Stockport Together Informatics Strategy

2015 -2020

Connect, Integrate, Empower and Understand

Produced by the Stockport Together Partnership

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An introduction to Stockport Together

The health and social care organisations in Stockport see the next five years as a challenging, but pivotal period. There is a strong desire to transform the way in which health and social care is delivered and to generate improved outcomes. The local partnership, Vanguard status and Greater Manchester Devolution provide an opportunity to tackle the challenges, develop innovative approaches and transform services to create a sustainable and vibrant health and social care economy.

The key provider and commissioner organisations that form the health and social care economy of Stockport have been working together in partnership. These partner organisations are Pennine Care Foundation Trust, Stockport CCG, Stockport Metropolitan Borough Council and Stockport NHS Foundation Trust. The GP Federation Viaduct is also an important partner in this work.

The collective vision is to provide a truly joined up, high quality, sustainable, modern and accessible health and care system. This reform is described under the brand name of 'Stockport Together'. The expected outcomes from the Stockport Together partnership are: Healthier People, Quality Services and a Sustainable System. There are a number of key challenges that the partners collectively face and in particular; system financial sustainability, the high inequality gap across the borough, the ageing population and a system that is over-reliant on the urgent care system.

Underpinning the Stockport Together work is agreed joint governance, which oversees four programmes of work. These programmes are as follows:

- Prevention and Empowerment - to prevent ill-health and empower residents to take control of their health

- Proactive Care – strengthening community capacity and improving health literacy, service quality, and outcomes of care for people such that fewer people will require hospital admission and consequently reduce demand

- Planned Care - improving the patient experience and outcomes across the planned care system whilst increasing efficiency and value for money

- Urgent Care – improving the quality, timeliness and clinical cost effectiveness of the urgent care system such that people avoid hospitalisation and/or return "home" more safely and more quickly

Stockport Together has been selected as an NHS Vanguard for the MCP (Multi-specialty Community Provider) model within the 'Five Year Forward View Strategy'. The MCP model is at the heart of the Stockport Together transformation. The MCP will undertake a number of key functions at a neighbourhood level, including:

- prevention and early detection of disease
- optimisation and complex management of people with long term conditions, promoting self-management and a team plan to pro-actively manage people's needs in the community

- crisis response, the management of exacerbations and supporting people to return home from hospital
- planned care, reducing outpatient appointments in a traditional hospital setting and ensuring that there are clearly defined self-care, primary care and GP/Consultant interfaces
- utilising the community as an asset, creating a health system that is for people, by people and with people of Stockport

Regional drivers

GM Devolution & Healthier Together

Greater Manchester (GM) is leading on public sector reform which has been reflected in the move by government in 2015 to devolve budgets and decision making under the *Greater Manchester Agreement* for devolution. Part of the agreement invites the GM Combined Authority (GMCA), GM Clinical Commissioning Groups and Acute (hospital) trusts to develop a plan for the integration of health and social care across GM.

The *Healthier Together* programme aims to reform primary care, go further in integrating health and social care services and reform hospital care by joining hospital teams across GM, moving to a model of specialist and local general hospitals system.

Local drivers

Stockport Together forms part of Stockport's locality plan. Each GM locality has a plan derived from national and regional strategy. Local priorities reflect differences in population and provider profile.

Health inequalities exist within and across all localities. Technology maturity differs across localities in all sectors of care.

National drivers

5 Year Forward View & '2020 Vision'

The NHS 5 Year Forward View sets out a national direction to *radically upgrade prevention and public health*, give people greater control over their own care and remove the barriers in the provision of care across providers. Technology enablers are set out including online services for family doctors, interoperable electronic health records, better data and intelligence and accredited apps for the population.

The framework for *Personalised Health & Care 2020* builds on these themes. It proposes requirements for joined up, digital real-time records across health care, standards around data, apps & devices, intelligence and patient / public access to view and add to records across all care settings.


Health & Social Care Informatics links information technology, communications and health & care to improve the quality and safety of care for our population. At its simplest it is about getting the *right information to the right person at the right time*.

Principles

A number of overarching technology principles have been established as part of the Stockport Together Informatics Programme. These principles are aligned with the Greater Manchester Devolution Programme and have been agreed by local and regional leadership.

1. Connect: Connected Infrastructure

Modern and connected infrastructure enabling practitioners and linking services and patients across health and care.
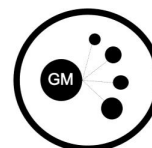
2. Integrate: Integrated Digital Care Records

Providing integrated records that have the ability to be interlinked across Stockport and beyond. Establishing a consent and information sharing model and robust data standards, security and quality.
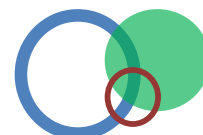
3. Empower: A consistent, multi-channel user and patient experience

A common, digital front door to our services, complementing traditional interactions. Enabling increased public and patient control and empowerment, moving away from a paternalistic culture of care.

4. Understand: New insights using health & care intelligence

Using data in new ways to lead to earlier intervention and enabling improved outcomes and wellbeing for people and the population
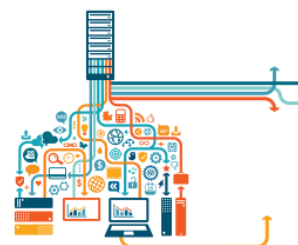
Initiatives - Connect

Vision: Providing the infrastructure to enable 21st century models of care is a cornerstone to achieving the transformation necessary across Stockport and Greater Manchester. We will move away from silo computer networks and systems and enable people and information to flow more dynamically across the locality.
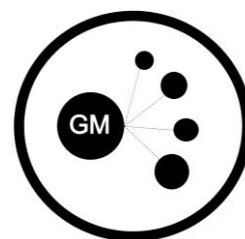
Network Infrastructure

A joined up network infrastructure gives us the foundations to work as **one** across Stockport.

In 2015 Stockport MBC and Mastercall Health joined the Greater Manchester computer network or CoIN (Community of Interest Network). They join all of Stockport's GP Practices, Community Services and the Foundation Trust. This builds on many years of work in the locality to standardise infrastructure.

This network can enable everyone connected to it to access a set of shared, common and secure systems such as clinical/case systems, logon, file storage, intranets and communications technology such as telephony and email. It is also a key enabler for delivering new data flows as part of a continuum of care.

