Better care together

Leicester, Leicestershire & Rutland health and social care

LEICESTER, LEICESTERSHIRE & RUTLAND (LLR)

BETTER CARE TOGETHER (BCT)

LLR STP DIGITAL STRATEGY & ROADMAP

2018-2021

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Version	Issued to	Issue Date	Author	Summary of Changes
1.2	LLR STP IM&T Strategy Board / LLR STP IM&T Delivery Board	09/05/18	Ian Wakeford and Adhvait Sheth. Initial contributions of achievements included.	Initial draft for comments on structure and anticipated content
1.3	Ian Wakeford	10/05/18	Ian Wakeford	SRO Review
1.4b	LLR STP IM&T Strategy Board / LLR STP IM&T Delivery Board	12/06/18	Adhvait Sheth and Ian Wakeford. Range of contributions received from STP workstreams and IM&T/service leads	Key updates following engagement and contributions
1.5a	Ian Wakeford	20/06/18	Ian Wakeford	SRO Review and comments/amends
1.6	LLR STP IM&T Strategy Board / LLR STP IM&T Delivery Board	11/07/18	Adhvait Sheth Range of contributions received from STP workstreams and IM&T/service leads	Key updates following further engagement and contributions
1.6.1	Ian Wakeford	02/08/18	Ian Wakeford	SRO Review and comments
1.8	LLR STP IM&T Strategy Board / LLR STP IM&T Delivery Board	07/08/18	Adhvait Sheth and Ian Wakeford.	Adhvait Sheth – Inclusion of initial indicative strategic objective milestone chart. Key updates/refinements following further engagement and contributions
1.8.4	Daljit Bains	18/09/18	Adhvait Sheth	Issues to consider EIA screening further to discussion held
1.8.4b	Adhvait Sheth	11/10/18	Ian Wakeford	SRO review and converted to split into strategic narrative with actions document. Other content to be used in Annual Plan. Includes principles and standards within format for each objective.
1.9a	LLR STP IM&T Strategy Board / LLR STP IM&T Delivery Board	05/11/18	Adhvait Sheth	Update of DHSC vision. Cross check with HSLI and 3 year planned /provisional portfolio Investment plan added. Funding narrative updated. Additional principles and standards added.
2.0	LLR System Leadership Team (SLT)	16/11/18	Ian Wakeford and Adhvait Sheth	Strategy board requested changes. Addition of high level example schematic. Workforce alignment intention. Inclusion of high level milestone dates for priority actions.
2.1	Ian Wakeford SRO Review	26/11/18	Adhvait Sheth	LA comments reflected. Insertion of specific record sharing for UHL systems review as requested at SLT.
2.2	LLR STP IM&T Strategy Board	14/02/19	Adhvait Sheth	Outpatients Transformation actions explicitly referenced further to input from UHL transformation team and IT.

Foreword

Welcome to the Local Digital Roadmap for Health and Social Care in Leicester, Leicestershire and Rutland (LLR).

This document is an Information Management and Technology Strategy for 2018 – 2021. It sets out visions and ambitions for a fully digital and integrated Health and Social Care community across Leicester Leicestershire and Rutland (LLR). The Strategy is grounded in supporting Better Care Together (BCT) and requires change and commitment across the entire Health and Social Care system. As authors of this document we hope you also share what we intend to do and why it is important to make these changes for the benefit of patients and practitioners alike.

1. Leicester, Leicestershire and Rutland (LLR) Footprint

1.1 Enabling Better Care Together through LLR's STP

The major challenges we face around health inequalities, patient safety, financial and workforce sustainability have led all statutory Health and Social Care partners in Leicester, Leicestershire and Rutland (LLR) to work together on a programme of service redesign since 2014. The overarching aim is to create an integrated Health and Social Care system for our population, which is clinically and financially sustainable for the long term.

This work has been brought together within 'Better Care Together' (BCT) – the Sustainability and Transformation Partnership (STP) for LLR. BCT brings together the three NHS Trusts and three clinical commissioning groups in LLR, working alongside a range of other independent, voluntary and community sectors providers and local authorities who combine to ensure that services change to meet the needs of local people. They also work closely with the patients and carers to develop plans for change.

The BCT vision is for a local Health and Social Care system that supports the LLR population through every stage of life, which:

- Supports children and parents for the very best start in life
- Helps people stay well in mind and body throughout their life
- Knows your history and can plan your health needs
- Cares for the most vulnerable and the most frail
- Has services available when it matters and especially in a crisis
- Helps support patients and their loved ones when life comes to an end
- Provides faster access , shorter waits and more services out of hospital

The Better Care Together partnership within LLR was set up to improve the provision of health care in LLR. The Local Digital Roadmap (LDR) maps to the footprint covered by LLR.

The LDR is the BCT Digital Strategy for LLR. The strategy describes how digital technology will enable LLR to achieve its strategic outcomes, and ensuring alignment with national IM&T drivers.

1.2 Better Care Together Partnership Alignment

Locally, during 2016, BCT partners across Leicester, Leicestershire and Rutland (LLR) developed a five year plan, the LLR Sustainability and Transformation Plan (STP)

(http://www.bettercareleicester.nhs.uk/Easysiteweb/getresource.axd?AssetID=47665), with the vision to create a high quality, integrated, Health and Social Care system, which is affordable and meets the needs of local people in the medium term.

This approach has improved services and demonstrated that they can be delivered more efficiently, and at the same time reduce pressure on parts of the health service that feel particular strain. We've launched an enhanced NHSYSTMONE11 service which provides more access to clinicians. We have also secured funding for priority areas like cancer, mental health and diabetes, as well as capital funding for new hospital facilities. We've also started changing the way that the NHS organisations work together, so that we operate more as one team working for the people of LLR.

The NHS is continually evolving and has become more efficient, removing waste and duplication and most importantly it has improved the health and wellbeing of local people. However, the last 18 months have also seen local NHS finances and performance stressed in many services and organisations, particularly over what was one of the most pressurised winters for many years. The national landscape is also evolving. The Prime Minister announced in June that the NHS will receive increased funding of £20.5 billion per year over five years (an annual increase of 3.4%). This will have an impact on what we are able to achieve through the plans and priorities of the BCT partnership. We will be able to assess the implications locally as the national details of this additional spending become clear.

Who is Better Care Together (BCT)?

East Leicestershire & Rutland CCG (Lead IM&T Commissioning Organisation)
Leicester City CCG
West Leicestershire CCG
University Hospitals Of Leicester NHS Trust (Inc. Leicester Urgent Care Centre)
Leicestershire Partnership NHS Trust
East Midlands Ambulance Service NHS Trust
Derby Health United (DHU) Loughborough Urgent Care Centre
East Leicestershire and Rutland Urgent Care Centre's (Northern Doctors)
DHU GP Out of Hours (OOH)
Leicestershire Health Informatics Service
LOROS (Leicestershire Organisation for the Relief of Suffering)
DHU NHS 111
Leicester City Council
Leicestershire County Council
Rutland County Council
Leicestershire and Rutland local pharmaceutical committee
GP Federations
SSAFA WIC (Soldiers, Sailors, and Airmen's Families Association Walk In Centre)

1.3. Our Approach to Developing our Strategy

In order to reinforce our local IM&T arrangements we embarked on a redesign of LLR Health & Care IM&T Governance arrangements to complement STP governance arrangements and to provide a mechanism for IM&T matters to have a profile and channel for escalation to LLR's System Leadership Team, to which it is accountable. Our roadmap is based on foundations of engagement with our stakeholders. We listened to all SROs of STP clinical workstreams to understand the service redesign aspirations and priorities for their respective focus areas. This process collected a set of new asks of IM&T to support and deliver which we aggregated and prioritised into major programmes of work covered by the 4 overarching Strategic Objectives.

Through clinical workstreams we have undertaken engagement with patients, service users, carers and staff to understand their experiences of Health and Social Care services and what matters most to them. The insights gathered through a wide range of research provide an evidence base to influence our transformational programmes. The BCT workstreams will incorporate all of these elements within the change process to deliver the STP.

This Local Digital Roadmap will be initiating projects to enable new models of care; providing digital technology and transformational change, supporting service redesign, staff training and communication.

2. Strategic Drivers

This section sets out the strategic context of this IM&T Strategy identifying national policy and local context and drivers that the strategy is designed to enable. IM&T is at centre of national efforts to develop and deliver a better, more efficient integrated Health and Social Care service. Our strategy takes into account the key drivers and factors that are influencing IM&T at a local level.

2.1 National Context

The National Information Board (NIB), who provides leadership across Health and Social Care organisations on information technology and information, published a framework in 2015 outlining proposals to transform outcomes for patients and the wider population through the use of technology and data. Subsequently CCGs were mandated later in 2015 to produce local footprint specific digital roadmaps outlining how their local Health and Social Care economies will achieve the ambition of being paper-free at the point of care by 2020. LLR first submitted its LDR in April 2016, and this document is now being refreshed because we want to continue to build on the good work and will use this document to help us to communicate plans to local stakeholders and inform local transformational change, commissioning and system wide and regional investment planning. Since our first LDR there has been significant development in National direction. The following outlines the main national

priority themes. There are now 10 major domains with 33 paper free Health and Social Care programmes with the objective of aligning to national aims to: Empower the person, Support the Clinician, Integrate Services, Manage the System Effectivity and creating the future.

NHSE have also announced that the uses of NHSE developed standards are Contractual requirements for Mental Health and Acute Trusts in England for Transfers of Care. The ask of local areas from Dec 18 is to use the Generic CareConnect record structures to be applied to all patient data held in clinical and administrative systems both as a sender and a receiver. This is on top of the core Transfers of Care requirements of: Transfers of Care (ToC) mandate for Acute and MH Trusts by 1 October 2018:

- electronic discharges for inpatient and day case stays using the nationally published structured message and Professionals Record Standards Body (PRSB) approved clinical content
- electronic discharges for mental health episodes using the nationally published structured message and PRSB approved clinical content
- emergency care electronic discharges using the nationally published structured message and PRSB approved clinical content
- outpatient letters using the nationally published structured message and PRSB approved clinical content

Our Trusts plans include a review of letter content to ensure alignment to published Professional Records Standard Body (PRSB) approved clinical content. Along with the Academy of Medical Royal Colleges (AoMRC) headings. We as a system will have oversight of these developments due to the importance this has in relation to the NHSE vision of having a longitudinal care record on a more regional basis pan STP basis. We recognise the synergies of these developments with the Provider Digitisation drive linking to Provider Digital Maturity. This provides potential to partner to develop a suit of standardised LLR API's using national standards at the foundation which will enable a platform to extend sharing capability to a partner STP footprint.

Furthermore very recently the Department for Health and Social Care has published its national vision for digital, data and technology in Health and Social Care. This reflects and builds on the commitments made by Secretary of State for Health and Social Care in 2018 that technology is one of his three priorities for the Health and Social Care sector. The ambition is clear that we need to improve care, improve staff working experience and make efficiencies through the uptake of technology which should start with getting the basics right through ensuring we have the ability for systems to talk through the provision of an open standards based and interoperable digital architecture.

This is an important development which needs to be considered at strategy iterations and managed in our medium to longer term plans along with other priorities in this strategy.

The following architectural principles have been outlined and will guide our delivery of strategy from now to the longer term future:

- Putting tools into modern browsers, according to open web standards
- Maximising the use of the internet in networks and services
- Running services in the public cloud
- Building data layers with registers and (APIs)
- Adopting good cyber security standards
- Separating layers within the patient record stack

The following priority 4 areas have also been outlined of which we will ensure is weaved into our delivery arrangements for this strategy.

Infrastructure
Central to this is the national interoperability agenda and joining up systems that don't talk. We await and will keep abreast of developments to legislation and emerging standards to ensure we are working in line with the vision. It's evident that a more standardised approach to procurement will enable this vision to manifest for local areas but in the meantime we will ensure that local developments and contracts are compliant as can be with both local and national standards.

