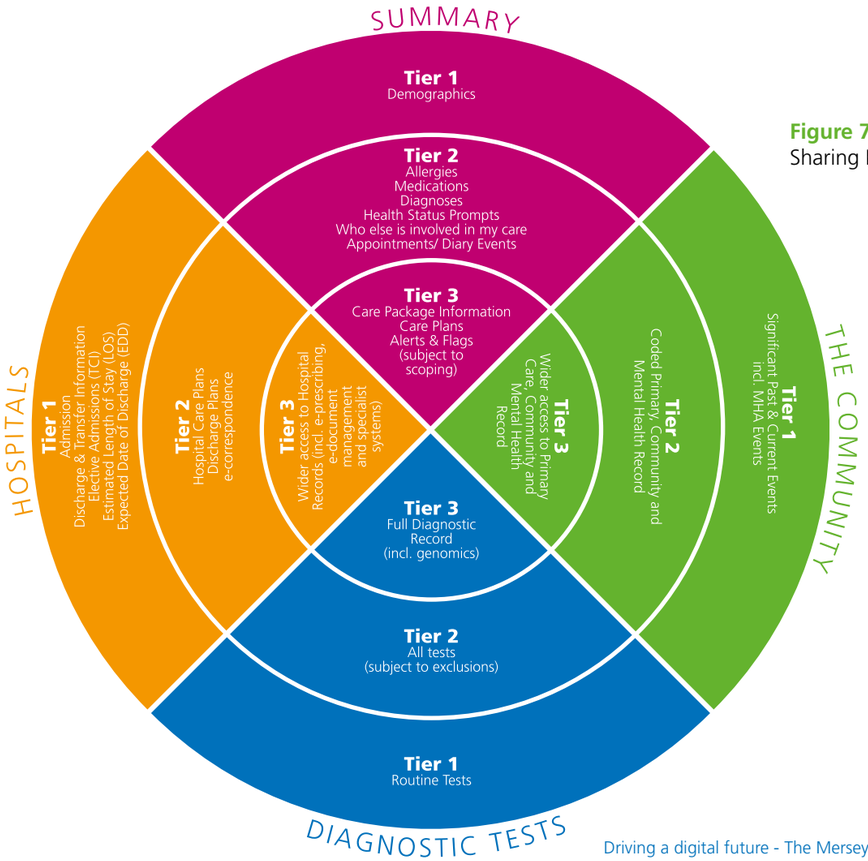


Figure 7: Merseyside Information Sharing Framework

The segments represent the following areas:

Summary Record – Summary patient information to be shared across a wide range of health and social care practitioners

The Community – Information held outside of hospitals, across Primary Care, Community, Mental Health and Social Care

Diagnostics – Key diagnostic information including pathology, radiology and other tests available for North Mersey Patients

Hospitals – Information held at secondary and tertiary care level across the many acute settings of the health economy There are 5 professional groups and 2 service areas which would have access to specified segments and tiers as described through the framework:

- Medical
- Registered Health Care Professional
- Social Care Professional
- Unregistered Professional
- Admin
- Urgent Care
- Extended Primary Care Team

The framework has been endorsed by 28 organisations.

A single information sharing agreement has been developed which all local heath and social care organisations are in the process of signing up to. This will be complete by Winter 2016.

Both documents have been reviewed from both legal and Information Commissioners Office perspectives. The Information Sharing Framework is included at Appendix 7 and the current sharing agreement is included at Appendix 8. Our information sharing approach demonstrated as a diagram is included at Appendix 9.

8.2 NHS Number and Standards

Across Merseyside the current adoption of the NHS number as the primary identify for patients under the care of health providers is universal. Health organisations have adopted and adhere to the requirements as set out in the ISB0149-01 (ISN 32/2008) & ISB0149-02 information standard boards. (http://webarchive.nationalarchives.gov.uk/+/http://www.isb.nhs.uk/library/dscn/dscn2008/dataset/322008.pdf)

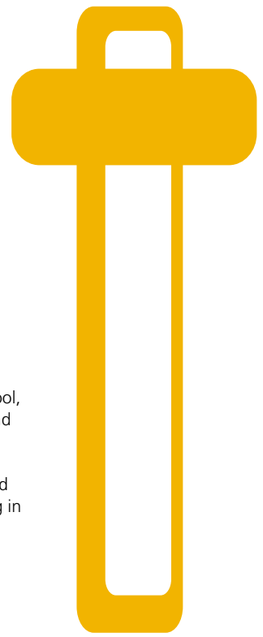
In some instances, there are gaps whereby a number of trust Patient Administration Systems do not have direct connectivity to the Person Demographic Service (PDS) therefore undertake regular batch tracing of records for patients under the care of the provider. As part of any future systems procurement, connectivity to PDS is stipulated to support direct querying for the NHS number at the point of care.

Across social care, regular batch tracing of adults services records is currently undertaken in collaboration with NHS providers to ensure that a high percentage of clients NHS numbers are known to social care.

Across Merseyside there are 3 separate trusts providing maternity services; Liverpool Women's, Southport and Ormskirk, and St Helens and Knowsley NHS trust. The trusts either utilise the issuing of NHS numbers via their PDS connected PAS system or have migrated to the Birth Notification Application. As part of local processes, babies NHS numbers are notified to Community Child Health Teams to ensure continuity of service within national timeframes

Within 16/17 and 17/18, to further address any gaps and improve upon the coverage and utilisation of the NHS number across Merseyside, a unified schedule and approach will be adopted to ensure that patient records are regularly traced against PDS to ensure full compliance.

Across Merseyside it is acknowledged that the adoption of Snomed CT is to be used as the single common terminology in all care setting. Merseyside has worked closely with key systems suppliers to ensure that all care settings products either have, or are developing, the capability to utilise SNOMED CT in line with national guidance. The iLinks Sharing Framework supports this multilingual vocabulary by clearly defining information held within each tier'd segment and the alignment against each data definitions. In addition, SNOMED CT will be a fundamental requirement in the development of a regional health information exchange across settings of care.



Radio City Tower
(also known as St. John's Beacon) is a radio and observation tower in Liverpool, Merseyside. Built in 1969 and opened by Queen Elizabeth II, the tower is 138 metres (452 ft) tall and is the second tallest free-standing building in Liverpool.

9. Infrastructure

Our vision for IT and infrastructure is to provide a best in class data network and connected services. The infrastructure will be focused on user requirements rather than physical location and the correct balance between new and highly effective cyber security measures will deliver secure data access in a user friendly manner.

The Merseyside infrastructure must be capable of supporting current and future requirements and ensure that care of patients and service users is not compromised. In particular, resilient and highly available networks are key, including the development of innovative and effective technologies to support business continuity measures.

Our vision for infrastructure is that it needs to enable, rather than disable our front line staff. The right balance between new and highly effective cyber security measures and ease of access are critical. By developing and enabling an infrastructure strategy for Merseyside, we will ensure all Health and Social Care Practitioners can:

- Access all appropriate clinical and corporate systems relevant to their role from any NHS or Social Care building across Merseyside using secure corporate Wi-Fi.
- Access all appropriate clinical and corporate systems relevant to their role from a none work setting e.g. patients or staff members home.
- Utilise secure end to end communication methods, such email, shared calendars across the whole Merseyside workforce (NHS Mail).
- Access to a range of services such as common unified communication platform, enabling video conferencing, instant messaging and flexible telephony solutions

The design and configuration of technical solutions must support current organisational form, however not be tied to organisational boundaries. This as a core design principle which will ensure our critical underpinning technologies can cater for organisational changes in the future, whilst simultaneously driving down implementation and operational costs; maximising the return on investment across the economy.

A modern infrastructure must also cater for interactions with patients and public. The potential benefits of increased engagement in health and self-care are well documented, however to be successful this engagement must take place in a trusted environment that is sufficiently simple, interesting and convenient for it to be a regular activity. Citizen access to records and the ability to carry out common health care transactions for example, booking appointments and ordering repeat prescriptions using technology are a firm component of our infrastructure vision.

Not only will our infrastructure be required to deliver information in a secure and accessible way, but it must also provide the ability to interact via consumer devices and 'wearables'. These devices such as fitbit, jawbone and the iWatch when coupled with a smartphone are becoming the primary method of generating and interacting with online health data. Therefore, a modern and accessible NHS must be capable of interacting with and utilising these devices and the data they produce when our service users wish to do so, providing them with the capability of monitoring their own health.

Current state

Currently within the Merseyside health and social care economy, there are varied approaches in terms of infrastructure. Each LDS footprint has it's own Community of Interest Network (COIN) and there are a plethora of data center's supporting the various organisations within the footprint.

Across the North-Mersey region there is a CoiN infrastructure in place which provides connectivity to over 230 sites. North Mersey CCGs, General Practices and Community Health Services (currently delivered by Liverpool Community Health NHS Trust) all utilise a shared domain and infrastructure providing a vastly reduced total cost of ownership and better collaboration. Plans are also in place to connect both Liverpool and Sefton Local Authority sites to the CoIN. Provider Organisations are also connected to the CoIN network but have their own internal corporate/clinical infrastructures, usually hosted in a data centre with a disaster recovery site located elsewhere.

Across the Mid Mersey region there is a CoiN infrastructure in place which provides network, digital telephony solutions and integrated WIFI connectivity to over 200 sites. The Mid Mersey CoIN is also directly connected to Halton, St helens & Knowsley Local Authorities. Mid Mersey CCGs, General Practices, both local hospitals, Community and Mental Health Services all utilise a single set of resilient data centres hosting a single security domain, infrastructure, remote access and associated shared informatics support service, providing a vastly reduced total cost of ownership and better collaboration.

Work is underway with regards to joining up the two key CoIN networks, with an aim to provide a seamless experience for staff regardless of where they are working e.g. Single corporate Wi-Fi. This includes a direction of travel to join up and integrate methods of communication with a seamless, integrated approach.

Enabling a mobile workforce

Each Organisation across Merseyside has traditional facilities which enable staff to work and access systems whilst off site, these are largely through accessing remote desktop environments and require multiple steps to ensure access is secure, resulting in a reduced user experience. Access to corporate resources like e-mail and calendar is also provided via corporate mobile devices e.g. smart phones and tablet devices.

Work is underway to further develop technologies to enable a truly mobile workforce. Development of mobile solutions are focusing heavily on user experience whist maintaining effective security standards. New technologies will enable staff to have a consistent and effective user experience whether accessing systems from inside or outside the corporate environment. Initiatives such as direct access coupled with state of the art consumer devices are key to providing mobile working solutions which meet the needs of a digitally savvy workforce.

Infrastructure strategy

Linked to delivery of our 'Digital Top 10', the Merseyside Local Digital Roadmap gives us an opportunity to expand this work and clearly articulate a whole economy infrastructure strategy through the establishment of a Merseyside Infrastructure Strategy Group. This approach will ensure maximum return on investment and a collaborative approach across the whole economy to enable the delivery of the LDR.

The table below identifies a number of key schemes which the group will initially focus attention on:

Table 16: Infrastructure Strategy key schemes

Initiative	Description
Strategically aligned to HSCN developments	Providing North Mersey with next generation network connectivity, using virtual switching and routing network technology, seamlessly linking Health and Social Care along with broader Public Sector Services and Public Sector Network
Enhanced mobile access solutions	Development of scalable mobile access solutions which provide a first class user experience
Shared Wi-Fi Access	Enabling all Health and Social Care staff to connect to corporate WIFI from all Health and Social Care locations across Merseyside
Consolidated and strategically situated data centres	Moving to state of the art energy efficient data centres, providing scalable and cost effective solutions based on the needs and requirements of the economy
Common mobile/agile working devices	Providing enhanced user experience through state of the art consumer devices enabled for the corporate environment, whilst maximising economies of scale through economy wide purchasing
Common Unified Communications platform	Providing innovative means of communication for both staff and patients through the use of collaboration tools such as instant messaging and video conferencing
Shared Active Directory	Providing the ability to logon to any machine independent of organisational ownership of hardware and access corporate/clinical resources
Shared Corporate e-mail system	Adoption of a common and secure email solution across Merseyside, such as NHS Mail allowing the sharing of calendars
Joining Telephony Systems	Exploring the provision of shared/joined telephony solutions across Merseyside, achieving efficiencies through free calling between organisations, whilst providing the facility to access calls from multiple locations
Connectivity to wider North West Coast initiatives	Ensuring the Merseyside economy is interconnected with neighbouring economies across the North West Coast
Online Citizen Identity	Enabling a secure method for patients and public to securely access health and social care services online

10. Risk

Delivery of a strategy of this scale and ambition highlight a number of strategic risks.

1. The ambition in the programme in itself requires a significant level of investment
2. Due to the national and international direction of travel, doing nothing is not a viable option. This programme will ensure that Merseyside is at the proactive forefront of digital developments both nationally and internationally
3. Due to the size and scale of investment, adherence to appropriate legal, technical and other governance standards are required to ensure best value for money managed in appropriate controls
4. Individual organisational strategic plans and funding to meet the ambitions of the LDR

They are many large scale, digitally enabled transformation programmes taking place across the Merseyside Health and Social Care Economy. Major changes across systems and processes at this scale will naturally introduce additional risks into the economy. It is therefore important that a robust approach to risk management is in place.

Risks associated to the Merseyside Local Digital Roadmap will be managed both via existing individual organisation or cross economy programme governance arrangements.

The iLINKS Transformation Programme monitors and manages risks across a range of digital programmes at an economy level, providing a cross economy platform to share, escalate and manage risks and issues collaboratively. This function is carried out via the iLINKS Informatics Transformation Programme Board and the associated iLINKS Clinical Informatics Advisory Group (CIAG), both of which have representative attendees from across the Merseyside Economy.

Table 17 below presents the current risks across the Merseyside digital roadmap, these have been aligned to the following risk categories:

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

Table 17: Current risks across the Merseyside Digital Roadmap

Category	Description	Impact	Mitigation / Progress
Strategic	There is a risk associated with the geography of the Merseyside Local Digital Roadmap, particularly as this is not aligned to the STP LDS footprints and some provider organisations sit across boundaries	Provider organisations may have to enable differing strategies, which are geography dependent rather than patient facing or within the LDR partnership	Closely monitoring of risk, and regular updates into the STP / LDS development/ delivery process Good communication and engagement with other Digital Roadmap Leads Regularly reviewing issues and risks with 6 Merseyside CCGs (via iLINKS PB North Mersey iLINKS Governance has been broadened to include Mid Mersey Organisations
Strategic	Digital plans must be flexible enough to meet change in local organisational form either through clinical service or organisational changes	Digital services and plans may not be agile or developed enough to meet timescales of potential organisational changes	Closely monitoring of risk, and regular updates into the STP / LDS development/ delivery process Close liks and direction from Community and Hospital Programmes or work
Strategic, Clinical Safety	A lack of ownership and engagement by health and social care organisations could cause significant issues if organisations elect not to share information	Clinical Information is not available to Health and Social Care Professionals in a consistent way, resulting in clinical risk to safety and quality Professionals become disengaged with the iLINKS Programme	Organisations clinical and informatics leaders represented at various governance groups and regular engagement sessions are in place Links to local IG/IM&T boards in place Strong clinical and informatics relationships across all organisations and with key stakeholders

Continued...

Implementation	Strategic risk that the programme does not satisfy clinical requirements and is business rather than clinically driven and led	Direction of programme will not meet the transformation requirements of the Merseyside economy	Strong Clinical Leadership across all iLINKS Programmes Strong strategic links into CCG transformation programmes
Strategic, Clinical Safety, Change Management	Information will not be available on care provided to patients outside the Merseyside boundary	Dual processes for practitioners, two tier system for patients	Develop strong links with neighbouring health and social care economies Utilise common technologies, enabling interoperability standards
Strategic, Clinical Safety	The scale of business change across the economy is considerable and cannot be underestimated. There is a significant risk that economy fails to deliver the changes in working practice required to deliver the benefits of shared records	Maximisation and exploitation of benefits and the level of required transformational change will not be achieved	Organisations clinical and informatics leaders represented at various governance groups and regular engagement sessions are in place
Strategic, Clinical Safety, Change Management	Systems accessed through the information exchange do not use NHS Number as the main patient identifier, or have incomplete NHS Number information on patients	Inability to successfully match patient/service user records across the information exchange	NHS Number use to be mandated for cross economy integration projects
Data Quality, accessible information standards	Organisations are at differing starting positions in terms of ability to share information due to differing levels of technical or digital maturity. There is a delivery risk if organisations are not able to share information or do not have electronic systems to provide information in the appropriate format	Clinical Information is not available to Health and Social Care Professionals in a consistent way, resulting in clinical risk to safety and quality Professionals become disengaged with the iLINKS Programme Inability to remove paper at the point of care	Organisations clinical and informatics leaders represented at various governance groups and regular engagement sessions are in place All organisations that have elected to participate in CQUIN have a digital maturity CQUIN in place
Implementation, data quality, accessible information standards, data protection and privacy	Organisations may select to purchase and implement systems that are not compliant with the guiding principles or requirements of the information exchange.	Procurement of systems that do not comply with the guiding principles or requirements of the information exchange will not be able to share information effectively across North Mersey	Organisations clinical and informatics leaders represented at various governance groups and regular engagement sessions are in place Links to local IG/IM&T boards in place Strong clinical and informatics relationships across all organisations and with key stakeholders
Implementation	The responsiveness, timeliness, prioritisation and commitment of existing and new strategic Merseyside system suppliers could hinder progress with the development and implementation of the digital programme	Unable to share information as set out in the interoperability roadmap	Early engagement has commenced with a number of suppliers in relation to the interoperability roadmap Pathfinder relationship with EMIS for Merseyside Input into specification for current procurements in relation to interoperability

Continued...

Implementation, accessible information standards	There is a risk that strategy and use of existing systems remains focused on organisational silos as opposed to cross organisational requirements	Inability to meet ILINKS strategy objective in relation to system wide leadership approach to informatics	Organisations clinical and informatics leaders represented at various governance groups and regular engagement sessions are in place Links to local IG/IM&T boards in place Strong clinical and informatics relationships across all organisations and with key stakeholders
Implementation, clinical safety, Change Management	There is a risk that the clinical ambitions in relation to information sharing will not be met due to individual organisations interpretation of Information Governance and legal requirements	Programme would be unable to be delivered at it's current scale or ambition	Information Sharing Framework developed and signed off across all Merseyside Provider Organisations.

GS1 Standards compliance

GS1 standards incorporated within barcodes and RFID technologies are increasingly used to provide improved patient safety, deliver greater regulatory compliance and drive operational efficiencies. The GS1 compliance table below shows North Mersey Provider Organisations current baseline state in relation to GS1 standards, and highlights future plans to further deploy and develop the use of this technology. Primary Care and Social Care organisations are out of scope for the GS1 standards compliance.

Table 18: GS1 compliance table

GS1 Compliance		
Provider	**Baseline**	**Plans**
Aintree University Hospital NHS Foundation Trust	The trust is in the process of implementing the GS1 standard	Expect full compliance following EPR procurement
Alder Hey Childrens NHS Foundation Trust	Not compliant	Expected full compliance by the end of 2016
Bridgewater Community Healthcare NHS Foundation Trust	No current requirement	Review as part of future development plans
Clatterbridge Cancer Centre NHS Foundation Trust	Not compliant	Moving towards full compliance
Liverpool Community Health	Not relevant	Not relevant
Liverpool Heart and Chest Hospital NHS Trust	Not compliant	Expect full compliance by September 16
Liverpool Womens Hospital NHS Trust	LWH Partially compliant with the GS1 standard	Expect full compliance following EPR procurement by Feb 18
Mersey Care NHS Foundation Trust	EPMA and RiO currently using font 3of9	Planned deployment for EPMA by Dec 16 RiO GS1 compliance date has been requested
Royal Liverpool and Broadgreen University Hospitals NHS Trust	Fully compliant	Fully compliant
Southport and Ormskirk Hospital NHS Trust	Implementation of GS1 compatible barcodes on patient wristbands underway	Patient Identification will be GS1 complaint within Medway EPR post upgrade 2016
St Helens & Knowsley Hospitals NHS Trust	GS1 compliant for Patient ID	Steering Group established to support the full implementation of the standard
The Walton Centre NHS Foundation Trust	Currently adopted in Theatres RFID ready in terms of wireless access points	Reviewing deployment elsewhere. Trust reviewing capability of Bluetooth-Low-Energy (BLE) for tracking internally
5 Boroughs Partnership NHS Foundation Trust	Not used	No plans currently

11. Governance

11.1 LDR development

This LDR has been developed in partnership and collaboration with all provider, commissioning and social care organisations in the LDR footprint.

The LDR builds on our well established strategy, direction and approach across the local economy. Its development has had input through the governance outlined in section 5 and below. The content has been developed in partnership with clinicians, front line staff and digital leaders.

A range of local workshops have been held including a 'Digital Disruption Clinical Summit', where over 140 local health and social care staff pledged their consensus and support for our LDR. This included a local definition of 'paper free at the point of care' being branded as 'delivery of seamless care through the eradication of dead trees and fax machines'. In addition, the development of this LDR has been undertaken with full alignment with our STP development.

As a local shared service provider, Informatics Merseyside have supported the coordination and design of the LDR in partnership with our CCGs and providers.

11.2 LDR governance

At the point of submission, the LDR has been endorsed by the iLINKS Programme Board on behalf of the health and social care economy. In addition, the LDR has been endorsed by Knowsley CCG, South Sefton CCG, Southport and Formby CCG and Liverpool CCG. Plans are in place for the LDR to be presented and signed off by all organisations and relevant Health and Wellbeing Boards over the summer months.

