

INFORMATION MANAGEMENT AND TECHNOLOGY

CHAPTER 2

EMBRACING INNOVATION TO DELIVER BETTER CARE, HEALTH AND WELLBEING



Document History

| | |
|--------------------|--|
| Title | INFORMATION MANAGEMENT AND TECHNOLOGY CHAPTER 2 – EMBRACING INNOVATION TO DELIVER BETTER CARE, HEALTH AND WELL BEING |
| Lead | Chris Russ (Russ Consulting Ltd) 07718658921 Chris.Russ@Russconsulting.co.uk www.russconsulting.co.uk |
| Version | <u>Final 1.2</u> |
| Date | November 2015 |
| Refresh Due | June 2017 |

CONTENTS

| | |
|---|----|
| Looking back over the last year | 4 |
| What's changed in the last year? - A Doctors perspective | 5 |
| How we have performed over the last 12 months | 6 |
| WHAT HAVE WE DONE TO IMPROVE THE USE OF IM&T ACROSS ALL MEMBER PRACTICES? | 7 |
| WHAT HAVE WE DONE TO IMPROVE THE SHARING OF PATIENT RECORDS? | 8 |
| HOW HAVE WE IMPROVED USE OF TECHNOLOGY TO SUPPORT PATIENTS WITH LONG TERM CONDITIONS? | 10 |
| HOW HAVE WE IMPROVED THE USE OF BUSINESS INTELLIGENCE TO SUPPORT COMMISISONING DECISIONS? | 11 |
| HOW ARE WE IMPROVING COMMUNICATION AND COLLABORATION USING INFORMATION TECHNOLOGY? | 12 |
| HOW HAVE WE BEEN EMBRACING INNOVATION TO DELIVER COST EFFECTIVE IM&T SERVICES? .. | 12 |
| Our Vision for IM&T and its role in transformation, capacity & demand management and care improvement. | 14 |
| Patient or Consumer? | 15 |
| Online video consultations | 16 |
| Wearable Devices and bio-sensing technologies..... | 16 |
| What we aim to do over the next 12 to 18 months | 18 |
| Shared Care Records | 21 |
| Stage 1 Delivering Shared Care Records across primary and community care. | 21 |
| Stage 2 Joining Primary, Community, Hospital, Mental Health, Social Care and other provider systems. | 22 |
| Shared Care Records – Summary Milestone Plan..... | 23 |
| Digital Health FLO (Florence) and other TECS (Technology Enabled Care Services) Technologies 24 | |
| Florence and TECS – Summary Milestone Plan | 27 |
| Electronic Referral Management | 28 |
| Referral Management – Summary Milestone Plan..... | 29 |
| Capacity and Demand Management | 30 |
| FLO and TECS | 31 |
| FLO and TECS – Summary Milestone Plan | 31 |
| Rally Round | 31 |
| Rally Round – Summary Milestone Plan | 32 |
| Social Media | 32 |
| Social Media – Summary Milestone Plan..... | 33 |

| | |
|---|-----------|
| Aligning Intelligence to manage care, capacity and demand | 33 |
| Care Co-ordination System – Summary Milestone Plan | 34 |
| Referral Management – Summary Milestone Plan..... | 35 |
| Exploiting what is already enabled | 35 |
| Technology and Vision Mapping..... | 36 |
| GP Information Technology | 37 |
| GP IT – Summary Milestone Plan..... | 37 |
| Digital Inclusion | 38 |
| Digital Inclusion – Summary Milestone Plan..... | 39 |
| Technology to support programme delivery..... | 40 |
| Programme Management Tool – Summary Milestone Plan..... | 40 |
| Glossary of terms | 41 |

Looking back over the last year

Information Management and Technology is one of key enablers which will help us transform how we deliver health care services. In 2014, we set ourselves an ambitious programme of work, core elements of which have been delivered as planned, and these have included:

- ✓ A national summary care record for all of our citizens who wanted one.
- ✓ The capability for our patients if they so wish, to book and cancel appointments on line, order repeat prescriptions and view their own summary record held by their GP
- ✓ Standardised on a single GP Clinical system making our plans for connecting systems across health and care setting easier to achieve.
- ✓ Improved IM&T infrastructure in our practices
- ✓ Created the capability for GPs to access their clinical records on tablets when working away from their own medical practice
- ✓ Reduced our operating costs by 0.3 Million through:
 - Improving through the use of technology our referral management processes
 - Implementing a CCG single device policy
 - Renegotiating some IM&T service costs.
- ✓ Engaged with partners to align plans for enhanced use of IT for improving health and wellbeing.
- ✓ An agreement with the Southport and Ormskirk Integrated Care Organisation which is our main provider, to implement EMIS Community, the first phase of which has now been implemented.
- ✓ Approved a business case to implement FLO (Florence), an SMS based Telehealth system which will benefit many patients who have long term conditions.

As we take stock of our achievements we need to be thinking about the challenges we face within our Five Year Strategy 2014/15 – 2018/19 and, how technology will help us transform the way services are delivered. Additionally, we will also assess how we can improve the use of technology to help our citizens take greater control of their health and well-being and avoid unnecessary contact with the NHS. Technology is at the heart of everything we do whether it's strategic planning or delivering care. The maturity of healthcare technology and the expectations of our citizens is at a level now where we know technology will be transformational for healthcare delivery.

As we deliver the 2015/1016 tranche of our strategic plan we will assess the impact technology can have on our clinical programmes and care pathways and work with our provider organisations to ensure our ambitions set out in this refresh are represented in our commissioning contracts.



Mike Maguire
Accountable Officer



Dr John Caine
Chair of the CCG

What's changed in the last year? - A Doctors perspective

Over 12 months ago, I described the frustrations GPs felt through not having connected systems and free flowing information when most of the world outside of the NHS is connected. I have seen some positive steps in the last 12 months but we still have a difficult journey ahead if we are to transform the NHS through better use of current and emerging technologies.

Most of the time we talk about technology not being available. We can't say that anymore. The maturity of healthcare technology has grown exponentially and will continue to grow as private sector innovators work towards making self-care and healthcare trendy. The Smart Phone revolution has of course driven much of this, and I am encouraged to see in this strategy refresh, the planned adoption of such technologies.

In the last 12 months we have addressed a lot of issues brought about by a previous lack of investment in IM&T. We are in the process of connecting all practices to a Lancashire wide network and telephony solution that will give us the capability to remodel some elements of primary care delivery.

We have worked and continue to work with our main provider to improve the timely delivery of discharge summaries and are currently in the process of implementing 'Electronic Ordering and Results reporting' for pathology. For many other CCGs and Trusts this will already have been in place for some time, so we have had a lot of catching up to do.

Having said that, we have made big steps in other areas:

- ✓ Establishing and implementing the sharing of patient records across Primary and Community care.
- ✓ Improving the use of Choose and Book and addressing many inefficiencies across both primary and secondary care
- ✓ Delivering against a range of national targets, which we are required to do.
- ✓ Experimenting with App technologies to improve communication with patients thus avoiding both GP visits and hospital appointments.

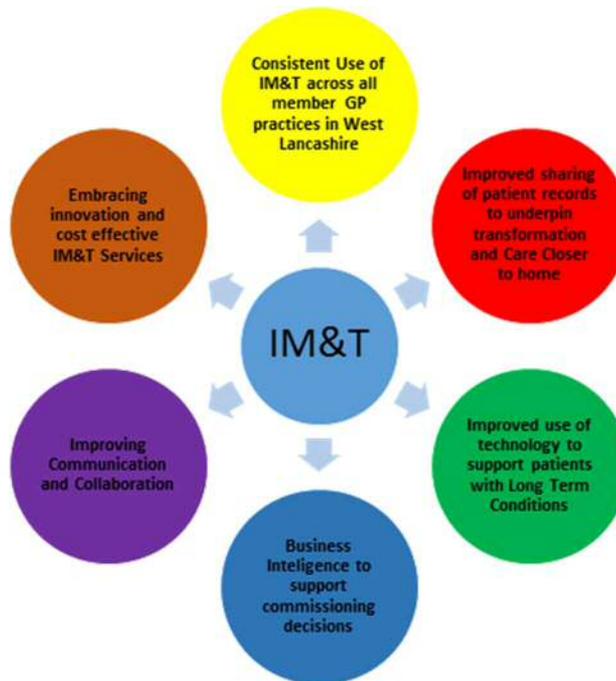
Telehealth and other 'tele' technologies as described within this refresh are game changers for the NHS. I now look forward to a 18 months of innovation. Getting there will not be easy as this will require many individuals to think outside of their traditional practice.



Dr Bapi Biswas
Deputy Chair and GP Lead for IM&T

How we have performed over the last 12 months

The CCG IM&T Strategy 2013 to 2015 described 6 programmes of work as show below:



Over the last 12 to 18 months we have been working hard to deliver against the commitments we made and will continue to do so over the next 12 to 18 months.

WHAT HAVE WE DONE TO IMPROVE THE USE OF IM&T ACROSS ALL MEMBER PRACTICES?

The table below taken from the 2013-15 strategy sets out the programme of work we had planned for our member practices.

| Sharing Patient Data | Infrastructure | Business Intelligence | Practice Support |
|--|--|--|---|
| Summary Care Records | Migration to EMIS Web | Risk stratification | Compliance with the National IG toolkit |
| Electronic Prescription Service R2 | VoIP Telephony | Urgent care dashboards | Achievement of data accreditation standards |
| Patient Access to GP Records | Practice connection to COIN Network | Practice level benchmarking | Data Quality training and support |
| Electronic Referrals (Referral Gateway) | Scanning solutions in place and embedded into business processes | Access to locally agreed pathways (use of Map of Medicine) | |
| Clinical Messaging (Radiology, Pathology, Discharge Summaries) | Access to patient records on the right device with the ability to prescribe and order test results on the go | | |
| Electronic Ordering of tests and results reporting | Patient access to book an appointment with a GP or practice nurse | | |
| Access to diagnostic imaging (Where required) | | | |
| Clinical System Integration with provider organisations | | | |

Work that we have completed:

- The National Summary Care Records Project.
- Electronic Prescription Service.
- Patient Access.
- Ability for GPs to access diagnostic images.
- Migration of all practices onto a common system (EMIS Web).
- Step down from the referral management centre for 1st Outpatient appointments.
- Upgrading of practice infrastructure including delivering the capability for GPs to access their patient's medical records on tablet devices and prescribe outside of their medical practice.

Work that is still underway

Although not completed at this stage, progress continues to be made against the following areas:

- The delivery of electronic discharge summaries to practices.
- The connection of all GP practices onto the Lancashire COIN.
- The deployment of IP Telephony.
- Improved usage of the National Choose and Book system.
- Electronic Ordering and Results reporting of Pathology Tests.