Digital services
Digital services need to be designed and focused on people's needs therefore we will need to ensure we keep up with the growing expectations of patients. We will ensure that everything we develop starts with user needs at its heart.

Innovation
We will encourage new suppliers to the market where there is a need for innovation and will hope to see the national drive to support suppliers and innovation as key to this in LLR.

Skills and culture
Locally we need to ensure the right digital and technical skills are developed in the local workforce and also leadership and change management as are transformational activity accelerates. We have reviewed our governance arrangements to ensure that we have robust clinical and digital leadership in place and there is work to do around supporting the aligning of workforce priorities to enable the best use of technology that we implement in services.

In addition now NHS Long Term Plan has been published in January 2019 and starts to set the architectural context for the next 10 years. A gap analysis on what our current plans will deliver and where the NHS Long Term Plan will place extra demands on IM&T is now taking place. This will include supporting Primary Care Networks, support renewed targeting of certain disease groups where extra improvement is required and accelerate channel shifting to digital for users of the NHS.

2.2 Local Context

2.2.1 Primary Care Forward View

Our General Practice systems play a key role in our ambitions to have a robust shared access to paperless patient records across all clinical interfaces. We aim to achieve better value from our existing systems through training and optimisation so that patients are treated more efficiently and are more empowered in their own management. This ambition forms part of LLR's IM&T strategy and delivery through the Local Digital Roadmap.

Whilst we have a strong collaborative approach in tackling key GPIM&T priorities in LLR, there are times when due to historical developments and local population health need, a more tailored solution is required. The below identifies some of the key areas to address:

- GPSoC – Within LLR all practices are on either SystmOne or EMISWeb. In Leicester City CCG all but one practice is on SystmOne whilst in the County there is more of a mix of both systems. We now have over 85% of our patient population registered with a SystmOne practice in LLR. This enables patient data to be shared securely across health and social care services using SystmOne promoting efficiency, standardisation, but most importantly increasing the patients experience and delivering safer patient care
- Cross Border Issues – Whilst 80% of patients are treated within the LLR footprint there are significant numbers of patients on East Leicestershire and Rutland CCG and West Leicestershire CCG that access healthcare outside of the LLR footprint. This has a number of practical issues for patients and practices and will require in the development of local plans.

The following collaborative achievements across LLR have set some of the foundations for our future roadmap:-

- All GP practices in LLR currently upload information for the Summary Care Record v2.1, via a locally agreed standard template, the Integrated Care Plan. SCR can be accessed by any health professional that has a legitimate reason to access the information and also gains the consent of the patient.

In LLR we have a strong commitment to using data from a variety of sources to better understand the current health of the local population. We have worked hard to create a safe consent model for data extraction, pseudonymisation, analysis and publication back to practices within a secure NHS environment.

2.2.2 Health and Social Care Integration

The 2015 Comprehensive Spending Review set out the government's intention that by 2020/21 health and social care will be integrated to provide better coordination of care around the individual, reduce inequalities, and support Health and Social Care

systems to become more sustainable, in the context of rising demands and ongoing financial constraints.

Since 2015 the National Better Care Fund Policy has provided a framework for a joint planning approach, along with a pooled budget mechanism, between Clinical Commissioning Groups (CCG) and Local Authorities (LA) to support this ambition.

Better Care Together is bringing local partners closer together. NHS working with local authority colleagues in social care to improve the flow of patients out of hospital and back home to their usual place of residence or into intermediate care. This integrated approach to work has significantly reduced the number of times when a patient is ready to leave hospital, but is still occupying a bed. It will improve the care and experience of patients and reduce the demand on the acute hospital.

As this work develops further it will put us alongside other areas of the country, which have matured and evolved and are working beyond their own organisation boundaries to improve services for their communities. They have joined up health commissioners and providers with social care, the voluntary and community sector, Healthwatch and other organisations and are all working together with residents to ingrate services.

2.2.3 Our model of care

The next steps to improving the health and wellbeing of our diverse population is centred around our model of care that has been evolving over recent years, which has the following four key components:

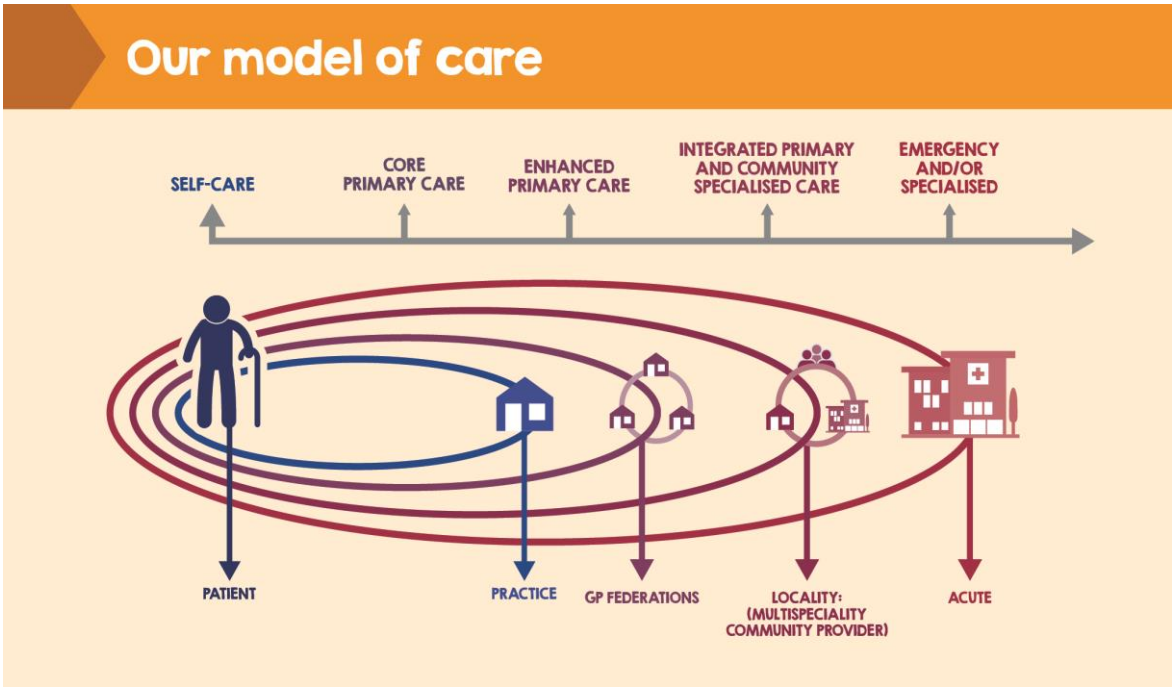
- Keep more people well and out of hospital
- More care closer to home
- Care in a crisis
- High quality specialist care

The evolving model of care will create a far more clinically effective and cost-efficient system, which is built around individuals, supporting them to be as active and as independent as they can be. Wherever it is clinically appropriate we will aim to treat people at or close to home. We will always ask ‘how best can we keep this person at home?’ or ‘why is this patient not at home?’

The model will strengthen primary care and the provision of GP services. The GP surgery with its list of registered patients will remain the central pillar of local care. Recruitment to new roles within the primary health care team, integration of care for people with long-term and complex conditions through multidisciplinary teams and practices working more closely together in federations or localities will increase the capacity available.

We anticipate that multidisciplinary teams including staff from social care, working on a placed-based model of care will reduce the number of emergency admissions. However, a patient will always receive specialist hospital care when it is required.

Figure A: LLR Better Care Together Next Steps Model of Care



3 Our Vision and Strategy

3.1 Vision for LLR STP Digital Transformation

In LLR we will deliver transformational digital developments to all citizens and professionals through enabling digital technology to support integrated service redesign and pathway development, further building and embedding a culture of electronic record sharing, using data to understand our population and what interventions it needs, empowering people to digitally self-care and enabling underpinning IT change effectively.

3.2 Principles for LLR Strategy

A key principle to our approach is that IM&T should not be the rate limiting step but is a key enabler to LLR STP workstreams. Our strategy is to provide rich real time Health and Social Care information to all Health and Social Care professionals. We want that information to be accurate and up-to-date at professional's fingertips to enable better patient care through supporting clinical decision making and assessments of need. We want this to be enabled in the future with all LLR partners through the implementation of a core backbone master patient index solution.

This approach will allow partners to have a system that serves their internal specific needs and operational functions and also then contributing to the wider LLR

information ecosystem to create a single LLR source of the truth in terms of base demographics.

Our vision is that all systems can feed one another and exchange data with the same master patient index which we know will enable more cooperative ways of working across LLR and where it makes sense to do so we will also share an EPR.

Figure B below is example of how limited record sharing can often mean a linear and time consuming pathway into hospital for patients in the community. Without up-to-date information about the person there wishes may not be known and there is limited information to consider an alternative to hospital admission due to known facts about the patient.

Figure B: Example Emergency Scenario – Limited Digital Enablement

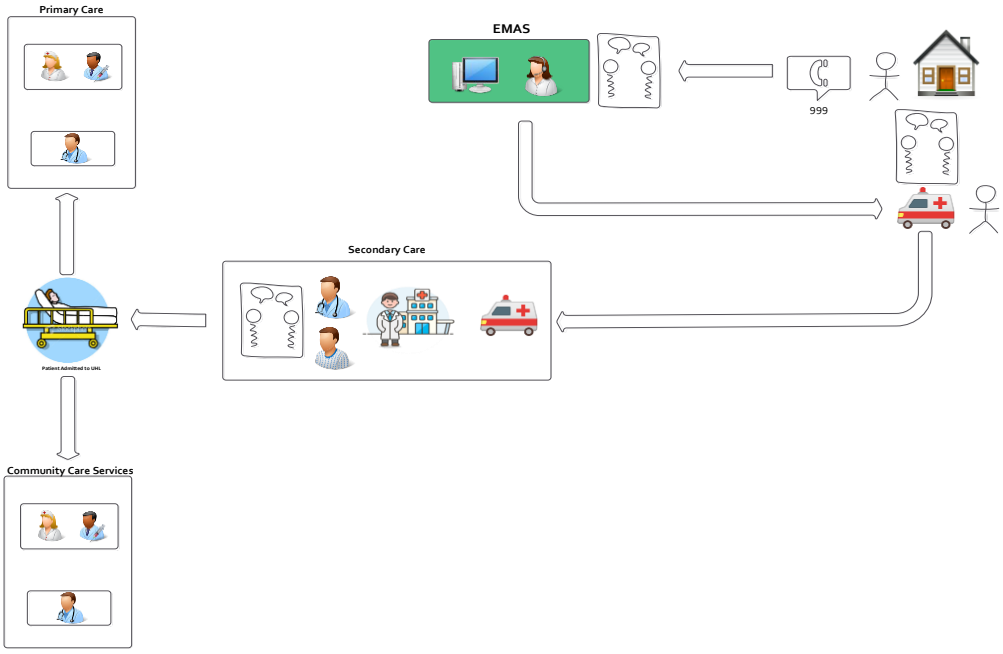
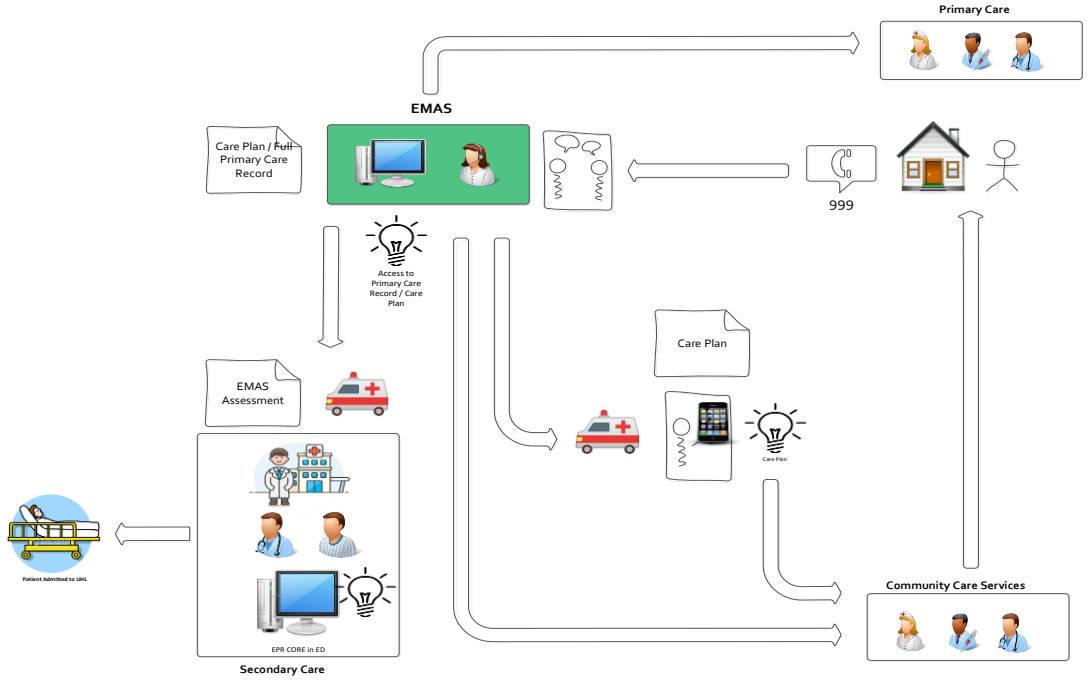


Figure C below is an example of how some of the work we will undertake will enable better care for patients through the provision of accurate and up-to-date clinical information. Staff will be enabled to make decisions about someone's care with the latest Health and Social Care information about that person and will inform whether there are appropriate closer to home community based settings that the person can be looked after in.