Table 19: LDR governance and sign-off

Governance	Date
Economy Wide Governance	
STP / LDS	June 2016
iLINKS Programme Board	June 2016
iLINKS CIAG	July 2016
CCGs	
Halton	Governing Body July 2016
Knowsley	Executive Management Team June 2016
Liverpool	Healthy Liverpool Digital Board June 2016
South Sefton	CCG Senior Leadership Team June 2016
Southport and Formby	CCG Senior Leadership Team June 2016
St Helens	Executive Management Team July 2016
Providers	
Aintree University Hospitals	Informatics Strategy Group: September 2016
Alder Hey	Clinical Systems Steering Group: September 2016
Bridgewater	Senior Management Team: August 2016
The Clatterbridge Cancer Centre	Transforming Cancer Transformation Board: July 2016
Liverpool Community Health NHS Trust	Technology and Innovation Sub Committee: August 2016
Liverpool Heart and Chest Hospital	Digital Healthcare Committee: September 2016
Liverpool Women's Hospital	Executive Team: July 2016

Governance	Date
Providers cont'd...	
Mersey Care NHS Foundation Trust	Digital Board: July 2016
Royal Liverpool and Broadgreen University Hospital	Executive Team: July 2016
Southport and Ormskirk Hospital NHS Trust	IM&T Board: July 2016
St Helens and Knowsley Trust	Executive Team: July 2016
The Walton Centre for Neurology NHS Foundation Trust	Digital Programme Board: September 2016
5 Boroughs Partnership NHS Trust	Informatics Programme Board: August 2016
Local Authorities	
Halton	September 2016
Knowsley	September 2016
Liverpool	September 2016
Sefton	September 2016
St Helens	September 2016
Health and Wellbeing Boards	
Halton	September 2016
Knowsley	September 2016
Liverpool	September 2016
Sefton	September 2016
St Helens	September 2016
Other Governance	
Mid Mersey HIS Board	July 2016

12. Summary

This LDR represents a seismic cultural and technological transformation plan. As with other industries, it will liberate and disrupt our health and social care economy. Whilst it represents huge collaborative efforts in the last 2 years, we recognise this LDR demands a scale, pace and impact of a magnitude yet seen in the NHS.

The shape of the health and social care economy over the lifetime of the digital roadmap will change. The transformation work through the STP builds on work undertaken by local economies. This work is co-designed with front line clinicians and has a relentless focus on patient benefits.

The development of the LDR has been a **collaborative approach with significant contributions made by all local health and social care organisations** in the footprint outlined in section two of this document.

The LDR is a cornerstone of our service transformation work. Without high quality digital care, our system simply will not be able to operate or achieve the level of transformational change we aspire to.

Our fundamental aim is to improve the health and wellbeing of the population we serve. The LDR gives us the opportunity to do this.

Sefton Park Palm House is an octagonal, 3 tiered, Grade II* listed Victorian glasshouse which was designed and built by MacKenzie and Moncur of Edinburgh in 1896. During the Liverpool Blitz of May 1941 a bomb fell nearby and shattered the glass. The Palm House was fully restored and reopened in September 2001 and is now a popular visitor attraction offering free and paid-for public entertainment and hire.

Royal Birkdale Golf Club is one of Britain's finest golf clubs and is among the best in the world. Nestled amid Southport's spectacular sand dunes, Royal Birkdale, with its distinctive art deco clubhouse, has staged eight Open Championships - the first in 1954 and the most recent in July 2008. It has also hosted the women's tournament five times, the Ryder Cup, the Walker Cup and the Curtis Cup.

13. Appendices / Supporting Documents

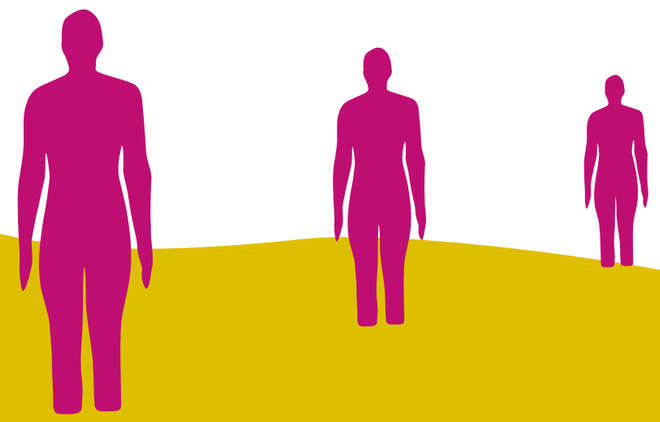
A list of the appendices referenced within this document are detailed below. An electronic copy of The Merseyside Digital Roadmap and the appendices detailed below can be viewed online at: www.ilinksmersey.nhs.uk

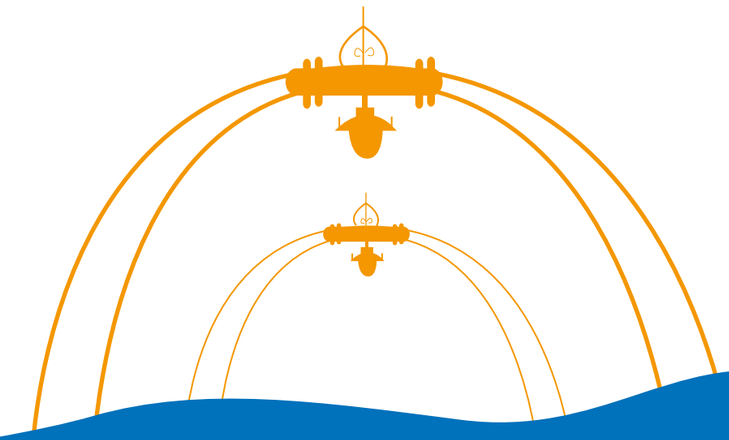
Additional printed copies of The Merseyside Digital Roadmap are available on request from the above website.

- Appendix 1: iLINKS Programme Board and CIAG terms of reference
- Appendix 2: 'Driving a Digital Future, The Merseyside Digital Roadmap' launch document
- Appendix 3: Patient Communication materials
- Appendix 4: Capability Deployment Schedule
- Appendix 5: Capability Deployment Trajectory
- Appendix 6: Universal Capabilities Delivery Plan
- Appendix 7: Information Sharing Framework
- Appendix 8: Information Sharing Agreement
- Appendix 9: Information Sharing Approach

Notes

'Another Place' by Antony Gormley consists of 100 cast-iron, life-size figures spread out along three kilometres of Crosby beach in Sefton. The figures - each one weighing 650 kilos - are made from casts of the artist's own body standing on the beach, all of them looking out to sea, staring at the horizon in silent expectation.





Southport Pier is a Grade II listed structure and is the second longest pier in Britain. First opened in 1860, the pier now stands at 3,650 ft in length and is open every day except Christmas Day.

iLINKS

informatics enabling connected care

NHS

For more information, please contact a member of the iLINKS Informatics Transformation Programme Team:

E-mail: ilinksinnovations@imerseyside.nhs.uk
Website: www.ilinksmersey.nhs.uk
Twitter: @ilinksinnovator

Document design by NHS Informatics Merseyside.

Appendix 3: Patient Communication Materials

we share because we care

NHS

"Across Liverpool, Sefton and Knowsley, we are joining up our digital services to improve communications between health and social care practitioners."

Delivering safer and effective care 24/7

By allowing us to share some of your personal information, you will be ensuring ALL those involved in your care have access to the information they need to make quicker and safer decisions, with you, about your care.

Speak to your doctor, nurse or care worker for more information.

Working in partnership: This initiative is being led by doctors, nurses and other care staff across Liverpool, Sefton and Knowsley, and is being coordinated by Liverpool, Knowlsey, South Sefton and Southport and Formby Clinical Commissioning Groups (CCGs).

HEALTHY LIVERPOOL

Shaping Sefton

Designed by NHS Informatics Merseyside

What do you need to do?

- When a health or care professional wants to see your shared record you will be asked for permission.
- You will be asked for consent at every consultation.
- You can opt out of the whole thing if you prefer.
- You can change your mind at any time.
- Every care will be taken to protect confidentiality and ensure the safety of you and your records.

As a social worker, being able to see recent letters sent between care settings means that I can now process benefits and care package applications much more efficiently. I am no longer waiting for forms and assessments to be returned by fax or post.

Working in partnership

This initiative has been led by local doctors, nurses and other staff involved in caring for you to ensure that the sharing of records is as safe and effective as possible.

It will be a lot quicker for us to share and respond to your needs across every area of care, so we can make people better, quicker.

Being able to see your up to date information when you need treatment, day or night, means that we can get you the right treatment more quickly and safely.

As a patient, I have fewer blood tests and investigations done these days, as my previous tests and results are shared across each of the hospitals and the teams that look after me in the community.

HEALTHY LIVERPOOL

Shaping Sefton

This initiative is being led by doctors, nurses and other care staff across Liverpool, Sefton and Knowsley, and is being coordinated by Liverpool, Knowsley, South Sefton and Southport and Formby Clinical Commissioning Groups.

This leaflet can be made available in other languages or formats if requested.

Designed by NHS Informatics Merseyside

we share because we care

NHS

Across Liverpool, Sefton and Knowsley, we are joining up our digital services to improve communications between health and social care practitioners

Delivering safer and effective care 24/7

we share because we care

When we have access to the right information, in the right place and at the right time, the result is safe and effective care 24/7.

Unfortunately, this isn't always the case, and important information held in one part of the NHS is not always immediately available to doctors, nurses and carers in other areas.

We share because we care

Allowing us to share some of your personal medical information will ensure ALL those involved in your care have instant and controlled access to the information they need to make safer and quicker decisions, with you, about your care.

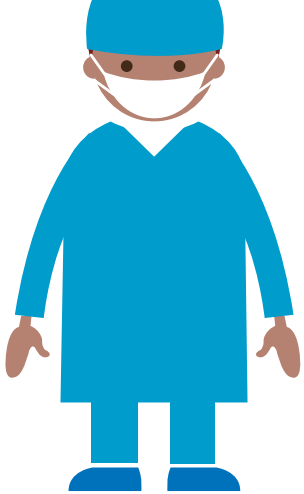
Across Liverpool, Sefton and Knowsley, we are joining up digital services to improve communication between health and social care practitioners.

When health and care teams can access the right information, in the right place, patients can get safer and effective care 24/7. As it stands, this isn't always the case.

We have a new approach, a joined up system where your doctor, nurse, therapist, social worker, mental health professional or support worker will have instant access to ALL the information they need to make a safer, quicker decisions, with you, about your care.

As a GP, I can now see a simple list of all the professionals who are involved in my patients' care, along with contact details and a summary plan.

As a hospital doctor, I can now see information recorded by GP or community clinicians, including prescribed medications and allergy information.



Who accesses the information?

We can only share your information with the relevant people who care for you, no one else.

To ensure this is managed correctly, healthcare professionals will only be able to view information relevant to their job role in order to inform treatment options or care plans. For example, a GP or consultant may have a different level of access to view records than a community mental health nurse or social care professional.

There will be some pieces of your information which will not be shared for legal and data protection purposes. This includes more sensitive and confidential information.

The sharing of records is to improve the care you receive day to day. This isn't about third parties such as researchers or insurance companies. It is for local health and social care services that need **your help to improve your care**.

Appendix 4: Capability Deployment Schedule

NHS

Footprint:	Merseyside

Capability				Locally defined attributes ->			
Who	What	Year	Capability group	Status	Digital Top 10	Digital Ambition	Organisations invovled
All Health and Social Care Professionals	Access to the information they need at the point of care by 2017/18	17/18	Records, Assessments and Plans	Regional Sharing Agreement agreed Point to Point Interoperability projects underway	Joint Governance & Clinical / Managerial Digital Leadership Partnerships All organisations commitment and pledge to the LDR digital principles Delivery of our Information Sharing Framework Digital Maturity transformation of all health and social care providers including primary care Interoperability Programme	A Connected Health and Social Care Economy Exploiting the Digital Revolution	Aintree University NHS Foundation Trust Alder Hey Childrens NHS Foundation Trust Bridgewater Community Healthcare Trust Clatterbridge Cancer Centre NHS Foundation Trust Liverpool Community Health Liverpool Heart and Chest Hospital NHS Trust Liverpool Women's Hosptial NHS Trust Merseycare NHS Foundation Trust Royal Liverpool and Broadgreen University Hospital NHS Trust Southport and Ormskirk Hospital NHS Trust St Helens & Knowsley Teaching Hospitals NHS Trust The Walton Centre NHS Foundation Trust 5 Boroughs Partnership NHS Foundation Trust
All Health and Social Care Professionals	Access to the information they need at the point of care by 2017/18	17/18	Transfer of Care	Regional Sharing Agreement agreed Point to Point Interoperability projects underway	Joint Governance & Clinical / Managerial Digital Leadership Partnerships All organisations commitment and pledge to the LDR digital principles Delivery of our Information Sharing Framework Digital Maturity transformation of all health and social care providers including primary care Interoperability Programme	A Connected Health and Social Care Economy Exploiting the Digital Revolution	Aintree University NHS Foundation Trust Alder Hey Childrens NHS Foundation Trust Bridgewater Community Healthcare Trust Clatterbridge Cancer Centre NHS Foundation Trust Liverpool Community Health Liverpool Heart and Chest Hospital NHS Trust Liverpool Women's Hosptial NHS Trust Merseycare NHS Foundation Trust Royal Liverpool and Broadgreen University Hospital NHS Trust Southport and Ormskirk Hospital NHS Trust St Helens & Knowsley Teaching Hospitals NHS Trust The Walton Centre NHS Foundation Trust 5 Boroughs Partnership NHS Foundation Trust
All Health and Social Care Professionals	Record clinical information in a consistent way, digitally, at the point of care (community, hospital) by 2018/19	18/19	Records, Assessments and Plans	Rationalised Hospital EPRs	Joint Governance & Clinical / Managerial Digital Leadership Partnerships All organisations commitment and pledge to the LDR digital principles Digital Maturity transformation of all health and social care providers including primary care Interoperability Programme Single Adult Acute Electronic Patient Record	Exploiting the Digital Revolution	Aintree University NHS Foundation Trust Alder Hey Childrens NHS Foundation Trust Bridgewater Community Healthcare Trust Clatterbridge Cancer Centre NHS Foundation Trust Liverpool Community Health Liverpool Heart and Chest Hospital NHS Trust Liverpool Women's Hosptial NHS Trust Merseycare NHS Foundation Trust Royal Liverpool and Broadgreen University Hospital NHS Trust Southport and Ormskirk Hospital NHS Trust St Helens & Knowsley Teaching Hospitals NHS Trust The Walton Centre NHS Foundation Trust 5 Boroughs Partnership NHS Foundation Trust

Footprint:	Merseyside

All Health and Social Care Professionals	Record clinical information in a consistent way, digitally, at the point of care (community, hospital) by 2018/19	18/19	Transfer of Care	Rationalised Hospital EPRs	Joint Governance & Clinical / Managerial Digital Leadership Partnerships All organisations commitment and pledge to the LDR digital principles Digital Maturity transformation of all health and social care providers including primary care Interoperability Programme Single Adult Acute Electronic Patient Record	Exploiting the Digital Revolution	Aintree University NHS Foundation Trust Alder Hey Childrens NHS Foundation Trust Bridgewater Community Healthcare Trust Clatterbridge Cancer Centre NHS Foundation Trust Liverpool Community Health Liverpool Heart and Chest Hospital NHS Trust Liverpool Women's Hosptial NHS Trust Merseycare NHS Foundation Trust Royal Liverpool and Broadgreen University Hospital NHS Trust Southport and Ormskirk Hospital NHS Trust St Helens & Knowsley Teaching Hospitals NHS Trust The Walton Centre NHS Foundation Trust 5 Boroughs Partnership NHS Foundation Trust
All Health and Social Care Professionals	Record clinical information in a consistent way, digitally, at the point of care (community, hospital) by 2018/19	18/19	Remote care	Mobile Working	Joint Governance & Clinical / Managerial Digital Leadership Partnerships All organisations commitment and pledge to the LDR digital principles Digital Maturity transformation of all health and social care providers including primary care Interoperability Programme Single Adult Acute Electronic Patient Record	Exploiting the Digital Revolution	Aintree University NHS Foundation Trust Alder Hey Childrens NHS Foundation Trust Bridgewater Community Healthcare Trust Clatterbridge Cancer Centre NHS Foundation Trust Liverpool Community Health Liverpool Heart and Chest Hospital NHS Trust Liverpool Women's Hosptial NHS Trust Merseycare NHS Foundation Trust Royal Liverpool and Broadgreen University Hospital NHS Trust Southport and Ormskirk Hospital NHS Trust St Helens & Knowsley Teaching Hospitals NHS Trust The Walton Centre NHS Foundation Trust 5 Boroughs Partnership NHS Foundation Trust
All Health and Social Care Professionals	Record clinical information in a consistent way, digitally, at the point of care (community, hospital) by 2018/19	18/19	Asset & Resource Optimistation	Efficiency	Joint Governance & Clinical / Managerial Digital Leadership Partnerships All organisations commitment and pledge to the LDR digital principles Digital Maturity transformation of all health and social care providers including primary care Interoperability Programme Single Adult Acute Electronic Patient Record	Exploiting the Digital Revolution	Aintree University NHS Foundation Trust Alder Hey Childrens NHS Foundation Trust Bridgewater Community Healthcare Trust Clatterbridge Cancer Centre NHS Foundation Trust Liverpool Community Health Liverpool Heart and Chest Hospital NHS Trust Liverpool Women's Hosptial NHS Trust Merseycare NHS Foundation Trust Royal Liverpool and Broadgreen University Hospital NHS Trust Southport and Ormskirk Hospital NHS Trust St Helens & Knowsley Teaching Hospitals NHS Trust The Walton Centre NHS Foundation Trust 5 Boroughs Partnership NHS Foundation Trust

Footprint:	Merseyside

All clinical correspondence between professionals	caring for patients is sent digitally and integrated into core clinical systems by 2017/18	17/18	Records, Assessments and Plans	Messaging Hub	Interoperability Programme	A Connected Health and Social Care Economy Exploiting the Digital Revolution	Aintree University NHS Foundation Trust Alder Hey Childrens NHS Foundation Trust Bridgewater Community Healthcare Trust Clatterbridge Cancer Centre NHS Foundation Trust Liverpool Community Health Liverpool Heart and Chest Hospital NHS Trust Liverpool Women's Hosptial NHS Trust Merseycare NHS Foundation Trust Royal Liverpool and Broadgreen University Hospital NHS Trust Southport and Ormskirk Hospital NHS Trust St Helens & Knowsley Teaching Hospitals NHS Trust The Walton Centre NHS Foundation Trust 5 Boroughs Partnership NHS Foundation Trust
All clinical correspondence between professionals	caring for patients is sent digitally and integrated into core clinical systems by 2017/18	17/18	Transfer of Care	Interoperability	Interoperability Programme	A Connected Health and Social Care Economy Exploiting the Digital Revolution	Aintree University NHS Foundation Trust Alder Hey Childrens NHS Foundation Trust Bridgewater Community Healthcare Trust Clatterbridge Cancer Centre NHS Foundation Trust Liverpool Community Health Liverpool Heart and Chest Hospital NHS Trust Liverpool Women's Hosptial NHS Trust Merseycare NHS Foundation Trust Royal Liverpool and Broadgreen University Hospital NHS Trust Southport and Ormskirk Hospital NHS Trust St Helens & Knowsley Teaching Hospitals NHS Trust The Walton Centre NHS Foundation Trust 5 Boroughs Partnership NHS Foundation Trust
All clinical correspondence between professionals	caring for patients is sent digitally and integrated into core clinical systems by 2017/18	17/18	Orders and Results Management	Diagnostics	Interoperability Programme	A Connected Health and Social Care Economy Exploiting the Digital Revolution	Aintree University NHS Foundation Trust Alder Hey Childrens NHS Foundation Trust Bridgewater Community Healthcare Trust Clatterbridge Cancer Centre NHS Foundation Trust Liverpool Community Health Liverpool Heart and Chest Hospital NHS Trust Liverpool Women's Hosptial NHS Trust Merseycare NHS Foundation Trust Royal Liverpool and Broadgreen University Hospital NHS Trust Southport and Ormskirk Hospital NHS Trust St Helens & Knowsley Teaching Hospitals NHS Trust The Walton Centre NHS Foundation Trust 5 Boroughs Partnership NHS Foundation Trust
Community Care teams	work as a team around individuals they are caring for with technology that "just works" by 2017/18	17/18	Records, Assessments and Plans	Digital skills for Workforce	Delivery of our Information Sharing Framework Digital Maturity transformation of all health and social care providers including primary care Interoperability Programme Digital No Wrong Door Consolidated Infrastructure	Exploiting the Digital Revolution	Bridgewater Community Healthcare Trust Liverpool Community Health Merseycare NHS Foundation Trust Southport and Ormskirk Hospital NHS Trust 5 Boroughs Partnership NHS Foundation Trust

Footprint:	Merseyside

Community Care teams	work as a team around individuals they are caring for with technology that "just works" by 2017/18	17/18	Transfer of Care	Digital skills for Workforce	Delivery of our Information Sharing Framework Digital Maturity transformation of all health and social care providers including primary care Interoperability Programme Digital No Wrong Door Consolidated Infrastructure	Exploiting the Digital Revolution	Bridgewater Community Healthcare Trust Liverpool Community Health Merseycare NHS Foundation Trust Southport and Ormskirk Hospital NHS Trust 5 Boroughs Partnership NHS Foundation Trust
Community Care teams	work as a team around individuals they are caring for with technology that "just works" by 2017/18	17/18	Remote care	Digital skills for Workforce	Delivery of our Information Sharing Framework Digital Maturity transformation of all health and social care providers including primary care Interoperability Programme Digital No Wrong Door Consolidated Infrastructure	Exploiting the Digital Revolution	Bridgewater Community Healthcare Trust Liverpool Community Health Merseycare NHS Foundation Trust Southport and Ormskirk Hospital NHS Trust 5 Boroughs Partnership NHS Foundation Trust
Individuals	interact with their care services digitally should they chose to by 2018/19	18/19	Records, Assessments and Plans	Digital No Wrong Door Citizen Identity PHR	Delivery of our Information Sharing Framework Digital No Wrong Door Single Adult Acute Electronic Patient Record	Digitally Empowered Individuals	Aintree University NHS Foundation Trust Alder Hey Childrens NHS Foundation Trust Bridgewater Community Healthcare Trust Clatterbridge Cancer Centre NHS Foundation Trust Liverpool Community Health Liverpool Heart and Chest Hospital NHS Trust Liverpool Women's Hosptial NHS Trust Merseycare NHS Foundation Trust Royal Liverpool and Broadgreen University Hospital NHS Trust Southport and Ormskirk Hospital NHS Trust St Helens & Knowsley Teaching Hospitals NHS Trust The Walton Centre NHS Foundation Trust 5 Boroughs Partnership NHS Foundation Trust
Acute clinicians	have early warning of patients that are deteriorating by 2018/19	18/19	Decision Support	Decision Support	Single Adult Acute Electronic Patient Record	A Connected Health and Social Care Economy Exploiting the Digital Revolution	Aintree University NHS Foundation Trust Alder Hey Childrens NHS Foundation Trust Clatterbridge Cancer Centre NHS Foundation Trust Liverpool Heart and Chest Hospital NHS Trust Liverpool Women's Hosptial NHS Trust Royal Liverpool and Broadgreen University Hospital NHS Trust Southport and Ormskirk Hospital NHS Trust St Helens & Knowsley Teaching Hospitals NHS Trust The Walton Centre NHS Foundation Trust