WHAT HAVE WE DONE TO IMPROVE THE SHARING OF PATIENT RECORDS?

On page 14 of our Information Management and Technology Strategy '2013 to 2015' we presented a model of Information Sharing that we aspired to achieve.

On page 9 of this strategy we have overlaid the progress that has been made. Core elements of this model we have already covered having considered progress made against the GP IM&T Programme.

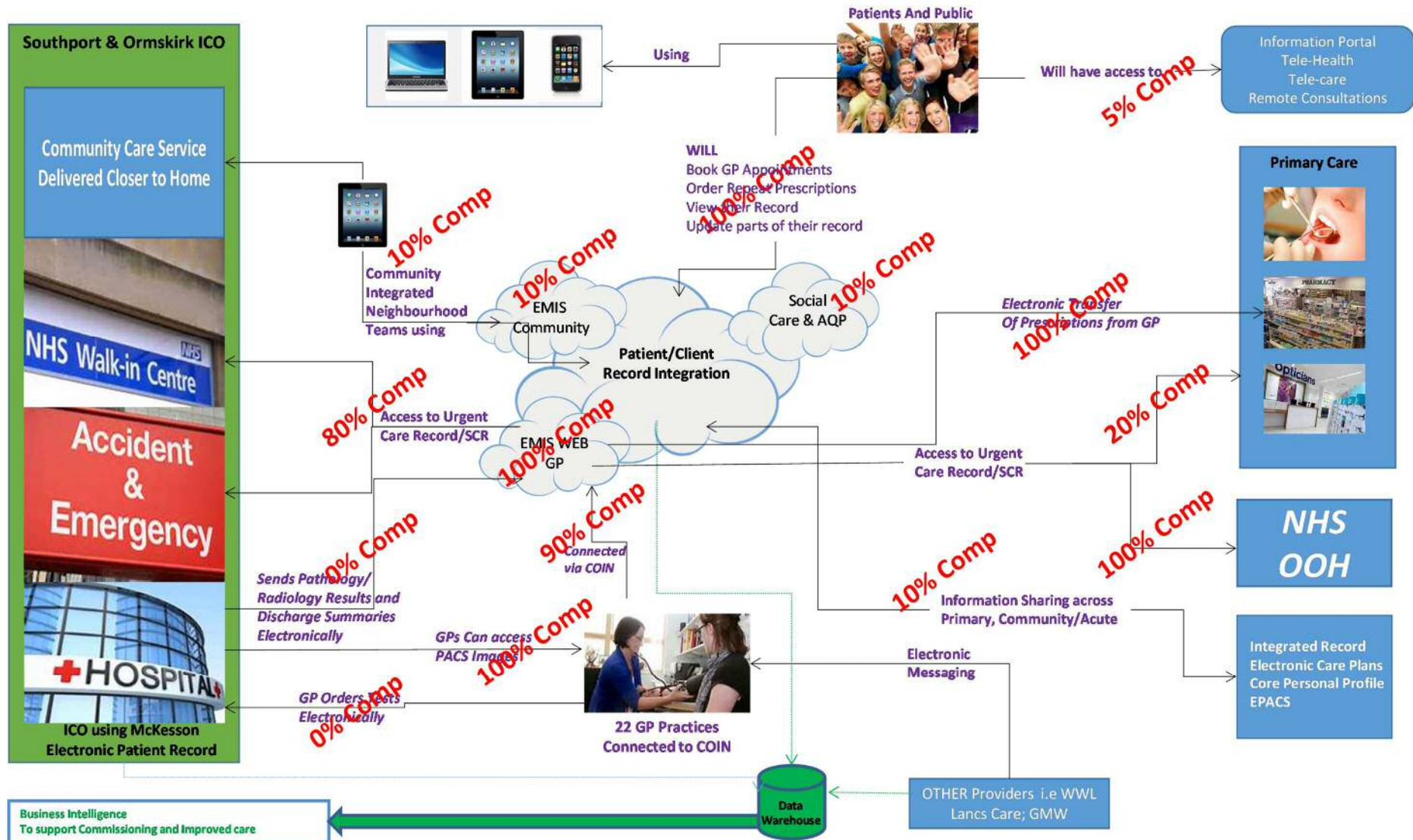
Overall progress has been excellent and we expect to see:

- A complete deployment of EMIS Community across our main provider's community services by March 2016.
- The capability for our GP Practices to electronically order tests and have results reported back into their clinical information systems.

Our journey to delivering 'Shared Care Records' is an important one and critical to the delivery of safe and timely care.

We have already begun the journey to share primary and community care records and will be architecting over the coming months the approach to delivering a fuller health and social care record and one which can be owned and updated by patients.

Pages 14 to 41 of this strategy describes in more detail the work that we will be doing over the next 12 to 18 months to achieve our vision of a 'connected' NHS.



HOW HAVE WE IMPROVED USE OF TECHNOLOGY TO SUPPORT PATIENTS WITH LONG TERM CONDITIONS?

The diagram below was used in our first IM&T Strategy (Chapter 1) to describe a management cycle that a patient with one or more long term conditions will typically follow.



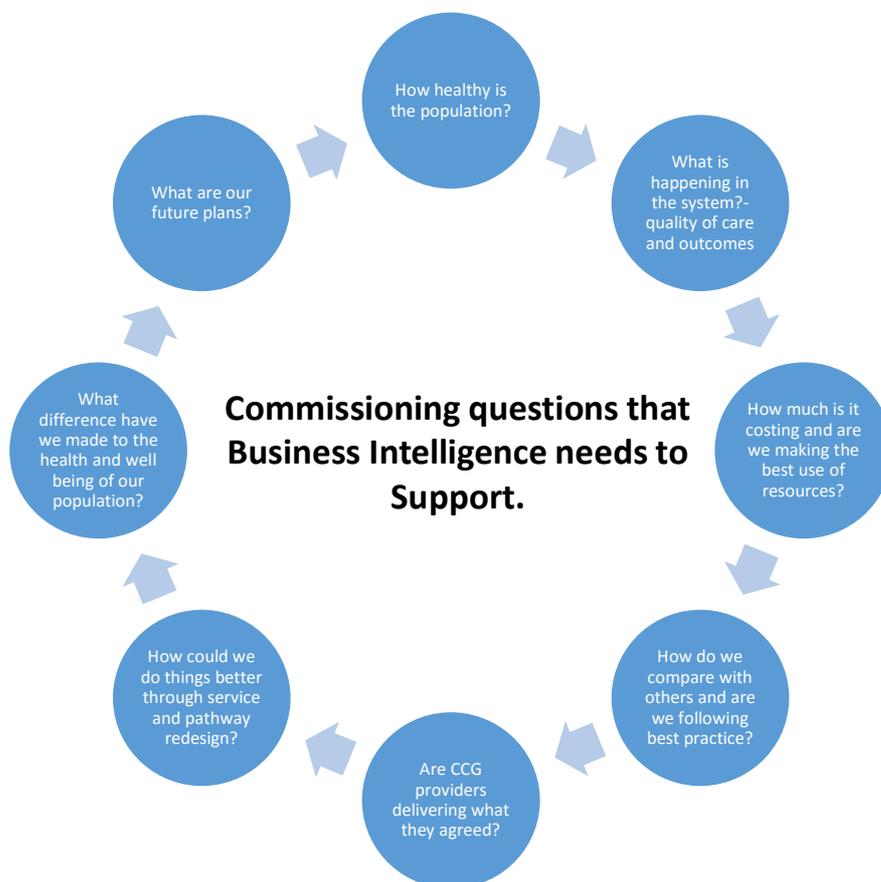
Through better use of Information Technology we can improve the quality of life for patients living with Long Term conditions no matter where they are within the cycle.

Over the last year we have:

- Developed our Business Intelligence capabilities to enable us to make the right decisions in terms of how resources are allocated whilst maintaining a balance between prevention and direct care.
- Worked with our member practices to ensure that they have appropriate systems and support in place to review and improve the care of specific patient groups such as:
 - The over 75's.
 - Those at high risk of hospital admission.
 - Those patients that are high cost and whether their preventative care can be improved to avoid unnecessary hospitalisation.
- Considered our options for the use of Telehealth technologies and approved a business case to implement 'FLO' a simple but effective SMS Telehealth solution in the autumn of 2015.
- Made progress in establishing systems and processes for sharing with carers the wishes of those patients at the end of their life to ensure dignity in dying.

HOW HAVE WE IMPROVED THE USE OF BUSINESS INTELLIGENCE TO SUPPORT COMMISISONING DECISIONS?

In West Lancashire CCG we use our Business Intelligence for many things which are best represented on the diagram below:



During the last 12 months:

- Our business intelligence capability has continued to mature. We have used our internal capabilities to shape our 5 year strategy and our strategic plan 2015/2016.
- We have worked with our BI provider to improve the service and reduce operating costs to the CCG through waste reduction.
- Scoped out the requirement to improve our own internal performance management systems which we aim to have in place by late summer 2015.

HOW ARE WE IMPROVING COMMUNICATION AND COLLABORATION USING INFORMATION TECHNOLOGY?

Within our previous IM&T strategy, we committed to improving communications with our patients but also internally through a better use of information technology.

During the last 12 months we have:

For our patients

- Created the capability for patients to engage with their GP practice via their computer or a tablet or a smartphone using the EMIS App if they so wish. Patients can now:
 - Book or cancel appointments
 - Order repeat medication
 - Access their summary care record
- We have used our communications networks to inform our patients of this service in order that they can adopt it for themselves.
- Established the technical capability for practices to collaborate to improve access and manage demand.
- Created our own CCG Twitter account to improve access and awareness of the work of the CCG.

Internally within the CCG

- We have improved the use of SharePoint to communicate more effectively with our membership.
- Reduced IT waste and saved cost, by implementing a 'preferred device' strategy with enhance communications and telephony capability allowing staff to work more productively and flexibly.
- We have commenced a review of our project and programme management approach and the technology we would require to improve better co-ordination of our programme delivery.

HOW HAVE WE BEEN EMBRACING INNOVATION TO DELIVER COST EFFECTIVE IM&T SERVICES?

Over the last 12 months and whilst delivering the first chapter of our IM&T strategy we have managed to reduce our IM&T overhead recurrently by £280K. This has been brought about by:

- Improving referral management processes and stepping down from the use of the Referral Management Centre
- Implementing our single device strategy

- Renegotiating IT and Business Intelligence costs.