Figure C: Example Emergency Scenario –Digitally Enabled



Whilst emergency and urgent care services are of great priority, we also know from local pressures and the NHS Long Term Plan that we will be required to transform our outpatient's services significantly as a system over the coming years.

We know from the work over the last few years that nearly a quarter of LLR's population have nearly 3-4 visits to our local trusts. Outpatient's services put major financial pressure on the LLR Health and Care system and the NHS Long Term Plan outlines the need for local health and care systems to reduce follow up appointments by one third. We will take action through technology where appropriate to reduce visits at hospital and enable people to remain in the community and still receive the support they need.

We believe that our model also lends itself to enabling patient digital self-care as we would like to develop integration through technical interoperability with self-monitoring equipment and self-care apps with the principle of feeding and receiving information from the central master patient index. We need to ensure that any significant information requiring an intervention is then also stored and shared, on that shared EPR instance.

Through this strategy we further aim to build on our footprints existing local leadership, accelerate the sharing of information to improve patient care locally and help spread benefits more rapidly across LLR. Our future architecture will incorporate the national standards as set out by NHSE to enable consistent information sharing across LLR and beyond our footprint for out of area sharing.

We will work in partnership and with suppliers to weave their development plans as part of the Care Connect and Transfers of Care mandates into our local plans to standardise clinical content and use nationally published API's where SystmOne is not used. We will work on the mandate but also stipulate to other potential suppliers to LLR that they must interoperate using national FHIR HL7 standards. This will also involve sharing these standards and bringing Social Care suppliers and LA's on board developments.

The most important principle that through our listening to the "Asks" from the STP work streams is that they do not want investment into pure IM&T projects, going forward business cases will be evaluated on the basis of transformation projects where the end to end business transformation must be included in the scope of the project and not left for services to work out, after the implementation of the technical aspects.

3.3 Our Strategic Objectives

This section sets out our 4 overarching strategic objectives that we recognise through what our engagement has told us we need to be achieved.

These objectives have been clustered into 18 transformational work programmes which are aimed at meeting the needs of the range of Health and Social Care services across our STP footprint. We believe there is merit in this approach as we are able to bring together common groups of IT and clinical expertise across our footprint to direct the delivery of work in order to meet our objectives.

3.3.4 Record Sharing

This benefits patients and practitioners by ensuring that they are all viewing the same Health and Social Care information about a patient and where required can also contribute to that shared record for others also involved in that care to see, to make informed decisions within that context. This can include key clinical and social information about the patient which the patient could contribute to, the ability to plan their care which could be in collaboration with other Health and Social Care providers. It also must give all those involved within that care the ability to pass actions between each other in that shared care model.

The ability to support this model is critical to the successful delivery of Integrated Locality Teams transcending Primary, Secondary, Community and Social Care. In LLR, the most pragmatic way to achieve this is by standardising down to fewer systems that either support very tight integration of record sharing, planning, assessing and workflow or by adopting common systems between the services involved in that Health and Social Care provision. The assumption of this workstream is that information is captured electronically to a standard, but because of barriers is not shared, but it may be the case that the information is not captured in the first place which is a pre-cursor action.

Example Challenge

The challenge we are facing is that what is digitally recorded is increasing, is available for the service that has recorded that information, but other practitioners in Health and Social Care must be able to see appropriate information when consented, so that they make the best and most clinically informed and decisions, safe in the knowledge that they have all the up to date facts at their fingertips.

An example of this for instance are emergency attendance at ED, first of all it may be that the patient has a care plan which indicates that treatment at home is the most appropriate action, but because an ambulance has been called and the dispatch team has not reviewed the patients care plan they take them to ED.

Once at ED, the person is clearly ill and has multiple conditions, but these are all known about and being managed in primary and community care. Time and resources is spent re-establishing these facts when in fact it may be that has this all been known the most appropriate response would be to turn that patient around and book an urgent appointment at their GP for later that day. Thus potentially avoiding a 4 hour wait breach for a non-admitted patient, freeing up an ED consultation, potentially freeing up an ambulance journey. If only the care plan was completed, up to date, shared with EMAS via enhanced SCR 2.1 or using a GP system viewer, the initial journey could have been avoided and an urgent care intervention in primary care, closer to the patient's home with a familiar clinician knowing their history and managing their condition would have been the outcome.

The lack of information sharing and therefore the risk adverse nature of healthcare lead to the Ambulance / ED pathway being followed rather than an urgent GP appointment being booked. To try and tackle problems such as these the LDR will have as a major strategic objective to deliver greater record sharing throughout Health and Social Care in LLR.

Strategic Design Principles

- Record the information digitally in the first place and ensure this is direct into EPR systems.
- Ensure that the system used can share beyond the service's boundaries.
- Ensure that the systems used are all working to a common version of the truth as to whom the patient is, their basic NHS administrative details e.g. which practice they are registered with.
- Have a single detailed care record which acts as the "sink" repository for all Health and Social Care partners interventions, this will be the GP System as it also feeds SCR and the NHS Spine.
- Ensure healthcare information sharing tools such as SCR and Viewers and not only deployed but established into the daily working practice of clinicians standard operating procedures.

- Take opportunities to share systems where it makes sense to do so, so that tighter business integration, such as shared appointment ledgers, tasking, e-workflow and the sharing and joint updating of assessment and planning information can be supported.
- Encourage the patients we serve to understand the importance or record sharing and how it will allow practitioners to give them a better service, thus generating the demand SCR upload and consenting to share when asked.

Standard we will use

- Use of secure NHS Mail as a minimum
- Use of systems that can output and consume Transfers of Care and Care Connect APIs using either FHIR / HL7 / CDA Establish MESH capability
- All Health and Social Care organisations use the NHS number as the primary identifier in electronic communication at the point of care.
- System must have capability to contribute data items to LLR's longitudinal patient record.

The actions we will take to achieve our strategic objectives:

Programme of Work	Programme Objective	Action	Organisation Impacted
Summary Care Record	Ensure the healthcare information sharing tools SCR v2.1 are not only deployed but established into the daily working practice of health and social care practitioners' standard operating procedures.	Public facing publicity campaign to encourage patients to not decent from sharing their records so that LLR SCR is as near 100% as possible.	LLR CCGs
		To ensure that there is a full rollout of SCR v2.1 into all areas of Health and Social Care providing a service in LLR where the EPR system does not perform this function within the native system and ensure that this functionality is embedded as part of normal standard operating procedures.	UHL, DHU, LPT, Pilot Care Homes, Social Care, EMAS, Community Pharmacies.
		Allow for wider input into SCR 2.1 than just Primary Care by setting rules in GP SYSTMONE and EMIS to automatically record SCR 2.1 consents and coded care plan updates that are written in provider letters into the GP record.	CCGs, UHL, LPT
		Embedded into regular use enhanced SCR 2.1 data to be used clinically by front line provider staff. Embedding SCR look-up for all patients e.g. routinely on ward-rounds would be a useful process change that we will consider. SCR (enhanced where consent exists) remains the core way of sharing basic and care plan data for all of our patients as well as out of county ones.	UHL, LPT
		EMAS to rollout SCR Mobile application for Paramedic crews to support clinical decision making.	EMAS,UHL

Programme of Work	Programme Objective	Action	Organisation Impacted
Sharing through an EPR	To review Health and Social Care record keeping into paper based or information systems and when opportunities arise due to IT contractual breaks, business transformations or organisational provision change, seize those opportunities to promote digital record keeping at point of care promoting very tight integration of record sharing, planning, assessing and workflow or by adopting common systems between the services involved in that Health and Social Care provision.	Review patient administration and EPR functionality of the LLR Alliance so that it can become part of the wider record sharing ecosystem. The Alliance will perform a feasibility exercise of system consolidation to their preferred platform to support the local left shift. The Community Hospitals and Community Health Provider already use TPP SystmOne and they are keen to enhance the benefits of consolidating the Alliance to enhance patient care into the community.	LLR Alliance
		Standardisation on UHL systems for clinicians in the community where appropriate and relevant including images via EMRAD from outpatient departments, endoscopy's Unisoft, DAWN, electronic discharge summaries, Patient Centre and reporting functionality of ORMIS.	LLR Alliance
		To enable capability to allow sharing of information electronically in a standardised way along key pathways and services where appropriate.	LLR Alliance
		Clinicians have access to Sunquest ICE from Community Hospital outpatient departments	LLR Alliance
		Ultrasound images taken in primary care are available via EMRAD	LLR Alliance
		To ensure that the UHL electronic transcription solution is implemented within the Alliance for letter storage and electronic sending of letters.	LLR Alliance
		To have an integrated patient record view that incorporates, as a minimum all UHL and Community Hospital activity.	LLR Alliance
		To implement the use of having an Alliance Desktop Anywhere throughout the sites that the Alliance perform patient care from.	LLR Alliance

Programme of Work	Programme Objective	Action	Organisation Impacted
		To review how we can work more effectively sharing information between Health and Social Care to avoid silo system working and explore the possibility of much tighter integration either between systems that we use or evaluate the use of single EPR systems if they can be demonstrated to offer the benefit of a single record transcending Health and Social Care but still permitting Social Care to perform the business functions and statutory duties it needs.	Leicester City, Leicester County, Rutland County.
		Extend the use of EPR Core into the rest of Health and Social Care where the ability to view and contribute to a care plan would be invaluable, e.g. UHL Outpatients.	Leicester City, Leicester County, Rutland County.
		To consider the most appropriate form of record sharing for Care Homes, based on a pilot of 28 care homes determine whether SCR 2.1 or TPP SystmOne will be the most appropriate access required. This will also require discharges to be fed into the GP Record via MESH from NerveCentre.	UHL, LPT, Leicester City, Leicestershire County, Rutland County.
		Special Educational Needs & Disabilities (SEND) assessments that are currently on Liquid Logic to be shared with Health Partners into TPP SYSTMONE. The action is to start a piece of work to look at the best way to achieve this sharing.	Leicester City, Leicestershire County, Rutland County.
		Currently in LLR there is no single source of truth around those with LD diagnosis. There are 3 different LD registers. We also want our Social Care teams to know when a patient has been in contact with LPT LD services. A flagging based approach will allow for the information to be linked to the EPR which could mean there is less of a need for an actual register. We will use TPP flagging capability to try and trigger for inclusion into the patients / service users ICP which will then allow it to be available to any Health and Social Care professional once uploaded to SCR 2.1 thereafter.	LPT, Leicester City, Leicestershire County, Rutland County.