Footprint:	Merseyside

All Clinicians	can order diagnositc test electronically and view share diagnostics results around a patient by 2016/17	16/17	Records, Assessments and Plans	Unified Labs / System processes	Delivery of our Information Sharing Framework Interoperability Programme Single Adult Acute Electronic Patient Record	A Connected Health and Social Care Economy Exploiting the Digital Revolution	Aintree University NHS Foundation Trust Alder Hey Childrens NHS Foundation Trust Bridgewater Community Healthcare Trust Clatterbridge Cancer Centre NHS Foundation Trust Liverpool Community Health Liverpool Heart and Chest Hospital NHS Trust Liverpool Women's Hosptial NHS Trust Merseycare NHS Foundation Trust Royal Liverpool and Broadgreen University Hospital NHS Trust Southport and Ormskirk Hospital NHS Trust St Helens & Knowsley Teaching Hospitals NHS Trust The Walton Centre NHS Foundation Trust 5 Boroughs Partnership NHS Foundation Trust
All Clinicians	can order diagnositc test electronically and view share diagnostics results around a patient by 2016/17	16/17	Transfer of Care	Unified Labs / System processes	Delivery of our Information Sharing Framework Interoperability Programme Single Adult Acute Electronic Patient Record	A Connected Health and Social Care Economy Exploiting the Digital Revolution	Aintree University NHS Foundation Trust Alder Hey Childrens NHS Foundation Trust Bridgewater Community Healthcare Trust Clatterbridge Cancer Centre NHS Foundation Trust Liverpool Community Health Liverpool Heart and Chest Hospital NHS Trust Liverpool Women's Hosptial NHS Trust Merseycare NHS Foundation Trust Royal Liverpool and Broadgreen University Hospital NHS Trust Southport and Ormskirk Hospital NHS Trust St Helens & Knowsley Teaching Hospitals NHS Trust The Walton Centre NHS Foundation Trust 5 Boroughs Partnership NHS Foundation Trust
All Clinicians	can order diagnositc test electronically and view share diagnostics results around a patient by 2016/17	16/17	Orders and Results Management	Unified Labs / System processes	Delivery of our Information Sharing Framework Interoperability Programme Single Adult Acute Electronic Patient Record	A Connected Health and Social Care Economy Exploiting the Digital Revolution	Aintree University NHS Foundation Trust Alder Hey Childrens NHS Foundation Trust Bridgewater Community Healthcare Trust Clatterbridge Cancer Centre NHS Foundation Trust Liverpool Community Health Liverpool Heart and Chest Hospital NHS Trust Liverpool Women's Hosptial NHS Trust Merseycare NHS Foundation Trust Royal Liverpool and Broadgreen University Hospital NHS Trust Southport and Ormskirk Hospital NHS Trust St Helens & Knowsley Teaching Hospitals NHS Trust The Walton Centre NHS Foundation Trust 5 Boroughs Partnership NHS Foundation Trust
Single Service Teams	have a single EPR to operate as a team by 2018/19	18/19	Records, Assessments and Plans	Rationalised Hospital EPRs	Delivery of our Information Sharing Framework Digital Maturity transformation of all health and social care providers including primary care Single Adult Acute Electronic Patient Record	Exploiting the Digital Revolution	Aintree University NHS Foundation Trust Liverpool Women's Hosptial NHS Trust Royal Liverpool and Broadgreen University Hospital NHS Trust

Footprint:	Merseyside

Single Service Teams	have a single EPR to operate as a team by 2018/19	18/19	Transfer of Care	Rationalised Hospital EPRs	Delivery of our Information Sharing Framework Digital Maturity transformation of all health and social care providers including primary care Single Adult Acute Electronic Patient Record	Exploiting the Digital Revolution	Aintree University NHS Foundation Trust Liverpool Women's Hosptial NHS Trust Royal Liverpool and Broadgreen University Hospital NHS Trust
Single Service Teams	have a single EPR to operate as a team by 2018/19	18/19	Medicines Management and Optimisation	Rationalised Hospital EPRs	Delivery of our Information Sharing Framework Digital Maturity transformation of all health and social care providers including primary care Single Adult Acute Electronic Patient Record	Exploiting the Digital Revolution	Aintree University NHS Foundation Trust Liverpool Women's Hosptial NHS Trust Royal Liverpool and Broadgreen University Hospital NHS Trust
Single Service Teams	have a single EPR to operate as a team by 2018/19	18/19	Remote care	Rationalised Hospital EPRs	Delivery of our Information Sharing Framework Digital Maturity transformation of all health and social care providers including primary care Single Adult Acute Electronic Patient Record	Exploiting the Digital Revolution	Aintree University NHS Foundation Trust Liverpool Women's Hosptial NHS Trust Royal Liverpool and Broadgreen University Hospital NHS Trust
Single Service Teams	have a single EPR to operate as a team by 2018/19	18/19	Asset & Resource Optimistation	Rationalised Hospital EPRs	Delivery of our Information Sharing Framework Digital Maturity transformation of all health and social care providers including primary care Single Adult Acute Electronic Patient Record	Exploiting the Digital Revolution	Aintree University NHS Foundation Trust Liverpool Women's Hosptial NHS Trust Royal Liverpool and Broadgreen University Hospital NHS Trust
[Insert further rows above as necessary]							

Appendix 5: Capability Deployment Trajectory

		Baseline						
Provider	ODS code	Records, assessments and plans	Transfers of care	Orders and results management	Medicines management and optimisation	Decision support	Remote care	Asset and resource optimisation
Aintree University Hospital NHS Foundation Trust	REM	59	87	88	66	43	17	60
Alder Hey Childrens NHS Foundation Trust	RBS	49	53	65	57	50	50	45
Bridgewater Community Healthcare NHS Foundation Trust	RY2	64	53	47	43	61	50	0
Clatterbridge Cancer Centre NHS Foundation Trust	REN	64	0	50	72	33	25	15
Liverpool Community Health	RY1	18	6	0	10	0	0	0
Liverpool Heart and Chest Hospital NHS Trust	RBQ	67	88	94	63	63	42	60
Liverpool Womens Hospital NHS Trust	REP	68	74	71	69	44	33	65
Merseycare NHS Foundation Trust	RW4	65	35	19	7	11	42	15
Royal Liverpool and Broadgreen University Hospitals NHS Trust	RQ6	51	84	93	74	67	33	60
Southport and Ormskirk Hospital NHS Trust	RVY	49	74	30	24	63	17	45
St Helens & Knowsley Hospitals NHS Trust	RBN	31	34	70	7	3	25	15
The Walton Centre NHS Foundation Trust	RET	62	57	63	54	60	50	65
5 Boroughs Partnership NHS Foundation Trust	RTV	37	15	27	6	11	0	10
Provider Average		**52.6**	**55.0**	**59.8**	**42.5**	**42.4**	**32.0**	**37.9**

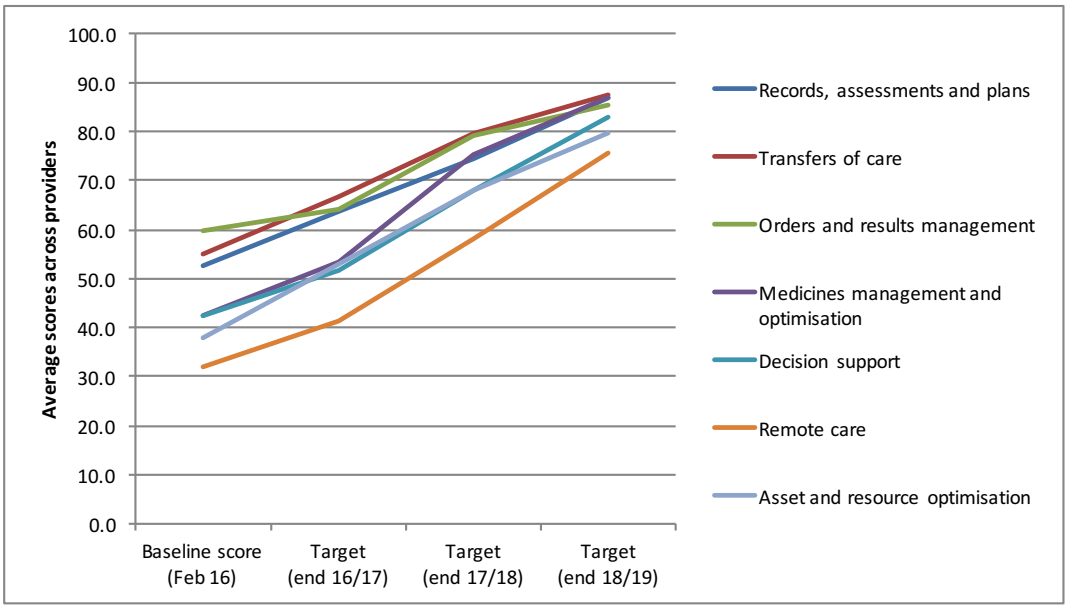
		2016/17						
Provider	ODS code	Records, assessments and plans	Transfers of care	Orders and results management	Medicines management and optimisation	Decision support	Remote care	Asset and resource optimisation
Aintree University Hospital NHS Foundation Trust	REM	59	87	88	66	43	17	60
Alder Hey Childrens NHS Foundation Trust	RBS	67	60	80	72	55	62	68
Bridgewater Community Healthcare NHS Foundation Trust	RY2	70	60	60	43	61	50	15
Clatterbridge Cancer Centre NHS Foundation Trust	REN	75	50	75	80	50	50	80
Liverpool Community Health	RY1	36	29	8	32	40	43	30
Liverpool Heart and Chest Hospital NHS Trust	RBQ	71	90	95	70	66	47	75
Liverpool Womens Hospital NHS Trust	REP	72	79	78	77	47	36	71
Merseycare NHS Foundation Trust	RW4	70	40	25	20	20	54	20
Royal Liverpool and Broadgreen University Hospitals NHS Trust	RQ6	60	87	95	74	75	40	60
Southport and Ormskirk Hospital NHS Trust	RVY	49	80	40	24	63	20	55
St Helens & Knowsley Hospitals NHS Trust	RBN	67	88	90	76	69	42	65
The Walton Centre NHS Foundation Trust	RET	80	60	75	54	60	65	75
5 Boroughs Partnership NHS Foundation Trust	RTV	51	55	27	6	22	10	15
Provider Average		**63.6**	**66.5**	**64.3**	**53.4**	**51.6**	**41.2**	**53.0**

		2017/18						
Provider	ODS code	Records, assessments and plans	Transfers of care	Orders and results management	Medicines management and optimisation	Decision support	Remote care	Asset and resource optimisation
Aintree University Hospital NHS Foundation Trust	REM	65	90	91	75	50	40	60
Alder Hey Childrens NHS Foundation Trust	RBS	82	80	92	84	73	85	83
Bridgewater Community Healthcare NHS Foundation Trust	RY2	80	75	75	65	65	60	45
Clatterbridge Cancer Centre NHS Foundation Trust	REN	90	75	90	90	75	75	90
Liverpool Community Health	RY1	38	31	9	33	42	44	32
Liverpool Heart and Chest Hospital NHS Trust	RBQ	80	93	95	75	70	60	80
Liverpool Womens Hospital NHS Trust	REP	80	83	84	83	53	40	78
Merseycare NHS Foundation Trust	RW4	90	75	80	75	75	84	65
Royal Liverpool and Broadgreen University Hospitals NHS Trust	RQ6	70	90	97	85	90	54	65
Southport and Ormskirk Hospital NHS Trust	RVY	60	100	100	80	75	40	80
St Helens & Knowsley Hospitals NHS Trust	RBN	74	88	90	79	75	52	72
The Walton Centre NHS Foundation Trust	RET	90	80	80	80	100	90	90
5 Boroughs Partnership NHS Foundation Trust	RTV	68	74	45	74	42	32	45
Provider Average		**74.4**	**79.5**	**79.1**	**75.2**	**68.1**	**58.2**	**68.1**

		2017/18						
Provider	ODS code	Records, assessments and plans	Transfers of care	Orders and results management	Medicines management and optimisation	Decision support	Remote care	Asset and resource optimisation
Aintree University Hospital NHS Foundation Trust	REM	80	95	95	85	85	75	75
Alder Hey Childrens NHS Foundation Trust	RBS	98	95	99	97	97	98	97
Bridgewater Community Healthcare NHS Foundation Trust	RY2	90	90	90	85	70	70	60
Clatterbridge Cancer Centre NHS Foundation Trust	REN	100	100	100	100	100	100	100
Liverpool Community Health	RY1	40	32	9	34	44	44	33
Liverpool Heart and Chest Hospital NHS Trust	RBQ	95	96	97	88	85	75	95
Liverpool Womens Hospital NHS Trust	REP	97	88	90	89	60	44	86
Merseycare NHS Foundation Trust	RW4	98	90	90	90	90	94	75
Royal Liverpool and Broadgreen University Hospitals NHS Trust	RQ6	85	95	100	95	100	70	75
Southport and Ormskirk Hospital NHS Trust	RVY	100	100	100	100	100	100	100
St Helens & Knowsley Hospitals NHS Trust	RBN	78	92	95	82	80	63	80
The Walton Centre NHS Foundation Trust	RET	100	90	100	95	100	100	100
5 Boroughs Partnership NHS Foundation Trust	RTV	68	74	45	90	67	50	60
Provider Average		**86.8**	**87.5**	**85.4**	**86.9**	**82.9**	**75.6**	**79.7**

Footprint:	Merseyside

Capability group	Average scores across providers			
	Baseline score (Feb 16)	Target (end 16/17)	Target (end 17/18)	Target (end 18/19)
Records, assessments and plans	52.6	63.6	74.4	86.8
Transfers of care	55.0	66.5	79.5	87.5
Orders and results management	59.8	64.3	79.1	85.4
Medicines management and optimisation	42.5	53.4	75.2	86.9
Decision support	42.4	51.6	68.1	82.9
Remote care	32.0	41.2	58.2	75.6
Asset and resource optimisation	37.9	53.0	68.1	79.7



Merseyside: Records, Assessments and Plans

Provider	ODS code	Baseline score (Feb 16)
Aintree University Hospital NHS Foundation Trust	REM	59
Alder Hey Childrens NHS Foundation Trust	RBS	49
Bridgewater Community Healthcare NHS Foundation Trust	RY2	64
Clatterbridge Cancer Centre NHS Foundation Trust	REN	64
Liverpool Community Health	RY1	18
Liverpool Heart and Chest Hospital NHS Trust	RBQ	67
Liverpool Womens Hospital NHS Trust	REP	68
Merseycare NHS Foundation Trust	RW4	65
Royal Liverpool and Broadgreen University Hospitals NHS Trust	RQ6	51
Southport and Ormskirk Hospital NHS Trust	RVY	49
St Helens & Knowsley Hospitals NHS Trust	RBN	31
The Walton Centre NHS Foundation Trust	RET	62
5 Boroughs Partnership NHS Foundation Trust	RTV	37
Provider Average		52.6

Target score (end 16/17)	Target score (end 17/18)	Target score (end 18/19)
59	65	80
67	82	98
70	80	90
75	90	100
36	38	40
71	80	95
72	80	97
70	90	98
60	70	85
49	60	100
67	74	78
80	90	100
51	68	68
63.6	74.4	86.8

Merseyside: Transfers of Care

Provider	ODS code	Baseline score (Feb 16)
Aintree University Hospital NHS Foundation Trust	REM	87
Alder Hey Childrens NHS Foundation Trust	RBS	53
Bridgewater Community Healthcare NHS Foundation Trust	RY2	53
Clatterbridge Cancer Centre NHS Foundation Trust	REN	
Liverpool Community Health	RY1	6
Liverpool Heart and Chest Hospital NHS Trust	RBQ	88
Liverpool Womens Hospital NHS Trust	REP	74
Merseycare NHS Foundation Trust	RW4	35
Royal Liverpool and Broadgreen University Hospitals NHS Trust	RQ6	84
Southport and Ormskirk Hospital NHS Trust	RVY	74
St Helens & Knowsley Hospitals NHS Trust	RBN	34
The Walton Centre NHS Foundation Trust	RET	57
5 Boroughs Partnership NHS Foundation Trust	RTV	15
Provider Average		55.0

Target score (end 16/17)	Target score (end 17/18)	Target score (end 18/19)
87	90	95
60	80	95
60	75	90
50	75	100
29	31	32
90	93	96
79	83	88
40	75	90
87	90	95
80	100	100
88	88	92
60	80	90
55	74	74
66.5	79.5	87.5

Merseyside: Orders and results management

Provider	ODS code	Baseline score (Feb 16)
Aintree University Hospital NHS Foundation Trust	REM	88
Alder Hey Childrens NHS Foundation Trust	RBS	65
Bridgewater Community Healthcare NHS Foundation Trust	RY2	47
Clatterbridge Cancer Centre NHS Foundation Trust	REN	50
Liverpool Community Health	RY1	
Liverpool Heart and Chest Hospital NHS Trust	RBQ	94
Liverpool Womens Hospital NHS Trust	REP	71
Merseycare NHS Foundation Trust	RW4	19
Royal Liverpool and Broadgreen University Hospitals NHS Trust	RQ6	93
Southport and Ormskirk Hospital NHS Trust	RVY	30
St Helens & Knowsley Hospitals NHS Trust	RBN	70
The Walton Centre NHS Foundation Trust	RET	63
5 Boroughs Partnership NHS Foundation Trust	RTV	27
Provider Average		60

Target score (end 16/17)	Target score (end 17/18)	Target score (end 18/19)
88	91	95
80	92	99
60	75	90
75	90	100
8	9	9
95	95	97
78	84	90
25	80	90
95	97	100
40	100	100
90	90	95
75	80	100
27	45	45
64.3	79.1	85.4

Merseyside: Medicines mgt and optimisation

Provider	ODS code	Baseline score (Feb 16)
Aintree University Hospital NHS Foundation Trust	REM	66
Alder Hey Childrens NHS Foundation Trust	RBS	57
Bridgewater Community Healthcare NHS Foundation Trust	RY2	43
Clatterbridge Cancer Centre NHS Foundation Trust	REN	72
Liverpool Community Health	RY1	10
Liverpool Heart and Chest Hospital NHS Trust	RBQ	63
Liverpool Womens Hospital NHS Trust	REP	69
Merseycare NHS Foundation Trust	RW4	7
Royal Liverpool and Broadgreen University Hospitals NHS Trust	RQ6	74
Southport and Ormskirk Hospital NHS Trust	RVY	24
St Helens & Knowsley Hospitals NHS Trust	RBN	7
The Walton Centre NHS Foundation Trust	RET	54
5 Boroughs Partnership NHS Foundation Trust	RTV	6
Provider Average		42

Target score (end 16/17)	Target score (end 17/18)	Target score (end 18/19)
66	75	85
72	84	97
43	65	85
80	90	100
32	33	34
70	75	88
77	83	89
20	75	90
74	85	95
24	80	100
76	79	82
54	80	95
6	74	90
53	75	87

Merseyside: Decision support

Provider	ODS code	Baseline score (Feb 16)
Aintree University Hospital NHS Foundation Trust	REM	43
Alder Hey Childrens NHS Foundation Trust	RBS	50
Bridgewater Community Healthcare NHS Foundation Trust	RY2	61
Clatterbridge Cancer Centre NHS Foundation Trust	REN	33
Liverpool Community Health	RY1	
Liverpool Heart and Chest Hospital NHS Trust	RBQ	63
Liverpool Womens Hospital NHS Trust	REP	44
Merseycare NHS Foundation Trust	RW4	11
Royal Liverpool and Broadgreen University Hospitals NHS Trust	RQ6	67
Southport and Ormskirk Hospital NHS Trust	RVY	63
St Helens & Knowsley Hospitals NHS Trust	RBN	3
The Walton Centre NHS Foundation Trust	RET	60
5 Boroughs Partnership NHS Foundation Trust	RTV	11
Provider Average		42

Target score (end 16/17)	Target score (end 17/18)	Target score (end 18/19)
43	50	85
55	73	97
61	65	70
50	75	100
40	42	44
66	70	85
47	53	60
20	75	90
75	90	100
63	75	100
69	75	80
60	100	100
22	42	67
52	68	83

Merseyside: Remote Care

Provider	ODS code	Baseline score (Feb 16)
Aintree University Hospital NHS Foundation Trust	REM	17
Alder Hey Childrens NHS Foundation Trust	RBS	50
Bridgewater Community Healthcare NHS Foundation Trust	RY2	50
Clatterbridge Cancer Centre NHS Foundation Trust	REN	25
Liverpool Community Health	RY1	
Liverpool Heart and Chest Hospital NHS Trust	RBQ	42
Liverpool Womens Hospital NHS Trust	REP	33
Merseycare NHS Foundation Trust	RW4	42
Royal Liverpool and Broadgreen University Hospitals NHS Trust	RQ6	33
Southport and Ormskirk Hospital NHS Trust	RVY	17
St Helens & Knowsley Hospitals NHS Trust	RBN	25
The Walton Centre NHS Foundation Trust	RET	50
5 Boroughs Partnership NHS Foundation Trust	RTV	0
Provider Average		32.0

Target score (end 16/17)	Target score (end 17/18)	Target score (end 18/19)
17	40	75
62	85	98
50	60	70
50	75	100
43	44	44
47	60	75
36	40	44
54	84	94
40	54	70
20	40	100
42	52	63
65	90	100
10	32	50
41.2	58.2	75.6

Merseyside: Asset and resource optimistaion

Provider	ODS code	Baseline score (Feb 16)
Aintree University Hospital NHS Foundation Trust	REM	60
Alder Hey Childrens NHS Foundation Trust	RBS	45
Bridgewater Community Healthcare NHS Foundation Trust	RY2	0
Clatterbridge Cancer Centre NHS Foundation Trust	REN	15
Liverpool Community Health	RY1	
Liverpool Heart and Chest Hospital NHS Trust	RBQ	60
Liverpool Womens Hospital NHS Trust	REP	65
Merseycare NHS Foundation Trust	RW4	15
Royal Liverpool and Broadgreen University Hospitals NHS Trust	RQ6	60
Southport and Ormskirk Hospital NHS Trust	RVY	45
St Helens & Knowsley Hospitals NHS Trust	RBN	15
The Walton Centre NHS Foundation Trust	RET	65
5 Boroughs Partnership NHS Foundation Trust	RTV	10
Provider Average		38

Target score (end 16/17)	Target score (end 17/18)	Target score (end 18/19)
60	60	75
68	83	97
15	45	60
80	90	100
30	32	33
75	80	95
71	78	86
20	65	75
60	65	75
55	80	100
65	72	80
75	90	100
15	45	60
53	68	80

Appendix 6: Universal Capabilities Delivery Plan

Universal Capabilities Delivery Plan

NHS

Footprint:	Merseyside

Instructions for Completion

- Please indicate your Local Digital Roadmap Footprint above
- Complete questions A to E in the subsequent pages – the same structure is used for each of the 10 universal capabilities
- For further guidance, refer to:
  - Sections 6.24 to 6.30 of the Developing Local Digital Roadmaps Guidance
  - The Universal Capabilities Information and Resources document
- This template and the documents referenced above can be downloaded from the LDR page on the NHS England website

Universal Capability:	A. Professionals across care settings can access GP-held information on GP-prescribed medications, patient allergies and adverse reactions
Capability Group:	Records, assessments and plans
Defined Aims:	• Information accessed for every patient presenting in an A&E, ambulance or 111 setting where this information may inform clinical decisions (including for out-of-area patients) • Information accessed in community pharmacy and acute pharmacy where it could inform clinical decisions

A. Baseline

Please summarise the current baseline across your local health and care system. The data may encompass deployment penetration (e.g. deployed in 80% of practices), volumetrics (e.g. accessed 2500 times in Q3) and take-up (e.g. accessed for 95% of prescriptions).