Wi-Fi

We will implement Wi-Fi across all GPs and Community sites in Stockport in 2015/16 and by April 2016 we will establish a trusted Wi-Fi across NHS & local Authority in Stockport.

This will allow staff and practitioners with mobile devices to work seamlessly across the borough and will deliver efficiencies and savings across the borough as part of estates planning.

As part of the rollout a 'Guest' Wi-Fi will be enabled for our users and patients to access the internet whilst at a health & care location, to take advantage of digital services.

Communications

Unified communications systems integrate traditional systems such as telephony and email alongside technology such as instant messaging/chat, video conferencing and presence (allowing colleagues to view your availability at any given time).

Traditional methods of communication will not meet the requirements of our newly proposed models of care. Practitioners will need to communicate across the old organisational boundaries and access specialist and multi-disciplinary colleagues in new and virtual ways.

Stockport Community Services and 35 GP practices share a single telephone system running across the CoIN. In 2016 we will future proof and expand this system across planned and urgent care teams at Stockport Foundation Trust. This new system will offer a single phone directory, call centre type technology, call recording, instant messaging, smart phone integration and video calling where required.

We will explore linking wider health and social care teams to the central telephone system as well as using the system to trial tele-care video calling within multi-disciplinary teams and between practitioners and care homes.

In 16/17 we will federate NHS Mail with our local email systems in the local authority and hospital giving us a **secure email** system across all services. We will add care homes to the national NHS Mail service and remove fax data flows.

Our communications aims are:

- All parts of the integrated system of care will join or federate with the NHS.net email system to enable secure communications across Stockport and its borders.

- We will join up telephony across local providers of health and social care.

- We will employ a common video conference solution across Stockport to enable MDTs and services to collaborate with each other and the public more easily

Authenticate, Print and Shared Resources

The vision is to offer seamless access to information and system resources regardless of location. In order to achieve the vision we will need to further build on the linked networks and link our computing domains, consolidating wherever possible into what's known as a 'Shared Resource Domain' (see below right).

This will allow practitioners and staff as part of the new MCP to deliver services seamlessly across the Stockport estate. Planned Care services will be enabled to operate out of community buildings, MDTs will be able to base themselves in the most appropriate place.

Enterprise Collaboration

Enterprise Collaboration tools allow teams and people to work together in a more joined up way combining email, chat, files and workflow. Stockport Together project teams have explored the use of tools such as Yammer and Huddle since 2014. We will explore the opportunities of a Stockport wide MCP Collaboration tool to streamline processes and improve communications.

Mobile & agile workforce

The ability for practitioners to work remotely is critical in enabling new models of care in Stockport.

A mobile enabled practitioner would connect to clinical/case records and information systems regardless of physical location, on a mobile device that is secure, simple to access, has a user interface that complements workflow and is discreet. This would ensure data entry at the point of care to improve accuracy and efficiency as well as being non-intrusive with regards to the person-practitioner interaction and dialogue.

Mobile solutions should offer the ability to work in an 'offline' mode when not connected to Wi-Fi or network connection. Where relevant and possible, connections will be made available through mobile 4G networks.

We will introduce mobile devices across Proactive Care Services to create efficiencies around patient/person contacts and increase convenience for people with care being increasingly delivered at home.
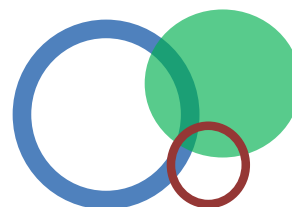

Key enabling technology - Connect

- Single network (CoIN)
- Shared Active Directory
- Single telephony
- Unified communications
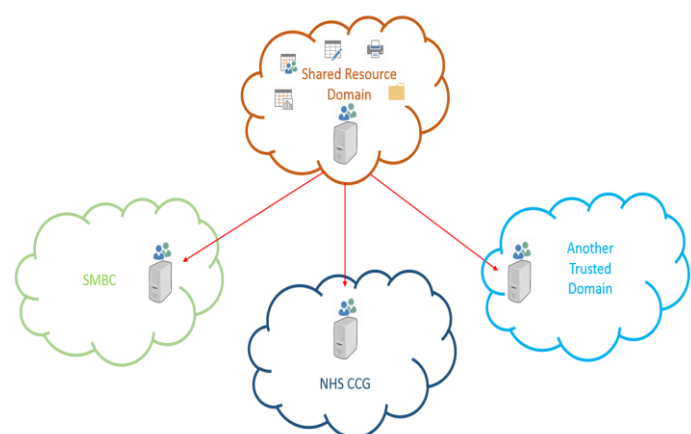
Initiatives – Integrate

Vision: Providing integrated records and intelligent systems that have the ability to be interlinked across Stockport and its borders. Enabling streamlined pathways, reduced duplication and increased efficiency leading to improved care. Developing a consent and information sharing model and robust data standards, security and quality.

Overview

There are a number of electronic clinical and case management systems in place across Stockport. There are also various flows of paper, fax and the use of telephones to deliver the information relevant for care provision.

In order to fully realise a joined up approach to care provision, clinical, case and information systems need to be consolidated and integrated to enable key person/patient data to be available at the point of care.