Programme of Work	Programme Objective	Action	Organisation Impacted
		There needs to be a sustainable and scalable way to have a single record for each patient in LLR to support Integrated Locality Teams. We will look to the implementation of a single EPR solution for our ILT's to ensure that day to day operational transactions are electronic and seamless so as to ensure the smooth integration of services. This will be TPP SystmOne as the majority of clinician and admin staff already use it.	LPT, Leicester City, Leicestershire County, Rutland County.
		To undertake a holistic strategic review of the opportunities for two way record sharing and updating of clinical records combined with digital self-care for patients and other LLR partners so that unnecessary face to face follow up outpatient appointments can be reduced.	UHL
		Practitioners within UHL want to create a single Therapy EPR which can be shared with the wider community and primary care. In order to achieve this work a feasibility exercise around UHL Therapy systems with a view to assessing whether a move to LLR's single preferred platform is beneficial to the pathway as a whole. UHL plans to continue use of Tiara for the next 12 months and in parallel will explore feasibility of standardising Therapy records with partners onto TPP SystmOne.	UHL
		To explore the feasibility and if possible and supported by the services to join up UHL Maternity and Children's Universal Services in the Community to have a shared community and maternity record and to maintain existing interfaces to specialist antenatal and neo-natal systems. The ambition to allow new parents to also have access to this record is also an ambition to be considered in this appraisal.	UHL, LPT
Single GP System Platform	To encourage General Practice to standardise onto a single GP System (TPP SystmOne) so that the record sharing benefits seen where this has happened in LLR can be delivered to all patients.	To continue the momentum generated over the last few years to promote system consolidation within Primary Care to TPP SystmOne and to increase the registered population on this platform by 5% by March 2019.	CCGs

Programme of Work	Programme Objective	Action	Organisation Impacted
		To support practices in exploiting national interoperability programme developed API's and sharing protocols as part of developments such as NHSE Care Connect work, to ensure that all practices have basic information sharing capability and inter-practice workflow capability is in place for all.	CCGs
		To ensure that GP System suppliers are informing us of their plans as soon as possible to enable LLR practices to be ready for supplier deployments to ensure a smooth local transition.	CCGs
Flagging	To develop a wider use of flagging based on a common set of rules in TPP SystmOne so that Health and Social Care professionals that have access to SystmOne EPR Core or full SystmOne can immediately have their attention brought to key conditions they need to be aware of.	Initial actions are to develop and implement EOL Care plan and Frailty flags across LLR.	CCGs, UHL, LPT
Trusted Assessor	To develop a wider use of Trusted Assessment documents which are shared between organisations so all can view and contribute to in a live context within the same EPR system. Work has started in TPP SystmOne on this project but there are many possible sharing opportunities within the Health and Social Care system that would benefit from this and have come forward for consideration.	After LPT migrate their RIO estate to TTP SystmOne to consider having a single trusted assessment form between Local Authorities and LPT in the context of learning disabilities.	LPT, Leicester City, Leicestershire County, Rutland County.

Programme of Work	Programme Objective	Action	Organisation Impacted
		To consider whether rolling out the TPP SystmOne Reablement Trusted Assessor template as used in Rutland will provide benefits for Adult Social Care in Leicester City and Leicestershire County.	Leicester City, Leicestershire County
Primary Care Infrastructure	To ensure that record sharing can be supported by the infrastructure in Primary Care, so that it does not act as a barrier and supports efficient working of practice staff and also supports a higher level of patient engagement with the practice and while they are at the practice.	Local procurement exercise through LHIS to obtain the best service to in the STP area for higher speed HSCN data links to replace N3.	CCGs
		To ensure that all GP Practice sites are able to offer NHS Wi-Fi free of charge to patients.	CCGs
		To implement Public Wi-Fi access points across the UHL estate to support mobile working and patient / equipment location	UHL, LPT
Provider Infrastructure			LPT,UHL
Urgent Care Treatment Centres	To ensure that record sharing and subsequent actions that can be performed in the Non-UHL Urgent Treatment setting.	To develop a regional approach to interoperability to NHS 111 telephone system.	DHU
		To have delivered EPS by June 2019 from Urgent Treatment Centres to Community Pharmacies	DHU

3.3.5 Supporting Pathways (Safer Shared and Transfer of Care)

Sharing information along a Pathway from one Clinical System to another can only be achieved if information is electronically and consistently collected, regardless of the source system so the next service in the patient journey receives reliable and complete information, without further requirement to refer back to the sender and also that information is targeted at the correct service.

This can best be achieved by giving clinicians pathway navigation tools, ensuring they collect consistent and complete information to hand over to the next clinician in the pathway.

In LLR we have three main ways to achieve this which is continuing to support and further enhance PRISM as a pathway tool, ensure that primary data capture templates are governed and standardised across LLR in partnership with clinicians in the patient journey and also ensure that information is fed back to the beginning of the pathway.

It is also critical to supporting pathways that information is collected digitally in the first place, and in UHL Out-patients there will be an incremental development of a paperless service over the next 3 years. This will enable seamless and better informed care thus resulting in a reduction in non-value adding attendances, move to a reliance through other mediums such as telephony and virtual clinics to help reduce the overall footfall of attendances to UHL.

This transformation will enable clinicians in UHL OP to access primary care and secondary care patient records online, anywhere ensuring clinicians have real time clinical information to support decision making and advise to patients and other healthcare professionals.

Example Challenge

It is increasingly important that with the aging population, with increasing long term conditions and shared care between Health and Social Care settings, that we manage the transition of that patient through the system as effectively as possible leaving the patient with a good experience and that all partners knew what they were doing and were fully informed of what was expected of them in their part of the pathway of care. This unfortunately is not always the patient experience and often the next practitioner in the pathway is not in receipt of the crucial information they need, or the information that is available requires further clarification, leading to delays in care.

Historically Health and Social Care IT systems are designed around supporting a function within an organisation and are not really designed as a system wide pathway based system, where information is moved on the next party that needs it and explained to them what they then need to do. The handover between services is not always as timely, automated and contextually useful as it could be.

An example of where existing systems can be exploited to great effect in LLR is the joint Health and Social Care reablement team in Rutland. Local authority and NHS staff work as a single virtual team using a shared trusted assessment template on TPP Systmone, this allows NHS staff to collect all the information they need on the ward at the local hospital in Peterborough, which can readily accessible by the decision makers within the local authority, which they can assess and then commission care if required, both in social care and healthcare. This has already brought real benefits in terms of quicker transfer of care where support is needed and also has released duplicate assessment capture from social care releasing more practitioner time.

Strategic Design Principles

- To ensure that the primary collection of information into EPR systems is consistent between all parties of Health and Social Care and complete where that information is required. This is generally achieved by having template driven data entry and the design of those templates needs to be governed in a collaborative manner by Health and Social Care partners.
- Having collected good information to support care of the patient, if that patient is then moved onto another service, by a formal mechanism such as a referral, it is really important that it is a quality referral, both in terms of navigating to the right service and ensuring that there are no delays caused by the requirement for further information or historic test or observation information.
- That we seize opportunities for shared trusted assessments between Health and Social Care so that all parties involved in complex multiagency care only have to perform the assessment once and then can view and further contribute to that record. This creates efficiency within the system and avoids having to ask for similar information twice by two or more different agencies. It also creates the opportunities to hold multidisciplinary team meetings remotely as all parties are looking at the same data of the same age.
- Where we need to pass the patient onto the next service in the pathway we need to ensure that the transmission of that information not only is timely so that arrives before the patient is seen by the following service. This can be a matter of a few hours for some pathways.

Standards we will use.

- Immediate availability within the e-workflow of the same system.
- A structured message adhering to NHS Digital standards sent via MESH to be work flowed and stored within the next system.
- A push notification to the next service that there is something to see and act upon, with the ability to then pull down the information in a simple manner, such as an API or pass through login.

- An email with an attachment that is sent via a secure transport mechanism, such as NHSMail to a services monitored inbox. The preference within this mechanism is to have automated email generation so that Subject lines or Sender can be monitored by workflow packages at the receiving system and navigated to the right team or person for action. Use of systems that can output and consume Transfers of Care Connect APIs using either FHIR / HL7 / CDA Establish MESH capability
- All Health and Social Care organisations use the NHS number as the primary identifier in electronic communication at the point of care

Actions we will take.

Programme of Work	Programme Objective	Action	Organisation Impacted
Standard approach to coding.	We recognise that SNOMED CT forms an integral part of a patients electronic care record. A move to a single terminology, SNOMED CT, for direct care was recommended by the National Information Board (NIB), in 'Personalised Health and Social Care 2020'.	To ensure that EPR patient systems are migrated to SNOMED CT when suppliers make this functionality available. In secondary care UHL have commenced use of SNOMED CT in its Emergency Department and have plans to have this in place for inpatients late 2018/19 and plans for 19/20 SNOMED rollout in outpatients in UHL and Alliance. LPT and CCGs are dependent on EMIS and TPP.	CCGs, UHL, LPT, Alliance
Outpatient Transformation	To transform Outpatient services in UHL in line with the NHS Long Term plan.	To provide the capability to record clinical decisions in UHL Outpatients digitally which will support onward referral within UHL and also return information back to the original referrer.	UHL
		To roll out the provide the capability for clinicians in Outpatients to see and acknowledge patient test results through the implementation of ICE in Outpatients which will speed up results acknowledgement and reduce the number of follow up Outpatient appointments	UHL
		UHL will explore app solution options from existing supplier Nerve Centre to host patient information to help guide and educate and to enable patient interaction with their services.	UHL
		The roll-out Dictate IT/Dictate V.3 which will allow removal of legacy dictation systems thus enabling electronic transmission of all inpatient and outpatient correspondence to patients and primary care in a consistent way.	UHL

GP System Exploitation	To maximise the effective use of GP systems for the benefits of staff, patients and supporting the automation of business processes, with consistent coded templates, screen layout and joining up pathways wherever possible.	To ensure that functionality is exploited and best practice is shared through the provision of dedicated technical GP support staff, supporting practices in using their systems of choice efficiently and effectively.	CCGs
		To ensure that there is consistency and commonality with coding, templates and presentation of screens wherever possible delivered through a GP system optimisation forum across the three CCGs.	CCGs

Programme of Work	Programme Objective	Action	Organisation Impacted
Care Planning	To support an Integrated Care Plan, a structured template, used within both SystmOne and EMISWeb practices, to form the backbone of the uploaded data to SCRv2.1. It also enables commonality in data collected and visible for all healthcare clinicians where two the sharing of two clinical systems allows, which is currently to all SystmOne users. By having a common set of structured templates across our clinical systems, effectively the Integrated Care Plan, acts as a shared Care Plan across all services who are able to view the sum of all the constitute provider entries.	To ensure that there is a process for capturing the ever evolving requirements and the templates are refreshed and kept relevant, with primary input from STP clinical work streams.	CCGs