Across Merseyside, our local shared record is used extensively in North Mersey and the national Summary Care Record (SCR) is used in pockets.

At a minimum, the content of the shared record is patient diagnoses, medications, allergies, health status, who else is involved in my care, and appointments and diary events. The content of the local shared record is compliant with the expectations set out in universal capabilities A, B and H. At a maximum the full GP record is shared with front line staff working in local community teams working collaboratively around our patients.

Our local shared record is used extensively in Liverpool, South Sefton and Southport & Formby CCGs with over 8.4 million records accessed to date. Plans are in place to further develop the local shared record pan Merseyside so that all patients in the LDR footprint have this level of sharing to facilitate their care.

Staff accessing the shared record are broadly working across urgent and emergency care settings and community care teams. Information which is shared includes patients' end-of-life preference information.

Baseline adoption figures by CCG, including patient opt out rates are outlined in the table below:

CCG	Local Shared Record Usage	Patient Opt out of Local Shared Record	Number of Staff accessing Local Shared Record	SCR record views 15/16	% of GP Practice Upload to National SCR	Patient Opt out of National SCR
Halton	0	N/A	0	66,135	100%	2.10%
Knowsley	0	N/A	0		96.77%	2.25%
St Helens	0	N/A	0		97.22%	2.00%
Liverpool	8,531,854	0.18%	4525	50,844	100%	2.26%
South Sefton		0.33%			100%	0.78%
Southport and Formby					100%	

B. Ambition

With reference to the defined aims set out above, please set out your ambition in the grid below. Remember that 'clear momentum' is expected in 16/17 and 'substantive delivery' in 17/18. Also note that you can go further than the defined aims – examples are provided in the Universal Capabilities Information and Resources document.

Year	Ambition
16/17	The ambition for 2016/17 is; • for the iLinks Sharing Agreement to be adopted as a standard for sharing across Merseyside LDR • for the full coded primary AND Community care record to be made available to Medics and Registered Healthcare professionals via EMIS interoperability projects into Trusts main strategic systems as digital maturity permits • for 100% of GP practices to publish information to SCR • for Trusts to increase their use of SCR
17/18	The ambition for 2017/18 is; • the full implementation of the iLinks sharing framework across all Health and Social Care organisations in Merseyside LDR • for the full coded primary AND Community care record to be made available to Medics and Registered Healthcare professionals via EMIS interoperability projects into Trusts main strategic systems as digital maturity permits • Explore consolidation of underlying infrastructures • Maximise usage of unified communications

C. Activities

Please detail the activities you propose to undertake, by quarter, in the grid below. Separate activities should be separated out as separate bullet points. At the time of submission on 30 June 2016, any activities for 16/17 Q1 should be complete.

Quarter	Activities
16/17 Q1	• Patient information sharing campaign complete
16/17 Q2	• iLinks Sharing Agreement approved by all stakeholders across the LDR • 100% of GP practices to publish information to SCR
16/17 Q3	• iLinks Sharing Agreement approved by all stakeholders across the LDR • Information Sharing Dashboard and Reporting development • Pro-active audit requirements defined
16/17 Q4	• Delivery of EMIS point to point interoperability programme enabling registered health and social care professionals to have access to primary care information • Increase Provider access to SCR • E-Learning Training - Working within Shared Care Records
17/18 Q1	• Support the adoption & rollout of sharing capability with Knowsley CCG
17/18 Q2	• Support the adoption & rollout of sharing capability with Halton CCG
17/18 Q3	• Support the adoption & rollout of sharing capability with St Helens CCG • Increase Provider access to SCR • Full coded primary & Community care record to be made available to Medics and Registered Healthcare professionals via EMIS interoperability projects into Trusts main strategic systems
17/18 Q4	• Economy wide benefits report to be authored

D. National Services / Infrastructure / Standards

In progressing the universal capabilities, if you are proposing to use alternative solutions to the national services, infrastructure and standards, please provide a rationale in the box below.

The following services will be used for the delivery of capability A: • Summary Care Record used in Secondary Care Providers

- EMIS point-to-point integrated view to provide a more detailed view of the Primary and Community Care record from within Trusts strategic systems for patients within the LDR footprint

E. Evidencing Progress

Please set out your proposals below for evidencing progress towards the defined aims for the universal capability, as set above. Your response should be informed by any national metrics available, as described in the Universal Capabilities Information and Resources document.

Local reporting mechanism to be developed with regular reporting from Patient Online Management Information (POMI)

Universal Capability:	B. Clinicians in U&EC settings can access key GP-held information for those patients previously identified by GPs as most likely to present (in U&EC)
Capability Group:	Records, assessments and plans
Defined Aims:	• Information available for all patients identified by GPs as most likely to present, subject to patient consent, encompassing reason for medication, significant medical history, anticipatory care information and immunisations • Information accessed for every applicable patient presenting in an A&E, ambulance or 111 setting (including for out-of-area patients)

A. Baseline

Please summarise the current baseline across your local health and care system. The data may encompass deployment penetration (e.g. deployed in 80% of practices), volumetrics (e.g. accessed 2500 times in Q3) and take-up (e.g. accessed for 95% of prescriptions).

Across Merseyside, our local shared record is used extensively in North Mersey and the national Summary Care Record (SCR) is used in pockets.

At a minimum, the content of the shared record is patient diagnoses, medications, allergies, health status, who else is involved in my care, and appointments and diary events. The content of the local shared record is compliant with the expectations set out in universal capabilities A, B and H. At a maximum the full GP record is shared with front line staff working in local community teams working collaboratively around our patients.

Our local shared record is used extensively in Liverpool, South Sefton and Southport & Formby CCGs with over 8.4 million records accessed to date. Plans are in place to further develop the local shared record pan Merseyside so that all patients in the LDR footprint have this level of sharing to facilitate their care.

Staff accessing the shared record are broadly working across urgent and emergency care settings and community care teams. Information which is shared includes patients' end-of-life preference information.

Baseline adoption figures by CCG, including patient opt out rates are outlined in the table below:

CCG	Local Shared Record Usage	Patient Opt out of Local Shared Record	Number of Staff accessing Local Shared Record	SCR record views 15/16	% of GP Practice Upload to National SCR	Patient Opt out of National SCR
Halton	0	N/A	0	66,135	100%	2.10%
Knowsley	0	N/A	0		96.77%	2.25%
St Helens	0	N/A	0		97.22%	2.00%
Liverpool	8,531,854	0.18%	4525	50,844	100%	2.26%
South Sefton		0.33%			100%	0.78%
Southport and Formby					100%	

B. Ambition

With reference to the defined aims set out above, please set out your ambition in the grid below. Remember that 'clear momentum' is expected in 16/17 and 'substantive delivery' in 17/18. Also note that you can go further than the defined aims – examples are provided in the Universal Capabilities Information and Resources document.

Year	Ambition
16/17	The ambition for 2016/17 is; • for the iLinks Sharing Agreement to be adopted as a standard for sharing across Merseyside LDR • for the full coded primary AND Community care record to be made available to Medics and Registered Healthcare professionals via EMIS interoperability projects into Trusts main strategic systems as digital maturity permits • for 100% of GP practices to publish information to SCR for Trusts to increase their use of SCR
17/18	The ambition for 2017/18 is; • the full implementation of the iLinks sharing framework across all Health and Social Care organisations in Merseyside LDR • for the full coded primary AND Community care record to be made available to Medics and Registered Healthcare professionals via EMIS interoperability projects into Trusts main strategic systems as digital maturity permits • Explore consolidation of underlying infrastructures • Maximise usage of unified communications

C. Activities

Please detail the activities you propose to undertake, by quarter, in the grid below. Separate activities should be separated out as separate bullet points. At the time of submission on 30 June 2016, any activities for 16/17 Q1 should be complete.

Quarter	Activities
16/17 Q1	• Patient information sharing campaign complete
16/17 Q2	• iLinks Sharing Agreement approved by all stakeholders across the LDR • 100% of GP practices to publish information to SCR
16/17 Q3	• iLinks Sharing Agreement approved by all stakeholders across the LDR • Information Sharing Dashboard and Reporting development • Pro-active audit requirements defined
16/17 Q4	• Delivery of EMIS point to point interoperability programme enabling registered health and social care professionals to have access to primary care information • Increase Provider access to SCR • E-Learning Training - Working within Shared Care Records
17/18 Q1	• Support the adoption & rollout of sharing capability with Knowsley CCG
17/18 Q2	• Support the adoption & rollout of sharing capability with Halton CCG
17/18 Q3	• Support the adoption & rollout of sharing capability with St Helens CCG • Increase Provider access to SCR • Full coded primary & Community care record to be made available to Medics and Registered Healthcare professionals via EMIS interoperability projects into Trusts main strategic systems
17/18 Q4	• Economy wide benefits report to be authored •

D. National Services / Infrastructure / Standards

In progressing the universal capabilities, if you are proposing to use alternative solutions to the national services, infrastructure and standards, please provide a rationale in the box below.

The following services will be used for the delivery of capability B:

- Summary Care Record used in Secondary Care Providers
- EMIS point-to-point integrated view to provide a more detailed view of the Primary and Community Care record from within Trusts strategic systems for patients within the LDR footprint

E. Evidencing Progress

Please set out your proposals below for evidencing progress towards the defined aims for the universal capability, as set above. Your response should be informed by any national metrics available, as described in the Universal Capabilities Information and Resources document.

Local reporting mechanism to be developed with regular reporting from Patient Online Management Information (POMI)

Universal Capability:	C. Patients can access their GP record
Capability Group:	Records, assessments and plans
Defined Aims:	• Access to detailed coded GP records actively offered to patients who would benefit the most and where it supports their active management of a long term or complex condition • Patients who request it are given access to their detailed coded GP record

A. Baseline

Please summarise the current baseline across your local health and care system. The data may encompass deployment penetration (e.g. deployed in 80% of practices), volumetrics (e.g. accessed 2500 times in Q3) and take-up (e.g. accessed for 95% of prescriptions).

Our digital aim of empowering our citizens includes interacting with services through a 'digital no wrong door'. This includes a number of aspirational areas including online consultations, use of assistive technology and other future innovations in health and care services. From a primary care perspective, the digital no wrong door approach will include patients being able to digitally interact with their GP practice to access their GP records, book online appointments and book repeat prescriptions through their choice of device or app.

CCG	% of GP practices signed up to give patients access to their online primary care record	% of Patients enabled to access their online primary care record
Halton	53%	0.1%
Knowsley	58%	0.0%
Liverpool	69%	0.3%
South Sefton	81%	0.0%
Southport and Formby	68%	0.0%
St Helens	72%	0.2%

B. Ambition

With reference to the defined aims set out above, please set out your ambition in the grid below. Remember that 'clear momentum' is expected in 16/17 and 'substantive delivery' in 17/18. Also note that you can go further

than the defined aims – examples are provided in the Universal Capabilities Information and Resources document.

Year	Ambition
16/17	The ambition for 2016/17 is; • to facilitate access to a patients GP record via their Personal Held Record /Digital No wrong door / EMIS Patient Access • to demonstrate a 10% increase on patient access registration and utilisation based upon CCG patient population
17/18	The ambition for 2017/18 is; • to facilitate patient access to Electronic Clinical Correspondence through their Personal Held Record /Digital No wrong door / EMIS Patient Access • to facilitate access to a patients Community Health record via their Personal Held Record /Digital No wrong door / EMIS Patient Access • to demonstrate a 10% increase on patient access registration and utilisation based upon CCG patient population from 16/17

C. Activities

Please detail the activities you propose to undertake, by quarter, in the grid below. Separate activities should be separated out as separate bullet points. At the time of submission on 30 June 2016, any activities for 16/17 Q1 should be complete.

Quarter	Activities
16/17 Q1	• NA
16/17 Q2	• Patient Group engagement to understand patient access requirements and any concerns relating to patient access
16/17 Q3	• Develop Merseyside wide patient access plan with priority areas
16/17 Q4	• to demonstrate a 10% increase on patient access registration and utilisation based upon CCG patient population from 15/16
17/18 Q1	• Enable patient access to community health information via EMIS patient access app
17/18 Q2	• Incorporate patient access to Electronic Clinical Correspondence through their Personal Held Record /Digital

	No wrong door / EMIS Patient Access
17/18 Q3	• to facilitate access to a patients Community Health record via their Personal Held Record /Digital No wrong door / EMIS Patient Access
17/18 Q4	• to demonstrate a 10% increase on patient access registration and utilisation based upon CCG patient population from 16/17

D. National Services / Infrastructure / Standards

In progressing the universal capabilities, if you are proposing to use alternative solutions to the national services, infrastructure and standards, please provide a rationale in the box below.

The following services will be used for the delivery of capability C:

- Local PHR development to support the delivery of the capability
- Digital No Wrong Door initiative via GPSoC Open API's to provide patiets with multiple routes to access their GP information
- EMIS Patient Access application

E. Evidencing Progress

Please set out your proposals below for evidencing progress towards the defined aims for the universal capability, as set above. Your response should be informed by any national metrics available, as described in the Universal Capabilities Information and Resources document.

Local reporting mechanism to be developed with regular reporting from Patient Online Management Information (POMI)

Universal Capability:	D. GPs can refer electronically to secondary care
Capability Group:	Transfers of care
Defined Aims:	• Every referral created and transferred electronically • Every patient presented with information to support their choice of provider • Every initial outpatient appointment booked for a date and time of the patient's choosing (subject to availability) • [By Sep 17 – 80% of elective referrals made electronically]

A. Baseline

Please summarise the current baseline across your local health and care system. The data may encompass deployment penetration (e.g. deployed in 80% of practices), volumetrics (e.g. accessed 2500 times in Q3) and take-up (e.g. accessed for 95% of prescriptions).

Our aim for E-Referrals is for every referral to be created and transferred electronically. Every patient will be presented with information to support their choice of provider and appointment date & time.

Our referrals sent from primary to secondary care utilise the national E-Referrals system and functionality which will be aligned to plans relating to referral management. Our current baseline is included in the table below:

CCG	% of GP referrals made via e-Referrals
Halton	28%
Knowsley	49%
Liverpool	64%
South Sefton	28%
Southport and Formby	41%
St Helens	53%
Total	**43.8%**

100% of GP practices across Merseyside have access to e-Referrals

B. Ambition

With reference to the defined aims set out above, please set out your ambition in the grid below. Remember that 'clear momentum' is expected in 16/17 and 'substantive delivery' in 17/18. Also note that you can go further

than the defined aims – examples are provided in the Universal Capabilities Information and Resources document.

Year	Ambition
16/17	The ambition for 2016/17 is; • to demonstrate over 80% of GP referrals are made through NHS E-referral
17/18	The ambition for 2017/18 is; • to demonstrate over 85% of GP referrals are made through NHS E-referral

C. Activities

Please detail the activities you propose to undertake, by quarter, in the grid below. Separate activities should be separated out as separate bullet points. At the time of submission on 30 June 2016, any activities for 16/17 Q1 should be complete.

Quarter	Activities
16/17 Q1	• NA
16/17 Q2	• Baseline e-referrals utilisation across each individual GP practice vs Referrals to secondary care
16/17 Q3	• Practice engagement programme to support the uplift in E-referrals utilisation
16/17 Q4	• Individual provider slot availability reporting to be reviewed
17/18 Q1	• Increase e-referrals utilisation by 10% per CCG area
17/18 Q2	• Increase e-referrals utilisation by 10% per CCG area
17/18 Q3	• Increase e-referrals utilisation by 10% per CCG area
17/18 Q4	• Increase e-referrals utilisation by 10% per CCG area

D. National Services / Infrastructure / Standards

In progressing the universal capabilities, if you are proposing to use alternative solutions to the national services, infrastructure and standards, please provide a rationale in the box below.

The following services will be used for the delivery of capability D:

- NHS-England e-Referrals
- EMIS managed referral capability for some aspects of referral management to provider organisations

E. Evidencing Progress

Please set out your proposals below for evidencing progress towards the defined aims for the universal capability, as set above. Your response should be informed by any national metrics available, as described in the Universal Capabilities Information and Resources document.

Local reporting mechanism to be developed with regular reporting from NHS-England e-Referrals

Universal Capability:	E. GPs receive timely electronic discharge summaries from secondary care
Capability Group:	Transfers of care
Defined Aims:	• All discharge summaries sent electronically from all acute providers to the GP within 24 hours • All discharge summaries shared in the form of structured electronic documents • All discharge documentation aligned with Academy of Medical Royal Colleges headings

A. Baseline

Please summarise the current baseline across your local health and care system. The data may encompass deployment penetration (e.g. deployed in 80% of practices), volumetrics (e.g. accessed 2500 times in Q3) and take-up (e.g. accessed for 95% of prescriptions).

In relation to E-Discharge summaries, e-communication of discharge summaries within 24 hours of discharge is a core component of provider contracts.

To achieve this objective, we have a number of technologies in use across Merseyside. In the North Mersey footprint, we have a messaging hub with 7 providers and 135 GP practices connected. In Mid Mersey we have a messaging hub and document management system with 1 provider and 81 GP practices connected. Both technologies are used in the main to communicate inpatient, outpatient, and Emergency Care discharge summaries from secondary to primary care.

A local minimum dataset has been in place since 2010. This complies with the Academy of Medical Royal Colleges Headings and is a core part of provider contract requirements.

The table below outlines the usage figures of the e-communications technologies.

CCG	Messaging Hubs E-communication usage 2015/16	% of discharge summaries delivered electronically to GP Practice within 24 hours
Halton	44,893	88.2%
Knowsley	99,571	88.3%

Liverpool	249,984	88.60%
South Sefton	79,968	
Southport and Formby	62,832	
St Helens	139,070	88.4%

B. Ambition

With reference to the defined aims set out above, please set out your ambition in the grid below. Remember that 'clear momentum' is expected in 16/17 and 'substantive delivery' in 17/18. Also note that you can go further than the defined aims – examples are provided in the Universal Capabilities Information and Resources document.

Year	Ambition
16/17	The ambition for 2016/17 is; • to unify the delivery approach to ECC across Merseyside
17/18	The ambition for 2017/18 is; • All providers to move to generating structured Transfer of Care - Discharge message to be sent from providers to EMIS (CDA)

C. Activities

Please detail the activities you propose to undertake, by quarter, in the grid below. Separate activities should be separated out as separate bullet points. At the time of submission on 30 June 2016, any activities for 16/17 Q1 should be complete.

Quarter	Activities
16/17 Q1	• NA
16/17 Q2	• Develop a unified approach to the delivery of ECC across Merseyside
16/17 Q3	• Benchmark Provider compliance
16/17 Q4	• Implement EMIS workflow management tools across Merseyside
17/18 Q1	• Pilot the use of Transfer of Care – Discharge message with the Royal Liverpool
17/18 Q2	• Develop an implementation plan for the Transfer of Care – Discharge specification
17/18 Q3	• Demonstrate a 10% increase in the use of ECC across Merseyside
17/18 Q4	• All providers to move to generating structured Transfer of Care - Discharge message to be sent from providers to EMIS (CDA)

D. National Services / Infrastructure / Standards

In progressing the universal capabilities, if you are proposing to use alternative solutions to the national services, infrastructure and standards, please provide a rationale in the box below.