Consolidation

We will consolidate our electronic Care systems to improve standardisation, create efficiency and increase digitisation whilst retaining the specialism we need in different areas of the care economy. The below illustrates the roadmap to consolidated systems that we are already on:
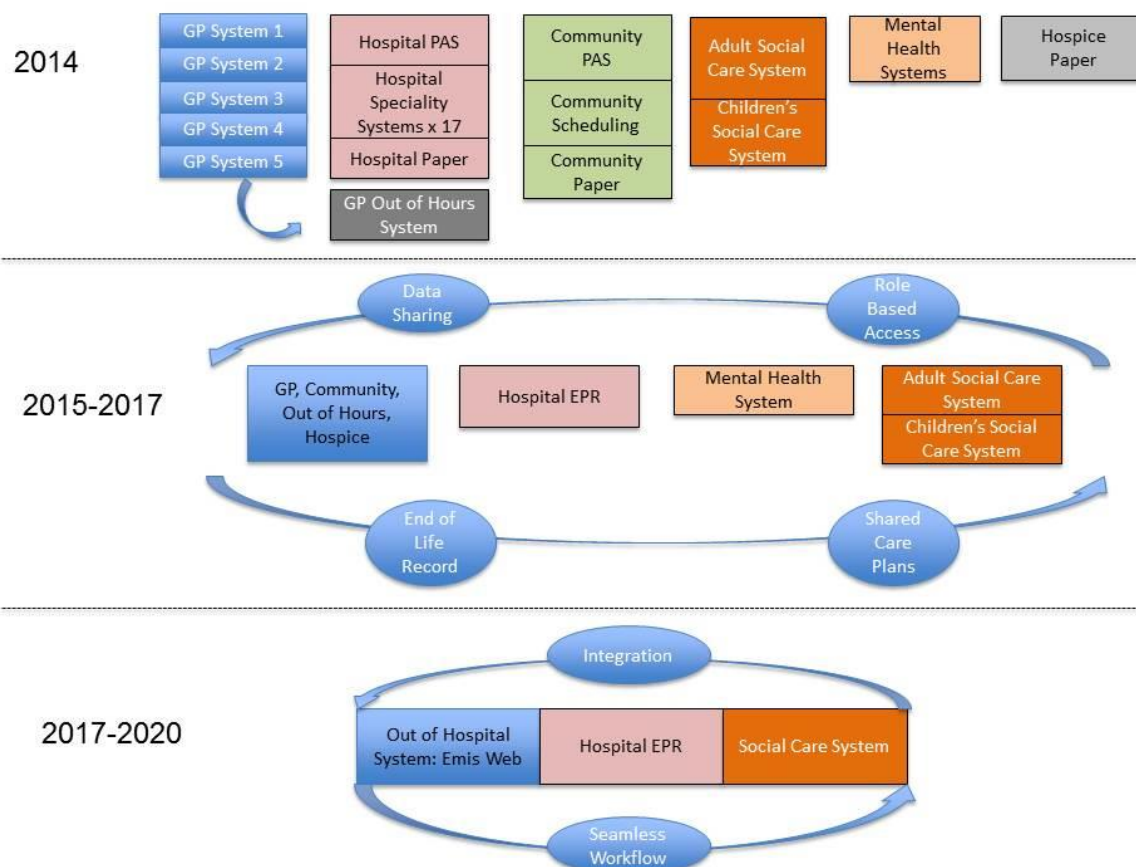
By consolidating our systems we can implement intelligent workflow and automation between our services. For instance within Proactive Care, Community Nurses, Mastercall and GPs will be able to access detailed records, assign tasks, access appointment books and standardise workflow protocols and templates.

Within the hospital a single Electronic Patient Record (EPR) will increase efficiency and standardise processes throughout departments and wards. In Social Care through the Digital by Design programme, Care systems will be more tightly integrated to improve workflow between adults and children's services.

An integration layer will knit the three specialist systems together using Open Standards to automate workflow across the whole system. These Open Standards will also allow us to integrate across our borders and link in with Healthier Together and Devolution initiatives.

Integration

As well as consolidating our systems we must also integrate them. Integration will provide the holistic view of records and information across all settings and it will enable us to automate processes. It will also enable parts of Empower, enabling the person to access the holistic view of their Care.

Building on the success of the Stockport Health Record between 2009 and 2013 (sharing of GP records to hospital teams and GP Out of Hours) we have continued to build the platform into the Stockport Health & Care Record or SHCR.

Using the NHS number

It is a key requirement and a national mandate that we integrate systems using the NHS number as the unique identifier. We will continue to configure all systems to use the NHS number and use this as the main identifier when integrating records.

Decision aids

Decision aids within clinical and case systems are designed to improve consistency and standards in care. Alerts and automation can be developed within the integrated SHCR. There is also the opportunity to procure 3rd party products to embed into our clinical and care systems. Across the out of hospital Emis health system standardised clinical 'protocols' will be developed with clinical leads. These protocols can then be published across the Stockport economy to standardise care. Similar protocols can be developed in our wider systems of in-Hospital and Social Care.

Holistic view of Care

From 2015 the SHCR brings together GP, Community, Acute and Social Care records, accessible through a Role Based Access approach with patient/person consent. The SHCR also has a Care Plan uploader allowing GP or MDT generated Care Plans to be shared. Stockport has also developed an Electronic Palliative Care module (EPAC), which is being further rolled out across Stockport MDTs. The Stockport EPAC is an early development success story, which has since been released nationally to other economies.

From 2016 we will work with our supplier Graphnet to incorporate new functionality into the SHCR, including a tablet and mobile friendly view, offline working and advanced care plan functionality. We will also explore the opportunities of integrating with Manchester and Cheshire to enable record feeds from Acute Hospitals beyond the Stockport border. The new interface and view has been endorsed by the SHCR Practitioner Reference Group.

A detailed GP record view

Stockport Together's locality working model means that GPs will work with different cohorts of people than they have done previously. In order for GPs to provide informed and safe Care to people across a locality and outside of their traditional 'list' they have told us that they require a detailed view of the GP record, including consultation notes. We will work with our supplier Emis to utilise the forthcoming Remote Consultation functionality within Emis Web in 2016 to allow GPs to work as **one** across any required footprint.

In addition to GPs other parts of the system will require a more in depth view of the GP record than what the SHCR can provide. Mastercall have implemented the Emis Web viewer to enable out of hours GPs and clinicians to view a full GP record, leading to

safer, more efficient Care and an expected reduction in referrals to hospital.

South Manchester Hospital are also implementing Emis Web viewer into a number of emergency and critical care settings and we will work with them to provide a view of Stockport records early in 2016. We will similarly explore with clinical colleagues whether departments within Stockport FT would benefit from a detailed GP record view alongside the coded summary provided in the SHCR.

The consolidation of out of hospital health systems onto Emis Web in 2016 will offer further opportunities to share detailed information across, as Stockport Community Services and St Ann's Hospice implement the system with Stockport Vanguard support.