Programme of Work	Programme Objective	Action	Organisation Impacted
Medicines Management	To ensure that information supporting patient's medication when their care is transferred or shared is accurate and supports an increase in patient safety.	Where there are certain drugs that can only be started by specialists in secondary care the consultant can request for the usual GP to take over the ongoing prescribing and monitoring via a shared care agreement. GP's currently sign and return these via paper/fax and we want UHL and LPT and GP practices to make this paperless.	UHL, LPT, CCGS
		To ensure that LPT and UHL use a single ePMA system working to a single formulary compliance, the action is for UHL to complete a migration to a single ePMA system within the Trust and for LPT and UHL to ensure that TTOs are integrated with 100% accuracy into discharge letters back into general practice or transfer into another provider.	UHL, LPT
		To continue to support the use of Pharma Outcomes software so that post hospital discharge information should flow to pharma outcomes upon discharge and consider integration capability of Pharma outcomes and how this could interoperate with UHL systems. Electronic information sharing will be completed by flagging e.g. when patient admitted into UHL to include the ability to flag frailty.	UHL
		To review the PINCER product so that pharmacists can review interventions in GP practices to reduce harm by medicines.	UHL
Pathway Navigation	To give clinicians pathway navigation tools, ensuring they collect consistent and complete information to hand over to the next clinician in the pathway.	To continue to support and further develop PRISM so that it covers a full pathway portfolio and further engaging and communicating with our referrers and providers in LLR. The key next challenges for this product will be widen its available to private and third sector providers and refresh the technology it was created in to allow support for next generation IT equipment and greater flexibility in product and allow more third party access to the rich directory of information via APIs. These APIs will also allow for the creation of planned Care Apps. (See Digital Self-care).	STP Planned Care

Programme of Work	Programme Objective	Action	Organisation Impacted
Appointment Booking	To allow appointment booking direct from one provider of care to the next provider of care in the pathway.	In the context of Urgent Care, to allow Direct Booking of GP appointments from the Urgent Care setting straight into the GP system and embed that option into working practices of urgent care services.	CCGs, Urgent Care STP Workstream, UHL
Care Providers	To implement an Adult Social Care Brokerage solution across LLR to manage the market place in care.	To identify a LLR wide solution for 19/20 to facilitate dialogue between commissioners and providers, making it quicker and simpler to request services and match these requests with offers of service provision. This would significantly benefit social care and health partners by speeding up placement and potentially discharge from hospital and would support members of the public sourcing their own care, whether they are self-funders or recipients of direct payments.	Rutland County Council, Leicester City Council, Leicestershire County Council
		LLR Care Provider Portal - Develop a health community repository back end services and review services. Data layer, API, Digital service layer will be up to local organisations.	Rutland County Council, Leicester City Council, Leicestershire County Council
	To implement structured transfer of care and discharge information	To allow UHL ED to receive EMAS assessment information prior to arrival from EMAS's MEDUSA EPR system. Nerve Centre will consume the EMAS records in a standard message.	EMAS, UHL
		To make all UHL to Primary Care letter electronic through the implementation of the e-correspondence system	UHL,LLR CCG's, General Practice
		Summary extraction from Nerve Centre to UHL longitudinal health record and also out to Primary Care GP electronically.	UHL, CCG, General Practice

Technology Enabled Care Services	To transform care services and maximise use of existing resources to support service redesign activity	To implement a fully electronic and real time way of managing bed state through deployment of Nerve Centres bed management app via existing and newly procured mobile devices.	UHL
		Alliance Referral Support management solution to support clinical triage, pathway navigation and rule based onward referral	Alliance, UHL, LLRCCG'S, LPT, General Practice
		To upgrade Nerve Centre to support Virtual Wards in UHL that will to support care closer to home.	UHL
		To consider and design Community Diagnostics Hubs IM&T infrastructure including EPR, record sharing and technology enabled diagnostics capability in the community hubs.	Alliance, UHL, LPT, General Practice

3.3.6 Digital Self Care

Three changes in the world we live are coming of age which Health and Social Care in well positioned to take advantage of. Firstly the proliferation of Internet access in the home now over 90% in the UK and smart phone ownership now exceeds 85% of UK adult population. Secondly with this greater familiarity of technology in the commercial and banking world there is now an expectation within the greater public to be able to interact with heath and care and also perform some level of self-management via digital tools. Thirdly, although not a mature market, but technology is now emerging that is cheap, reliable, secure and non-proprietary that will utilise domestic broadband or smartphones to either allow interaction with Health and Social Care, self-manage conditions, or remotely monitor observation without the need for a Health and Social Care professional. This will give service users a sense of control and empowerment, a more responsive service and also, where the public sector is struggling to fully staff or afford its workforce, an opportunity where a service user elects and it is appropriate, to switch to a digital service rather than a face to face one.

The benefits this will bring once a rich offering is in place from Health and Social Care will be to identify and support patients in greatest need and navigate them to the right pathway for their care. The role of this IM&T Strategy is to create the environment to foster an acceleration of the shift to digital self-care but also to exercise some governance and prioritisation of developments based on greatest impact upon health and wellbeing of the population but also the system as a whole.

The greatest challenges will not be the frontline technologies but will be interfacing the vast data digital self-care will produce, most of which will be normal and no cause for concern with data that is starting to indicate a problem with an individual and whether the Health and Social Care system actively monitors these outliers and is able to target a timely intervention, through an alert to one of the EPR systems used. This does shift the primary responsibility of the patient/carer to-determine they require an intervention or support to that of a remote monitoring function. Which could have a better outcome for the patient but also could also create a lot more demand.

The NHS Long Term plan significantly plays on the shift to Digital Self Care to not only empower patients but also to support transformation in services provided, for example the UHL Out Patient transformation programme, to reduce attendances by a third.

Digital Self-Care is fundamentally made up of two related parts with this portfolio which is also commonly known as assistive technology:-

- Apps - Offering patients online tools that can equip and empower them to take a greater role in managing their own health. This could involve delivering

health training resources online or enabling patients to directly monitor key aspects of their condition at home and use this to motivate lifestyle change.

- Remote sensing - considering the potential for telehealth, where remote measurement are used to enable the close involvement of clinical teams in assessing or tracking the wellbeing of patients located remotely, in a hospital at home scenario.

Challenge Example

A good example of digital self-care would be diabetes management; the vast majority are people are managed in primary care, mainly diet controlled type two diabetic, with the more complicated conditions and type one diabetics having contact with acute hospital services. All glucose testing kits commissioned by the CCGs support the remote upload to data to cloud based storage of observations made by patients and these observations can be several times a day. Via an app or a web portal some patients can now view their readings history but also elect to share those readings at a time of their choosing with a clinician, either by handing them their smartphone or in some cases in a clinic setting. The clinician may also have consent to view those readings from their workstation.

However the patient / clinician interaction remains the same, there is no active remote monitoring of the readings and no triggers are set to alert a healthcare professional that the patient is experiencing worrying trend of abnormal readings. The emphasis still remains on the patient to take responsibility for managing their condition and only when they feel they need support to reach out for it. Digital self-care opens a real challenge to Health and Social Care, which is do we let the remote monitoring and apps remain solely as a tool for patients and consented carers to view how they are doing, or do we take the next step as a society and to proactively monitor using AI tools, and elect to intervene to potentially prevent a serious episode of healthcare crisis.

It may be that this strategic priority stops short of the full potential as society and Health and Social Care are not ready for it, and concentrates on the short term in dealing with administrative transactions between the patient and organisations with some document and record sharing. This will be for the work stream to work out and deal with.

Strategic Design Principles

- To ensure that data collected by apps or remote sensing is initially processed by AI or rules software to understand if the information being collected is normal for the patient or whether it is an abnormal reading.
- To ensure that data collected that requires an onward action within Health and Social Care is work flowed into the operational patient system for attention and does not require an active log on to another portal system to pull information, this should be a push notification.

- To ensure that all locally developed apps are subject to the NHS apps library framework criteria
- All Digital Self Care apps and technology developments have use cases that test and confirm the potential for benefits with the patient population

Standards we will use

- Any procured apps will need to be NHS apps library compliant or have plans to do so
- Immediate availability from source system to be sent to the e-workflow of the receiving system.
- Ideally a structured message adhering to NHS Digital standards sent via MESH.
- As a secondary option an email with an attachment that is sent via a secure transport mechanism, such as NHSMail to a services monitored inbox. The preference within this mechanism is to have automated email generation so that Subject lines or Sender can be monitored by workflow packages at the receiving system and navigated to the right team or person for action. Use of systems that can output and consume Transfers of Care Connect APIs using either FHIR / HL7 / CDA Establish MESH capability

Programme of Work	Programme Objective	Action	Organisation Impacted
Patient Self Service Apps and Assistive Technology	To create the environment to foster a shift to digital self-care and exercise governance and priority setting over this domain of work.	To procure a system to support online consultations in LLR General Practice.	CCGs
		To implement a single LLR wide secure Identity Management Agent to provide an underpinning access infrastructure for all our care professionals. As part of this a natural extension to enhance LLR citizens Digital Inclusion we will want to use the same infrastructure capability to provide single sign on access to our patients and citizens in LLR to enable multi app plug in and access. This could be through a locally developed Health and Wellbeing account for LLR patients.	LPT
		To create capacity within the IM&T community to look at the opportunities for Digital Self Care across Health and Social Care and to create governance structure within that to prioritise and evaluate benefits of those potential uses. This has been branded as the Digital Innovation Hub and strategically agreed by the STP IM&T Board subject to funding.	STP IM&T Board
		To redevelop the LLR NHS Now App including the syndicating to NHSE national content databases with APIs so that all services are up to date to give patients a direct link to services, click through booking capability and self-care.	ELR CCG
		To support a pilot currently in Rutland using the VitruCare self-care toolkit, starting with a focus on diabetes management. The main aim is to enhance patient self-management: involved GPs can use the data collected to help to inform the care they give, but they will not be monitoring that data 24:7.	RCC, ELR CCG

Programme of Work	Programme Objective	Action	Organisation Impacted
		To support the development of a series of self-management and self-care mobile apps which will essentially allow patients access to a wide range of PRISM resources on their smart devices (Apple and Android compatible) to either educate, self-refer and /or self-manage within the convenience of their own homes and also quickly locate supporting services. Information will include patient leaflets, signposting and the PRISM directory of services for relevant support groups, videos content / multi-media such as exercise material, functional movement patterns for MSK and useful information around self-help.	STP Planned Care
		To develop a Follow Up app to avoid unnecessary physical follow up appointments in UHL for Patients when then can be done virtually or via an app.	UHL, LPT
		To support a programme aiming to improve the treatment pathway for people either identified as being at risk of suffering a fall, or those who have experienced a fall. This includes work to embed specialist therapy triage; the continued development of the Steady Steps programme and e-FRAT; and a pilot project to develop a non-emergency falls response service for Leicestershire and Rutland. The IM&T element requiring supporting is a Falls mobile app providing an electronic falls risk assessment tool (eFRAT) to enable paramedics to assess the risk of further falls in a patient where conveyance to hospital is not required thus saving admission. In addition QTUG technology will be deployed within community clinics to support assessment of those referred by GP as being at risk of a fall.	Rutland County Council, Leicester City Council, Leicestershire County Council, LPT

3.3.7 BI and Research

Although there is more to do in moving from paper based clinical notation to full utilisation of EPRs in LLR, Health and Social Care still is data rich in the systems that are used and the data will only increase at an ever increasing rate the more we digitise what we record. However the problem that has not been addressed is that high quality Business Intelligence information is often limited to individual organisations for operational, performance or contractual purposes.

To design the future pathways of care and monitor whether the outcomes we are striving to improve along those pathways is having any impact, we need to be able to plan across Health and Social Care at the local health economy level. Record sharing only deals with one patients record at a time, in the context of the now, supporting pathways only moves the supporting information along the pathway with the patient, but BI is critical to first of all understanding how our Health and Social Care economy works, what the flows are along the pathways and gives us that helicopter view of aggregate data over time, tracking patients between sectors fed by source IT systems.

The challenge then is to deliver this vision of a single Health and Social Care data repository for this purpose and ensure that its use is exploited within a governance framework.

The enabler to providing this will undoubtable to build a common secondary use identifier for LLR residents accessing heath and care services along with activity datasets with a common structure, then there is the hosting of that secondary use data which would need to pseudonymised consistently between donor organisations. Turning the vision by defining how this will be delivered will be answered in the LLR STP BI Strategy implementation plan.

To this end the LLR System Leadership Team (SLT) gave the mandate to develop this Business Intelligence (BI) strategy to underpin the Sustainability and Transformation Partnership (STP) for Leicester, Leicestershire and Rutland (LLR). The strategy for BI covers the three-year time period 2018/19 to 2020/21. During this three-year window, we will develop the building blocks for integrated working in the longer term. Our BI strategy initial focus is on Health and Social Care BI however the principles we have developed will be expanded to cover wider partnership BI matters going forward.