Our programme of innovation will continue and is described later with a heavy focus on the use of current and evolving technologies to improve the management of our patients with complex health and social needs.

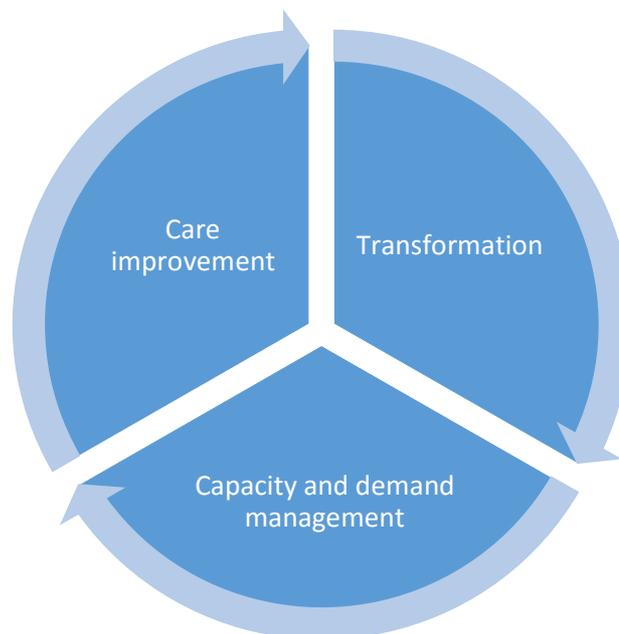
This is being driven by advances in digital health capability which will begin to exploit over the next 18 months.

Our Vision for IM&T and its role in transformation, capacity & demand management and care improvement.

In 2013, describing our vision for IM&T we said that we needed effective and reliable IM&T Systems:

- To provide an efficient commissioning service.
- To improve connectivity and sharing of patient records with clinicians and with patients to deliver better outcomes and improve quality.
- To gather intelligence about the health needs of our patients and the wider public to help ensure that our budget for health care provision is appropriately used.
- To understand what is working and what is not. By gathering this intelligence, we can re-design pathways of care around patients' needs to deliver better outcomes.

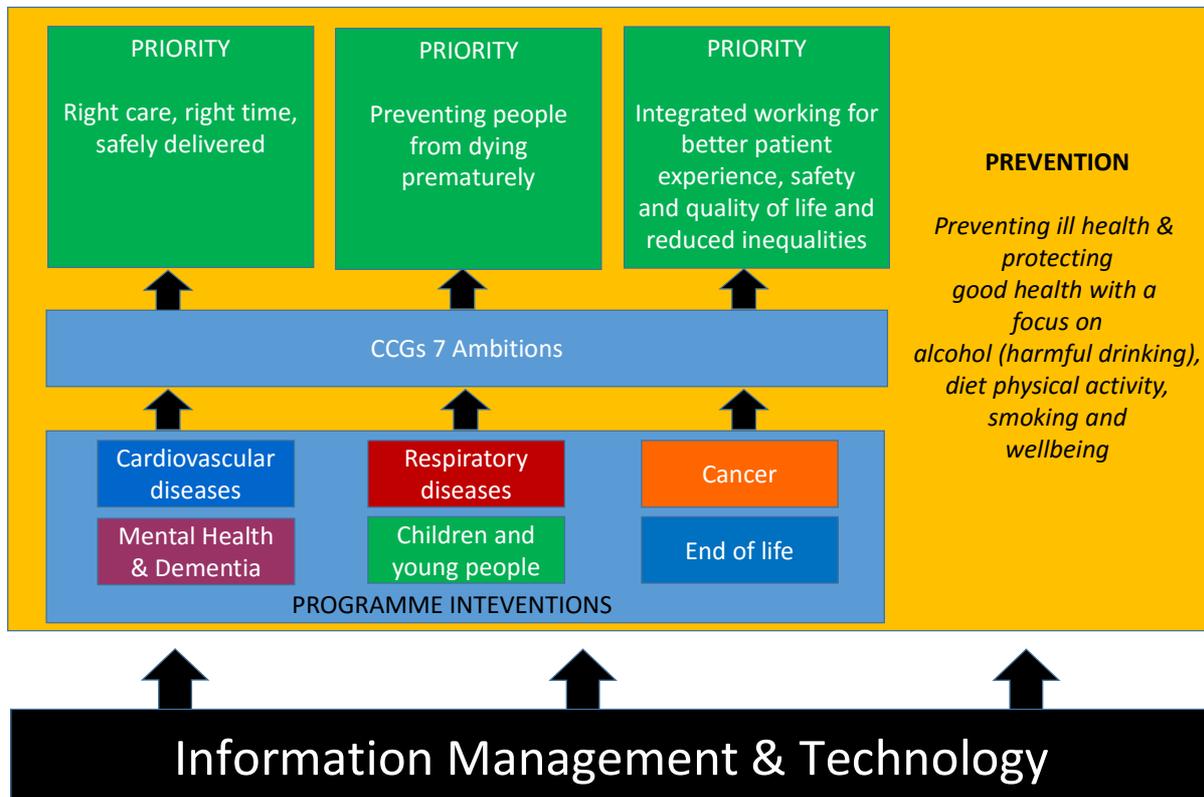
This is still relevant today. However, as we close the page on chapter 1 of our journey and what we have achieved so far, we need to focus on where we want to be in the next 12 to 18 months whilst keeping an eye on emerging consumer trends and begin to prepare for these. Our IM&T plans are designed to support service transformation, capacity and demand management, and care improvement which are all intrinsically linked.



Our transformation programmes are designed to ensure that we manage demand for services by encouraging individuals to take control of their health and well-being, to self-care and self-manage

their conditions, and to become ‘consumer aware’. By doing this we aim to ensure that we deliver the best care and support within the resources we have available.

The diagram below is a modified version of the one which appears on pages 6 and 7 of the Strategic Plan 2015/2016 showing the CCG priorities and IM&T as an underpinning enabler.



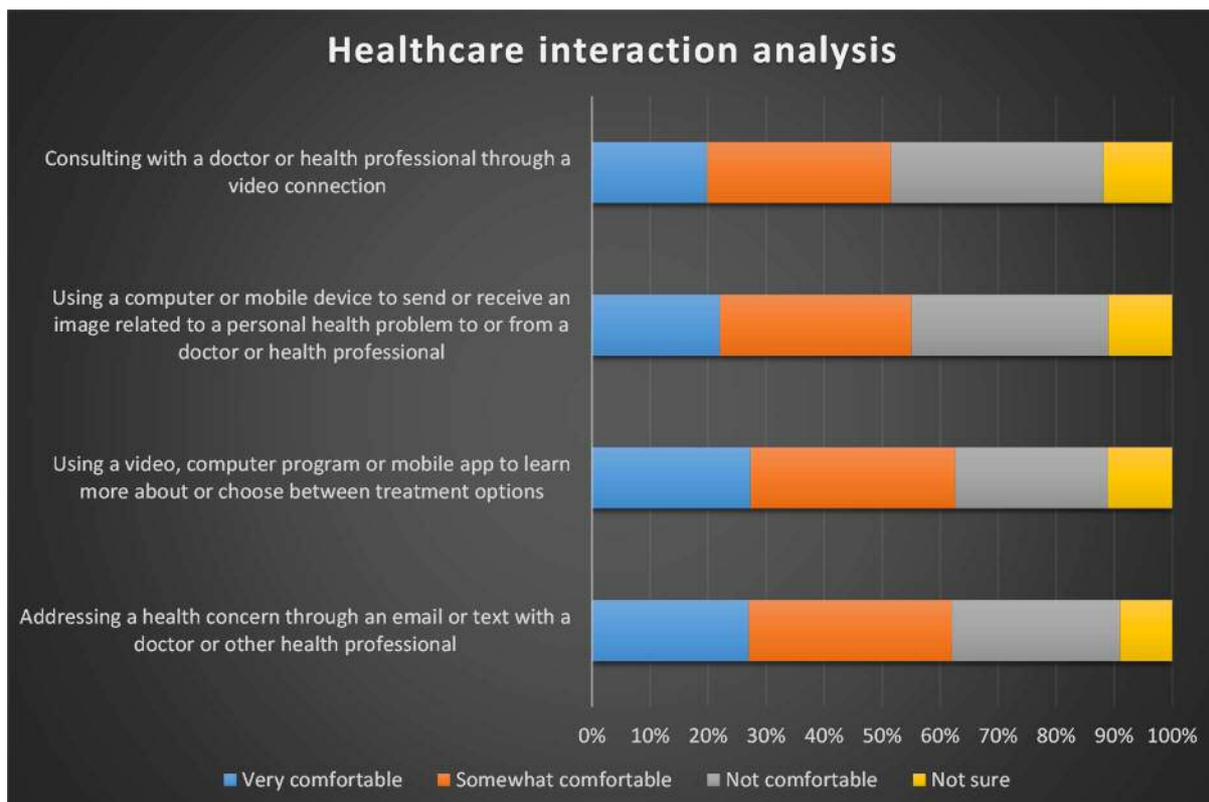
Patient or Consumer?

“While most industries have embraced the idea that the customer comes first, healthcare has lagged far behind. No more, the recognition has finally dawned on healthcare providers that meeting the challenges of today rests on their ability to put the customer at the centre of everything they do, changing from a paternalistic approach to a patient-centred approach that will recast the deal between patients providers and payers”

(Sarah Thomas, Director, Deloitte US Center for Health Solutions)

There is an emerging generation of ‘digitally enabled’ citizens whose expectations of healthcare in the future will exceed current delivery models.

The chart below demonstrates from research undertaken in 2013 by Deloitte (Healthcare and Life Sciences Predictions 2020) that the majority of those asked were either very comfortable or somewhat comfortable with interacting with clinicians using digital technology. In the same report it predicts that many doctor-patient contacts will become virtual, delivering much more care in the patient’s home.



Source: Deloitte US Centre for Health Solutions 2013

Online video consultations

Online consultations are here now, we are already aware that some companies such as <https://www.pushdoctor.co.uk/> are offering subject to a small cost, private appointments for a range of conditions by video link using a network of 7000 NHS and GMC registered doctors with access being provided from an iPhone, iPad, Laptop or PC.

Additionally in some part of the NHS video consultations are becoming mainstream.