A unified approach requires development, it is anticipated the approach will align with those outlined in the Transfer of Care – Referral Message specification utilising MESH as opposed to Healthcare Gateway MIG

E. Evidencing Progress

Please set out your proposals below for evidencing progress towards the defined aims for the universal capability, as set above. Your response should be informed by any national metrics available, as described in the Universal Capabilities Information and Resources document.

Local reporting mechanism to be developed with regular reporting

Universal Capability:	F. Social care receive timely electronic Assessment, Discharge and Withdrawal Notices from acute care
Capability Group:	Transfers of care
Defined Aims:	• All Care Act 2014 compliant Assessment, Discharge and associated Withdrawal Notices sent electronically from the acute provider to local authority social care within the timescales specified in the Act

A. Baseline

Please summarise the current baseline across your local health and care system. The data may encompass deployment penetration (e.g. deployed in 80% of practices), volumetric (e.g. accessed 2500 times in Q3) and take-up (e.g. accessed for 95% of prescriptions).

Our aim for e-communications between Acute Trusts and Social care is to enable the sharing of hospital admission and discharge information to replace assessment notifications (previously known as Section 2 Notification) and Social Care Discharge Notification (previously known as a Section 5 Notification). This ambition will:

- Improve capability and capacity in primary care, community care and social care
- Support closer working with the Community Care Team and hospital teams to plan for discharge, with people discharged as soon as it is safe to do so.
- Effective and cohesive reablement arrangements will be introduced, with timely assessment and deployment of community equipment and a single integrated health and social care community reablement team in place to support people to remain in their home.

The ambition will be met via the implementation of a message exchange facility to allow details of hospital admissions and discharges to be shared electronically between Hospital and Adult Social Care system. The solution will replace Assessment (Section 2) and discharge (Section 5) forms being faxed by hospital wards to hospital social work teams and then manually recorded into system. Instead this functionality will be embedded seamlessly within the Adult Social Care System and, where appropriate, integrated directly into existing workflow processes.

- Liverpool Council, Sefon Council, Halton Council are users of Liquid Logic
- St Helen Council are users of Carefirst
- Knowsley Council are users of LiquidLogic for Children's services & Northgate for Adult services

B. Ambition

With reference to the defined aims set out above, please set out your ambition in the grid below. Remember that 'clear momentum' is expected in 16/17 and 'substantive delivery' in 17/18. Also note that you can go further than the defined aims – examples are provided in the Universal Capabilities Information and Resources document.

Year	Ambition
16/17	Implementation of the messaging standard to facilitate the transfer of Assessment, Discharge and associated Withdrawal Notices from Royal Liverpool Hospital to Liverpool Council LiquidLogic
17/18	Expand utilisation of the messaging standard to facilitate the transfer of Assessment, Discharge and associated Withdrawal Notices across all providers and councils

C. Activities

Please detail the activities you propose to undertake, by quarter, in the grid below. Separate activities should be separated out as separate bullet points. At the time of submission on 30 June 2016, any activities for 16/17 Q1 should be complete.

Quarter	Activities
16/17 Q1	• NA

16/17 Q2	• Implement access to LiquidLogic from Secondary care locations
	  ○ Royal Liverpool
	  ○ Aintree Hospital

16/17 Q3	• Implementation of the messaging standard to facilitate the transfer of Assessment, Discharge and associated Withdrawal Notices from Royal Liverpool Hospital to Liverpool Council LiquidLogic
16/17 Q4	• Define and adopt new workflow processes for the receipt of electronic Assessment, Discharge and associated Withdrawal Notices in Liverpool Council
17/18 Q1	• Expand the use of the messaging standard to other provider

	organisations across Merseyside
17/18 Q2	• Expand the use of the messaging standards to other councils across Merseyside ○ Sefton (Liquid Logic) ○ Knowsley (Liquid Logic) ○ Halton (Liquid Logic)
17/18 Q3	• Expand the use of the messaging standards to other councils across Merseyside ○ St Helens (Carefirst) ○ Knowsley (Northgate)
17/18 Q4	• Produce an economy wide adoption and benefits report of the use of electronic Assessment, Discharge and associated Withdrawal Notices

D. National Services / Infrastructure / Standards

In progressing the universal capabilities, if you are proposing to use alternative solutions to the national services, infrastructure and standards, please provide a rationale in the box below.

The following services will be used for the delivery of capability F:

- ITK standards to be utilised with direct interoperability between Hospitals and LiquidLogic

E. Evidencing Progress

Please set out your proposals below for evidencing progress towards the defined aims for the universal capability, as set above. Your response should be informed by any national metrics available, as described in the Universal Capabilities Information and Resources document.

Local reporting mechanism to be developed with regular reporting

Universal Capability:	G. Clinicians in unscheduled care settings can access child protection information with social care professionals notified accordingly
Capability Group:	Decision support
Defined Aims:	• Child protection information checked for every child or pregnant mother presenting in an unscheduled care setting with a potential indicator of the child being at risk (including for out-of-area children) • Indication of child protection plan, looked after child or unborn child protection plan (where they exist) flagged to clinician, along with social care contact details • The social worker of a child on a child protection plan, looked after or on an unborn child protection plan receives a notification when that child presents at an unscheduled care setting and the clinician accesses the child protection alert in their record

A. Baseline

Please summarise the current baseline across your local health and care system. The data may encompass deployment penetration (e.g. deployed in 80% of practices), volumetrics (e.g. accessed 2500 times in Q3) and take-up (e.g. accessed for 95% of prescriptions).

Baseline information for Universal Capability G are as follows:-

- The following authorities are live with CP-IS upload to the spine
  - Sefton Council
  - Knowsley Council
  - St Helens Council
- The following authorities are committed to upload CP-IS to the spine
  - Halton Council
  - Liverpool Council

B. Ambition

With reference to the defined aims set out above, please set out your ambition in the grid below. Remember that 'clear momentum' is expected in 16/17 and 'substantive delivery' in 17/18. Also note that you can go further than the defined aims – examples are provided in the Universal Capabilities Information and Resources document.

Year	Ambition
16/17	The same approach to record sharing is being taken across the Merseyside footprint regardless of the setting of care access or content Prioritised implementation for SCR access for Alder Hey, Walk In Centres, and Children's centres will be made
17/18	The same approach to record sharing is being taken across the Merseyside footprint regardless of the setting of care access or content

C. Activities

Please detail the activities you propose to undertake, by quarter, in the grid below. Separate activities should be separated out as separate bullet points. At the time of submission on 30 June 2016, any activities for 16/17 Q1 should be complete.

Quarter	Activities
16/17 Q1	• Sefton Council uploading CP-IS to SCR • Knowsley Council uploading CP-IS to SCR • St Helens Council uploading CP-IS to SCR
16/17 Q2	• Develop Merseyside wide plan for holistic upload of CP-IS information
16/17 Q3	• Benchmark SCR CP-IS information access
16/17 Q4	• Liverpool Local Authority uploading CP-IS to SCR • Prioritised SCR access for Alder Hey
17/18 Q1	• Prioritised SCR access for Walk In Centres
17/18 Q2	• Prioritised SCR access for Children's centres
17/18 Q3	• Further rollout to all provider organisations as per capability A & B
17/18 Q4	• All health professionals across Merseyside will have access to CP-IS information

D. National Services / Infrastructure / Standards

In progressing the universal capabilities, if you are proposing to use alternative solutions to the national services, infrastructure and standards, please provide a rationale in the box below.

The following services will be used for the delivery of capability G:

- Summary Care Record used in Secondary Care Providers
- EMIS point-to-point integrated view to provide a more detailed view of the Primary and Community Care record from within Trusts strategic systems for patients within the LDR footprint

E. Evidencing Progress

Please set out your proposals below for evidencing progress towards the defined aims for the universal capability, as set above. Your response should be informed by any national metrics available, as described in the Universal Capabilities Information and Resources document.

Local reporting mechanism to be developed with regular reporting

Universal Capability:	H. Professionals across care settings made aware of end-of-life preference information
Capability Group:	Decision support
Defined Aims:	• All patients at end-of-life able to express (and change) their preferences to their GP and know that this will be available to those involved in their care • All professionals from local providers involved in end-of-life care of patients (who are under the direct care of a GP) access recorded preference information where end-of-life status is flagged, known or suspected

A. Baseline

Please summarise the current baseline across your local health and care system. The data may encompass deployment penetration (e.g. deployed in 80% of practices), volumetrics (e.g. accessed 2500 times in Q3) and take-up (e.g. accessed for 95% of prescriptions).

Across Merseyside, our local shared record is used extensively in North Mersey and the national Summary Care Record (SCR) is used in pockets.

At a minimum, the content of the shared record is patient diagnoses, medications, allergies, health status, who else is involved in my care, and appointments and diary events. The content of the local shared record is compliant with the expectations set out in universal capabilities A, B and H. At a maximum the full GP record is shared with front line staff working in local community teams working collaboratively around our patients.

Our local shared record is used extensively in Liverpool, South Sefton and Southport & Formby CCGs with over 8.4 million records accessed to date. Plans are in place to further develop the local shared record pan Merseyside so that all patients in the LDR footprint have this level of sharing to facilitate their care.

Staff accessing the shared record are broadly working across urgent and emergency care settings and community care teams. Information which is shared includes patients' end-of-life preference information.

Baseline adoption figures by CCG, including patient opt out rates are outlined in the table below:

CCG	Local Shared Record Usage	Patient Opt out of Local Shared Record	Number of Staff accessing Local Shared Record	SCR record views 15/16	% of GP Practice Upload to National SCR	Patient Opt out of National SCR
Halton	0	N/A	0	66,135	100%	2.10%
Knowsley	0	N/A	0		96.77%	2.25%
St Helens	0	N/A	0		97.22%	2.00%
Liverpool	8,531,854	0.18%	4525	50,844	100%	2.26%
South Sefton		0.33%			100%	0.78%

The same approach to record sharing is being taken across the Merseyside footprint regardless of the dataset as per Universal Capability A. In terms of End of Life information access, there are currently 881 health professionals with access to End of Life preferences either via:

- EMIS interop to view End of Life information
- EMIS read only Client to view End of Life information

B. Ambition

With reference to the defined aims set out above, please set out your ambition in the grid below. Remember that 'clear momentum' is expected in 16/17 and 'substantive delivery' in 17/18. Also note that you can go further than the defined aims – examples are provided in the Universal Capabilities Information and Resources document.

Year	Ambition
16/17	The same approach to record sharing is being taken across the Merseyside footprint regardless of the dataset as per Universal Capability A
17/18	The same approach to record sharing is being taken across the Merseyside footprint regardless of the dataset as per Universal Capability A

C. Activities

Please detail the activities you propose to undertake, by quarter, in the grid below. Separate activities should be separated out as separate bullet points. At the time of submission on 30 June 2016, any activities for 16/17 Q1 should be complete.

Quarter	Activities
16/17 Q1	• NA
16/17 Q2	• Baseline the completion of End of Life preferences on primary care systems across Merseyside
16/17 Q3	• iLinks Sharing Agreement approved by all stakeholders across the LDR
16/17 Q4	• Delivery of EMIS point to point interoperability programme enabling registered health and social care professionals to have access to End of Life information across all providers
17/18 Q1	• Support the adoption & rollout of sharing capability with Knowsley CCG
17/18 Q2	• Support the adoption & rollout of sharing capability with Halton CCG
17/18 Q3	• Support the adoption & rollout of sharing capability with St Helens CCG
17/18 Q4	• Economy wide benefits report to be authored

D. National Services / Infrastructure / Standards

In progressing the universal capabilities, if you are proposing to use alternative solutions to the national services, infrastructure and standards, please provide a rationale in the box below.

The following services will be used for the delivery of capability H:

- EMIS point-to-point integrated view to provide a more detailed view of the Primary and Community Care record from within Trusts strategic systems for patients within the LDR footprint

E. Evidencing Progress

Please set out your proposals below for evidencing progress towards the defined aims for the universal capability, as set above. Your response should be informed by any national metrics available, as described in the Universal Capabilities Information and Resources document.

Local reporting mechanism to be developed with regular reporting

Universal Capability:	I. GPs and community pharmacists can utilise electronic prescriptions
Capability Group:	Medicines management and optimisation
Defined Aims:	• All permitted prescriptions electronic • All prescriptions electronic for patients with and without nominations - for the latter, the majority of tokens electronic • Repeat dispensing done electronically for all appropriate patients • [By end 16/17 – 80% of repeat prescriptions to be transmitted electronically]

A. Baseline

Please summarise the current baseline across your local health and care system. The data may encompass deployment penetration (e.g. deployed in 80% of practices), volumetrics (e.g. accessed 2500 times in Q3) and take-up (e.g. accessed for 95% of prescriptions).

Our aim for e-prescribing between GP practices and community pharmacies are for all prescriptions to be sent digitally using the national Electronic Prescribing Service (EPS) system.

Our baseline in this area is below:

CCG	% of practices signed up to EPS	Average usage of Electronic Prescribing of those practices that are enabled	Average usage of repeat dispensing
Halton	94%	59.2%	0.52%
Knowsley	96%	64%	2.41%
Liverpool	100%	70%	1.65%
South Sefton	52%	71%	0.67%
Southport and Formby	100%	86%	2.00%
St Helens	100%	64%	1.26%

B. Ambition

With reference to the defined aims set out above, please set out your ambition in the grid below. Remember that 'clear momentum' is expected in

16/17 and 'substantive delivery' in 17/18. Also note that you can go further than the defined aims – examples are provided in the Universal Capabilities Information and Resources document.

Year	Ambition
16/17	• 80% prescriptions to be transmitted electronically
17/18	• 90% prescriptions to be transmitted electronically

C. Activities

Please detail the activities you propose to undertake, by quarter, in the grid below. Separate activities should be separated out as separate bullet points. At the time of submission on 30 June 2016, any activities for 16/17 Q1 should be complete.

Quarter	Activities
16/17 Q1	• NA
16/17 Q2	• Identify at a practice level whereby compliance is less that 80%
16/17 Q3	• Support practice adoption of EPSr2 to increase usage
16/17 Q4	• 80% prescriptions to be transmitted electronically
17/18 Q1	• Identify at a practice level whereby compliance is less that 90%
17/18 Q2	• Support practice adoption of EPSr2 to increase usage
17/18 Q3	• Produce an economy wide baseline and benefits report on the coverage of EPSr2
17/18 Q4	• 90% prescriptions to be transmitted electronically

D. National Services / Infrastructure / Standards

In progressing the universal capabilities, if you are proposing to use alternative solutions to the national services, infrastructure and standards, please provide a rationale in the box below.

The following services will be used for the delivery of capability I:
• EPSr2

E. Evidencing Progress

Please set out your proposals below for evidencing progress towards the defined aims for the universal capability, as set above. Your response

should be informed by any national metrics available, as described in the Universal Capabilities Information and Resources document.

Local reporting mechanism to be developed with regular reporting from Patient Online Management Information (POMI)

Universal Capability:	J. Patients can book appointments and order repeat prescriptions from their GP practice
Capability Group:	Remote care
Defined Aims:	• [By end 16/17 – 10% of patients registered for one or more online services (repeat prescriptions, appointment booking or access to record)] • All patients registered for these online services use them above alternative channels

A. Baseline

Please summarise the current baseline across your local health and care system. The data may encompass deployment penetration (e.g. deployed in 80% of practices), volumetrics (e.g. accessed 2500 times in Q3) and take-up (e.g. accessed for 95% of prescriptions).

Phase one of our digital no wrong door approach includes patients being able to book appointments and order repeat prescriptions online. We have made progress in this area, our current baseline as at February 16 is below:

CCG	% of GP practices signed up for patients to electronically book or cancel an appointment	% of Patients enabled to electronically book or cancel an appointment	% of GP practices signed up for patients to request prescriptions online	% of Patients enabled to request prescriptions online
Halton	100%	9.9%	100%	9.3%
Knowsley	100%	5.4%	96.8%	5.4%
Liverpool	100%	9.1%	100%	9.0%
South Sefton	100%	11.8%	96.8%	11.4%
Southport and Formby	100%	11.7%	100%	11.7%
St Helens	100%	14.5%	100%	12.8%

B. Ambition

With reference to the defined aims set out above, please set out your ambition in the grid below. Remember that 'clear momentum' is expected in 16/17 and 'substantive delivery' in 17/18. Also note that you can go further

than the defined aims – examples are provided in the Universal Capabilities Information and Resources document.

Year	Ambition
16/17	• Facilitate access to GP record via PHR & • Commence development if the Digital No wrong door • Demonstrate 10% increase in patient access registration
17/18	• Complete the development of the Digital no Wrong Door • All GP practices to offer 80% of appointment availability for regular appts through online booking

C. Activities

Please detail the activities you propose to undertake, by quarter, in the grid below. Separate activities should be separated out as separate bullet points. At the time of submission on 30 June 2016, any activities for 16/17 Q1 should be complete.

Quarter	Activities
16/17 Q1	• NA
16/17 Q2	• Commence development if the Digital No wrong door
16/17 Q3	• Demonstrate 10% increase in patient access registration
16/17 Q4	• Facilitate patient access through EMIS Patient Access
17/18 Q1	• Complete the development of the Digital no Wrong Door
17/18 Q2	• Facilitate patient access through their Personal Held Record /Digital No wrong door
17/18 Q3	• All GP practices to offer 60% of appointment availability for regular appts through online booking
17/18 Q4	• All GP practices to offer 80% of appointment availability for regular appts through online booking

D. National Services / Infrastructure / Standards

In progressing the universal capabilities, if you are proposing to use alternative solutions to the national services, infrastructure and standards, please provide a rationale in the box below.

The following services will be used for the delivery of capability J:
• Local PHR development following on from the DALLAS Mi Programme to support the delivery of the capability • Digital No Wrong Door initiative via GPSoC Open API's • EMIS Patient Access application

E. Evidencing Progress

Please set out your proposals below for evidencing progress towards the defined aims for the universal capability, as set above. Your response should be informed by any national metrics available, as described in the Universal Capabilities Information and Resources document.

Local reporting mechanism to be developed with regular reporting from Patient Online Management Information (POMI)

Appendix 7: Information Sharing Framework

iLINKS
informatics enabling connected care

NHS

iLINKS Information Sharing Framework

February 2016

Contents

1. Executive Summary

1.1 Integrated Health and Social Care Records

The implementation of integrated health and social care records is a key priority for health and social care organisations both locally and nationally. Locally, the Healthy Liverpool Programme and Shaping Sefton Programme both recognise integrated electronic health and social care records as a significant priority for the transformation of community and hospital based services. The North Mersey iLINKS Informatics Transformation Programme will enable this, providing all local health and social care practitioners with the information they need, over and above that held in their employing organisation, to care for individuals.

As a local economy, we have extensive experience in joining up care and sharing information safely and securely, with circa 6.5 million primary and community electronic records already shared to date. However, in order to achieve a major step change in the approach to information sharing at scale, a robust, economy wide information sharing framework, spanning all local health and social care organisations is crucial.

1.2 Information Sharing Framework Principles

Over the past 12 months, significant collaborative work spanning over 20 organisations has been undertaken to develop a scaled Information Sharing Framework. The framework will drive and determine the implementation approach to delivery. From a risk and safeguarding perspective, the framework is based upon a number of key risk and safeguarding principles which are summarised below:

1. Role / Service Based Access - Levels of access to information will be based on roles or service profiles, for example a GP, hospital doctor or across an urgent care setting.
2. Consent and Opt Out - Information shared is facilitated only when an individual has given consent to do so. An individual holds the right to 'opt out' to all or parts of their personal information being shared.
3. Proactive Audit - The framework will result in a significant increase in information being shared, therefore there is a significant safety and security need to assure that only those that require access to data, are able to access it.
4. Exclusions - There are a number of exclusions which will not be included within the sharing model, unless explicitly stated due to legal/statutory requirements and sensitivity concerns.
5. Mandatory Training - All staff will be expected to undertake mandatory training.
6. Monitoring and Evaluation - Ongoing monitoring and evaluation of both the model and its effectiveness will be undertaken.
7. Patient and Public Engagement - Patients and members of the public will be given an opportunity to consult, debate and inform the approach to sharing for the role purposes of providing care.

1.3 Information Sharing Framework

With the principles in place, the framework is based on a number of segments, professional groups/roles and service areas. The segments are broken down into a number of tiers with information starting at lower levels of sharing and building upwards. The segments represent the following areas:

Summary Record - Summary patient information to be shared across a wide range of health and social care practitioners.

The Community - Information held outside of hospitals, across primary care, community, mental health and social care.

Diagnostics - Key diagnostic information including pathology, radiology and other tests available for North Mersey patients.

Hospitals - Information held at secondary and tertiary care level across the many acute settings of the health economy.

There are 5 professional groups and 2 service areas which would have access to specified segments and tiers as described through the framework:

- Medical
- Registered health care professional/ social care professional
- Unregistered professional
- Admin
- Urgent care
- Extended primary care team

1.4 Implementation

The sharing framework purposely deals only with the principles, safeguards and model. There are a number of priority areas for implementation throughout 2015 and 2016 that are outlined within the framework. Implementation planning will include patient and public communications, financial discussions and Information Governance implementation requirements.

1.5 Summary

The iLINKS Information Sharing Framework is a substantial, collaborative piece of work that has been clinically led and developed by local health and social care professionals. It has been identified nationally as a pioneering approach that could be replicated elsewhere. The framework will enable us to put in place critical safeguards as key foundations to scaled information sharing for health and social care services.

2. Purpose

The purpose of this document is to provide an Information Sharing Framework for the North Mersey health and social care economy. The document provides a clear set of safeguards and principles in relation to information sharing, and describes a clinically led scaled Information Sharing Model to be used for the purposes of direct care.

The model will enable the economy to achieve a major step change in information sharing, giving all local health and social care practitioners relevant information to care for individuals, regardless of the care setting or organisation where the information is held.