A simple guide to electronic records in Stockport
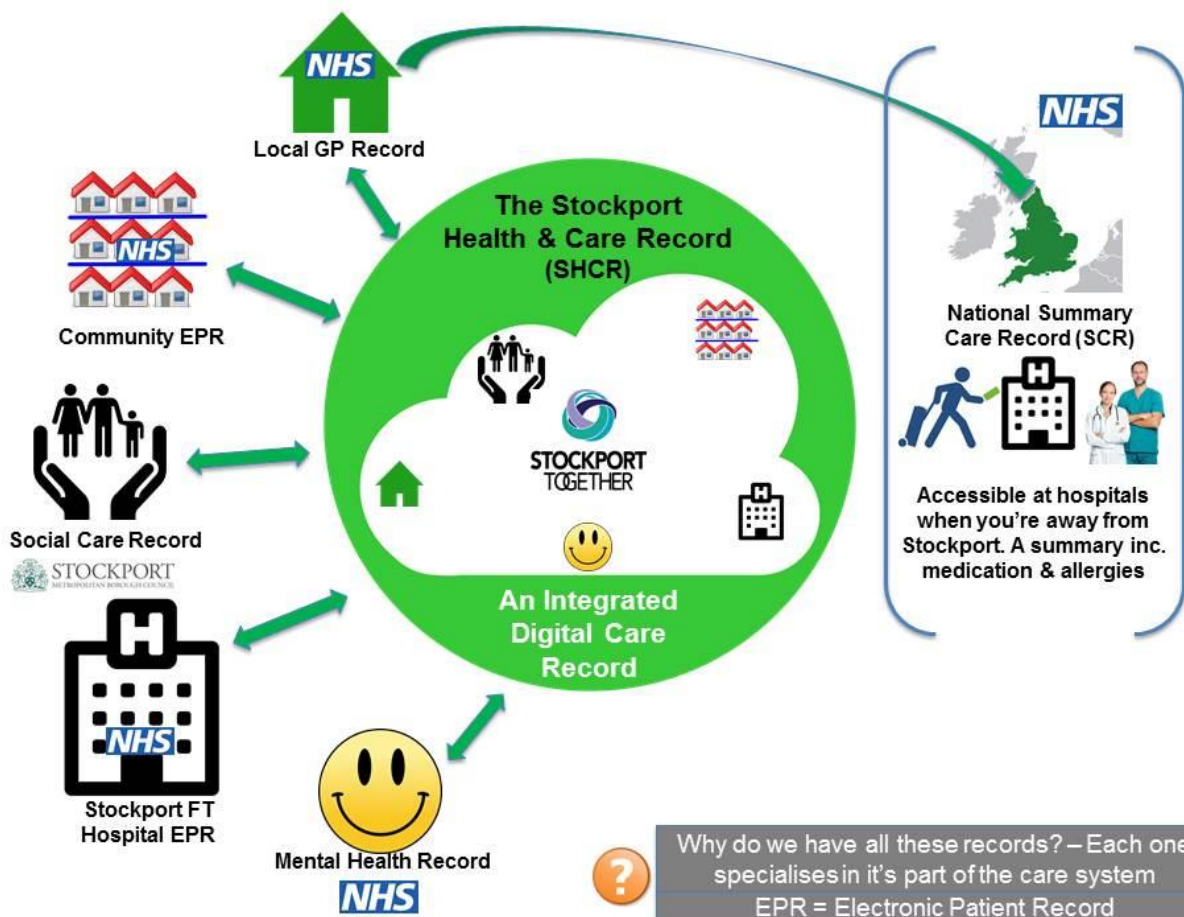
Care Plans

A Care Plan sets out how a person's care needs will be met. Care Plans will usually be put in place where a patient has a long term condition or requirement for a prolonged period of treatment/care including palliative (end of life) care. Care plans should be jointly created with care providers, usually working in multi-disciplinary teams, as well as with the person or carer receiving services.

Giving secure, electronic, read-write access to these plans for all relevant care providers is essential to provide continuity of care and improve safety and quality. People receiving care and their carers should also be given electronic access to the Care Plan to ensure that they have the most up to date and relevant information about their care. This is also important for when people receive care in settings outside of Stockport, for instance a specialist centre or emergency setting outside of Greater Manchester, the person will carry with them up to date information to pass on to the relevant practitioners.

A dynamic, Digital Care Plan is a key requirement of the new integrated service. Emis have a Care Plan module in development, Graphnet have already developed a Care Plan now in use across our border in Manchester. We will incorporate the Graphnet Care Plan functionality to provide a dynamic Care Plan across the Stockport system of Care during 2016. When Emis' development is complete we will work with our suppliers to provide interoperability and automation between the two Care Plan modules.

Community bed management

Alongside our services we will investigate the requirements around management of the 150 community beds. Working closely with suppliers, we will investigate similar technology to in-hospital bed management and look to transfer an out of hospital setting.

Summary Care Records

Summary Care Record (SCR) is a national system that allows a summary data set about a patient to be available in unplanned or emergency care settings across enabled sites in England. The system benefits settings where the SHCR is not in place or when a person is a temporary resident or on holiday.

We will continue to stream to the SCR from Stockport GP systems and we will incorporate the SCR into the Hospital. Hospital usage began in 2015 with access for Pharmacists. This will ensure that patients from outside the borough who attend Stockport FT will be able to share key details such as medications and allergies with clinicians, ensuring safer care.

Continuum of Care

To support a new approach for a continuum of care we will introduce a messaging tool to enable a bi-directional flow of documents, alerts, messages and referrals.

Currently we use the GM wide Docman system to transfer discharge summaries from 10 GM Acute Hospitals to GPs. We will extend this system to enable two way messaging flow between the hospital and out of hospital services including Social Care in Stockport.

In the longer term we aim to configure our systems to be directly interoperable using Open Standards, lessening the requirement on proprietary products.

Workforce Scheduling

In line with requirements from the Proactive Care work stream we will work with services to specify and procure a system to schedule the workforce in order to organise and plan workload across the newly integrated teams.
A workforce scheduling system would take account of data such as role, skills, locality, leave (absence) and intelligently automate workforce planning. Experience from Stockport FT Community's proof of concept 'DOMINIC' system will be useful in developing the solution.

Protecting People's Data

Robust controls around consent, access, Information Governance and data sharing are critical cornerstones that will enable increased information exchange to support improved pathways of care.

Data Sharing & Information Governance (IG)

In 2014 the Stockport Together partner organisations agreed to a set of standards and principles around sharing data. During 2015 Stockport have built on this agreement and developed an overarching information sharing protocol.