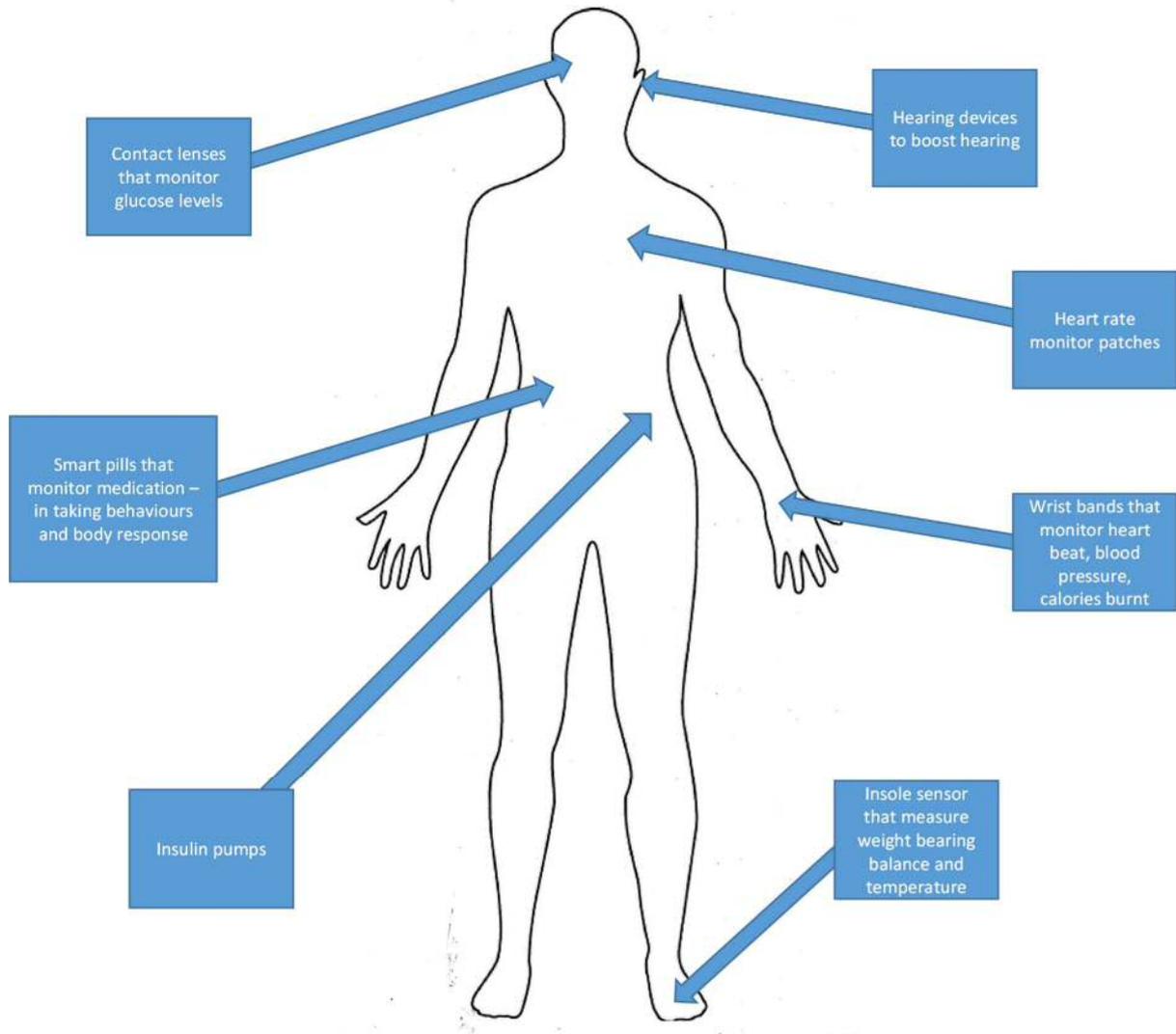
We will respond to this and consider how through our own transformation programmes we can develop services to meet growing 'consumer' expectations.

Wearable Devices and bio-sensing technologies

There market is now flooded with wearable devices that are blue-tooth enabled to remotely track and share health related information. These wearable devices are fast becoming the new trend and are available to consumers and relatively low cost. The aim of these is to support a drive towards better health and disease prevention. Those consumers who are already living with one or more long term conditions will also benefit from the remote monitoring capabilities that these wearable technologies bring.

This affordable capability will help to deliver a new partnership between the clinician and the patient, improving awareness, self-management and prevention strategies.

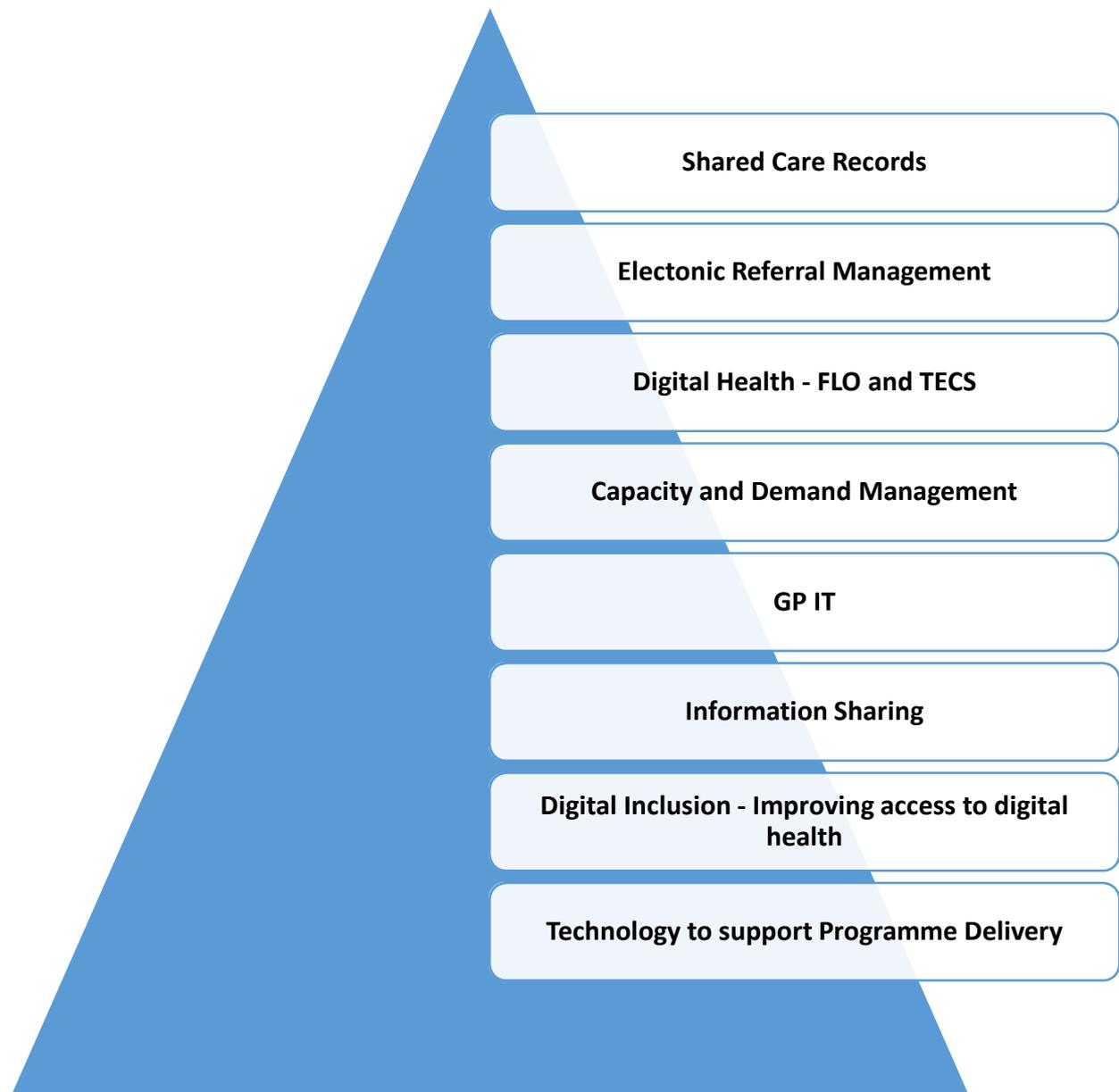
Our vision as we take forward this strategy is to ensure that the patients' healthcare record is able to capture data received from wearable devices into a patient record that the patient can share with whomever they choose. This could be within or outside of the NHS.



The diagram above offers a few examples of wearables which would be capable of sharing data between the patient and the clinician and would be transformational in improving care.

What we aim to do over the next 12 to 18 months

In setting out our programme for the next 12 to 18 months, we have described a number of work streams that are aligned to our vision of connecting systems and enabling our patients to interact with those systems, sharing what they wish, with whomever they wish as they 'consume' services from both within and also outside of the NHS.



Shared Care Records

Our 'Shared Care Records' project is designed to do two things:

1. Connect systems across Health and Social Care to ensure the best possible care is given in the most efficient way.
2. Provide patients with the capability to interact with their record and share parts of their record with others as healthcare consumerism grows.
3. Ensure that those involved in the co-ordination and delivery of care have access to the latest information and at the time they need it.

Electronic Referral Management

It is important to us that our citizens get the most efficient care when they need it. From the point at which they are referred this project aims to ensure that our citizens:

1. Are offered a choice of provider and that the first outpatient appointment is booked by their doctors surgery if this is what they want.
2. Have all of their appointment booked in advance as the pathway of care become clear.
3. Can access their appointment through their own patient controlled record.

Digital Health

Digital Health will be transformational in the way care is delivered in the future We have discussed in our vision the trend towards using wearable devices and how data captured from these can be presented into the patient own record and shared within whomever they choose.

This project will:

1. See an early use of SMS based telehealth introduced in a number of clinical areas.
2. Challenge our thinking in terms of how we embed a range of technologies such as telecare; telehealth, teleconsultation, tele coaching etc. into new care delivery models.

Capacity and Demand Management

This work encompasses a range of projects designed to improve the way we use our resources to deliver better, safer and more efficient and tailored care. Our projects will:

1. Enable us to connect carers better to those living in the community requiring a range of support.
2. Allow us to use our combined clinical intelligence to ensure we focus our resources and co-ordinate care better.
3. Connect our systems and intelligence across all partners to ensure that those planning and co-ordinating care/well being services whether across the entire CCG footprint or at neighbourhood level will:
 - a. Have population data to influence service redesign and care delivery
 - b. Understand the impact on planned outcomes to enable us to continually improve services.

- c. Have access to real time predictive analytics to help manage demand and patient flows.
 - d. At a citizen level know who is where in the care system to ensure patient flows are lean and we can set the standard for Care co-ordination in West Lancashire.
4. Support our patients to become more intelligent consumers of healthcare, to better management their conditions through improved use of social media and digital health technologies.
 5. Challenge the way we deliver care, in particular across our Primary and Community Care settings.