The implementation of the framework is outlined briefly as part of this document, however detailed planning will be undertaken as part of the next stage of this work to drive priorities and plans for implementation. Organisations and local economy governance within the scope of the Information Sharing Framework are:

Clinical Commissioning Groups (CCG)

- Liverpool CCG
- Knowsley CCG
- South Sefton CCG
- Southport and Formby CCG

Health and Wellbeing Boards (HWB)

- Liverpool HWB
- Sefton HWB

Liverpool Clinical Laboratories

Local Authorities

- Liverpool City Council
- Sefton Council

Local Medical Committees (LMC)

- Liverpool LMC
- Sefton LMC

Provider Organisations

- Aintree University Hospital NHS Foundation Trust
- Alder Hey Children's NHS Foundation Trust
- Gtd Healthcare
- Liverpool and Sefton GP Practices
- Liverpool Community Health NHS Trust
- Liverpool Heart and Chest NHS Foundation Trust
- Liverpool Women's NHS Foundation Trust
- Mersey Care NHS Trust
- Royal Liverpool and Broadgreen University Hospitals NHS Trust
- Southport and Ormskirk Hospital NHS Trust
- The Clatterbridge Cancer Centre NHS Foundation Trust
- The Walton Centre NHS Foundation Trust
- Urgent Care 24

Update February 2016: Work is ongoing in collaboration across a wider digital footprint including Halton CCG, St Helens CCG, Bridgewater NHS Trust and St Helens and Knowsley NHS Trust.

3. Background

The North Mersey health and social care economy must bring about the radical shift required to ensure not only services are sustainable, but also succeed in improving the health and wellbeing of the population. North Mersey is brought together under the leadership of three Clinical Commissioning Groups (CCGs) - Liverpool CCG, South Sefton CCG and Southport and Formby CCG, along with two overarching Health and Wellbeing Boards - Liverpool and Sefton.

Each organisation has set a clear strategy for the provision of health and social care services across North Mersey through the Healthy Liverpool and Shaping Sefton Programmes. Integrated health and social care provision, is at the heart of each CCG Strategy; designing and developing services to ensure they are wrapped around patient need, truly harnessing collaborative working to maximise resources and improve the outcomes of the population across all settings of care.

Update February 2016: Work is ongoing in collaboration across a wider digital footprint including Halton CCG, St Helens CCG, Bridgewater NHS Trust and St Helens and Knowsley NHS Trust.

4. Integrated Health and Social Care Records

The implementation of integrated health and social care records are a key priority to enable and transform care both from a local and national perspective. This integrated record is for direct care purposes, and not for secondary uses such as local intelligence gathering or national data initiatives.

4.1 National Context

Personalised Health and Care 2020: A Framework for Action notes that "better use of technology and data has the power to improve health, transforming the quality and reducing the cost of health and care services".

The NHS Five Year Forward View includes integration and interoperability of systems as key to not only enable but transform future care models.

4.2 Local Context

Each organisation has set a clear strategy for the provision of health and social care services across North Mersey through the Healthy Liverpool and Shaping Sefton Programmes. Integrated health and social care provision is at the heart of each CCG strategy, designing and developing services to ensure they are wrapped around patient need, truly harnessing collaborative working to maximise resources and improve the outcomes of the population across all settings of care.

4.3 Integrated Health and Social Care Records

The Healthy Liverpool Digital Care and Innovation Programme and Shaping Sefton Programme recognise integrated health and social care records as a significant programme of work to not only enable but transform future models of care.

Through the North Mersey iLINKS Informatics Transformation Strategy, integrated health and social care records will enable all local health and social care practitioners to have access to the information they need, over and above that held in their employing organisation, to care for individuals.

In order to achieve this at scale, having in place a robust, economy-wide Information Sharing Framework is essential.

As a local economy, our health and social care organisations have a track record of sharing information safely and securely, enabling joined up care with circa 6.5 million primary and community electronic records already shared to date. The Information Sharing Framework will enable us to achieve a significant step change in information sharing as a core foundation to transforming community and hospital based services, ensuring patients receive high quality care through practitioners having access to the information they need, in the right care setting.

4.4 iLINKS Informatics Transformation Strategy

The iLINKS Informatics Transformation Strategy is the cross health and social care economy informatics strategy, providing a clear blueprint for the delivery of integrated health and social care records, which will enable the strategic objectives of the CCGs, local councils and NHS provider organisations across the local economy.

The iLINKS Informatics Transformation Strategy aims to enable patients to have better health outcomes through providing local health and social care professionals with the information they need to enable them to work and share collaboratively around the individual for care purposes, allowing pathways of care to be designed around the patients and service users, with the confidence that the appropriate information will be available at the right time, at all key touch points along a care pathway.

North Mersey has for many years reaped the benefits of informatics enabled clinical information sharing across many services and care settings. However, the current processes, governance and technical mechanisms supporting clinical information sharing have undergone a wholesale review in order to achieve the key objectives of the programme, which is to define and implement a unified, scalable and fit-for-purpose process for information sharing which is compliant with all legal frameworks, enabling us to deliver the changes required across the Healthy Liverpool and Shaping Sefton Programmes.

5. iLINKS Information Sharing Framework

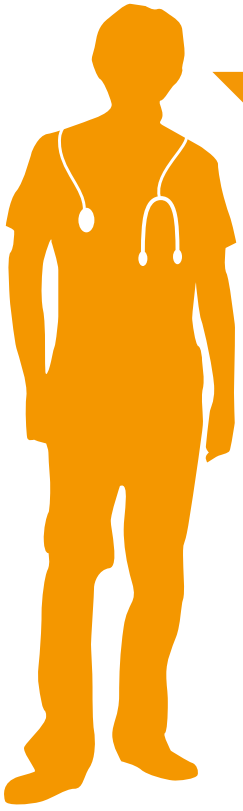
5.1 The Framework

The Information Sharing Framework is broadly a set of processes, principles and procedures that bring structure to the sharing of an individual's health and social care record for the purposes of care. This in turn enables the economy to significantly improve the delivery of health and social care services, through a safe, legal and consistent approach to collaboration.

Key clinical and informatics stakeholders across the economy have worked collaboratively to debate and document a scaled Information Sharing Framework which will meet the objectives of the economy transformational change strategies. The framework will drive and determine the implementation approach to delivery.

The iLINKS Information Sharing Framework provides a structured framework to facilitate information sharing, ranging from basic demographics and summary information sharing, through to access for practitioners to view full electronic health and social care records. The model is based on the roles and service profiles of practitioners, with specified roles and services having access to a defined set of information based on need and risk.

The iLINKS Information Sharing Framework takes into account the type of information that is being made available, along with the care setting in which it is being utilised. Patient consent is a central component to the framework, along with all information that is shared being deemed necessary, proportionate and relevant for the delivery of care.



As a secondary care clinician, I get to see relevant information from primary care, including medications and allergies. I can quickly and simply exchange information, thoughts and discussions through annotating and sending parts of the record - this has resulted in massive efficiencies and reduced patient risk.

- Necessary - The reason for sharing an individual's information will be what is required to support that particular contact with care professionals.
- Proportionate - The amount of information shared will be no more than what is needed to cater for an individual's health and social care needs.
- Relevant - The information shared will be deemed of an appropriate level when assessed against why it is being shared.

The information shared through the framework is information over and above that which is held in individual employing organisations. It is explicitly aimed to give practitioners access to information about an individual they are caring for which is held by a different health or social care provider. Information within a practitioners employing organisation is subject to internal local organisational Information Governance policies and procedures. Viewing the shared record is not automatic, and will always be based on explicit patient consent, which is discussed at the point of care and/or referral.

The purpose of the iLINKS Information Sharing Framework is to support public service organisations and their partners in delivering holistic and responsive health and social care services. It concerns the sharing of personal data and seeks to lay the foundation for the safe and secure sharing of information in order to comply with the duties placed on organisations to work together, such as the 7th Caldicott principle - the duty to share.

"The duty to share information can be as important as the duty to protect patient confidentiality."

The Information Sharing Framework is intended as a means of establishing a standard to which all North Mersey health and social care organisations will work towards in respect of the sharing of personal health and social care information for care purposes.

5.2 Information Governance and Legal Frameworks

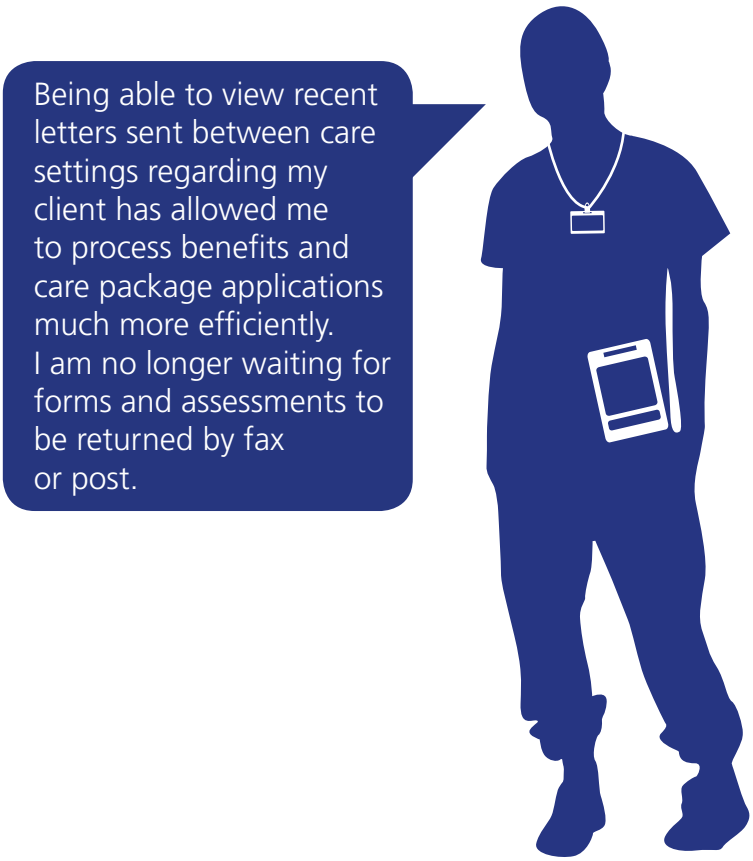
The iLINKS Information Sharing Framework has a contribution to make towards fostering a culture where all services work together to deliver better outcomes for residents and visitors across North Mersey. From an Information Governance and legal perspective, the objective of the iLINKS Information Sharing Framework is:

- To assist staff in protecting the confidentiality of patients, customers, clients and employees where it is necessary to share personal data.
- To enable the economy to quickly comply with new legislation through having a consistent approach to information sharing at an economy-wide level.
- To enable integrated and collaborative working by providing a secure and efficient way to exchange personal data where the power exists to do so, in accordance with the Data Protection Act 1998, the Human Rights Act 1998 and other relevant legislation.
- To support joined up local health and social care services.
- To promote best practice in information sharing, with regard to general management, data quality and staff training and development needs.

Each organisation has its own local policies and procedures regarding information security and confidentiality. This Information Sharing Framework is not designed to supersede existing local policies, but to enhance them by facilitating cross-boundary dialogue and agreement, along with providing a context for information sharing between organisations across North Mersey.

External Information Governance and legal expertise has been commissioned and utilised throughout the development of the iLINKS Information Sharing Framework, which concluded that sharing personal health and social care information, which is relevant and proportionate, when necessary to do so, with explicit consent of the individual, has a sound legal base. It is also apparent that not only does the model give an opportunity to increase information sharing across health and social care organisations to improve outcomes for patients, customers and services users, it will also provide a mechanism for uplifting professional practice in relation to when and how personal information is shared.

Throughout the implementation tranches of the Information Sharing Model with each organisation, further discussions will be conducted to ensure a best practice approach is adopted in relation to Information Governance and legal requirements. It is envisaged that the number of data sharing agreements, privacy impact assessments and other associated requirements can be not only reduced, but also improved throughout the implementation processes at each organisation.



6. Information Sharing Framework Principles

From a risk and safeguarding perspective, the framework is based on a number of key principles:

6.1 Role / Service Based Access

Levels of access to information across the Information Sharing Framework will be based on roles or service profiles. For example, a GP, hospital doctor or across an urgent care setting.

A balance has been sought between identifying a minimum number of role/service profiles to maintain simplicity, whilst allowing for enough role/service profiles to ensure levels of access are proportionate, relevant and necessary to each health and social care role, or service area. Amending, removing or adding role or service profiles will be subject to appropriate governance processes.

6.2 Consent and Opt Out

The iLINKS Information Sharing Framework is based on the principle that the information shared across professional groups and organisational boundaries is facilitated only when an individual has given consent to do so. An individual is at the heart of the Information Sharing Framework and holds the right to 'opt out' to all or specific parts of their personal information being shared.

When consent is obtained, information may then be shared across health and social care organisations on a 'need to know' basis, at a level that is deemed proportionate, relevant and necessary for that particular health and social care setting and scenario. These levels of access are clearly defined within the Information Sharing Model, and its associated segments, tiers and role/service based profiles.

The Information Sharing Model does include the ability for any professional to override the need to obtain explicit consent if there is an urgent need to do so, for example to save a life where an individual is unable to give consent due to being unconscious or to prevent significant harm or risk. Any instances of consent being overridden will be subsequently investigated, and professionals will be required to give an explanation of the decision they took and record this in the individual's record.

6.3 Proactive Audit

The iLINKS Information Sharing Framework aims to improve care delivery through enabling access to information required at the point of care, whilst also improving the processes, mechanisms and practices associated with the sharing of personal information.

The Information Sharing Framework will result in a significant increase in data being shared between services and organisations, therefore there is an ever-increasing requirement to provide assurance that data is being shared safely and securely, as well as providing evidence that only those who require access to data, are able to access it.

One method that will be used throughout the implementation approach is to improve system audit capability, and the associated processes. Through proactively monitoring audit logs of key systems across the health and social care economy, significant improvements will be made in identifying inappropriate access to personal records by proactively highlighting concerning system activity and allowing the appropriate bodies to investigate and deal with inappropriate access.

6.4 Exclusions

Whilst recognising the importance of sharing information to support the care provided to individuals, the Information Sharing Framework also identifies a series of exclusions that will not be included within the sharing model, unless explicitly stated. These exclusions have been identified due to legal/statutory requirements and sensitivity concerns, and are included within Appendix 1.

6.5 Mandatory Training

All staff accessing information through the framework will be expected to undertake mandatory training for safeguarding information and the use of a shared record in practice.

6.6 Monitoring and Evaluation

In addition to the proactive audit systems, ongoing monitoring and evaluation of both the model and its effectiveness will be undertaken.

6.7 Patient and Public Engagement

Residents across North Mersey are at the heart of the Information Sharing Model, and therefore have an important voice in its development and implementation. Through a variety of approaches, patients and members of the public will be given an opportunity to consult, debate and inform the economy approach to sharing health and social care information, for the sole purposes of providing care. These activities may include patient focus groups, public consultation, patient information sources, such as leaflets, posters and websites, which will ensure an open and transparent approach to further developing and implementing the Information Sharing Framework.

7. Information Sharing Model

With the framework principles in place, the Information Sharing Framework is based on 4 segments. Each segment is broken down into a number of tiers with information starting at lower levels of sharing and building upwards. The segments represent the following areas:

- Summary Record - Summary patient information to be shared across a wide range of health and social care practitioners.
- The Community - Information held outside of hospitals, across primary care, community, mental health and social care.
- Diagnostics - Key diagnostic information including pathology, radiology and other tests available for North Mersey patients.
- Hospitals - Information held at secondary and tertiary care level across the many acute settings of the health economy.

Diagram 1 provides a visual representation of the iLINKS Information Sharing Model, showing all four segments and each tier of sharing within.

The iLINKS Information Sharing Model purposely represents health and social care information repositories as either type (summary and diagnostics) or as the care setting in which that information is held (community and hospital). It is important however, to consider that within each of these segments, multiple organisations exist. The implementation of each segment will be tackled from an organisational footprint perspective e.g. implementing the hospital segment will include sharing information across secondary care organisations as well as sharing that information into community-based services and organisations.

7.1 Summary Segment

The summary segment contains information regarding an individual's key health and social care information. This information will provide professionals with a clear overview of vital health care information, along with details on how to best care for individuals through the sharing of care plans, care package information and intelligence about who else is involved in a person's care.

Table 1 gives an overview of the summary segment of the iLINKS Information Sharing Model, along with an outline of the content of each of the tiers and the likely source system(s) of that information.

Over time, the summary segment will contain information such as an alert or flag within a person's shared record, highlighting information of key importance. An alert or flag may inform professionals to potential hazards they should be aware of such as dangerous dogs. The inclusion of flags and alerts however, requires further discussion across the economy to clearly define the scope and governance associated with this type of information sharing, and therefore will be revisited before its implementation as part of the Information Sharing Model.

diagram 1:
iLINKS Information Sharing Model

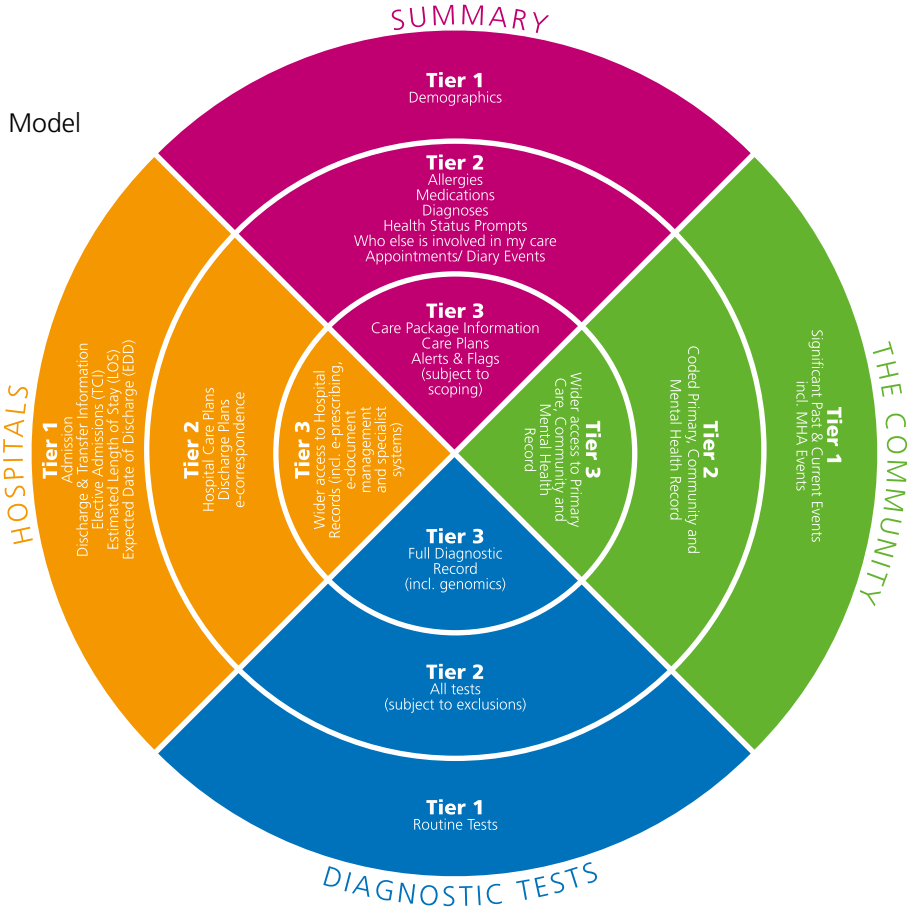


table 1:
Summary segment

Tier 1	• Demographics	• Primary care
Tier 2	• Allergies • Medication • Diagnoses • Health status prompts • Who else is involved in my care • Appointments / diary events	• Primary care • Primary care • Primary care (subject to exclusions) • Primary care • Multiple source systems • Multiple source systems
Tier 3	• Care package information • Care plans (Inc. end of life care plans, enhanced care plans) • *Alerts and flags	• Liquidlogic • Multiple source systems • TBC – further scoping work required

scenario 1

Joe is a 63-year-old man, living with his wife in Southport. Joe is a diabetic and has COPD. Joe is taken into hospital one evening due to increased shortness of breath. He has recently been seen by his GP who has been treating Joe's chest infection.

Joe gives consent for AED staff at Southport and Ormskirk Hospital NHS Trust to see vital information contained within summary Tier 2 of his shared record, such as current medication, allergies and diagnosis. This enabled the care team to manage Joe's presenting symptoms in a timelier manner, whilst avoiding any possible clinical risks.

Once Joe's health improved, the wider care team at the hospital were able to manage a safe and prompt discharge back home for Joe, through knowing the key professionals involved in Joe's 'care closer to home' package, whilst accessing and updating Joe's shared care plans. This enabled a collaborative approach across all of Joe's care providers, improving coordination of care and communication across the care team and reducing the number of times information is repeated and duplicated.

7.2 Community Segment

The community segment refers to key health and social care information that is recorded and held within community provider organisations. Making this information available to a wider set of professional groups will provide professionals, caring for an individual across a community neighbourhood or ward environment, with the information they require to work collaboratively, in order to deliver an improved and joined up approach to care.

Secondly, community segment information will be used to provide hospital-based professionals with a clear understanding of an individual's community-based care. This will ensure continuity of care and improved assessment and discharge planning processes.

Table 2 below gives an overview of the community segment of the iLINKS Information Sharing Model, along with an outline of the content of each tier and the likely source system(s) of that information.

table 2:
Community segment

Tier 1	• Significant past and current events (incl. MHA events)	• Multiple source systems
Tier 2	• Coded primary, community and mental health record	• Multiple source systems
Tier 3	• Wider access to primary care, community health and mental health record	• Multiple source systems

scenario 2

Joan is a 52-year-old lady living alone in a terraced house. Joan has a number of long-term conditions, and a history of regular hospital admissions and poor self-management of her health.

Joan's GP and Community Matron speak to Joan about how to better care for her needs in the community, reducing her time spent in hospital, whilst increasing her quality of life. Joan is accepted as part of the Virtual Ward Programme and agrees to share relevant health and social care information across the extended primary care team.