Our strategy sets out a framework for how organisations in LLR could work differently as BI partners in the Health and Social Care System, and sets out the opportunity to join forces on a number of important priorities, where it makes sense to do so.

Our LLR STP workstreams rely on taking a system-wide approach to analysis and measuring the impact of transformational change that they are making. We therefore know that the ability of partners to generate and interpret joint data to

inform the planning and delivery of Health and Social Care is a critical enabler for our STP plans.

Similar in its need but with more of a medical focus rather than a service focus, will be supporting Medical Research in LLR. The challenge here is that the sanctioning of the release of data and the new obligations under GDPR mean that the way that data is retrieved, stored and used needs to fundamentally change in LLR. The research community have proactively responded and their next steps will include these key deliverables:-

- Agreeing a new Data Sharing Agreement with Primary Care for Research
- Establishing a extract tool and pseudonymisation process
- Appointing a provider to host the secondary use research database.

Challenge Example

Currently we cannot analyse the utilisation and flow across the Health and Social Care system, and evaluate the impact of changes in models of care across and between agencies. We would like to be able to evaluate the impact of the new frailty interventions on patients admitted to hospital and post their discharge – e.g. have the number of readmissions for patients with a frailty score of 6-9 reduced, and of these how many had new social care/prevention interventions in support of their care plan, and then look at how many and what types of housing interventions have supported patients on hospital discharge (people with long term conditions, older people, Mental Health patients) and what has been the impact on length of stay and readmissions at UHL and LPT.

We would like to be able to show that for patients receiving the new integrated reablement offer in the County (coming on stream in October 2018) if there has been a reduction in the number of residential/nursing home placements/ or the number and size of domically care packages for this cohort, as a result of having more a more effective initial reablement offer.

With regards to research a recent example is that the UHL Microbiology Lab wants to be able to link over 20 years of infection testing data to GP Prescribing history on Antibiotics. Although both datasets exist, there is currently no streamlined process in LLR to govern this request and extract the data for analysis.

Strategic Design Principles

- Data will be pseudonymised at rest within the secondary use data warehouse.
- Transition of data will be via secure datalinks from donor organisations.
- Assurance around vulnerability testing of platform.
- Privacy by design to support GDPR

Standards we will use.

- ISO 27001 IT Security

- ISO 9001 Change Management
- GDPR Data Sharing Agreements for access.

Programme of Work	Programme Objective	Action	Organisation Impacted
LLR Business Intelligence Strategy	To develop a strategy for how organisations in LLR could work differently as BI partners in the Health and Social Care System and seize opportunities to join forces on a number of important priorities, where it makes sense to do so. This is a critical enabler for our STP plans as our LLR STP work streams rely on taking a system-wide approach to analysis and measuring the impact of transformational change that they are making.	To publish the underlying delivery plan for the LLR BI Strategy and submit to the STP IM&T Board for consideration, especially with regards to ensuring it dovetails with other programmes of work in its delivery and investment opportunities. There are themes that need to be addressed as part of this plan, these are:- - Information Governance (IG) - Analytics and Tools - Data Management & Integration - Workforce - Population Profiling and Case Finding	LLR BI Strategy Group
Research	To establish a single coordinated repository of Health and Social Care data from which the LLR academic and research partners can conduct a wide range of approved research activities with local partners and service users in LLR and to ensure that patients are more engaged and informed about the use of their data for research purposes.	To mobilise this aspiration into delivery plan for Leicester University, UHL and LPT with a governance body and delivery partner.	UHL, Leicester University, LPT

4 Enablers

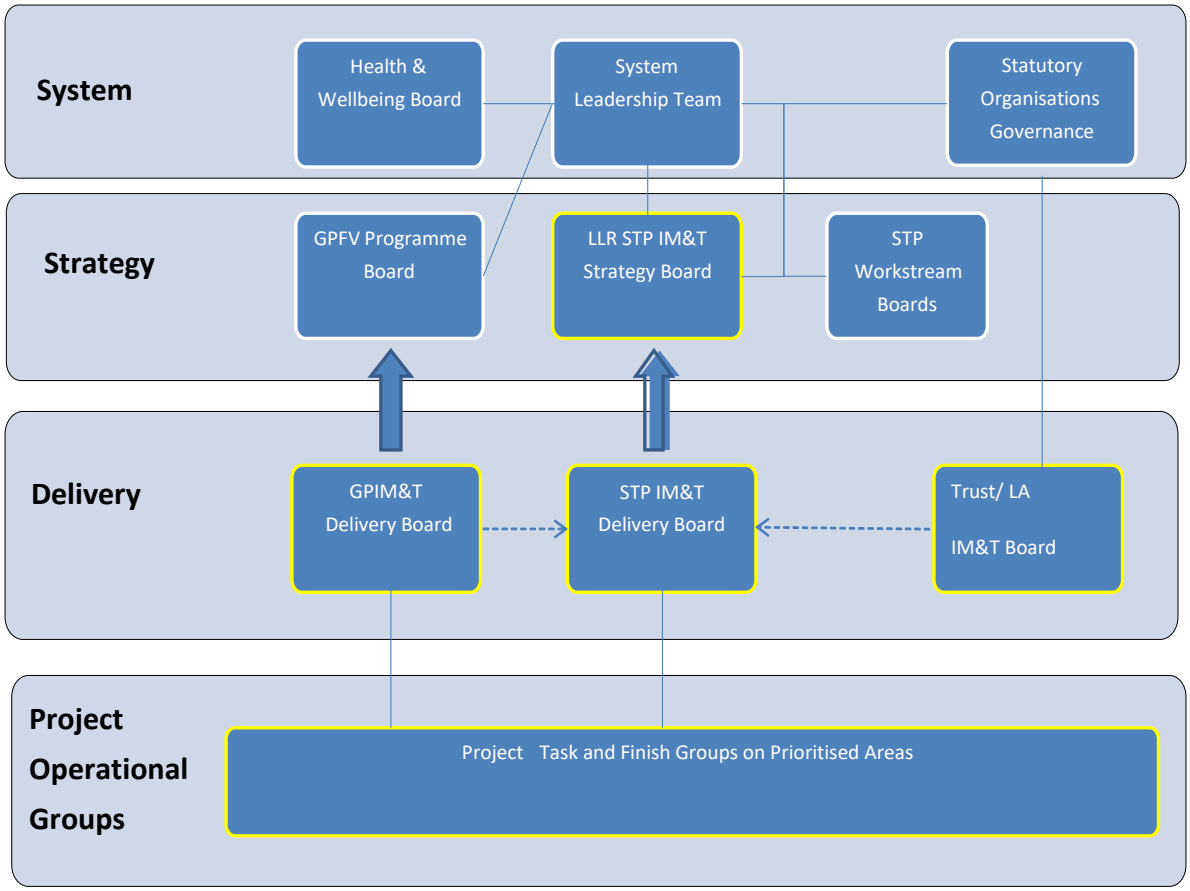
4.1 Governance

The existing governance is set out in Figure D below. Arrangements have evolved in line with the development of our Better Care Together work through our STP and emergence of initiatives within the local health economy in response to national and local priorities. We have a strong commitment for patient and clinicians involvement in the development and implementation of our strategic vision. Our lead clinicians for IM&T support effective design and configuration as well as strategic planning input into system wide transformation. This is aided by establishing of organisational clinical safety officers or similar which supports IM&T transformation governance within their respective partner organisations. We have a track record which we have built around consensus decision making to drive our multi organisational digital transformation. We see this as a key enabler in having the right blend of clinical leadership and IM&T expertise and leadership to make effective system change, providing authority and accountability for LLR IM&T which ultimately rests our LLR wide IM&T Strategy Board.

The Strategy Board is chaired by Dr Peter Miller, CEO of LPT and AO for LLR STP IM&T and SRO for STP IM&T is Ian Wakeford, CTO LPT and Head of LHIS. All partner organisations have senior clinical and management input into the STP IM&T Strategy design and development with a commitment to deploying its resources to the delivery of this strategy. This is supported by East Leicestershire and Rutland CCG Programme Management Office with and any additionally funded posts to support delivery of sponsored programmes of work.

Our Delivery Board provides the system wide delivery arm for the STP, providing a forum for expert challenge and clinical support to help progress and deliver our programme delivery plans.

Figure D: LLR STP IM&T Governance Diagram



4.2 Communications, engagement and our patients experience

There is a commitment from the IM&T work stream to ensure that patients and stakeholders are involved in co-designing services. In most, but not all cases engagement and communications to influence proposals for service change has, is or will be undertaken through the relevant BCT clinical work streams. This work will be triangulated to ensure that insights and experiences specific to IM&T are captured and have a strong evidence base and impact on service improvement and redesign.

There will be in some cases the need for dedicated engagement and communications within the IM&T – which is not specific to any particular work stream

As these work areas are prioritised then engagement and communications activities will be designed in line with them to reach out to the range of target groups – recognising interdependencies across work streams to provide patient, carer and staff insights and business intelligence. It will also be supported by communications to better inform people of service improvements.

4.3 What our Patients, clinicians, staff, services users and carers tell us

Our objectives also align with patient, carer and staff insights and business intelligence undertaken through BCT and individual clinical workstreams. This engagement needs to be built through co-design principles to ensure that the delivery of the strategic objectives is patient-centred.

- Inter-professional communication is perceived as an area that needs improvement. It is suggested that standardised IT systems would help to achieve this and make records universally accessible and reduce story-telling fatigue as well as ensuring that up to date information is passed to all those involved so that patients and their families have a more seamless experience of care.
- Service users and carers need information that is appropriate, accurate, relevant and in an accessible format. Service users and carers felt empowered by having accessible and correct information on their diagnosis and treatments.
- Staff identified a need for improvements in IT to give them joined up accessible records, and a common IT interface. Service users and carers supported this view saying that technology should be used to improve staff access to their records.
- Patients reported breakdowns in communication, and failures at moments of transfer and transition between services and systems. This was also associated with the access to, and availability of community-based support, and patients' experiences of delayed discharge.
- People felt communications was important to support better coordination and information flow and that technology should support this. This was important for patients, carers and staff to build trust and stronger relationships. Having a common language across teams was felt important and this should translate to patients, remembering that 'one size doesn't fit all.'
- People felt that it was fundamental that IT is joined up to assist communications. Shared records were essential across whole system including NHS 111. Perception was that technology needs to improve significantly in order that patients only need tell their story once.

The developments of this strategy will result in implications to the STP workforce workstream. We will need to consider the impact on the workforce and want to ensure that clinicians and the range of Health and Social Care staff across the system have the necessary digital skills and are supported to optimise the use of enabling technology. We will look to ensure that system wide workforce plans are reflective of the digital skills requirements for LLR's digital strategy.

4.4 Funding and Sources of Investment.

We want our strategy to enable to deliver new models of care and support the STP in being financially sustainable. Additional funding sources for innovation will be sourced as all new changes in digital technology require some degree of investment. However, this will be invested in programmes that we will want to impact and contribute to the wider STP workstreams outcomes framework.

We have a very strong local partnership commitment to advance our digital maturity further and know that targeted investment is needed from heron to deliver enhanced

capability and support the realisation of benefits for our STP workstreams over the duration of our strategy.

We expect to enter a period of increased digital activity and innovation through extending our information ecosystem to join up Health and Social Care in LLR and which we will include the local care providers digitising their activity. This will enhance our digital maturity as a footprint over the next few years so we will undertake robust identification of funding opportunities and consideration of how to else to fund our ambitions. Over the last 6 months our work has gained traction on building robust business cases as we will be applying for national funding in Sept and beyond to support our priorities. In order to achieve this we will ensure that we work to our most pressing priorities have robust business cases in place in the short term. In the medium to long term we are entering major feasibility activity to help us be ready for calls for funding to help with our more medium term multi organisational transformational ambitions as set out in this strategy.