GP IT

Our previous IM&T strategy (Chapter 1) focussed heavily on addressing a former lack of investment in General Practice IT.

Although we achieved a great deal in bridging this gap, there is still much to do in particular:

1. Reducing the levels of variation that exist by sharing best practice in the way IT systems in practices are used.
2. Improving the timely electronic flow of clinical data (Discharge Summaries, Electronic Ordering and Results Reporting, Referral Management).
3. Determining how technologies already deployed can shape how primary care services are delivered in the future.
4. Ensuring that GPs have access to real time data on their patients to enable them to better co-ordinate care and support and reduce unnecessary contact with the service.

Information Sharing

Much of our IM&T programme involves the sharing of patient data across various delivery settings. This is one area that generate a great deal of debate and one which has slowed progress. It is important that we work to agree a simple model of information sharing that is transparent and one which avoids delays to future planned initiatives.

To address this we will work with colleagues across Lancashire and Merseyside to adopt best practice.

Digital Inclusion

Our vision is one that puts Digital Health at the heart of our delivery models. However we are aware that in doing so we should not disadvantage any groups in the community. Over the life of this strategy we will work with the West Lancashire District Council and other partners to introduce a range of initiatives that will help to tackle this problem. Work has already begun in this area through the Go ON UK initiative described later in this section.

Technology to support programme delivery

The CCGs transformation programme has grown with many projects and initiatives underway across a range of clinical areas. Over the last 12 months it has been recognised that greater control is

needed to ensure that projects are delivering expected outcomes and that we are not overstressing our resources and limiting benefit delivery.

By autumn of 2015 we intend to re-define our programme and select a programme management system to track progress and resource utilisation.

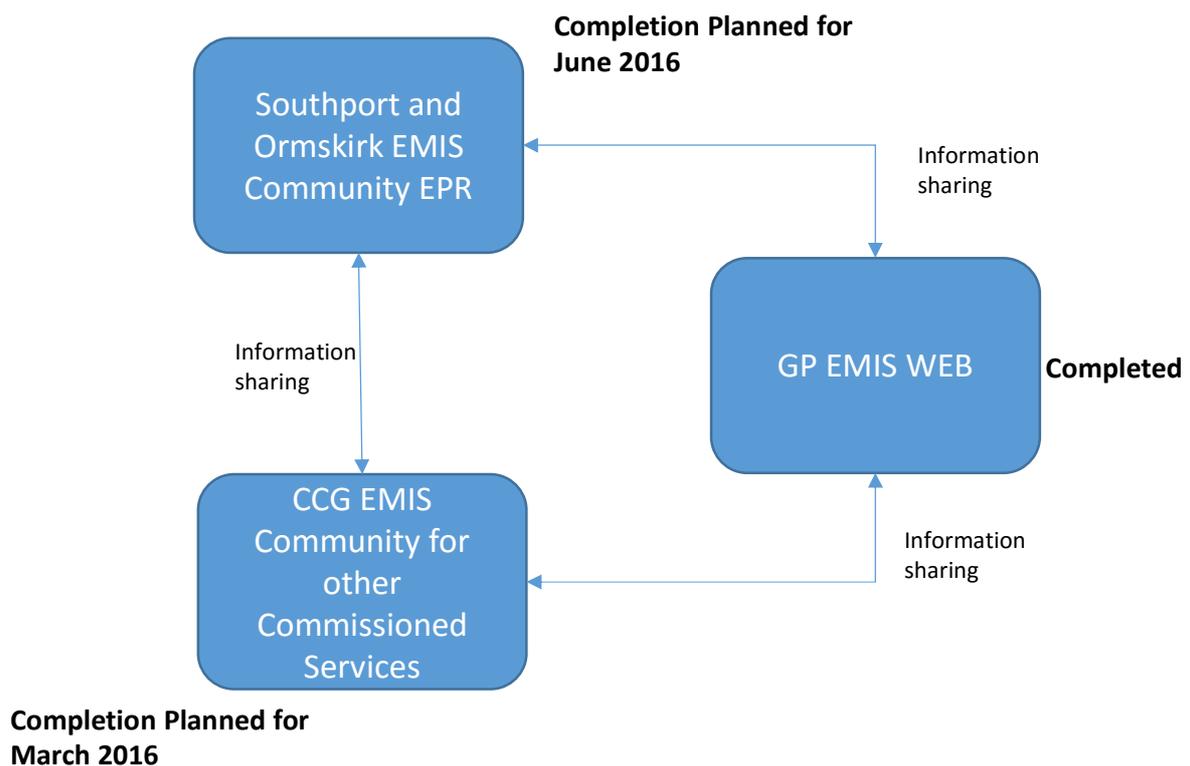
Shared Care Records

The CCG set out in April 2015 its vision for the creation of a Shared Care Record.

Stage 1

Delivering Shared Care Records across primary and community care.

The diagram below sets out what is currently being delivered to ensure that we have a fully integrated and shared care record across primary and community care.



All of the GP practices are now using EMIS Web and we have worked with our main provider to begin the process of implementing EMIS Community which is already allowing electronic sharing of patient data between GPs and Community teams.

In addition to working with our main provider, the CCG also commissions a range of other 'community type' services from other providers, presently these are:

- Anti-coagulation
- Vasectomy
- Minor Surgery
- Gastroscopy
- Heart Failure

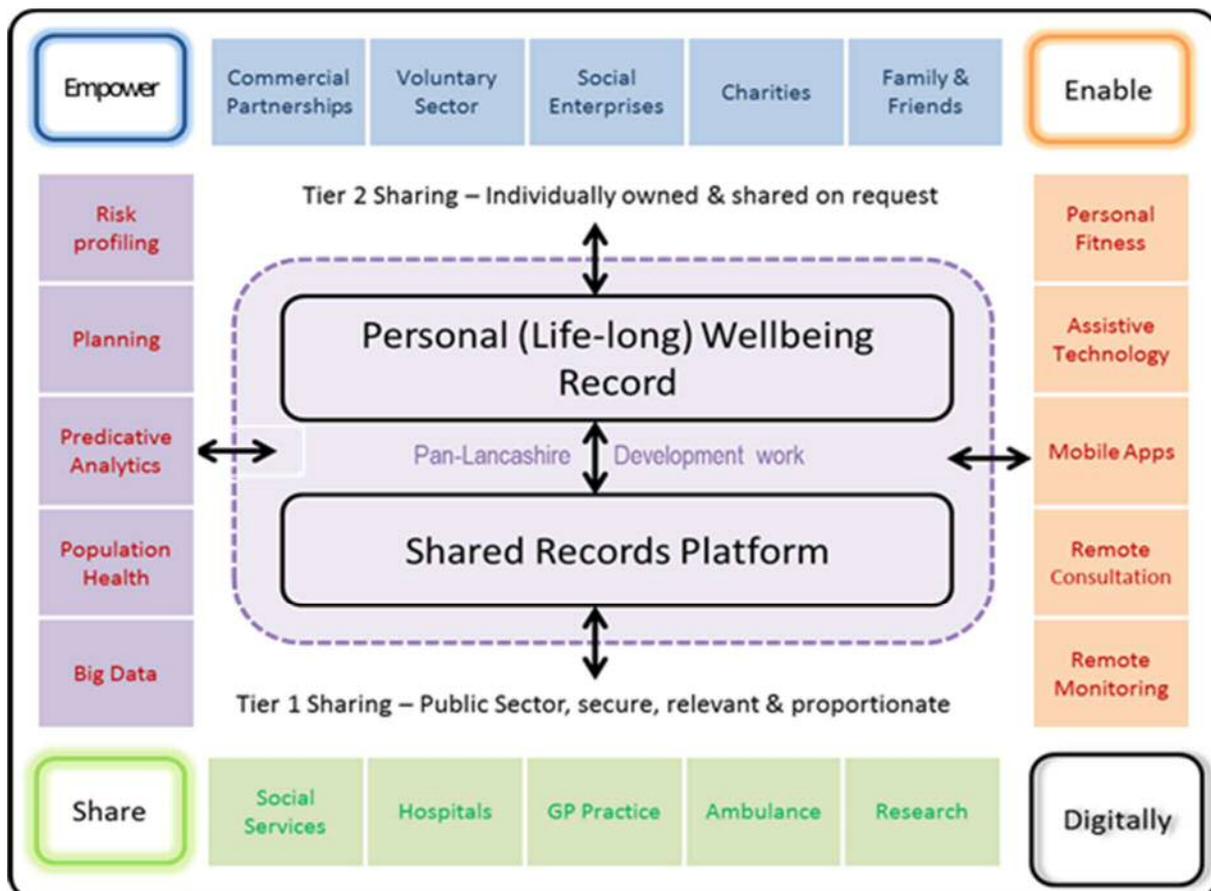
It is intended that EMIS Community will be used for these services and for other planned services that the CCG commissions.

Stage 2

Joining Primary, Community, Hospital, Mental Health, Social Care and other provider systems.

In 2014 the CCG entered into discussions with the Area Team concerning a technology, code named LPRES (Lancashire Patient Record Exchange Service). The technology is designed to create a level of interoperability across a range of organisations but also to deliver a Personal (Life-Long) wellbeing record which offers the patient a level of granularity to determine which parts of the patient record they wish to share and with whom.

The diagram below summarises what LPRES is designed to do.



The technology would also support the management of data from other patient held assistive technology solutions like Telehealth which are planned for, and discussed later in this strategy.

During 2015, we will develop a business case for investment ensuring we consider all options available to us including LPRES before committing to project delivery.