The document was developed together with our IG, Caldicott and LMC leads and is going through a process of BMA approval. This document covers all of the standards and principles that Stockport Care providers must adhere to when sharing data as part of Stockport Together.

Gaining consent

When accessing records we will use an explicit consent model, where the person approves access for a practitioner to access their integrated record. A robust consent model is implemented with all record sharing systems in Stockport.

As the MCP develops and the service operates as a single provider, the issues around consent will likely become less complex. We will link our IG and Caldicott leads with national experts and GM leads to develop a new model of consent.

Relevant access to records

Clinicians and Practitioners should only be able to view the parts of an integrated record that are relevant to their role in the Care pathway. We are developing alongside our Practitioner Reference Group a Role Based Access model that specifies which data each role should be able to access. This is linked with NHS smart card access where smart cards are used for authentication.

Greater Manchester sharing

As part of the GM Devolution, a region wide data sharing framework is being developed. This is in its early stages but our longer term aim is to align Stockport with GM wide frameworks around data sharing where applicable. GM is engaging the Information Commissioners Office as part of the work and single approaches in this area will save time and cost, reducing duplication and also reducing any confusion for the public.

Opting Out of sharing

People can opt out of having their records shared through the Integrated Health & Care Record. Our systems allow people to opt out at their GP practice, the practice will enter a code against the record to prevent any wider sharing within Health & Social Care. Of course people can also opt not to share their record when asked at the point of Care.

It is important to provide the public with as much information and education as possible to ensure they understand both the risks of opting out, from a safety perspective as well as the safeguards around sharing.

Communicating around sharing

We will communicate to the public in line with an agreed Informatics communications plan, working in conjunction with the Communications project team. We are currently distributing information through various media channels such as radio, social media, web, The Civic Review, leaflets at the point of Care, posters and notices. We are also in contact with the Information Commissioners Office and have engaged them around our communications campaign for Informatics in Stockport.

Key enabling technology - Integrate

- Consolidated Care Record Systems
- Integrated Record & Care Plan
- Bi-directional messaging - Continuum

Initiatives - Empower

Vision: A common, digital front door to our services, complementing traditional interactions, thus enabling increased public and patient control and empowerment, moving away from the paternalistic culture of care.

Overview

Historically the public has accessed local health and care services by either telephone or in person. Communication back to patients and people in health and care is generally via letter, phone and face-to-face.

Increasingly people are utilising digital technology to consume products and access information. Some of the best examples of digital services are in the retail, travel and banking industries. The public's expectation around accessing services is changing and our children are growing up surrounded by high technology.

The latest research suggests that 86% of males and 83% of females access the internet, with the highest frequencies (up to 100%) in young and affluent groups. Smartphone and tablet ownership is on the increase at the expense of traditional laptop and personal computers. Smartphone ownership has risen to 61% and there has been a threefold increase in UK tablet ownership over the past 2 years.

It is vital that Stockport Together embraces the digital shift amongst our population and also bridges the 'digital divide' for those with less access to technology. We will bring together the various Digital projects across Stockport and build upon progress already made.

Patient online

All Stockport GPs now offer patients online facilities for appointment booking, repeat medication ordering and access to their summary GP held records. From April 2016 GPs will offer patient access to detailed records comprising of coded data such as test results.

SMBC – Digital by Design

Stockport Council's Digital by Design Programme aims to transform Council services to the public, increasingly offering Digital ways to interact and also building Digital skills amongst the population. A new single portal will bring together various Digital services.

The Council aims to use data about its customers in new, exciting ways. Budget reductions that will impact on Social Care over the next two years will be countered by an increased investment in Digital encompassing areas such as mobile working, self care portal, improved analytics and an assisted Digital offer for users of services.

Personal Health & Care Records

An electronic Personal Health and Care Record is a repository of health and wellness information held by, and relevant to, an individual. They can improve health and preventative care through increased patient/person education and engagement in their own care, transforming people into activated contributors to their Care.

We aim to integrate the public digital experience so that the people (and their carers) with the most complex needs have a simple and easy way to manage their care needs online as much as possible. This means that Integrated Digital Care Records are accessible and integrated with ordering, booking and tracking facilities. Our integrated public portals should be intelligent and be able to tailor content and information similar to the 'Amazon' experience, giving the person data and information allowing them to take increased control of their own care.

Online & 'App' information

Providing the public with up to date and accurate information about local services is imperative in the information age we now live in. Our population is becoming accustomed to 'multi-channel' customer experiences where they can find information on mobile apps, websites, social media, through a range of mobile and home based devices such as tablets, smart enabled TVs and games consoles.

Across Stockport we will bring together the Digital by Design and Stockport Together Empower projects to coordinate a multi-channel, 'one stop' information experience for the public.

> **30,000 people have already signed up to patient online in Stockport**

Tele Care – Remote Interactions

Proof of Concept :
Stockport Health & Care Finder App

The Stockport Together partnership has released a smart phone and tablet app that offers the public a local directory of services as well as self-care advice and information around care pathways. Users can sort by geography easily, to give them the nearest local services. Users can also take the friends and family test for GPs through the app. Although public facing, the app has also proved popular with services themselves who can now carry a one-stop shop directory in their pocket.

The use of technology to remotely manage and interact with patients and people will be key to long term transformation of services.

Through the integrated Personal Health & Care Record we will enable remote monitoring of people at home linking them to the services they need. Working with different care pathways we will establish agile methods of introducing and proving the technology. The key success criteria will be the impact on quality of care and the affordability/return on investment. An app will be developed for a given care pathway, by the services and users involved, that will link seamlessly into the person held portal/record. This app will be integrated with the SHCR and teams will be able to intervene early to prevent further complications or a hospital admission.

Giving people the ability to communicate via Video will enable new virtual ways of working. Early trials of video GP consultations in Stockport have highlighted opportunities. We fitted cameras to all consulting PCs in one practice in 2015 and worked as an early adopter with one of our suppliers, Emis;

'We are, to minimise risk, testing [video] on non-urgent situations such as medication reviews, follow up appointments and asthma reviews (note the video connection quality was sufficient to see a powder from a poor inhaler technique)' – **Johan Taylor, Stockport Practice Manager**

The new telephone system will enable video calling from computers and laptops connected to the new single Stockport network. This would allow GP and Community services to link patients via video to consultants in hospital, or social workers to link people with lifestyles services or community teams. Services will also be able to initiate a video call with 3rd parties such as care homes and people & carers, by sending them a link to 'join' the call.