We have already secured and utilised most of the £760k funding from Estates and Technology Transformation Fund (ETTF) which has enabled us over the last few years to drive up digital enablement within Primary Care which has been one of the main building blocks to our system wide plans to have a single digital source of the truth in LLR. In order to achieve our ambitions and become truly paperless we will ensure we are in a position to take advantage of other potential sources, including:

- Health Led System Investment (HSLI)
- Digital Social Care Demonstrators (DSCD)
- Estates and Technology Transformation Fund (ETTF)
- STP Wave 4 Capital Sustainability and Transformation Funds
- Local Health and Social Care Record Exemplars (LHRCE)

We have an awareness of a more collaborative approach between NHSI and NHSE around STP estates and technology funding having alignment in terms of having to have local prioritisation in place so with STP finance leads have been weaving our technology asks for the STP into our wider Capital Prioritisation process to ensure that as a system we have undertaken this key exercise to be ready for STP funding for technology and estates programmes that underpin our system plans.

For our ambitions to be achieved over the next 3 years we will require an overall investment of circa £27m in LLR Health and Social Care Digital and IM&T. We have actual planned investments of circa £16m over the next 3 years and then have of a further circa £11m which will be required between now and 2021 to deliver our strategy in full for its duration. As feasibility progresses more detailed and refined proposals will be developed as part of the strategic planning cycle for digital in LLR. This will include additional schemes which at present are in very early planning and do not have timescales due to gap in funding. Below is a table of actual planned strategic investments by LLR lead delivery organisation and sources of associated

investment. A further more detailed version of this information can be found in Appendix B and which also includes provisional schemes.

Figure C: Summary Table of Planned IM&T Investments 2018-2021

Lead Delivery Org	Provisional Investment Source	2018-19 (£m's)	2019-20 (£m's)	2020-21 (£m's)	Total 3 year Investment (£m's)
University Hospitals Leicester (UHL)	UHL Internal Capital	2.250	0.000	0.000	2.250
	HSLI	1.721	1.152	1.511	4.384
University Hospitals Leicester Total	**Total Planned**	**3.971**	**1.152**	**1.511**	**6.634**
Leicestershire Partnership Trust (LPT)	LPT Internal Capital	1.822	1.406	0.996	4.224
	HSLI	0.265	0.416	1.837	2.518
	ETTF	0.103	0.156	0.158	0.417
Leicestershire Partnership Trust Total	**Total Planned**	**2.190**	**1.977**	**2.991**	**7.158**
East Midlands Ambulance Service (EMAS)	EMAS Internal Capital	0.000	0.000	0.000	0.000
	HSLI	0.065	0.190	0.475	0.730
East Midlands Ambulance Service Total	**Total Planned**	**0.065**	**0.190**	**0.475**	**0.730**
LLR Clinical Commissioning Groups	CCG BAU	0.650	0.650	0.000	1.300
	ETTF	0.272	0.030	0.030	0.332
LLR Clinical Commissioning Groups Total	**Total Planned**	**0.922**	**0.680**	**0.030**	**1.632**
LLR Local Authorities	Social Care Internal	0.009	0.000	0.000	0.009
	DSCD	0.180	0.000	0.000	0.180
LLR Local Authorities Total	**Total Planned**	**0.189**	**0.009**	**0.009**	**0.189**
Grand Total Annual 3 Year Planned Investment in LLR STP IM&T (£m's)		**7.338**	**3.999**	**5.007**	**16.343**

Whilst we are confident that we will partake in any calls for funding exercises we as a system have identified capacity to deliver transformation at the necessary pace and scale as a risk area for some of our major priorities that will enable our STP. In saying this we are a key member of East Midlands Accord collaborative and also have robust planning in place across our STP governance which will enable us to jointly allocate delivery resources and partake in any joint regional activity where there are synergies. We will ensure that these arrangements are reflected during the development of VFM business cases as part of the accessing of funding process.

We in partnership have been reviewing our investment requirements for digital to meet our ambitions set out in this roadmap. At present we are as a footprint are at "Level 2" interoperability standard status as set out by NHS England for local areas

and believe that with the right level of investment in digital funding outlines above for the footprint will enable us to achieve “Level 3” interoperability status within the duration of this strategy.

4.5 Information Governance.

Our strategy will require information governance mechanisms that will underpin different aspects of the strategy, this will include, for instance, building on and reviewing existing information sharing protocols and information sharing agreements which support direct care, enable new care models and govern security and access to data, as well as secondary use of data. We recognise the need to start thinking about information sharing agreements at pace and scale in order to underpin system wide transformational change.

In our approach locally our underpinning ethos is to respect the patients data at all times, ensuring safe and legal use across the board whilst ensuring that our data controllers help shape the framework for sharing the data that they control. For Record Sharing in LLR our data controllers are GP’s as Leicester Shared Care Record approach relies on coded care delivery data centrally held by GP clinical systems either through direct coded input or standards based interoperability.

In our CCG led approach we recognise the different parameters for sharing patient information. As the CCG is a membership organisation we will ensure there is always a choice for our data controllers to release data the hold. Our CCG’s have a strong relationship built over the years with our patients and GP’s and we will maintain and enhance this as we transform further as a system and move towards use for secondary care purposes also. From a CCG perspective, only anonymised data is accessed when concerning secondary uses.

Currently across LLR have a number of separate groups that have the remit to ensure robust information is in place for Digital projects that look at IG from either a CCG commissioner or Provider perspective respectively and this will involve exploring new ways of working.

We will over the next 6-12 months review these arrangements and look to have conversations with key stakeholder with a view to resolving fragmentation that exists and bringing together expertise in the form of a single IG forum to meet the needs of our system wide transformation Digital initiatives that support our STP.

Alongside this another action we will take will be to work with the new arrangements to ensure that our strategic portfolio work is understood during planning phase and that we plan for priority IG activity well in advance of project commencement. We will outline a process to ensure that all patients data and data controllers in LLR regardless of setting will remain safe and only used within a suitable legal framework. This will enable IG colleagues to resource projects proportionately based on impact and work on those with the greatest system priority.

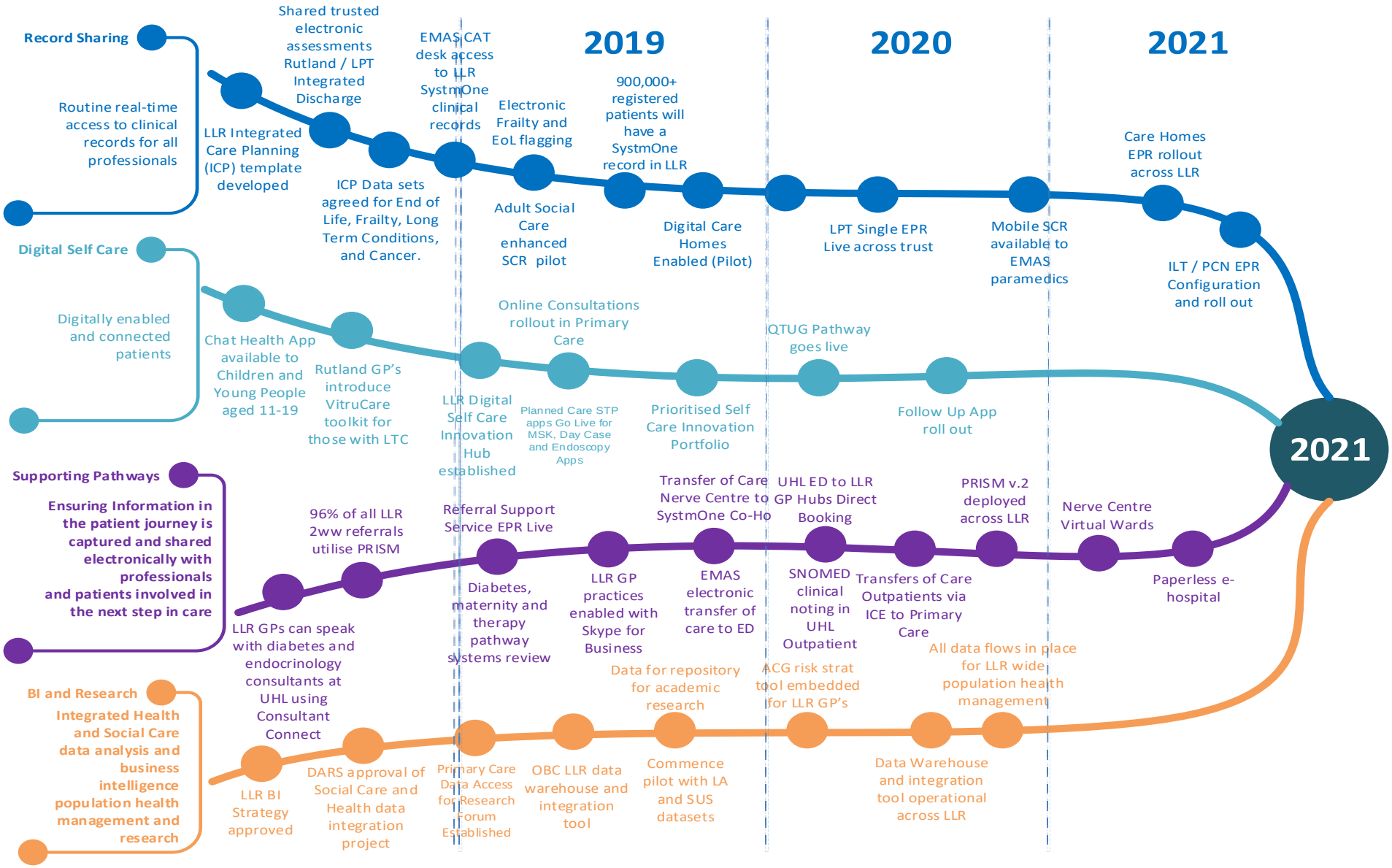
Our system wide transformation projects will be required to demonstrate compliance with IG processes such as the robust completion of the DP Privacy Impact Assessment (DPIA) which for us are mandatory perquisites at project planning stage at the outset. These will be required to be transparent to ensure that all stakeholders understand from the outset the key impact areas that must be addressed during delivery.

Currently we have an LLR wide Information Governance Provider Group. This was established in 2015 in response to the need to build information governance into the fabric of the Better Care Together programme as opposed to being an add-on, as well as establishing stronger links with partner agencies beyond traditional Health and Social Care.

Its focus is around on supporting the development and delivery of BCT initiatives through a co-ordinated approach to information governance by way of the provision of support and advice on the safe use of information; identifying and developing areas of good practice and sharing these across the wider LLR community.

The group has extended its reach increasingly over recent years, its membership now covering Health and Social Care partners covering LLR NHS, Local Authorities, Leicestershire Police and Leicestershire Fire and Rescue Services. It is taking the opportunity to look across the programme and develop a strategic approach to tackling associated Information Governance challenges that is more streamlined. This includes the need to consider fewer agreements, maximise consistency, reconsidering the need to get every GP practice to agree all care record changes, as well as looking at the impact of changes in legislation for example, embedding Privacy by Design and completing Data Protection Impact Assessment as set out in the General Data Protection Regulation 2016/679 and the Data Protection Act 2018.

