BCS Health Informatics London & SE Specialist Group

Update on the London Programme for IT

Kevin Jarrold – Chief Information Officer NHS London
Planned Agenda

• Update on progress with the implementation of the National Programme for IT in London
• Impact of Lord Darzi’s Next Stage Review and the IT and information challenges in responding to the new models of care
• Overview of the key issues coming out of the recently published Health Informatics Review
• A forward look….
Theme for the day...

The challenge is not about delivering the National Programme (although that is hard enough) it is about delivering fit for purpose IT to support clinical transformation.
London Care Records Service

National Summary Care Record

London Shared Patient Record

Acute System (Cerner)

Community System (RiO)

Primary care System (INPS)

Mental health System (RiO)
Key features of this approach

- A pragmatic way of achieving the original vision of the ubiquitous electronic patient record
- Based on ‘best of breed’ so not a holistic solution from a single supplier
- Took as the starting point known products with existing functionality
- Tried as far as possible to model the approach and the behaviours on those that had previously worked successfully outside of the programme
- Taking each care setting in turn…
Acute - Cerner Millennium

• In London Homerton and Newham hospitals had deployed Cerner under their own contract pre-NPfIT
• In theory the South had taken the Homerton and Newham product
• In practice when BT offered Cerner to London and Homerton and Newham evaluated it they found a significant delta
• London Configuration therefore emerged to add back in Homerton and Newham developments and to provide for further enhancements to meet the needs of the NHS in London
Community and Mental Health
CSE Servelec - RiO

• Key benefits of RiO
  – It existed as a product
  – Provided immediate benefits for users as it provided a step forwards from existing systems
  – Had a clear development path and a good process of engaging users
  – Deployment had been constrained by concerns that it was not the strategic solution

• But it was recognised that RiO
  – Has a separate instance per organisation
  – Does not yet contain all the functionality envisaged at the start of the programme
Primary Care

- INPS was a successful product in London
- But it was delivered under the programme with
  - Functionality turned off as not in requirements
  - With a different service wrap around it
  - Added NPfIT information governance
- Turned it into a product no one wanted to take
- Meanwhile – other suppliers had consolidated their market position
- Approach now assumes INPS will be linked into the shared patient record along with an alternative GP supplier so that choice is maintained
Shared Patient Record

- Essential for delivery of new models of care arising from the Next Stage Review
- Delivered in two releases IR1 and IR2 scheduled for 2009 and 2010
- Originally planned to sit within the INPS GP system but this is being revised
- Intended to integrate with National Summary Care Record (both designed by Logica)
- Potential for flexibility to bring in other suppliers like iSoft
LPfIT Approach to Engagement

• Assume that NHS organisations have choice about whether to participate in the programme
• Complex clinical transformation project cannot be imposed from outside – you need to want to do it
• Risk that in the early stages the programme attracts the organisations least likely to succeed
• Assume that if the product is fit for purpose and it is free organisations will ultimately take it
• Put effort in to getting product fit for purpose rather than persuading trusts to take inadequate product
Pre-deployment process

- BT invest in “pre-sales” activity with trusts before they sign up to a slot
- LPfIT team provide trusts with help in evaluating options for a business case
- Aim to ensure that lessons are learnt from previous projects and to clarify roles & responsibilities
- Process concludes with sign off of a Declaration of Intent
- This is similar to the contract a trust might have signed before the programme
- Trusts then work together in cohorts for support
Governance arrangements

- Key assumptions:
  - Governance arrangements need to evolve as you move through the programme life cycle
  - NPfIT Local Ownership Programme was the start of a process not the end
  - NHS organisations using the products need to be controlling the future development of the products
  - The challenge is not about delivering the programme (although that is hard enough) it is about delivering fit for purpose IT to support clinical transformation
**London Programme Board and Care Setting**

**Expand scope to include:**
- Whole IM&T agenda
- Strategic perspective for London

**New Body - Role to include:**
- resolution of multi-care setting issues (e.g. shared patient record)
- coordination of innovations across care settings (e.g. with HfL projects such as Unscheduled Care)
- integration & coordination of IM requirements/delivery

**Scope to include:**
- set strategy and agenda – provide leadership for wider IM&T agenda
- link IM&T to national and local strategic priorities
- focus on LPfIT deployment
- set direction/agenda for strategic stakeholder group
- escalation route for Trusts
- set benefits expectations
- communicate to wider NHS

**Lift membership** to ensure CEO leadership and mandate to act on behalf of represented organisations
Generic sub-structure for each Care Programme Boards