There are many possibilities and we need to work closely with services to develop new ways of working. The biggest challenge will be the shift in culture for both people and services. A starting point will be to replace some face to face interactions with a telephone call.

Technology to enable empowerment

The below diagram illustrates how the Personal Health & Care Record will be linked to the Stockport Health & Care Record to enable and empower citizens as well as service providers, increasing quality, safety, access and involvement in care.

Connected Services and People

Digital empowerment in practice

We will need to tailor our digital offer in line with the needs of the Stockport people. Someone who needs to access services as a one off case, who is otherwise healthy and in a stable social situation may not need a one stop shop health and social care portal but would require digital access to book an appointment and view any letters or advice as illustrated:
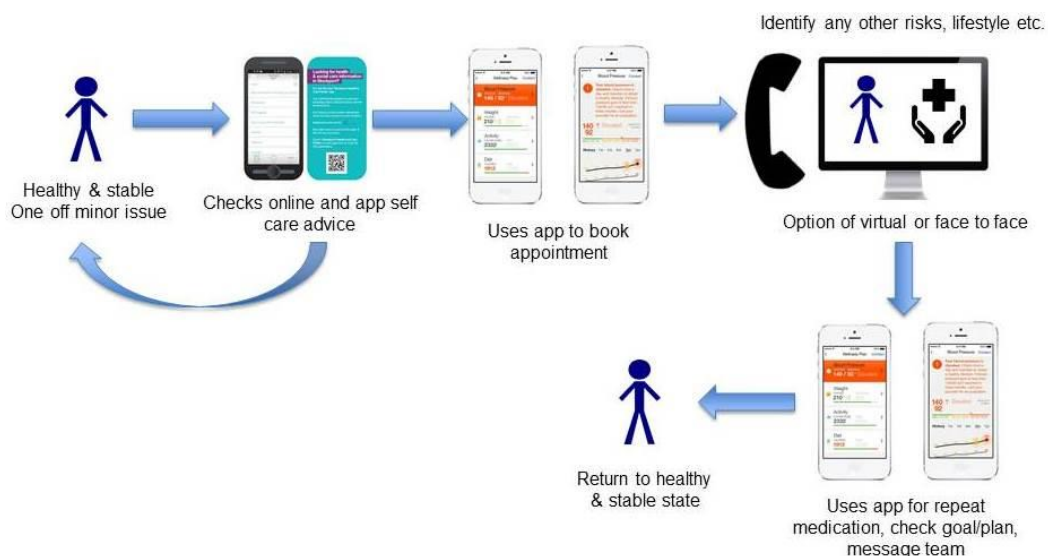
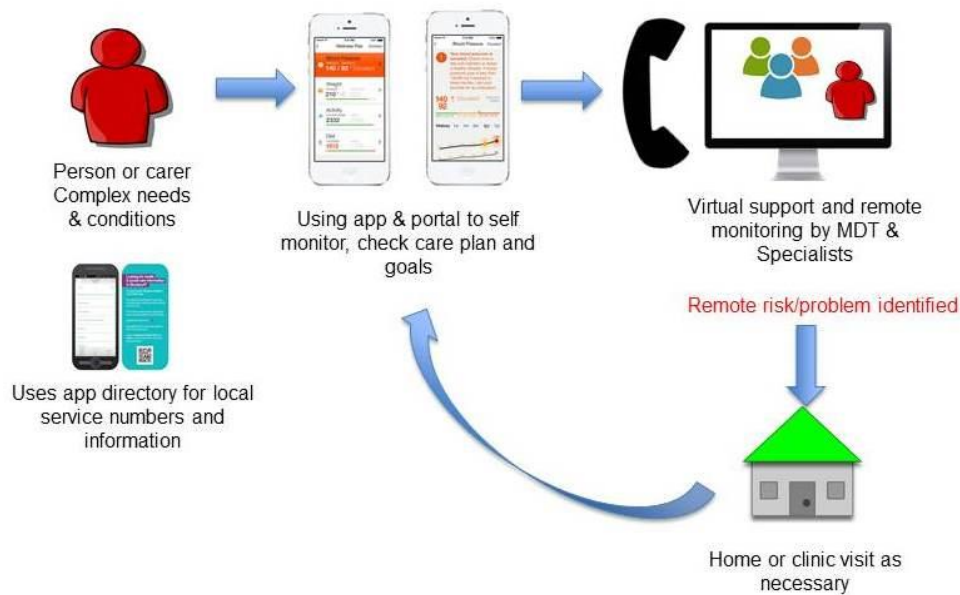For a person with more complex conditions and dependencies our empowering technology will be more proactive;

Person or carer
Complex needs
& conditions

Using app & portal to self
monitor, check care plan and
goals

Virtual support and remote
monitoring by MDT &
Specialists

Uses app directory for local
service numbers and
information

Remote risk/problem identified

Home or clinic visit as
necessary

Our Empower principles are;

- The public should be able to access services digitally by default

- Everyone in Stockport will be able to access mobile apps with local service information, guides to pathways and self-care/self-service functionality

- Subject to robust consent and screening standards, patients will be given full access to their GP records, including consultation notes and results to reduce practice demand and increase empowerment

- People will increasingly interact with services and self-monitor by using person held digital records linked to service held records

- We will strive to maximise usage of online and app technology amongst our collective population, working alongside prevention, proactive & planned care and comms and engagement work streams

Key enabling technology

- Patient online
- Combined online & app Digital offer
- Personal Health & Care Record
- Video

Initiatives – Understand

Vision: We will combine and use data in new ways to find people at risk leading to preventative, early action. We will use person and population data in innovative ways to lead to healthier outcomes and better lifestyles for the Stockport population.