Joan's Health Trainer visits her at home to review and amend jointly set goals. These are shared across a wider multi-disciplinary team as part of Joan's shared care plan, along with key information such as Joan's planned appointments and key health status. Joan has equipment installed within her home that allows her to monitor and self-manage her conditions much more proactively, and ensure any decline in health and wellbeing is identified at the earliest opportunity, which is managed appropriately by her care team.

On a monthly basis, the community multi-disciplinary team (MDT) carry out a full case review regarding Joan's progress and care needs. These discussions are facilitated through making the relevant sections of Joan's record available across the MDT, and key decisions and actions being recorded live as part of Joan's shared care plan.

Tier 3 of the community segment caters for wider access to community-based information, over and above that which is coded and included in tier 2. This level of access is unlikely to be utilised by a wide number of professional groups, however is included in the Information Sharing Model to cater for those scenarios where an increased level of information sharing is required such as in an extended primary care team.

The detail behind the term 'wider access' will be defined on an individual case basis, subject to all relevant legal and information governance processes of the organisations concerned, along with patient consent.

7.3 Diagnostics Segment

The diagnostics segment contains information relating to diagnostics tests and procedures, not just limited to radiology and pathology. Diagnostic services are of great importance in the NHS, and when used correctly they support or rule out potential diagnoses, and underpin the effective and efficient management of patient pathways. Sharing this key information across relevant professionals (irrelevant of care setting or employing organisation) will improve rates of over-use of diagnostic tests and significantly improve the timeliness and coordination of care pathways and outcomes for patients.

Table 3 below gives an overview of the diagnostic segment of the iLINKS Information Sharing Model, along with an outline of the content of each of the tiers and the likely source system(s) of that information.

Tier 1 is aimed at health professionals who do not require a wider view of a patient's diagnostic record, however access to routine tests and results will allow for increased quality and timeliness of care, along with reducing rates of re-testing.

Tier 2 gives access, where necessary, to all tests and results but excludes information that is deemed sensitive, such as blood-borne disease status or an individual's genitourinary medicine (GUM) record. If access to such exclusions is required, then this is facilitated through access to tier 3.

table 3:
Diagnostics segment

Tier 1	• Routine tests (FBC, U&E, LFT, TFT, Glucose, Cholesterol, B12/folate, INR, PT/APTT, Bone profile, drug level monitoring, Urine and Microbiology samples, ACR, ECGs, Echo, 24 Hour Tape, Pulmonary Function Tests, Endoscopy, Radiology)	• ICE • LIMS • Other Source Systems
Tier 2	• All tests (excluding sensitive information - GUM, HIV and AIDS)	• ICE • LIMS • PACS
Tier 3	• Wider Diagnostic Record – no exclusions (including genomics)	• ICE • LIMS • PACS

scenario 3

Brenda is a 44-year-old lady living in a terraced house in suburban Liverpool with her parents. Brenda is a recovering alcoholic and has a history of mental health issues.

Brenda is in receipt of a number of health and social care services, supporting her on her road to recovery whilst also improving her management of schizophrenia. During a particularly challenging weekend for Brenda, she is seen by her Community Mental Health Team who decide to increase aspects of her medication regime.

Such a medication change requires a blood test to check Brenda's liver function profile and often results in a delay to commencing the prescribed medication changes. However, Brenda's Mental Health Team can see that her GP carried out a liver function test very recently, during a routine health check within the General Practice. Through the sharing of diagnostics tier 1 information, Brenda and her care team are able to commence the jointly agreed plans of care much sooner than would have previously been possible. This also results in Brenda not having to undergo a repeat blood test.

Tier 3 however does not exclude any tests or results and also may contain a patient's genomic record in the future (subject to further scoping at an appropriate time).

7.4 Hospital Segment

The hospital segment contains key health and social care information that will provide professionals, caring for an individual across hospital settings, with key information they require to work collaboratively.

This information will also be used by community-based professionals, giving a clear understanding of an individual's stay in hospital, in order to better join-up the care between hospital and community based health and social care services. This information will allow community-based professionals to access information regarding planned admissions, along with important information such as expected date of discharge.

This will enable great improvements in coordinating hospital discharges and cater for the required after-care across the community setting.

Table 4 below gives an overview of the hospital segment of the iLINKS Information Sharing Model, along with an outline of the content of each of the tiers and the likely source system(s) of that information.

Tier 3 of the hospital segment caters for wider access to hospital-based information, often contained in Electronic Document Management Systems (EDMS) or Electronic Prescribing and Medicines Administration (EPMA) systems. This level of access is unlikely to be utilised by a wide number of professional groups yet is included in the Information Sharing Model to cater for those scenarios where this level of access is required. For example, a hospital-based consultant requiring access to an individual's scanned health records housed in another hospital trust or a GP requiring access to a hospital prescribing system to give a detailed medicines management picture of a patients stay in hospital, over and above that contained within a discharge summary.

table 4:
Hospitals segment

Tier 1	• Admissions, discharges and transfer information (Inc. mental health) • Elective admissions (TCI) • Estimated length of stay (LOS) / Expected date of discharge (EDD)	• Through Trust integration engines (TIE) and HL7 messaging
Tier 2	• Hospital care plans • Discharge plan • E-correspondence (discharge summaries / OPD letters)	• Trust EPR systems
Tier 3	• Wider access to hospital records (Inc. E-prescribing, e-document management systems, specialist systems)	• Trust EPR systems

scenario 4

David is a 69-year-old gentleman diagnosed with motor neurone disease. David has a care package in place to assist him to carry out most of his activities of daily living, requiring a Care Assistant to visit three times a day.

David is taken into hospital one evening suffering from chest pain and shortness of breath. David had suffered a pulmonary embolism.

The hospital clinicians are able to access a thorough summary of David's health and social care needs due to having access to summary tiers 1, 2 and 3 within the hospital environment. David's Social Worker was notified of his hospital admission (hospital tier 1) and was able to make appropriate adjustments and plans in relation to his community care package.

Increased information sharing enabled both the hospital and community health and social care teams to respond to David's condition in a safer and more timely manner but also got David back home with the appropriate levels of care much quicker than what would have been previously possible.

7.5 Exclusions

As a key principle of the framework there are a series of exclusions that will not be included within the Information Sharing Model, unless explicitly stated. These exclusions have been identified due to legal/ statutory requirements and sensitivity concerns.

Table 5 below shows the heading areas along with some high-level rationale for excluding this information from the sharing model (unless explicitly stated). Further detail of each exclusion code associated with each of these categories can be found in Appendix 1.

table 5:
Exclusion criteria

Data field	Reason
HIV and Aids	AIDS (Control) Act 1987.
Sexually Transmitted Diseases	NHS (Venereal Diseases) Regulations 1974; NHS Act 1977; NHSTs & PCTs (STDs) Directions 2000.
Termination of Pregnancy	Sensitive data.
IVF treatment	Legal requirement - Human Fertilisation & Embryology (Disclosure of Information) Act 1992 imposes restrictions on the disclosure of information about individuals.
Complaints	Could be perceived to prejudice care if known that patient was complaining about care.
Convictions & imprisonment	Sensitive data.
Abuse	Sensitive data.
Gender Reassignment	Legal requirement.
Adoption	Legal requirement.

scenario 5

Phil is a doctor working in the emergency department of the new Royal Liverpool Hospital. As part of the single service, city-wide delivery for hospital services and to maintain aspects of his clinical skills, he rotates his shifts between the Royal and Aintree Hospitals.

With the new IT systems in place, he can see a complete picture of his patients' medical and social care records at the click of a button. This allows him to ensure that he is aware of any key preferences, which are particularly important in urgent care including information about resuscitation, mental capacity and end of life wishes.

table 6:
Current role and service based profiles

Professional Group	Sub Category	Levels of Access
1. Medical	1a. Hospital Specialist 1b. GP 1c. Community Medical	S3, C2, D3, H3 S3, C3, D3, H2 S3, C2, D3, H2
2. Registered Health Care Professional	2a. Specialist (e.g. Matron) 2b. Generalist (e.g. Allied Health Professional)	S3, C2, D2, H2 S3, C1, D1, H1
3. Social Care Professional	3a. Hospital 3b. Community	S3, C1, DX, H2 S3, C2, DX, H1
4. Unregistered Professional	Nil (e.g. Support Worker, Health Trainer, Auxiliary Nurse)	S3, CX, DX, HX
5. Admin / Clerical	Nil	S1, CX, DX, HX
Service Area	**Sub Category**	**Levels of Access**
6. Urgent Care	E.g. AED, WIC, AMU etc	S3, C1, D3, H3
7. Extended Primary Care Team	E.g. GP, Community Matron, District Nurse, Practice Nurse	S3, C3, D2, H2

7.6 Role and Service Based Profiles

A core principle of the framework is role and service-based profiles.

Table 6 above shows each of the role/service profiles that have been identified to date as part of the iLINKS Information Sharing Framework, along with the associated levels of access each profile will have across each segment of the Information Sharing Model.

7.6.1 Social Care

Integration and collaboration across health and local authority services to better support the needs of citizens is well established across the UK. Initiatives, such as the Better Care Fund, are supporting joint collaboration, bringing services such as social care and housing into integrated care teams, enabling a more holistic approach to a person's care.

In order to facilitate such collaboration, the Information Sharing Framework allows for the sharing of information across the traditional health and social care boundaries for the purposes of care.

Social care professionals will be identified through local neighbourhood/ward teams and will be individually named as part of local data sharing agreements. Access to health information outside traditional NHS organisations is solely for the purposes of care and all of the Information Sharing Framework principles will be applied. For example, shared information is proportionate, necessary and relevant for social care professionals to have access to, and is done so with the explicit consent of the individual.

scenario 6

Graham, Sarah and David are professionals working in a neighbourhood team. Graham is a Social Worker, Sarah is a District Nurse and David is a GP.

Being able to share records within the team has enabled them to care for patients differently and in a much more joined-up way.

The shared record has become a dynamic care plan aiding communications, preventing duplication and supporting a much more efficient patient journey.

For example, the team has advanced knowledge that an individual has a planned admission (TCI) in the coming weeks, which enables not only care packages to be adjusted accordingly but also allows for a greater coordination in discharge planning and after care needs. Similar benefits are seen for unplanned hospital stays across the neighbourhood setting.

8. Implementation

8.1 Governance and Implementation Approach

The Information Sharing Framework development to date has been overseen by the iLINKS Programme Board, Clinical Informatics Advisory Group (CIAG) and the associated sub-groups. The framework will most certainly continue to evolve, particularly throughout its implementation phases through applying new scenarios and addressing changes in health and social care requirements.

It is therefore important that the governance and approach to implementation is of a dynamic nature. This approach must also ensure that areas that require further consultation and debate do not hold back the North Mersey health and social care economy in implementing areas that are deemed complete. For example, the economy could progress the implementation of the summary tiers across all organisations, whilst continuing to develop the detail behind other aspects of the Information Sharing Model.

8.2 Governance Structures and Processes

To support the on-going development and phased implementation, three levels of governance have been identified.

1. Level one will seek Chief Executive Officer sign up to the Information Sharing Framework from each organisation. This involves agreement to the approach, standards and principles of the Information Sharing Framework and a firm commitment to the future development and implementation of the Information Sharing Model. The pledge for commitment (Appendix 2) has been used to capture the support from the CEOs across the North Mersey health and social care organisations, providing a very strong platform for future developments and implementation.

2. Level two will cater for the on-going development of the Information Sharing Framework, including the formulation of implementation tranches. This will continue to be overseen by the well-established iLINKS Programme Board, Clinical Informatics Advisory Group (CIAG) and associated sub-groups.

3. Level three will be triggered at specific points in the framework's development and implementation. The iLINKS Programme Board will ask associated organisations to formally sign-off the content of the Information Sharing Framework, along with agreeing to its next tranche of implementation. This sign-off will follow existing organisational governance structures and involve the formulation of a very clear implementation approach for that particular tranche. For example, data sharing agreements, privacy impact assessments and defining the relevant professional training.

Level three governance will be provided via well-established Information Governance forums within each health and social care provider organisation, along with the Local Medical Committees (LMC) across the patch.

The Information Sharing Framework is not designed to supersede existing local governance structures but to enhance them by facilitating a consistent approach at an economy level. The governance within each organisation is outlined within Appendix 3.

The Information Sharing Framework will be endorsed by CCGs and care providers as best practice across the economy. The framework has been collectively led and developed at an economy-level and will in the future, form part of the provision of health and social care services.

Any new provider organisations will be supported by the iLINKS Programme Team with regards to adopting the iLINKS Information Sharing Framework, which in the future, will form part of the tendering process. New organisations will be invited to join the CIAG and existing agreements will be updated accordingly and put through local governance structure (as per level 3 above) for sign off before implementation takes place.

scenario 7

Andrea, a Careline Contact Advisor, receives an anonymous call out-of-hours regarding a known service user called Susan. The caller has stated that they are concerned about Susan's behaviour and are worried about her safety and wellbeing.

Andrea searches Liquidlogic for Susan's record and documents the safeguarding alert. Andrea then assigns the contact to the Social Work Team Leader who works in the local neighbourhood team.

The Social Work Team Leader is able to view, from within Liquidlogic, who else is involved in Susan's Care, alongside shared care plans on how to best support Susan during a difficult period.

The Social Worker is able to quickly alert Susan's Community Psychiatric Nurse and GP and all are able to respond to Susan's needs in a coordinated manner using technology to enable collaborative working and information sharing around the individual's needs.

8.2 Implementation Approach

Tranches of implementation will be recommended by the iLINKS Programme Board and formally agreed by the organisations' which it impacts. The implementation approach will not only recommend particular elements of the Information Sharing Model to be progressed, but also clearly describes the approach for each organisation which it impacts.

The implementation of the Information Sharing Model is broken into tranches, balancing further development of the model and adding value across care settings simultaneously. Table 7 provides a high level overview of the priority areas for implementation.

Across the North Mersey health and social care economy, over 6 million records have been shared across traditional organisational boundaries, enabling a more integrated, safer and informed delivery of care. The Information Sharing Framework clearly outlines a structured and robust approach to increasing the sharing of personal information, when appropriate to do so for the purposes of care. This will ensure that the benefits associated with better access to information are achieved and consistent across all settings of care.

It is acknowledged that mobilising the sharing model will look different for each organisation involved, due to varying degrees of digital maturity and technical ability across the North Mersey landscape. Therefore, the implementation teams will work jointly with organisations to ensure an appropriate approach to implementation is sought, clearly defining how the following will be undertaken:

- Workforce training and development
- Level of competency and technical capability of each organisation
- Reporting and recording issues with shared records (breaches / errors)

My online access has put me in touch with people who have similar conditions as me. I have made a number of new friends who know what I am going through!

table 7:
Indicative implementation plan

Sharing model segment/ tier	Indicative dates
Summary tiers 1, 2 & 3	2015 / 16
Community tiers 1 & 2	2015 / 16
Hospital tiers 1 & 2	2015 / 16
Diagnostics tier 3	2015 / 16
Hospitals tier 3	TBC
Community tier 3	TBC
Diagnostics tiers 1 & 2	TBC

- Information data flows
- Information sharing agreements
- Privacy impact assessments
- Approach to consent and legitimate relationship controls
- Access controls and processes (including staff movements)
- Proactive audit requirements
- Technical enablement and interoperability of systems

8.3 Digital Interoperability Roadmap

The Information Sharing Framework will be delivered through the technical interoperability of our strategic IT systems. This roadmap is deliberately driven by the Information Sharing Framework and will be further influenced through the implementation phases at each organisation.

The approach to the interoperability roadmap can be categorised into the phases outlined below:

Phase 0 - Direct log-on to systems for health and social care staff.

Phase 1A - Connect, using each organisation's main strategic system, to an embedded view of data from another system held on a separate tab.

Phase 1B - A message sent from hospital to primary or community systems using HL7 message standards.

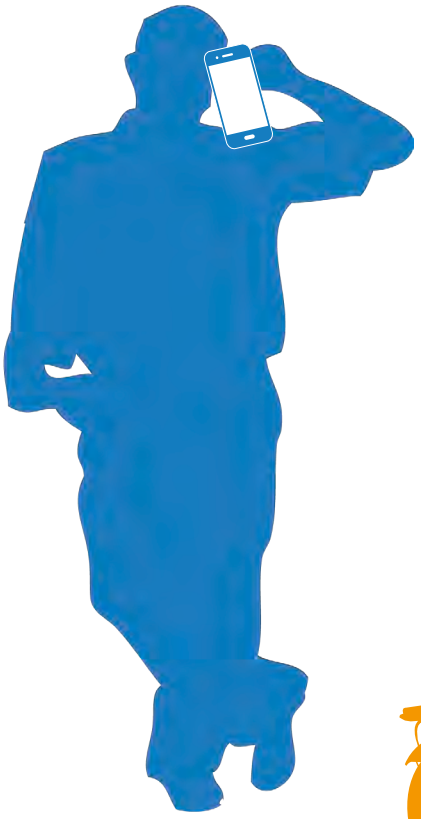
Phase 2 - Connect, using each organisation's main strategic system, to a single view of all other information held outside your strategic system.

Phase 3 - Access a fully integrated rendered record, via the organisation's strategic systems.

9. Summary

The iLINKS Information Sharing Framework has been clinically led and developed by local health and social care professionals. It has been identified nationally as a pioneering approach to scaled information sharing that could be replicated elsewhere in the UK.

The framework will enable us to put in place critical safeguards from an Information Governance perspective as a key building block to scaled information sharing, enabling the transformation of community and hospital services.



I get text and e-mail reminders about appointments or tasks I need to complete at home (such as monitoring my blood pressure). This has really helped me keep on top of things, my daughter gets them too which is good as she helps me with my day-to-day care.

My parents can book appointments for my asthma clinic online and my hospital doctor can see information about my last asthma attack and what inhalers I take.

Appendices

Appendix 1 - Exclusion Codes

Category / Code	Description
HIV & Aids	
13N5.	HIV risk lifestyle
43C%	HTLV-3 antibody test
43WK.	Human immunodeficiency virus antibody level
43d5.	HIV antibody/antigen (Duo)
43h2.	HIV 1 PCR
43W7.	HIV1 antibody level
43W8.	HIV2 antibody level
4J34.	HIV viral load
62b..	Antenatal HIV screening
65P8.	AIDS contact
65QA.	AIDS carrier
65VE.	Notification of AIDS
67I2.	Advice about HIV prevention
6827.	AIDS (HTLV-III) screening
8CAE.	Patient advised about the risks of HIV
A788%	Acquired immune deficiency syndrome
A789%	Human immunodef virus resulting in other disease
AyuC4	HIV disease resulting in other infectious and parasitic diseases
Eu024	Dementia in human immunodef virus [HIV] disease
R109.	Laboratory evidence of human immunodeficiency virus
ZV018	Human immunodeficiency virus – negative
ZV019	Contact with and exposure to human immunodeficiency virus
ZV01A	Asymptomatic human immunodeficiency virus infection status
ZV19B	Family history of human immunodeficiency virus [HIV] disease
ZV6D4	Human immunodeficiency virus counselling
ZV737	Special screening examination for human immunodeficiency virus
Sexually Transmitted Diseases	
1415.	H/O: venereal disease
14OP	At risk of sexually transmitted infection
43U%	Chlamydia antigen test
65P7.	Venereal disease contact
65Q9.	Venereal disease carrier NOS
6832.	Venereal disease screening
A780.	Molluscum cantagiosum
A7812	Genital warts
A78A.	Chlamydial infection
A78A3	Chlamydial infection of pelviperitoneum and other genitourinary organs
A78AW	Chlamydial infection, unspecified
A78AX	Chlamydial infection of genitourinary tract, unspecified
A9%	Syphilis and other venereal diseases
EGTON34	Chlamydia infection
L172%	Other maternal venereal diseases during pregnancy, childbirth and the puerperium
ZV016	Contact with or exposure to venereal disease

ZV028	Other venereal disease carrier
ZV745	Screening for venereal disease
Termination of Pregnancy	
1543%	H/O: abortion
6776.	Preg. termination counselling
7E066	Hysterotomy and termination of pregnancy
7E070	Dilation of cervix uteri and curettage of products of conception from uterus
7E071	Curettage of products of conception from uterus NEC
7E084	Suction termination of pregnancy
7E085	Dilation of cervix and extraction termination of pregnancy
7E086	Termination of pregnancy NEC
8H7W.	Refer to TOP counselling
8M6..	Requests pregnancy termination
956%	HSA1-therap. abort. green form
9Ea%	Reason for termination of pregnancy
L05%	Legally induced abortion
L06%	Illegally induced abortion
IVF treatment	
ZV26%	Infertility management
8C8%	Treatment for infertility
7E0A%	Introduction of gamete into uterine cavity
7E1F2	Endoscopic intrafallopian transfer of gamete
Complaints	
9U%	Complaints about care
Convictions & imprisonment	
13H9.	Imprisonment record
13HN	Criminal Record
13HQ.	In prison
1317	Imprisonment of a family member
14X4	On sex offenders register
2JC	Medically fit adjudication young offenders
6992.	Prison medical examination
EMISNAC814	Accorn status: Young offenders institution
EMISNAC815	Accorn status: Bail/probation hostel
EMISNQSC1	Schedule 1 offender
EMISNQY03	Young Offender
EMISQAC759	Accorn location: Young offenders institution
T776.	Place of occurrence of accident or poisoning, prison
ZV4J4	Conviction in civil and criminal proceedings without imprisonment
ZV4J5	Problems related to release from prison
ZV625	Imprisonment
Abuse (physical, psychological or sexual, by others)	
14X..	History of abuse
1J3..	Suspected child abuse
SN55.	Child maltreatment syndrome
SN571	Sexual abuse
TL7..	Child battering and other maltreatment
TLx4.	Assault by criminal neglect
ZV19C	Family history of physical abuse to sibling

ZV19D	Family history of physical abuse to sibling by family member
ZV19E	Family history of sexual abuse to sibling
ZV19F	Family history of sexual abuse to sibling by family member
ZV19G	Family history of mental abuse to sibling
ZV19H	Family history of mental abuse to sibling by family member
ZV19J	Family history of sibling abuse NOS
ZV19K	Family history of sibling abuse by family member NOS
ZV4F9	Problems related to alleged sexual of abuse child by person outside primary support group
ZV4G4	Problems related to alleged sex abuse child by person within primary support group
ZV4G5	Problems related to alleged physical abuse of child
ZV612	Child abuse
TL01	Sexual Assault
ZV6D3	Counsel related/combined concern regard sex attitude/behaviour
Gender reassignment	
1K4	Gender reassignment
E225	Transexualism
EMISNQGE23	Gender reassignment
Adoption	
13I8	Adoption of child
6981	Adoption medical examination
8GE8	Adoption
9F5%	BAAF B1/2-adopt: birth history
9F6%	BAAF C/D-adopt: child report
EMISNQH120	Child legal status - freed for adoption
EMISNQH362	Child no longer for adoption
ZV703	Adoption medical

Appendix 2 - CEO Information Sharing Framework Commitment

HEALTHY LIVERPOOL

iLINKS
informatics enabling connected care

Shaping Sefton

We confirm our commitment to the North Mersey Information Sharing Framework

Aintree University Hospital NHS
NHS Foundation Trust
Print Name: S.R. WEMBURTON Date: 10/7/15

Alder Hey Children's NHS
NHS Foundation Trust
Print Name: RICK TURNOCK Date: 10/7/15

gtd healthcare
APPROVED SEPTEMBER 2015
Print Name: Date:

Liverpool City Council
Print Name: Roz Gladden Date: 10/7/2015

NHS
Liverpool
Clinical Commissioning Group
Print Name: KATHERINE SHERIN Date: 10/7/2015

Liverpool Community Health NHS
NHS Trust
Print Name: Johanna Reilly Date: 10.7.15

Liverpool GP Provider Organisation
Print Name: JAMES CUTHBERT Date: 14/7/15.