Strategic Stakeholder Group:
- Translate strategic priorities into IM&T / LPfIT priorities & development plans (inc. LSP solutions);
- Prioritise work packages to the Design Group
- Approve LPfIT project scope and release strategy
- Assure cross-setting requirements incorporated into care setting plans/requirements
- Collate/structure performance information for the Care Setting Board
- Make recommendations to Care Setting Board
- Champion benefits realisation / service transformation
- Ensure information management requirements are reflected in delivered solutions

Role of Design Group:
- Deliver agreed scope and design configuration
- Work within remit set by operational group

Role of QA Group:
- QA throughout the DBT lifecycle
- Scope covers full range of stakeholder perspectives

Performance Management Function:
- Track key issues/risks resolution
- Track solution delivery
- Track LPfIT deployment against contract
- Track and report benefits realised
- Track NHS readiness for deployment
Cerner Millennium LC2 Development Process

• NPfIT LSP contracts assume 4 major releases of software and then no further enhancements
• In theory requirements for R3 need to be elaborated before R0 is deployed
• On LC2 there were two clear messages from the NHS in London:
  – Cannot release staff to participate in development of LC2 as cannot see how process will work
  – Will not take product until LC2 is developed
• Therefore had to explore alternative approaches
Cerner Millennium LC2 Development Process (2)

- Adopted model used successfully before the programme came along
- Embedded development work at Homerton Hospital with input from clinical staff across three trusts
- Working across 8 streams:
  - PAS - Clinicals
  - Reporting - Theatres and anaesthetics
  - Emergency Medicine - Medication management
  - Maternity - Critical Care
- London-wide assurance by subject matter experts
- Has taken more time but will deliver better output
- Aim to move to incremental delivery and a continuous improvement process
London Programme for IT: Coverage of RiO Mental Health June 2008

Key
- Deployed
- Planned
- Not Planned
Key
- Cerner
- Cerner deployed outside of the LPfIT contract
- iSoft
- In Deployment
- Not Planned

London Programme for IT: Coverage of Acute Systems June 2008
The Future....

• By the end of 2008/9 a large proportion of the NHS in London will be on systems supported by the programme
  – 29 of 31 PCTs
  – 8 of 10 Mental Health Trusts
  – 15 of 32 acute hospitals
  – 100% of GPs (under GP Systems of Choice)

• Key challenges are going to be:
  – Standardisation vs localisation
  – Improving the functionality
  – Delivering the shared patient record
  – Improving the interface with social care
  – Responding to Healthcare for London
Why Polyclinics?

- Complex model that is cross care-settings, including social care, local authority, independent and voluntary sectors
- Challenges all aspects of information and technology
- Further developed and has actively sought a collaborative consultation approach (Learning and Development Programme)
- Moving into an Early Implementer Phase, requires more direct support and pan-London agreement i.e. infrastructure
- Priority for local communities already committed to an ‘integrated model for delivering primary care’
- National and International thinking and models to be called upon
LPfIT Input to date

• Healthcare for London
  – LPfIT input into formal governance structure
  – Regular engagement with project leads
  – Set up HfL IT Steering Group to develop a strategic response

• Polyclinics
  – Developed the IM&T requirements specification
  – Facilitated enabler workshop for potential early adopters
  – Worked on Super Health Centre IM&T project
Governance for HfL Consultation

- Joint Overview and Scrutiny Committee
- Joint Committee of PCTs

- All London PCT Boards
- NHS London Board

- Patient and Public Advisory Group

- London Commissioning Group

- Clinical Advisory Group

- HfL Programme Executive Group

HfL Public Consultation

- Mental Health Services
- Children’s Services

Next Stage Review Clinical Working Groups

Healthcare for London Projects

- Stroke
- Major Trauma
- Polyclinics
- Diabetes
- Local Hospital Feasibility
- Unscheduled care
## Alignment of IT to principles

<table>
<thead>
<tr>
<th>IT Objectives</th>
<th>Consulting the Capital</th>
<th>Services focused on individual needs and choices</th>
<th>Localised where possible, centralise where necessary</th>
<th>Maximising the contribution of the entire network</th>
<th>Prevention is better than cure</th>
<th>A focus on health inequalities and diversity</th>
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</thead>
<tbody>
<tr>
<td>Deliver CRS within Care Settings</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
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<tr>
<td>Deliver an electronic Shared Patient record for London</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
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<tr>
<td>More agile to respond to new Business Models</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>◼</td>
<td>◼</td>
<td>✓</td>
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<tr>
<td>Deliver a robust, resilient and ‘fit for purpose’ underlying IT infrastructure across London</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>◼</td>
<td>◼</td>
<td>✓</td>
</tr>
<tr>
<td>Safe guarding information</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>◼</td>
<td>◼</td>
<td>✓</td>
</tr>
<tr>
<td>Develop our use of information</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>◼</td>
<td>◼</td>
<td>✓</td>
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<tr>
<td>Maximise the benefits from our investment in IT</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>◼</td>
<td>◼</td>
<td>✓</td>
</tr>
<tr>
<td>Develop an effective IT workforce across London</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>◼</td>
<td>◼</td>
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<tr>
<td>Maximise value for money</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>◼</td>
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<td>✓</td>
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</tbody>
</table>