Overview

The use of data and intelligence is key to the delivery of a sustainable, efficient and effective model of care for Stockport. Data is captured in various ways from different systems across health and social care services. Multiple teams provide a business intelligence function in each organisation. Data hasn't historically been combined to identify patterns or trends in order to make better decisions about the total care provision for our people. The data we collect is rich and complex and we need to utilise this resource to improve outcomes for people, whilst at the same time fiercely protect the data rights of those people and adhere to legislation and policy.

Risk profiling

Services that cover Proactive Care and Prevention require systems that flag people that are at risk of developing complex conditions and dependencies. Intelligent systems should analyse a number of complex criteria across health and social care. These systems will provide teams and practitioners with lists of cases and people to target in a proactive and preventative way. We will work with teams to specify detailed requirements and work with suppliers, using wherever possible the rich repositories of data that we already hold.

Emis Enterprise Search & Reports

Given the Emis Web coverage across the borough and the rich data held within GP records, one of our first steps will be to implement the 'Enterprise Search & Reports' tool from Emis. This will enable Prevention specialists to provide data to MDTs and practitioners in order for them to take preventative action for people and patients. Although social aspects are not captured in detail in this data set, use of the tool will act as an early proof of concept and can be implemented quickly. Prevention professionals will then begin to define more detailed requirements for future solutions.

Combining data across sectors

Tools are available to us that combine health data from Primary and Secondary Care. There are also suppliers who have successfully combined health and social care data. By combining data we can develop a '3D' insight to give us better understanding about conditions, problems, behaviours and care models. This insight will allow us to properly design a single model of care that meets the needs of the Stockport population.

Continuous Improvement

We can use data in new ways to improve services by intelligently capturing and combing data such as Patient Report Outcome Measures or 'PROMs' and Friends and Family testing. Linking such data with existing data from services will enable a culture of Continuous Service Improvement.

Understand : Our Vision - Potential and Possibilities

Industry - moving forward

Consumer technology and apps have blazed a trail in recent years around the use of person generated data.

The 'Foursquare' app tracks location data from smart devices and can accurately track and predict group and population behaviours using GPS and WiFi hotspots.

The 'Waze' app tracks smartphones to predict and monitor road traffic, alerting people to traffic jams and accidents in order for them to plan alternative routes and give them an accurate time of arrival.

Facebook is well known for the wealth of data it holds on people and its use of this data to target its users in many ways.

The 'Amazon experience' has led to new ways of tailoring services and goods to individuals using intelligent algorithms and usage history. Spotify and iTunes have applied similar technology to provide people with music they 'might like' and link them to others who have similar interests.

Finally the 'Uber' app has been a disruptive innovation in the world Taxi market, linking user location with willing and available drivers. These are only some examples of ground breaking 'big data' technologies in the app world.

Risks

We need to be mindful of the issues of 'big data' and absolutely protect the rights of the individuals we serve. We also need to be aware of the security risks after many recent, high profile cases of hacking and data breaches. Robust controls and assurances alongside open dialogue and collaborative planning with our public will mitigate these risks.

Opportunities for Health & Care

We need to harness new technology to gain new insights into the behaviours, conditions and outcomes of our population.

For instance with intelligent systems, we can help to navigate people around the care system similar to the way that 'Waze' navigates drivers around the motorway system, leading to both efficiencies in the care system and convenience for the user.

Through tracking Lifestyles data from wearable devices we can build a much richer insight into health & wellbeing if we link that data to the information we collect from presentations in health & care.

If we were to harness technology similar to the 'Uber' app we could link people with community champions or services that can help them, using locations and available resources. This could digitally enable a people powered health system and mobilise an increased workforce.

Key enabling technology

- Emis Search & Reports
- Combined Health & Social Care Intelligence Solution
- Big data technology
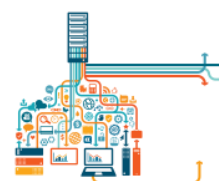
Collaborate

Vision: A single, inclusive governance and delivery model with commissioners, providers and receivers of care, leading to better outcomes through minimised duplication and increased pace & quality of innovation.

One of the most important enablers in making the change outlined in this document happen is a collaborative approach to governance and delivery. Without Stockport economy wide Informatics governance and delivery the risk of not delivering consistent, joined up and standardised projects is high. To ensure economies of scale and innovation we need to work as one wherever possible.

Current model

Each organisation has in place IT or Informatics boards and groups overseeing technology programmes and strategy. There is also a wider Greater Manchester governance framework covering informatics in each care sector - provider, primary care and local authority. More recently a work stream for GM devolution has been established. Initiatives, systems and procurements are almost entirely duplicated across Health & Social Care economies and organisations in Greater Manchester. The Primary Care IT Strategic Vision brought together commissioners, providers and local authorities in 2015, which has led to the development of the GM Devolution Digital Roadmap.

In Stockport we have been working in a collaborative way since November 2014 with the establishment of the Stockport Informatics Group. A number of initiatives have been launched through this partnership and various products for integrated working have been delivered over the past 2 years.

Proposed model

Our proposed model will lead to increasing authority and control for the Stockport Informatics Group and a pooling of IT resources to deliver the new capability, where necessary. During 2016 we will analyse the workforce requirements and form shadow pooled teams, in line with the requirements from Stockport Together.

Our current collaborative sub groups including Business Intelligence and Information Governance will increase their operational remit leading to increasingly pooled knowledge and teams. Systems and project teams working on clinical and case management solutions will increasingly work collaboratively to create synergy and ensure opportunities are seized upon. Finally the Stockport Together Empowerment resources will work hand in hand with SMBC's Digital by Design team to ensure a joined up Digital offer to the people of Stockport.

We will take advantage of our shared buying power to achieve economies of scale for high value IT products and services.
We will work with our GM colleagues to ensure that duplication is minimised and wider opportunities are not missed in procurement, resourcing and also in areas such as data sharing and business intelligence. We will align wherever possible with programmes emerging from the forthcoming Greater Manchester Digital Roadmap.

Making it happen

To enable the vision and change programme we have developed a roadmap (appendix 2) and investment plan (appendix 3). We also need to be mindful of the constraints that may impact our ability to deliver on our ambitious plan.

Investment plan

Investment will need to be made for collaborative technology to enable Stockport Together transformation. This strategy also outlines some of the on-going programmes that will need to continue to be internally funded by organisations. For the purpose of this strategy we will concentrate on the costs of the new, collaborative technology changes. We will need to understand both the initial investment required as well as the year on year revenue impact.