Shared Care Records – Summary Milestone Plan

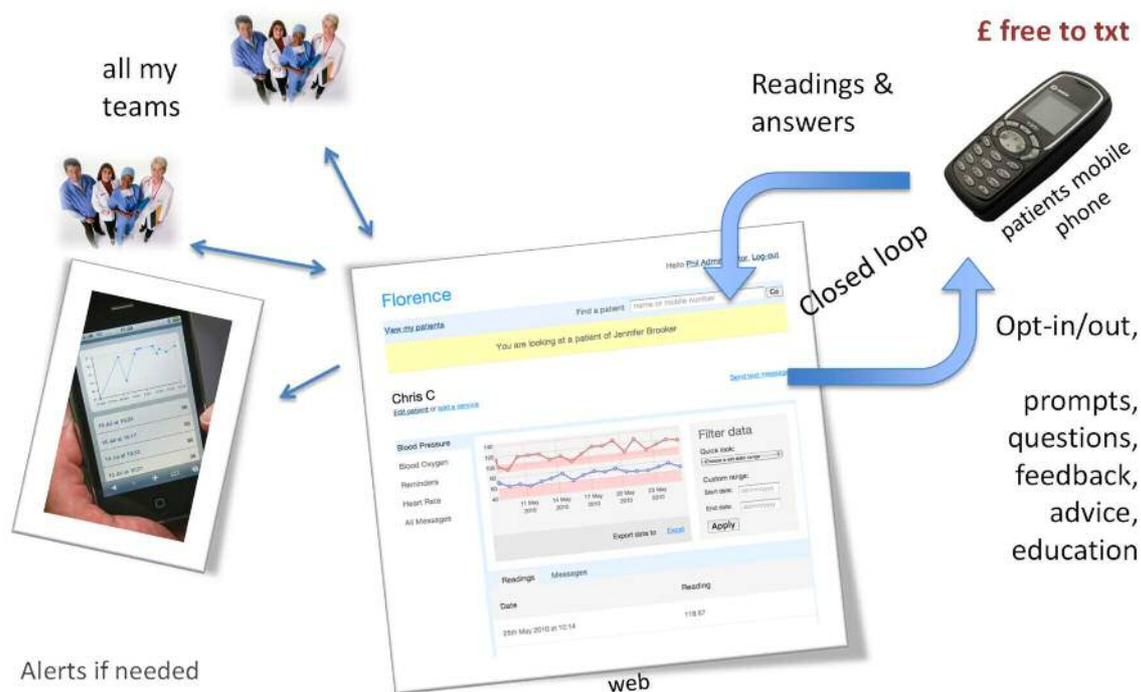
| Milestone | To be achieved by |
|--|-------------------|
| EMIS Community deployed to all ICO services | June 2016 |
| EMIS Community in place for all other contracted community services allowing data exchange with general practice | March 2016 |
| Business Case completed for stage 2 of the Shared Care Record to start | November 2016 |
| Subject to Business Case approval PID completed and signed off. | May 2016 |
| Implementation of stage 2 underway | May 2016 |

Digital Health

FLO (Florence) and other TECS (Technology Enabled Care Services) Technologies

On page 15 of our 'IM&T Strategy 2013 to 2015' we set out the opportunity to use technologies such as Telehealth and Telecare to support the management of patients with Long Term Conditions (LTCs).

To take this forward we considered a number of options that would provide the best balance between affordability, risk and benefit delivery. In June of this year, the CCG approved a business case to implement FLO (Florence) a simple but effective text messaging already in use to good effect across other parts of the NHS. The diagram below provides a simple view of how FLO works.



We firmly believe that FLO can support us to better manage cohorts of patients and support those patients to better manage their own health.

There are clear opportunities for us to put FLO to work in a number of areas including:

- COPD, Asthma and other respiratory illnesses.
- Mental Health
- AF and Heart disease
- Stroke
- Diabetes
- Musculo-skeletal
- Medication management
- Health coaching

In addition, we will consider how the technology could be used to support the newly commissioned 'Integrated Wellbeing service' recently announced by Lancashire County Council.

Our intention is to commence the journey of implementation from late summer in a staged and controlled way.

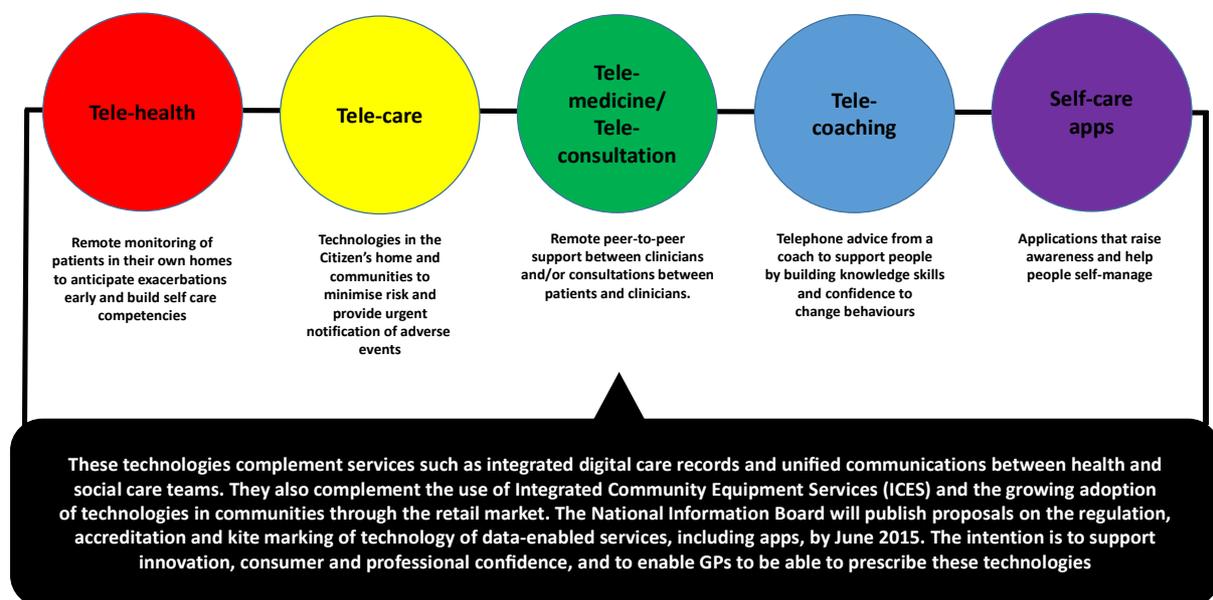
FLO is just one technology that we believe will bring improvements and help us to use our resources better whilst improving outcomes and lives.

Recognised nationally by NHS England the use of 'Tele' type technologies will help to transform the way care is delivered in the future. In January 2015, the NHS Commissioning Assembly produced the TECS (Technology Enabled Care Services) toolkit to support commissioners and delivery partners to:

- Select, procure, deploy and measure TECs effectively to transform care pathways and deliver the most appropriate care for patients.
- Map, understand and harness the potential of resources already available within the local health economy.
- Implement local innovation and commissioning practices that are responsive to rapid advances in technology and enable increasing digital maturity.

In reality what this means is that we will work with our providers to ensure that when commissioning services, our providers are capitalising on the technical capabilities available to transform care, deliver more, improve outcomes and deliver a better patient experience.

The diagram below summaries the types of technologies that we will work to put in place to transform care delivery.



The table on page 26 offers a simple example of how these technologies could be used at different stages of life from birth through to older years.

| Pregnancy & first year of life Conception to age 1 700,000 births | Childhood Age 1-11 6.5m people | Adolescence Age 12-16 3m people | Young Adulthood Age 17 – 39 16m people | Middle Age Age 40 -64 17.4m people | Older years Age 65+ 9.3m people |
|---|---|---|---|---|--|
| <p>Telehealth Monitoring of high risk pregnancy</p> <p>Telecoaching To stop smoking, improve parenting & education around breastfeeding benefits.</p> | <p>Telecoaching For obesity, parental skills and exercise, bullying and emotional health & wellbeing</p> <p>Apps To help with management of LTCs</p> <p>Telecare Supporting parents of disabled children</p> | <p>Apps For advise on diet and nutrition</p> <p>Telecoaching For early smoking/drinking/sex/drug misuse etc</p> <p>Text (SMS) Reminders</p> <p>Teleconsultation Supporting Child and Mental Health Services (CAMHS)</p> | <p>Teleconsultation To facilitate access to services</p> <p>Mobile Telehealth For LTCs</p> <p>Telecare Supporting independence of adults with physical and learning disabilities</p> <p>Teleconsultation For convenient access to mental health specialists</p> | <p>Telehealth To manage LTCs such as COPD, CHF and other early onset chronic conditions</p> <p>TECS For screening</p> <p>APPS For telecare providing advice, support and Reassurance</p> <p>Teleconsultation To support family and carers</p> | <p>Telehealth To support management of multiple LTCs and rehabilitation</p> <p>Telecare To maintain independence and provide carer support</p> <p>Teleconsultation To facilitate contact with friends and family to reduce loneliness</p> |

The CCG wants to improve the way patients and clinicians communicate using current and emerging technology in order to ensure we are delivering the best and most convenient services for our citizen population.

To ensure that this happens we will:

1. **Assess how we can use TECs including FLO across each of our six programme interventions and our priority around prevention:**
 - a. *Cardiovascular Diseases*
 - b. *Respiratory Diseases*
 - c. *Cancer*
 - d. *Mental Health and Dementia*
 - e. *Children and Young People*
 - f. *End of life*
2. **Build into 'all' new provider contracts clear expectations upon our providers to embed the use of TECS technologies across the services that they deliver. In doing so we will pledge to work with them to ensure our expectations are met.**

Florence and TECS – Summary Milestone Plan

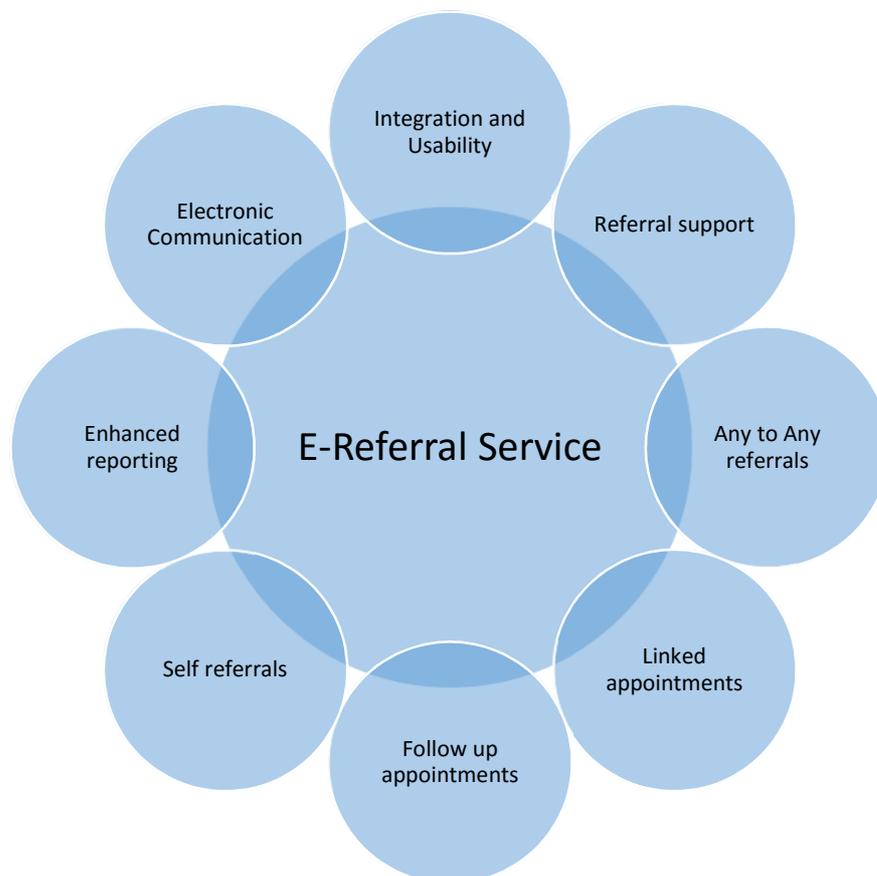
| Milestone | To be achieved by |
|---|--------------------------|
| FLO Project Initiation completed | July 2015 |
| 1 st Implementation of FLO commences | September 2015 |
| TECS technology assessment completed for each of the three programme intervention | February 2016 |
| Plans developed for TECS usage | February 2016 |
| TECS expectation embedded into new and current re-negotiated contracts | Immediate |

Electronic Referral Management

Since the introduction of choose and book in 2004 over 40 million referrals have been made across England using the technology.