APPENDIX A – LLR STP IM&T Digital Roadmap 2018 - 2021



APPENDIX B (Page 1) – LLR STP IM&T Investment Plan for Planned and Provisional Schemes 2018 – 2021

STP Footprint Lead Delivery Organisation	Anticipated Funding Source	Planned and Provision IM&T Priority Schemes	2018-19 (£m's)	2019-20 (£m's)	2020-21 (£m's)	Total 3 year Investment (£m's)	Key Milestone Date
University Hospitals Leicester (UHL)	**UHL Internal Capital**	UHL PACS Solution	0.100	0.000	0.000	0.100	18/19 - Q4
	UHL Internal Capital	Document Management	0.250	0.000	0.000	0.250	18/19 - Q4
	UHL Internal Capital	Electronic Prescribing Equipment	0.400	0.000	0.000	0.400	18/19 - Q4
	UHL Internal Capital	Paperless Hospital 2020	1.500	0.000	0.000	1.500	18/19 - Q4
	TBC	Order Comms in OPD	0.016	0.000	0.000	0.016	18/19 - Q4
	TBC	Electronic Outpatient ID Cards	0.061	0.000	0.000	0.061	18/19 - Q4
	TBC	Additional Modules for UHL EDRM workflow and e-referrals	0.000	0.000	0.000	0.000	TBC
	TBC	CDS/MDS submissions to LLR	0.000	0.000	0.000	0.000	TBC
	TBC	ICE Pathology Module	0.000	0.000	0.000	0.000	TBC
	TBC	Integration of departmental systems to ICE/EDRM/Primary Care	0.000	0.000	0.000	0.000	TBC
	TBC	Intelligent dashboards	0.000	0.000	0.000	0.000	TBC
	TBC	Meds mgmt and administration see PMA rollout	0.000	0.000	0.000	0.000	TBC
	TBC	Mobile ICE	0.000	0.000	0.000	0.000	TBC
	TBC	Public Wi-Fi access points to support mobile working and patient / equipment location	0.000	0.000	0.000	0.000	TBC
	TBC	Radiology	0.000	0.000	0.000	0.000	TBC
	TBC	UHL HSCN Enablement	0.000	0.000	0.000	0.000	TBC
	TBC	Clinical/Patient Portal for Sharing UHL data with partners/patients	0.000	0.000	0.205	0.205	TBC
	TBC	WebEx / video conference calls	0.000	0.050	0.050	0.100	TBC
	TBC	Mobile working for community staff and care closer to home (midwives and outreach workers)	0.000	0.065	0.000	0.065	TBC
	TBC	Integration refresh	0.000	0.080	0.000	0.080	TBC
	TBC	Integrate genomic, rapid innovation around predictive algorithms and AI enabling research	0.000	0.146	0.246	0.392	TBC
	TBC	Data Warehouse refresh to support intelligent hospital (analytics)	0.000	0.223	0.000	0.223	TBC
	TBC	Identity Access Management - Internal UHL AD Links	0.000	0.381	0.000	0.381	TBC
	TBC	Data Centre Provisioning	0.000	0.850	0.000	0.850	TBC
	TBC	Wi-Fi refresh - GH and LGH	0.000	0.850	0.000	0.850	TBC
	TBC	Cyber Essentials + accreditation, XP replacement, unsupported software	0.000	2.198	0.000	2.198	TBC
	TBC	Cons to Cons referrals and see removal of bleeps	0.012	0.000	0.000	0.012	TBC
	TBC	UHL Comms	0.040	0.040	0.040	0.120	TBC
	TBC	UHL IG	0.040	0.040	0.040	0.120	TBC
	TBC	Training Resources	0.068	0.068	0.068	0.203	TBC
	TBC	Medical Equipment Integration	0.075	0.059	0.039	0.173	TBC
	TBC	UHL Other	0.136	0.136	0.136	0.408	TBC
	TBC	Upgrade EDRM	0.179	0.279	0.228	0.686	TBC
	HSLI	SNOMED conversion - OP and IP clinical noting modules	0.765	0.218	0.218	1.201	18/19 - Q1
	HSLI	Bed Management	0.055	0.152	0.250	0.457	18/19 - Q2
	HSLI	ICE Results	0.058	0.000	0.000	0.058	18/19 - Q3
	HSLI	Electronic Assessments	0.014	0.085	0.028	0.127	18/19 - Q4
	HSLI	SCR Facilitation	0.055	0.050	0.000	0.105	18/19 - Q4
	HSLI	E- Correspondence	0.080	0.080	0.000	0.160	18/19 - Q4
	HSLI	Transfers of Care - Outpatients	0.108	0.000	0.000	0.108	18/19 - Q4
	HSLI	Admissions, Discharges and Transfers (ADT's) Feeds	0.121	0.055	0.000	0.176	18/19 - Q4
	HSLI	Off Spec Nerve Centre Developments	0.267	0.000	0.000	0.267	18/19 - Q4
	HSLI	To upgrade Nerve Centre to support Virtual Wards	0.000	0.043	0.000	0.043	19/20 - Q4
	HSLI	UHL ED to GP Hubs Direct Booking	0.000	0.091	0.000	0.091	19/20 - Q4
	HSLI	LLR Longitudinal Care Record	0.000	0.111	0.340	0.451	19/20 - Q4
	HSLI	EPR Core Facilitation	0.010	0.040	0.040	0.090	20/21 - Q2
	HSLI	Integrated Electronic Alerting	0.000	0.227	0.635	0.862	20/21 - Q3
	HSLI	EPMA Hardware Upgrade	0.189	0.000	0.000	0.189	TBC
University Hospitals Leicester Total			**4.598**	**6.617**	**2.562**	**13.777**	

APPENDIX B (Page 2) – LLR STP IM&T Investment Plan for Planned and Provisional Schemes 2018 – 2021

STP Footprint Lead Delivery Organisation	Anticipated Funding Source	Planned and Provision IM&T Priority Schemes	2018-19 (£m's)	2019-20 (£m's)	2020-21 (£m's)	Total 3 year Investment (£m's)	Key Milestone Date
Leicestershire Partnership Trust (LPT)	**ETTF**	Alliance PCL move to TPP S1 for GP Provider Work	0.028	0.080	0.081	0.189	18/19 - Q4
	LPT Internal Capital	RIO upgrades	0.050	0.050	0.000	0.100	18/19 - Q1
	LPT Internal Capital	Agile Working Staffing and Devices	0.509	0.000	0.000	0.509	18/19 - Q2
	LPT Internal Capital	Developing and delivering digital offer	0.309	0.374	0.285	0.968	18/19 - Q2
	LPT Internal Capital	Tiara Migration	0.287	0.000	0.000	0.287	18/19 - Q3
	HSLI	Digital Innovation Hub	0.040	0.085	0.173	0.298	18/19 - Q4
	HSLI	Rainbows Record Sharing	0.040	0.025	0.000	0.065	18/19 - Q4
	LPT Internal Capital	Agile Working Rolling Replacement	0.000	0.050	0.050	0.100	18/19 - Q4
	LPT Internal Capital	Clinic Letters to GPS - Consultant Led OP	0.100	0.000	0.000	0.100	18/19 - Q4
	HSLI	Alliance Referral Support Service	0.050	0.050	0.000	0.100	19/20 - Q1
	HSLI	Electronic Record Sharing Project (EPR Core Social Care and Urgent Care)	0.075	0.115	0.117	0.307	19/20 - Q2
	TBC	Social Care Record Sharing Enablement (SCR)	0.000	0.035	0.000	0.035	19/20 - Q2
	HSLI	Follow Ups Apps	0.000	0.025	0.000	0.025	19/20 - Q3
	HSLI	Ophthalmology Triage and Advice Service (OTAS)	0.000	0.000	0.000	0.000	19/20 - Q3
	HSLI	LLR Falls Programme - QTUG equipment	0.000	0.051	0.152	0.203	19/20 - Q4
	HSLI	PRISM	0.060	0.065	0.000	0.125	19/20 - Q4
	LPT Internal Capital	Single EPR System	0.567	0.932	0.661	2.160	20/21 - Q1
	ETTF	LLR SystmOne Configuration Blueprint	0.076	0.076	0.077	0.228	20/21 - Q2
	HSLI	Care Homes - General Rollout	0.000	0.000	0.875	0.875	20/21 - Q4
	TBC	Allocate Nurses or PAMs to conduct follow ups in community	0.000	0.000	0.000	0.000	TBC
	TBC	Meds Mgt Shared Care Agreements	0.000	0.000	0.000	0.000	TBC
Leicestershire Partnership Trust Total			**2.190**	**2.012**	**2.471**	**6.673**	
East Midlands Ambulance Service (EMAS)	**EMAS Internal Capital**	EMAS BI Data Infrastructure	0.000	0.000	0.000	0.000	TBC
	EMAS Internal Capital	EMAS Skype Implementation - Video Consultations	0.000	0.000	0.000	0.000	19/20 - Q3
	HSLI	EMAS Electronic Transfers of Care to LLR (GP)	0.000	0.100	0.100	0.200	19/20 - Q3
	HSLI	EMAS Record Sharing	0.040	0.075	0.125	0.240	19/20 - Q3
	HSLI	EMAS Transfer of Care (GP and UHL Structured based on standards)	0.025	0.015	0.250	0.290	20/21 - Q3
	TBC	EMAS SCR Mobile Rollout for Paramedics	0.000	0.000	0.250	0.250	20/21 - Q3
East Midlands Ambulance Service Total	**TBC**		**0.065**	**0.190**	**0.725**	**0.980**	
Leicestershire County Council	**TBC**	LLR BI Project	0.050	0.225	0.050	0.325	19/20 - Q3
	TBC	LLR Care Provider Portal	0.025	0.003	0.003	0.031	19/20 - Q1
Leicestershire County Council Total			**0.075**	**0.228**	**0.053**	**0.356**	
LLR Clinical Commissioning Groups (CCG's)	**CCG BAU**	Primary Care E-Consultations	0.650	0.650	0.000	1.300	19/20 - Q4
	ETTF	Flagging, Notifications and SPNs	0.000	0.000	0.000	0.000	18/19 - Q3
	ETTF	GP-IT new requirement - Mobile working	0.157	0.020	0.020	0.197	18/19 - Q4
	ETTF	NHS Now App	0.115	0.010	0.010	0.135	19/20 - Q1
	TBC	DQ work for Patient Access to GP Records (2 locums)	0.075	0.250	0.250	0.575	19/20 - Q3
	TBC	GP Clinical System Migrations	0.468	0.468	0.468	1.404	20/21 - Q4
	TBC	Anticoagulation and ICE Letters Module	0.000	0.000	0.000	0.000	TBC
LLR Clinical Commissioning Groups Total			**1.465**	**1.398**	**0.748**	**3.611**	
LLR Local Authorities	**Social Care Internal**	Social Care Record Sharing Infrastructure	0.009	0.000	0.000	0.009	18/19 - Q4
	TBC	Electronic GP referrals to social care	0.000	0.000	0.000	0.000	18/19 - Q4
	TBC	Social Care Brokerage Solution	0.000	0.000	0.000	0.000	19/20 - Q4
	TBC	Electronic MARF developments	0.000	0.000	0.000	0.000	TBC
	TBC	Electronic referrals from Health to social care	0.000	0.000	0.000	0.000	TBC
	TBC	Single Laptop for Social Care - Multi EPR instance hardware	0.000	0.000	0.000	0.000	TBC
	TBC	Social Care to Health Interop - S1 to LL API Development	0.000	0.650	0.000	0.650	TBC
	TBC	Trusted Assessment	0.090	0.060	0.061	0.211	TBC
LLR Local Authorities Total			**0.099**	**0.710**	**0.061**	**0.870**	
Rutland County Council	**DSCD**	Care Homes Record Sharing Pilot	0.180	0.000	0.000	0.180	18/19 - Q4
Rutland County Council Total	**DSCD**		**0.180**	**0.000**	**0.000**	**0.180**	
TBC	**HSLI**	ILT EPR inc rostering and scheduling capability	0.000	0.000	0.520	0.520	20/21 - Q2
	TBC	Community Diagnostics Hubs	0.000	0.000	0.000	0.000	TBC
	TBC	LLR Cyber Security Programme	0.000	0.000	0.000	0.000	TBC
	TBC	LLR Single Identity Management Solution	0.000	0.000	0.000	0.000	TBC
TBC Total			**0.000**	**0.000**	**0.520**	**0.520**	
Grand Total Annual 3 Year Planned Investment in LLR			**8.673**	**11.155**	**7.140**	**26.967**	