The detailed, initial investment plan can be found in appendix 2. This plan will need to evolve over time as the different change programmes develop priorities and new requirements emerge.

Funding could be sought in the form of capital and revenue from the Vanguard budget, Better Care Fund, national 'Tech Funds' and GM Devolution. We will work with the finance enabler to establish budget streams.

Resources – Through the work to date we've learned that project management resources need to be in place across each of our project areas and that a programme lead is needed to drive implementation of the strategy. Each project area involves a number of potentially complex products. As we increasingly pool our resources the need for additional resources would reduce.

Constraints

This strategy sets out an ambitious agenda for system wide Informatics change. There are a number of constraints and risks that will need to be managed in order to achieve success.

Business as usual – Our resources are already stretched managing continual change and business as usual support with increasing demand for IT.

GM agenda – GM Devolution will need to bring together elements of locality Informatics and will in turn provide funding. We need to be aligned and keep up to date with developments.

Major IT change – The Hospital EPR, Digital by Design programmes and Emis Web are major, multi-million pound change programmes in their own right. We need to align these programmes with Stockport Together but be aware of the scale and impact of the change and the challenge.

Workforce– We face challenges in adapting the Informatics workforce as well as changing cultures within services to adopt the new technology products. We must involve practitioners in the design and implementation process.

The Public – We must involve people in the design of portals and apps that transform their involvement in care. Champions, expert patients and citizen / patient groups will need to work with us to deliver on the vision. We will need to work with communications on marketing to drive a change in behaviours.

Data security & IG – Expert advice and transparent methods will be required to ensure adherence to legislation and an informed public.

Other areas of constraint that must be factored include Data Quality, national requirements, organisational form and supplier readiness.

Opportunities

The Informatics programme offers a number of opportunities for us as an economy, on top of those highlighted through the main projects. There are major opportunities for us around workforce, with a wealth of Informatics people within Primary, Community, Secondary and Social Care as well as Mental Health and the wider Local Authority. The opportunities of combining this rich set of knowledge and skills must be analysed early in our journey. Our IT infrastructure and the major IT contracts across Stockport are also a huge area of opportunity for achieving cost savings and efficiencies, whilst also unlocking better, combined capability.

Summary & Outcomes

- **We will** put people in control of how their records and data are used and accessed and put in place robust consent and data sharing safeguards

- **We will** enable seamless connectivity to systems at any trusted health and care location, including in the field where required.

- **We will** ensure that health and care records are available at the point of care locally across organisations and locality borders at specified services across GM, so that people don't have to repeat their story every time.

- **We will** deliver consistent and mature online and mobile app services to the public with the ability for people to transact with health and care services electronically and add data to personal records and share with professionals.

- **We will** develop business intelligence systems and new methods to support and improve pathways, planning and commissioning.

- **We will** minimise manual processes by delivering secure electronic data and messaging flows across health and care services to enable a continuum of care.

- **We will** establish modern, secure and collaborative systems to provide seamless communications between services and for interactions with people and patients.

- **We will** provide the necessary resources and development for our workforce and services to enable the change.

Appendix 1 - Governance

Economy wide programme – Governance

Integrated Care Board

Informatics Programme Group

Empower Project (TBC)

Business Intelligence Group

Connect Project

IG Data Sharing Group

Integrate Project

Practitioner Group

GM

healthwatch

General Practice

Pennine Care NHS Foundation Trust

STOCKPORT TOGETHER

huddle

NHS North West Ambulance Service

3rd Sector

STOCKPORT METROPOLITAN BOROUGH COUNCIL

Stockport NHS Foundation Trust

Appendix 2 - Roadmap

Stockport Together Informatics high level proposed roadmap 2016 - 2020

Appendix 3 – Initial Investment Plan

Indicative investment Plan - Stockport Together Informatics Programme

Pay	Project area	15/16	16/17	17/18	18/19	19/20	20/21	Total
Resources	Integrate	140,000	140,000	140,000	50,000	0	0	470,000
Resources	Connect	0	50,000	50,000	0	0	0	100,000
Resources	Empower	0	50,000	50,000	50,000	50,000	50,000	250,000
Resources	Understand	0	50,000	50,000	50,000	50,000	50,000	250,000
Sub total		140,000	290,000	290,000	150,000	100,000	100,000	1,070,000

Non pay	Project area	15/16	16/17	17/18	18/19	19/20	20/21	Total
SHCR with Care Plan, mobile and personal held record portal	Integrate & Empower	0	397720	372070	323320	313320	313320	1,719,750
Community EPR	Integrate	800,000	0	0	0	0	0	800,000
St Ann's Hospice Emis Web contribution	Integrate	20,000	0	0	0	0	0	20,000
Intermediate bed management	Integrate	0	25,000	30,000	5,000	5,000	5,000	70,000
Resource scheduling tool	Integrate	0	25,000	30,000	5,000	5,000	5,000	70,000
Messaging system	Integrate	0	100,000	40,000	40,000	40,000	40,000	260,000
Mobile working Proactive	Connect	0	150,000	100,000	0	0	0	250,000
GP & Community WiFi	Connect	90,000	8,000	8,000	8,000	8,000	8,000	130,000
Active Directory Integration	Connect	40,000	50,000	50,000	0	0	0	140,000
Email federation	Connect	0	0	0	0	0	0	0
Single telephony project implementation	Connect	50,000	180,000	0	0	0	0	230,000
Video and virtual working	Connect	0	100,000	30,000	0	0	0	130,000
Pooled back office analysis/project/consultancy	Collaborate	0	40,000	0	0	0	0	40,000
Personal Health & Care Record	Empower	0	100,000	35,000	35,000	35,000	35,000	240,000
Pathway app developments and sprints	Empower	0	10,000	30,000	50,000	10,000	10,000	110,000
Combined H&SC BI solution	Understand	50,000	150,000	150,000	150,000	150,000	150,000	800,000
Next generation BI scoping & development	Understand	0	0	10,000	30,000	100,000	100,000	240,000
Non pay subtotal		1,050,000	1,335,720	885,070	646,320	666,320	666,320	5,249,750
Total costs		1,190,000	1,625,720	1,175,070	796,320	766,320	766,320	6,319,750