Liverpool Heart and Chest Hospital NHS
NHS Foundation Trust
Print Name: David Jagg Date: 10/7/15

Liverpool Women's
NHS Foundation Trust
Print Name: KATHRYN THOMPSON Date: 10/7/15

Mersey Care NHS
NHS Trust
Print Name: DAVID FARRAR Date: 10/7/15

North West Ambulance Service NHS
NHS Trust
Print Name: EDDIE TUNN Date: 10/7/15

Sefton Council
APPROVED SEPTEMBER 2015
Print Name: Date:

NHS
Southport and Formby
Clinical Commissioning Group
Print Name: Dr Rob Cardwell Date: 10/7/15

Southport and Ormskirk Hospital NHS
NHS Trust
MR ROBERT GILLIES 20/7/15
Print Name: Date:

NHS
South Sefton Clinical Commissioning Group
Print Name: Dr Rob Cardwell Date: 10/7/15

The Clatterbridge Cancer Centre NHS
NHS Foundation Trust
Print Name: PETER KIRKBRIDE Date: 16/9/15

The Royal Liverpool and Broadgreen University Hospitals NHS
NHS Trust
Print Name: P S WILLIAMS Date: 10/7/15

NHS Urgent Care 24
Print Name: KATE LUCY Date: 10/7/2015

The Walton Centre NHS
NHS Foundation Trust
Print Name: CHRIS HARROP Date: 10/7/15

Appendix 3 - Organisational Governance

Organisation	Governance
Clinical Commissioning Groups	
Liverpool CCG	Healthy Liverpool Leads Governing Body
Knowsley CCG	Governing Body
South Sefton CCG	Senior Leadership Team Finance and Resource Committee
Southport and Formby CCG	Senior Leadership Team Finance and Resource Committee
Health and Wellbeing Boards	
Liverpool	Liverpool Health and Wellbeing Board
Sefton	Sefton Health and Wellbeing Board
Liverpool Clinical Laboratories	
Liverpool Clinical Laboratories	Liverpool Clinical Laboratories Board
Local Authorities	
Liverpool City Council	Cabinet Briefing Management Team Select Committee Cabinet
Sefton Council	Audit and Governance Committee
Local Medical Committees	
Liverpool	Liverpool Local Medical Committee
Sefton	Sefton Local Medical Committee
Provider Organisations	
Aintree University Hospital NHS Foundation Trust	Information Governance Group
Alder Hey Children's NHS Foundation Trust	Information Governance Steering Group Electronic Patient Record Steering Group
gtd healthcare	IM&T Subgroup Committee
Liverpool and Sefton GP Practices	Local Medical Committees Liverpool GP Provider Organisation Individual GP Practices
Liverpool Community Health NHS Trust	Executive Team Information Governance Steering Group Technology Innovation and Information Sub-Committee Strategy and Performance Committee Trust Board
Liverpool Heart and Chest NHS Foundation Trust	IM&T Board Clinical Systems Authority Risk Management and Corporate Governance Committee
Liverpool Women's NHS Foundation Trust	Information Governance Committee Governance and Clinical Assurance Committee
Mersey Care NHS Trust	IM&T Board SIRO Information Governance and Caldicott Committee Executive Committee
Royal Liverpool and Broadgreen University Hospitals NHS Trust	Information Governance Committee
Southport and Ormskirk Hospital NHS Trust	IM&T Board
The Clatterbridge Cancer Centre NHS Foundation Trust	Information Governance Group
The Walton Centre NHS Foundation Trust	Information Governance and Security Forum
Urgent Care 24	UC24 Board

iLINKS
informatics enabling connected care

NHS

For more information, please contact a member of the iLINKS Informatics Transformation Programme Team:

E-mail: ilinksinnovations@imerseyside.nhs.uk
Website: www.ilinksmersey.nhs.uk
Twitter: @ilinksinnovator

Document design by NHS Informatics Merseyside.

Appendix 8: Information Sharing Agreement

iLINKS Informatics Transformation Programme

Information Sharing Agreement

May 2016

1. Purpose

This Information Sharing Agreement (ISA) defines the arrangements for processing data across the iLINKS Informatics Transformation Programme and sits underneath the overarching iLINKS Information Sharing Framework for all its Partner Organisations.

This ISA must be read in conjunction with the iLINKS Information Sharing Framework (0v6). The iLINKS Information Sharing Framework provides a basis for safeguarding the processing of all personal information.

2. Parties to the agreement

Organisation
Halton CCG
Knowsley CCG
Liverpool CCG
South Sefton CCG
Southport and Formby CCG
St Helens CCG
Aintree University Hospitals
Alder Hey
Bridgewater
The Clatterbridge Cancer Centre
Liverpool Community Health NHS Trust
Liverpool Heart and Chest Hospital
Liverpool Women's Hospital
Mersey Care NHS Foundation Trust
Royal Liverpool and Broadgreen University Hospital
Southport and Ormskirk Hospital NHS Trust
St Helens and Knowsley Trust
The Walton Centre for Neurology NHS Foundation Trust
5 Boroughs Partnership NHS Trust
Halton Local Authority
Knowsley Local Authority
Liverpool Local Authority
Sefton Local Authority
St Helens Local Authority

3. Why is the information being shared?

The iLINKS Informatics Transformation Programme aims to enable patients to have better health outcomes through providing local health and social care professionals with the information they need to enable them to work and share collaboratively around the individual **for direct care purposes only**, giving confidence that the

appropriate information will be available at the right time at all key touch points along a care pathway.

The ILINKS Information Sharing Framework takes into account the type of information that is being made available, along with the care setting in which it is being utilised. **Patient Consent** is a central component to the Framework, along with all information that is shared being deemed **necessary, proportionate and relevant for direct care purposes**.

4. What information being shared?

The iLINKS Information Sharing Framework is based on 4 segments. Each segment is broken down into a number of tiers with information starting at lower levels of sharing and building upwards. The segments represent the following areas:

- **Summary Record** – Summary patient information to be shared across a wide range of health and social care practitioners
- **The Community** – Information held outside of hospitals, across Primary Care, Community, Mental Health and Social Care
- **Diagnostics** – Key diagnostic information including pathology, radiology and other tests available for North Mersey Patients
- **Hospitals** – Information held at secondary and tertiary care level across the many acute settings of the health economy

Table 1 below outlines the information across all four segments and each tier within.

Summary Segment		
Tier 1	• Demographics	• Primary Care
Tier 2	• Allergies • Medication • Diagnoses • Health Status Prompts • Who else is involved in my care • Appointments / Diary Events	• Primary Care • Primary Care • Primary Care (Subject to exclusions) • Primary Care • Multiple source systems • Multiple source systems
Tier 3	• Care Package Information • Care Plans (Inc. End of Life Care Plans, Enhanced Care Plans) • *Alerts & Flags	• Liquid Logic • Multiple source systems • TBC – Further scoping work required
Community		

Tier 1	• Significant Past & Current Events (Inc. MHA events)	• Multiple source systems
Tier 2	• Coded Primary, Community and Mental Health record	• Multiple source systems
Tier 3	• Wider access to Primary Care, Community Health and Mental Health Record	• Multiple source systems
Diagnostics		
Tier 1	• Routine tests (FBC, U&E, LFT, TFT, Glucose, Cholesterol, B12/folate, INR, PT/APTT, Bone profile, drug level monitoring, Urine and Microbiology samples, ACR, ECGs, Echo, 24 Hour Tape, Pulmonary Function Tests, Endoscopy, Radiology)	• ICE • LIMS • Other Source Systems
Tier 2	• All tests (excluding sensitive information - GUM, HIV & AIDS)	• ICE • LIMS • PACS
Tier 3	• Wider Diagnostic Record – **no exclusions** (including genomics)	• ICE • LIMS • PACS
Hospitals		
Tier 1	• Admissions, discharges and transfer information (Inc. Mental Health) • Elective admissions (TCI) • Estimated Length of stay (LOS) / Expected Date of Discharge (EDD)	• Through Trust Integration Engines (TIE) and HL7 Messaging
Tier 2	• Hospital Care Plans • Discharge Plan • E-Correspondence (Discharge summaries / OPD Letters)	• Trust EPR Systems
Tier 3	• Wider access to hospital records (Inc. E-Prescribing, E-	• Trust EPR Systems

	Document Management Systems, Specialist Systems)	

Table 1: Information Sharing Segments and Tiers

5. Who will have access to the shared information?

A core principle of the iLINKS Information Sharing Framework is role and service based profiles, meaning professionals will only gain access to information deemed necessary, proportionate and relevant to their role and setting of care.

Table 2 below shows each of the role / service profiles that have been identified as part of the ILINKS Information Sharing Framework, along with the associated levels of access each profile will have across each segments of the Information Sharing Model.

Professional Group	Sub-Category	Levels of access
1. Medical	1a. Hospital Specialist	S3, C2, D3, H3
	1b. GP	S3, C3, D3, H2
	1c. Community Medical	S3, C2, D3, H2
2. Registered Health Care Professional	2a. Specialist (e.g. Matron)	S3, C2, D2, H2
	2b. Generalist (e.g. Allied Health Professional)	S3, C1, D1, H1
3. Social Care Professional	3a. Hospital	S3, C1, DX, H2
	3b. Community	S3, C2, DX, H1
4. Unregistered Professional	Nil (e.g. Support Worker, Health Trainer, Auxiliary Nurse)	S3, CX, DX, HX
5. Admin / Clerical	Nil	S1, CX, DX, HX
Service Area		
6. Urgent Care	E.g. AED, WIC, AMU etc	S3, C1, D3, H3
7. Extended Primary Care Team	E.g. GP, Community Matron, District Nurse, Practice Nurse	S3, C3, D2, H2

Table 2: Role and Service Based Profiles

6. What is the legal justification for sharing? Has consent been gained if required?

This ISA covers the sharing of personal confidential data (PCD) only with the individual's explicit consent at the point of care or referral into a care episode, unless a legal or statutory requirement applies as outlined in the Data Protection Act 1998.

7. How will the information be shared?

The iLINKS Transformation Programme has set out a clear roadmap for interoperability between the Health and Social Care Economies Strategic Systems. The interoperability approach can be categorised into the phases outlined below:

- **Phase 0**: Direct logon to systems for health and social care staff
- **Phase 1A** : Connect, using each organisations main strategic system, to an embedded view of data from another system held on a separate tab
- **Phase 1B**: A message sent from hospital to primary or community systems using HL7 message standards
- **Phase 2**: Connect, using each organisations main strategic system, to a single view of all other information held outside of your strategic system
- **Phase 3**: Access a fully integrated rendered record, via organisations Strategic Systems

This ISA covers the read only viewing of shared records either through direct login to hosts systems with read only access, or through point to point interoperability between systems resulting in a read only view of the shared record through a professionals' main strategic system.

As technology enables the more sophisticated interoperability solutions in phase 2 and 3 of the iLINKS Interoperability Roadmap, then data will move more freely between information systems. At this stage the iLINKS Information Sharing Agreement (ISA) will be updated to include relevant data flows.

The iLINKS Information sharing Framework is based upon a number of key safeguarding principles which are summarised below:

- **Role/Service Based Access**: Levels of access to information will be based on roles or service profiles, for example a GP, hospital doctor or across an urgent care setting
- **Consent and Opt Out**: Information shared is facilitated only when an individual has given consent to do. An individual holds the right to 'opt out' to all or parts of their personal information being shared
- **Proactive Audit**: The framework will result in a significant increase in information being shared, therefore there is a significant safety and security need to assure that only those that require access to data, are able to access it
- **Exclusions**: There are a number of exclusions which will not be included within the sharing model, attached as appendix 1.
- **Mandatory Training**: All staff will be expected to undertake mandatory training in Information Governance and working within a shared record environment
- **Monitoring and Evaluation**: Ongoing monitoring and evaluation of both the model and its effectiveness will be undertaken by the iLINKS Clinical Informatics Advisory Group and its Partner Organisations

8. How will the information be stored and how long will the information be kept?

There are strict laws and regulations to ensure your health records are kept confidential and can only be accessed by health and social care professionals directly involved in your care. There are a number of different laws that relate to health records, the two most important laws are:

- Data Protection Act (1998)
- Human Rights Act (1998)

Under the terms of the Data Protection Act (1998), organisations such as the NHS must ensure that any personal information it gathers in the course of its work is:

- only used for the stated purpose of gathering the information (which in this case would be to ensure that you receive a good standard of healthcare)
- kept secure

The Human Rights Act (1998) also states that everyone has the right to have their private life respected. This includes the right to keep your health records confidential.

This ISA is facilitating the viewing of shared health records and therefore the data remains in those secure storage locations of its host organisations and is only transmitted for viewing purposes via a safe and secure encrypted network. Information is not copied, consequently no change will take place with regards to records retention as a result of this ISA.

9. When will this agreement be reviewed and by whom?

The iLINKS Informatics Transformation Programme has responsibility along with all Partner Organisations in the reviewing and monitoring of the iLINKS Information Sharing Framework.

The Information Sharing Framework, including the formulation of implementation tranches will continue to be overseen by the well-established ILINKS Programme Board, Clinical Informatics Advisory Group (CIAG) and associated subgroups.

Further governance and leadership will be provided via well-established Information Governance forums within each Health and Social Care provider Organisation, along with the Local Medical Committees (LMC) across the economy.

The information sharing framework is not designed to supersede existing local governance structures, but to enhance them by facilitating a consistent approach at an economy level.

The information sharing framework is endorsed by Merseyside CCGs and care providers as best practice across the economy. The framework has been collectively led and developed at an economy level and will in the future form part of the contractual obligations of health and social care services.

Any new Provider Organisations will be invited to join the CIAG, and existing agreements will be updated accordingly, and put through local governance structures for sign off before implementation takes place.

Organisation:

Example NHS Foundation Trust

This ISA must be read in conjunction with the iLINKS Information Sharing Framework (0v6). The iLINKS Information Sharing Framework provides a basis for safeguarding the processing of all personal information.

This agreement must be formally approved and signed by all parties before any information sharing takes place. All parties will ensure that the ISA and any associated documents are known and understood by all staff involved in the process.

General Principles

1. Each organisation signing this protocol has a responsible officer who ensures the protection of personal information e.g. Caldicott Guardian or senior manager responsible for data protection.
2. Each organisation signing this protocol takes measures to comply with the Data Protection Act 1998 and the Caldicott Principles, ISO 17799 / Information Security Management: NHS Code of Practice, Records Management: NHS Code of Practice and national guidance and rules around processing personal and sensitive information.
3. Each organisation is committed to reviewing practice with the aim of ensuring all exchanges of personal information meet legal and Caldicott standards.
4. Each organisation is committed to ensuring staff are appropriately trained in Information Governance.
5. Each organisation is committed to issuing practical guidelines to staff on the transfer of personal information.
6. This protocol will be reviewed in 12 months from the date of implementation.

Signed by:

Name of Organisation	Print Name	Signature	Date
Named NHS Foundation Trust	**Caldicott Guardian**		

Appendix 1 - Exclusion Codes

Category / Code	Description
HIV & Aids	
13N5.	HIV risk lifestyle
43C%	HTLV-3 antibody test
43WK.	Human immunodeficiency virus antibody level
43d5.	HIV antibody/antigen (Duo)
43h2.	HIV 1 PCR
43W7.	HIV1 antibody level
43W8.	HIV2 antibody level
4J34.	HIV viral load
62b..	Antenatal HIV screening
65P8.	AIDS contact
65QA.	AIDS carrier
65VE.	Notification of AIDS
67I2.	Advice about HIV prevention
6827.	AIDS (HTLV-III) screening
8CAE.	Patient advised about the risks of HIV
A788%	Acquired immune deficiency syndrome
A789%	Human immunodef virus resulting in other disease
AyuC4	HIV disease resulting in other infectious and parasitic diseases
Eu024	Dementia in human immunodef virus [HIV] disease
R109.	Laboratory evidence of human immunodeficiency virus
ZV018	Human immunodeficiency virus – negative
ZV019	Contact with and exposure to human immunodeficiency virus
ZV01A	Asymptomatic human immunodeficiency virus infection status
ZV19B	Family history of human immunodeficiency virus [HIV] disease
ZV6D4	Human immunodeficiency virus counselling
ZV737	Special screening examination for human immunodeficiency virus
Sexually Transmitted Diseases	
1415.	H/O: venereal disease
14OP	At risk of sexually transmitted infection
43U%	Chlamydia antigen test
65P7.	Venereal disease contact
65Q9.	Venereal disease carrier NOS
6832.	Venereal disease screening
A780.	Molluscum cantagiosum
A7812	Genital warts
A78A.	Chlamydial infection
A78A3	Chlamydial infection of pelviperitoneum and other genitourinary organs
A78AW	Chlamydial infection, unspecified

A78AX	Chlamydial infection of genitourinary tract, unspecified
A9%	Syphilis and other venereal diseases
EGTON34	Chlamydia infection
L172%	Other maternal venereal diseases during pregnancy, childbirth and the puerperium
ZV016	Contact with or exposure to venereal disease
ZV028	Other venereal disease carrier
ZV745	Screening for venereal disease
Termination of Pregnancy	
1543%	H/O: abortion
6776.	Preg. termination counselling
7E066	Hysterotomy and termination of pregnancy
7E070	Dilation of cervix uteri and curettage of products of conception from uterus
7E071	Curettage of products of conception from uterus NEC
7E084	Suction termination of pregnancy
7E085	Dilation of cervix and extraction termination of pregnancy
7E086	Termination of pregnancy NEC
8H7W.	Refer to TOP counselling
8M6..	Requests pregnancy termination
956%	HSA1-therap. abort. green form
9Ea%	Reason for termination of pregnancy
L05%	Legally induced abortion
L06%	Illegally induced abortion
IVF treatment	
ZV26%	Infertility management
8C8%	Treatment for infertility
7E0A%	Introduction of gamete into uterine cavity
7E1F2	Endoscopic intrafallopian transfer of gamete
Complaints	
9U%	Complaints about care
Convictions & imprisonment	
13H9.	Imprisonment record
13HN	Criminal Record
13HQ.	In prison
1317	Imprisonment of a family member
14X4	On sex offenders register
2JC	Medically fit adjudication young offenders
6992.	Prison medical examination
EMISNAC814	Accorn status: Young offenders institution
EMISNAC815	Accorn status: Bail/probation hostel
EMISNQSC1	Schedule 1 offender
EMISNQY03	Young Offender
EMISQAC759	Accorn location: Young offenders institution
T776.	Place of occurrence of accident or poisoning, prison
ZV4J4	Conviction in civil and criminal proceedings without imprisonment
ZV4J5	Problems related to release from prison

ZV625	Imprisonment
Abuse (physical, psychological or sexual, by others)	
14X..	History of abuse
1J3..	Suspected child abuse
SN55.	Child maltreatment syndrome
SN571	Sexual abuse
TL7..	Child battering and other maltreatment
TLx4.	Assault by criminal neglect
ZV19C	Family history of physical abuse to sibling
ZV19D	Family history of physical abuse to sibling by family member
ZV19E	Family history of sexual abuse to sibling
ZV19F	Family history of sexual abuse to sibling by family member
ZV19G	Family history of mental abuse to sibling
ZV19H	Family history of mental abuse to sibling by family member
ZV19J	Family history of sibling abuse NOS
ZV19K	Family history of sibling abuse by family member NOS
ZV4F9	Problems related to alleged sexual of abuse child by person outside primary support group
ZV4G4	Problems related to alleged sex abuse child by person within primary support group
ZV4G5	Problems related to alleged physical abuse of child
ZV612	Child abuse
TL01	Sexual Assault
ZV6D3	Counsel related/combined concern regard sex attitude/behaviour
Gender reassignment	
1K4	Gender reassignment
E225	Transexualism
EMISNQGE23	Gender reassignment
Adoption	
13I8	Adoption of child
6981	Adoption medical examination
8GE8	Adoption
9F5%	BAAF B1/2-adopt: birth history
9F6%	BAAF C/D-adopt: child report
EMISNQH120	Child legal status - freed for adoption
EMISNQH362	Child no longer for adoption
ZV703	Adoption medical

Appendix 9: Information Sharing Approach

Information sharing approach – Merseyside LDR