On the 15th June 2015 the new NHS E-Referrals Service went live which promises enhanced functionality delivering benefits to patients, clinicians and the NHS. Over a period of quick releases the new system is planned to enable the delivery of a slicker more efficient referral management process that will enable commissioners to have greater intelligence about referral patterns, service demands and the use of commissioned resources.

The diagram below summaries the scope of the new E-Referrals Service.



In December 2014 the CCG initiated a Referral Management Project to lay the foundations for adopting the released capabilities of the new E-referrals Service.

At this time the CCG was making use of a Referral Management service which was not delivering the expected benefits and was costing too much. The first stage of this project was to decommission the Service and establish the right governance structure to improve the use of Choose and Book in both our GP surgeries and at our main provider, the Southport and Ormskirk Hospitals NHS Trust.

The decommissioning is now complete and the journey to improve referral management processes will now continue.

There are two specific targets we are aiming to deliver against:

1. Within the GP Contact 80% of referrals need to be processed via Choose and Book (the New NHS E-Referrals Service) by March 2016.
2. The NHS England target to process 100% of referrals via the new NHS E-Referrals Service by 2017.
(Note this target is linked to the national target of a paperless NHS by 2018)

Our priorities for the year ahead include:

1. A standardisation of electronic referral forms.
2. A benchmarking of practices to:
 - a. Identify support needed.
 - b. Improve practice processes.
 - c. Deliver tailored training.
3. Working with our main provider to make as many services directly bookable and maximise capacity.
4. Working with our main provider to improve electronic referrals into community services as they begin to adopt EMIS Community.
5. To align enhanced capabilities delivered from the new E-referrals service to new models of care.
6. Achieve 80% of referrals being processed through the E-Referrals Service by March 2016.

Referral Management – Summary Milestone Plan

| Milestone | To be achieved by |
|---|-------------------|
| 80% of hospital referrals processed in general practice to go through the new E-Referrals Service | March 2016 |
| Commence roll out of directly bookable community services | June 2016 |

Capacity and Demand Management

The CCG has a rich source of data available and uses much of this data to deliver business intelligence to help shape future service delivery models and also to help to finely balance capacity and demand.

The problem we face is that year on year this becomes more challenging as people age, our population grows and the prevalence of Long Term conditions increase.

We are aware that sometimes our approach to managing care results in 'failure demand' where patients re-present thus reducing future capacity.

To address this, the CCG has a clear vision to:

1. Focus on prevention through better engagement and understanding of patients' needs rather than attempting to control them.
2. Move more care into the community.
3. To improve Care Co-ordination through a 'Single Point of Access' concept and focus on the individual, their needs and aspirations.
4. To enable 'Self Care' though connecting people, and the wider community assets available to us.
5. Embrace digital innovation and use this as a catalyst to transform the way care is delivered.

The diagram below brings together a portfolio of projects that will underpin this vision.



FLO and TECS

Described on pages 24 to 27, FLO and other TECS technologies such as Tele-consultation, Tele-medicine, Tele coaching, and the wider use of accredited Healthcare 'Apps' will play a pivotal role in transforming healthcare if applied well.

FLO and other Telehealth technologies have been shown to be effective in supporting patients to better manage their conditions, keeping them well for longer and away from hospital in addition to delivering workforce efficiencies.

Combining FLO and TECS with an enhanced community support model and using those assets to best effect we can deliver better health and well-being for our population.

FLO and TECS – Summary Milestone Plan

| Milestone | To be achieved by |
|---|--------------------------|
| FLO Project Initiation completed | September 2015 |
| 1 st Implementation of FLO commences | October 2015 |
| TECS technology assessment completed for each of the three programme intervention | February 2016 |
| Plans developed for TECS usage | April 2016 |
| TECS expectation embedded into new and current re-negotiated contracts | Immediate |

Rally Round

Rally Round is an innovative product which connects 'carers' around an individual. Carer's in this sense include, relatives, support/volunteer groups and individuals. We have in the local community and at an individual level, many people who will willingly help out and support each other. Combining this willingness with the capabilities of Rally Round we can truly enhance community cohesion.

Rally Round can help to keep people, in particular the frail elderly, better supported and more able to live independently at home.

By taking both a targeted approach (those citizens that are high users of hospital services) and allowing the product to grow organically through the use of our voluntary services we believe this product can be a valuable asset in our toolkit for improving care, reducing demand and enabling improved support following discharge from hospital.

Discussions have already advanced with the West Lancashire Council for Voluntary Services who have presented an approach to develop awareness and growth.

Rally Round – Summary Milestone Plan

| Milestone | To be achieved by |
|---------------------------------------|-----------------------|
| Project approval and funding in place | July 2015 |
| Implementation Readiness | November 2015 |
| Product deployment commences | December/January 2016 |

Social Media

With more of our Citizens connected to technology we need to ensure that we continue to exploit the benefits that social media can bring.

Social Media in Health Care can be used effectively for:

1. Provide health information on a range of conditions.
2. Provide answers to medical questions.
3. Facilitating dialogue between patients, or between patients and health professionals.
4. Collect data on patient experiences and opinions.
5. Health intervention.
6. Health promotion
7. Health education.
8. Reducing stigma.
9. Professional online consultations.

There are a range of benefits that can be delivered which in the main are:

1. Enhancing and providing capability for self-care.
2. Increases interactions with others and reduces social isolation.
3. More available, shared and tailored information.
4. Increase accessibility and widening access.
5. Peer/social/emotional support, community cohesion, social capital and community resilience.
6. Public health surveillance.
7. Potential to influence health and well-being.

In West Lancashire the Council for Voluntary Services (CVS) has developed a 'Community site called 'community-I WEST LANCASHIRE'. Although the site offers a range of services the potential is there to develop its use for supporting better the health and well-being of our citizens, for connecting individuals with similar issues and providing live interactions with clinical or other health specialists

in West Lancashire. We will explore options around this and consider best practice in other parts of the country that can be adopted.

Social Media – Summary Milestone Plan

| Milestone | To be achieved by |
|--|-------------------|
| Development plan in place for support LTCs | January 2016 |
| Product Development | From January 2016 |
| Awareness development | From March 2016 |

Aligning Intelligence to manage care, capacity and demand

Underpinning our vision to improve Care Co-ordination is the need for accurate intelligence on those citizens or patients most in need or most at risk of hospitalisation and where they are presently being cared for. Having a more holistic view of an individual, their behaviours, motivation and concerns will enable better care and support to improve their overall well-being. In older years, sometimes people need support and re-assurance to make the right decisions. Having both hard and soft intelligence will enable us to coordinate a better package of tailored care.

Although it is unlikely that the CCG will ever be able to prevent ‘all’ unavoidable admissions, we will use our data and intelligence systems to ensure that we do as much as we can to prevent hospitalisation and where it is necessary ensure we have an appropriate package of care in the community following discharge.

Achieving this requires us to have a number of this in place. In particular, we will:

Connect our systems and intelligence across all partners to ensure that those planning and co-ordinating care/well being services whether across the entire CCG footprint or at neighbourhood level will:

1. Have population data to influence service redesign and care delivery
2. Understand the impact on planned outcomes to enable us to continually improve services.
3. Have access to real time predictive analytics to help manage demand and patient flows.
4. At a citizen level know who is where in the care system to ensure patient flows are lean and we can set the standard for Care co-ordination in West Lancashire.

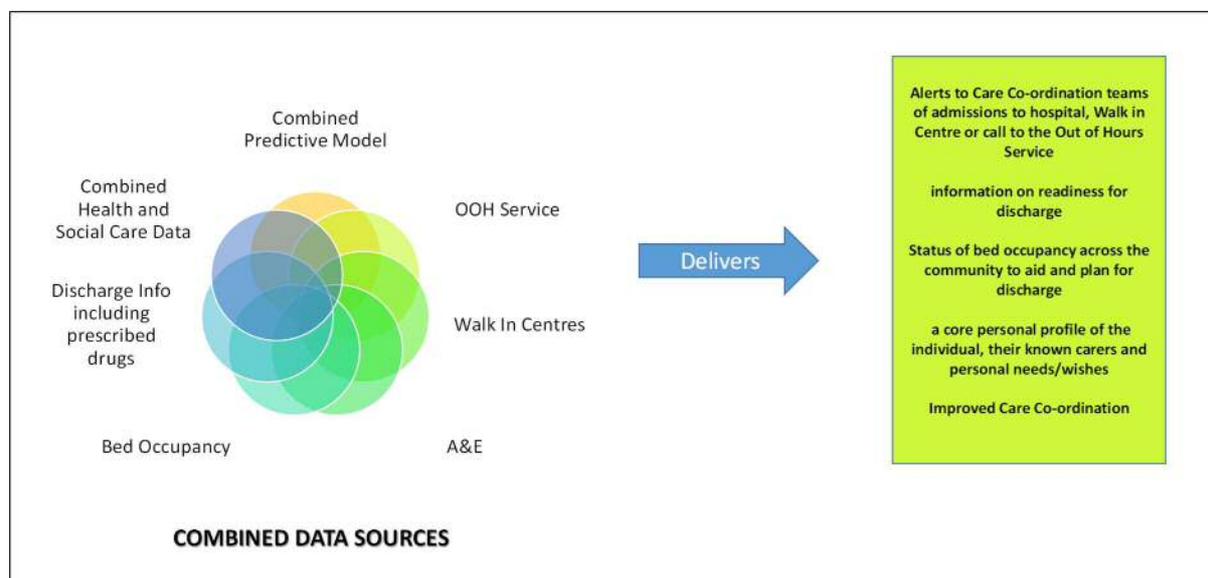
Within general practice all of our practices have access to a risk stratification tool which ranks patient’s according to risk of hospitalisation, how many admissions and attendances they have had, and the running total of cost per patient. The tool also shows at patient level which chronic conditions were used to calculate the scores.

Using this tool to deliver a 'Combined Predictive Model' we can ensure that our commissioned community teams can better target patients to better manage capacity and cost and deliver enhanced models of care.

There will of course be times when hospitalisation occurs and patient are admitted. We will work to put in place systems and processes that immediately flag this admission to those involved in the care of that patient in order that appropriate care and resources can be better co-ordinated upstream to avoid bottle necks occurring in the hospital.

We will also ensure that core data (A personal profile) is created for all high-risk patients, data that can be shared across both Health, Social Care and Ambulatory Care and available within nursing homes to ensure the right care is given involving the right people, in the right place.

The diagram below is a conceptual model that we will use over the coming year to build the capability to support emerging models for improving care co-ordination.



Care Co-ordination System – Summary Milestone Plan

| Milestone | To be achieved by |
|---|-------------------|
| Solution design and business case for Care Co-ordination system | April 2016 |
| Product build | From April 2016 |

Referral Management

The new E-Referral Service went live in June 2015 and is discussed on pages 28 and 29 of this strategy.

As we continue to work with our provider trusts to make all services directly bookable we will also consider the opportunities to deliver a bookable consultant advice and guidance service which may reduce the number of unnecessary referrals and reduce overall activity costs whilst creating additional capacity for those that need to be referred.

Referral Management – Summary Milestone Plan

| Milestone | To be achieved by |
|---|-------------------|
| 80% of hospital referrals processed in general practice to go through the new E-Referrals Service | March 2016 |
| Commence roll out of directly bookable community services | June 2016 |

Exploiting what is already enabled

Over the last 12 to 18 months the CCG has delivered a great deal of IT capability which can now be used to help shape and improve the way care is delivered.

Delivering enhanced care in the community requires a change across both community and primary care. With our GP Clinical systems now in the cloud and portable telephony and unified communications available, practices can work together pooling expertise and specialisms to provide an enhanced level of service for patients. We will explore this opportunity over the coming 12 months.

Over the next 12 to 18 months we will see a significant growth in data interoperability and connectivity required to improve care delivery models. This capability will align itself to the CCG plans for improving community services and Care Co-ordination across West Lancashire.

Technology and Vision Mapping

In summary the table below shows how each project supports the CCG vision.

| | Focus on prevention | More care into the community | Improved Care Co-ordination | Self-Care Enablement | Embrace digital Innovation |
|---|---------------------|------------------------------|-----------------------------|----------------------|----------------------------|
| FLO and TECS | | | | | |
| Rally Round | | | | | |
| Social Media | | | | | |
| Aligning Intelligence | | | | | |
| Referral Management | | | | | |
| Exploiting what is already enabled already enabled | | | | | |

GP Information Technology

On page 7 of the strategy we have described the work that has been completed over the last 12 months.

We will, before the end of the calendar year completed the remaining work that we described in our IM&T Strategy 2013 to 2015 in particular:

1. The delivery of electronic discharge summaries to practices
2. The connection of all GP practices onto the Lancashire COIN
3. The deployment of IP Telephony
4. Improved usage of the National Choose and Book system
5. Electronic Ordering and Results reporting of Pathology Tests

In addition to completing this work it is our intention to refocus some of the work that our CSU have been doing for us to help us ensure we improve standards of data quality within our practices as journey to sharing patient records gathers pace.

During the coming months, our IT Service provider will work to implement wireless technology in all practices initially for practice staff, but this will be extended to public access in the near future.

There are a number of initiatives within this strategy that will impact and require the support of GP practices and these include:

1. Improved use of the risk stratification tool to support better care co-ordination.
2. The implementation of FLO (Simple Telehealth Solution described on pages 19 to 22)
3. The opportunity to use TECS technologies in primary care.
4. The continued deployment of EMIS Community across all services.
5. Development of our Care Co-ordination system.

GP IT – Summary Milestone Plan

| Milestone | To be achieved by |
|---|-------------------|
| Electronic Discharge summaries | March 2016 |
| COIN Connectivity and IT Telephony | January 2016 |
| Improving use of the E-Referral Service for direct booking of appointments across Hospital and Community Services | On going |
| Electronic ordering and Results Reporting of Pathology Tests | December 2015 |
| Deployment of Wireless Technology | March 2016 |
| New SMS Text solution in place for practices | October 2015 |

Information Sharing

Many of the projects set out in this strategy require information to flow freely from one organisation to another.

The sharing of information whilst ensuring compliance with privacy laws, IG compliance and, the wishes of our citizens presents challenges that we must overcome if we are to improve the way care is delivered.

It is clearly necessary for us to have in place information sharing agreement between organisations that share data. As the NHS is complex and commissions services from a range of providers, keeping track of who is sharing what with whom can be difficult and this needs to be properly systemised.

Additionally, as we move forward with our programme of work we need to ensure we have in place a clear map of what information is required at down to specific NHS roles in order that this can be agreed upfront to avoid re-inventing wheels. Putting this in place early on will enable a speedier transformation of care.

Information Sharing – Summary Milestone Plan

| Milestone | To be achieved by |
|--|-------------------|
| Electronic map of who shares with who and what information is shared | October 2015 |
| Role based information sharing agreement developed and signed up to by all of our GPs and provider organisations | February 2016 |

Digital Inclusion

With the NHS moving at pace into the digital world, we need to ensure that we work with our partners to ensure we do as much as we can to avoid digital ‘exclusion’.

With many of us leading very busy lives, technology has enabled us to more efficiently address basic tasks that previously would have taken up much of our spare time, such as:

- [Booking a holiday.](#)
- [Ordering our groceries.](#)
- [Paying bills and general banking.](#)

With this capability the expectations on the NHS have grown and have resulted in technologies being delivered that mean:

- [You can book or cancel an appointment with your GP.](#)
- [You can order repeat prescriptions on line.](#)

- You can access your health record and valuable information about managing specific conditions.

This online trend is gathering pace and driving innovation enabling people to interact with the health service, and be monitored remotely using sophisticated technologies.

Much of this strategy is about enabling service transformation by embracing Digital Health. However we need to be aware of the following:

- More than 11 million people in the UK lack basic digital literacy skills.
- More than 7 million people in the UK have never used the internet. Of this 7 million, around 85 per cent are over the age of 55.
- Around 40 per cent of those aged 65 and over do not have access to the internet at home, and 5 million of these have never been online.
- People with a disability are three times more likely to have never used the internet, and 4 million people with a disability have never been online.
- The number of adults aged 16 to 24 without basic digital skills is double the number of Germany and triple the number on France.

In West Lancashire the story is the same and so finding innovative ways to improve ‘digital inclusion’ is a priority for us.

Go ON UK established by Baroness Lane-Fox in 2012 is a digital skills charity set up to help address the issues of digital exclusion.

In West Lancashire a new group has recently been established led by West Lancashire Borough Council to take this work forward at a local level.

West Lancashire CCG is part of that group and will work with key partners including the Council for Voluntary Services to pool assets and capabilities and introduce innovative ways of improving the digital skills and access to technologies for those currently excluded.

Digital Inclusion – Summary Milestone Plan

| Milestone | To be achieved by |
|---|-------------------------------|
| Attendance and support at the West Lancashire Go On UK group meeting | Ongoing |
| Identify and mobilise and report on a range of initiatives in place to improve the digital skills of our citizens | Interim report due March 2016 |

Technology to support programme delivery

The CCG is delivering through its transformation programme a broad portfolio of projects.

At a recent workshop this portfolio of work was reviewed to ensure that the projects currently underway were correctly aligned, prioritised and delivering against the CCGs 7 ambitions, 3 priority areas and encompassing QUIPP programme.

To ensure there is transparency the CCG will be putting in place a portfolio management tool which will monitor through a performance dashboard progress of projects linked to both a range of National and Local outcomes.

It is intended that we will use the product to ensure we manage our resources better, that staff do not become swamped and that what we deliver, we deliver well.

Programme Management Tool – Summary Milestone Plan

| Milestone | To be achieved by |
|--|--------------------------|
| Project design and technology selected | August 2015 |
| Product delivery | From September 2015 |

Glossary of terms

| | |
|----------|--|
| A&E | Accident and emergency |
| APP | Software application used on mobile devices such as tablets and Smartphones |
| BI | Business intelligence |
| BYOD | Bring your own device |
| CCG | Clinical Commissioning Group |
| CDMI | Clinical Digital Maturity Index |
| COIN | Community of interest network |
| COPD | Chronic Obstructive Pulmonary Disorder |
| CSC | Computer Sciences Corporation |
| CSU | Commissioning Support Unit |
| CVS | Council for voluntary services |
| EMIS WEB | Electronic Patient Record System used predominantly within General Practice |
| EPR | Electronic patient record |
| FLO | (Florence) –Simple SMS Text Telehealth solution |
| GP | General practitioner (Doctor) |
| GP2GP | System and method for transferring patient records electronically between GP practices |
| IBR | Integrated Business Report |
| ICO | Integrated Care Organisation (Southport and Ormskirk Hospital NHS Trust) |
| IG | Information governance |
| IM&T | Information management and technology |
| IT | Information technology |

| | |
|--------------|--|
| IPM | Name of a patient administration system |
| IP TELEPHONY | Technology that allows telephone calls to be made and managed over a data network |
| LMC | Local Medical Committee |
| LPRES | Lancashire Patient Record Exchange Service |
| LTC | Long term condition |
| MoM | Map of medicine used for developing and adopting best practice clinical pathways. |
| NHS | National Health Service |
| OOH | Out of hours service |
| PACS | Picture archiving and communications system (X-rays, scans etc.) |
| PAS | Patient administration system |
| PCT | Primary Care Trust (Now abolished organisations) |
| QIPP | A programme of Quality, Improvement, Productivity and Prevention |
| SCR | Summary care records |
| SKYPE | Publicly available on line communication tool for making telephone and video calls over the internet |
| TECS | Technology Enabled Care Services |
| SHAREPOINT | Microsoft product used collaboration and delivery of Business Intelligence. |
| TELEHEALTH | Technology to remotely monitor a patient's vital signs to enable them to live improved lives in the community and at home. |
| TELECARE | Technology which provides sensors and aids for use in a patients home to enable them to live at home safely |
| VOIP | Voice over IP Telephony (Telephones running over data network) |

| | |
|-------|--|
| WI-FI | Network that allows computers and other devices to exchange data without being physically connected. |
|-------|--|