Modified outputs from June 08 HfL IT Directors workshop

Direct Enablement
## Service Provision (Hours per Day)

<table>
<thead>
<tr>
<th>Service Provision</th>
<th>Hours per Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>General practice services</td>
<td>12</td>
</tr>
<tr>
<td>Community services</td>
<td>12</td>
</tr>
<tr>
<td>Most outpatient appointments (including antenatal/postnatal care)</td>
<td>12</td>
</tr>
<tr>
<td>Minor procedures</td>
<td>12</td>
</tr>
<tr>
<td>Urgent care</td>
<td>18 - 24</td>
</tr>
<tr>
<td>Diagnostics &amp; radiology</td>
<td>18 – 24</td>
</tr>
<tr>
<td>Interactive health information services</td>
<td>18 - 24</td>
</tr>
<tr>
<td>Proactive Mgmt (LTC incl Mental Health)</td>
<td>12</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>18 - 24</td>
</tr>
</tbody>
</table>

## IM&T Requirements

### Integration
- Intra & Inter-super centre communications (Centralised booking systems), Spine / N3 compliant

### Access
- Web Browsers, Remote access, Handheld Devices, E-mail and Pager, Desktop PCs, Mobile Phones, traditional phones, single sign-on, roaming profiles, centralised call-centre

### Network
- Single network (COIN), Hardware, WAN & LAN Components, High Bandwidth Backbones, Internet & Firewall Capabilities, Voice Over IP

### Application Functionality
- GP, Pharmacy, Community, Childrens, online decision support, Medical pathways etc

### Business Continuity
- Backups and storage, Disaster recovery planning, Extended support (IT) desk

### Data and Databases
- Robust relational databases, simplify administration and interfaces between systems, data appropriately coded, standardised and collated, appropriate data management, reporting, analysis and synchronisation

## IM&T Standards / Principles

- Allows the sharing of patient data across community and primary systems
- Ensures that Caldicott Guidelines relating to Patient Identifiable Data and Security are adhered to.
- Ensures that in the future, patient records travel with the patient and are accessible from a variety of national systems
- Ensures data integrity and facilitate Business Continuity/ Disaster Recovery.
- Facilitates Trusts with Emergency and Pandemic Plans.

‘For the Patient, the journey through the super centre(s) should appear seamless as the necessary IT has enabled integrated working and sharing of information’
Gap Analysis

Integration
- Shared Patient Record
- Centralised Booking & Appointments
- Unified Messaging

Access
- Hot desking
- Mobile computing
- Web based knowledge access
- Centralised Call Centre
- Single Sign-on
- Registration Authority (Smart Cards)
- Roaming Profiles

Infrastructure
- Single Network
- Locked down environment
- Standard PC build
- Single Telephony
- Hardware – JAYEX Boards, touch screens etc
- Dedicated line for images

Applications
- N3 delivered applications
  - GPSoC
  - Community
  - Walk-in Centre functionality
  - Diagnostics & Imaging
  - Minor procedures
- Urgent Care
  - Preventive Care and Education
  - LTC
  - Pharmacy
  - Booking & Appointing system
  - Health and Social Care

Business Continuity
- Daily backups
- Remote storage
- Disaster Recovery Plans
- Telephony backup (VoIP)
- Local backup servers
- Information Governance (Caldicot Guardian, data encryption etc)

Data and Databases
- Robust relational databases
- Simplify administration and interfaces between systems
- Data appropriately coded, standardised and collated
- Appropriate data management, reporting, analysis & synchronisation

Support
- On-site support (during working hours)
- On-call support (out of hours)
- Desktop training
- Remote control (access)
- SLA monitoring and reporting

Ability to close
- R
- G
- A

Dependency on LPfIT
- High
- Low
- Med
Options Appraisal

Patients

Staff

Flu, Dietetics, Physiotherapy, Podiatry etc

Booking, Arrival, Assessment, Diagnostics, Treatment, Referral, Transfer

Information Governance

Partial LPfIT Offerings

Applications

Desktop Environment

Infrastructure

Enabler ✓

Blocker ✗

IMT =

Acute

Mental Health

Social Care

Application & Process Support & training

ICT Support

Information Governance

SLA

Staff

Partial LPfIT Offerings

Applications

Desktop Environment

Infrastructure

Acute

Mental Health

Social Care

Enabler ✓

Blocker ✗

IMT =

Acute

Mental Health

Social Care

Enabler ✓

Blocker ✗

IMT =
What we need to do...

• Progress defining pan-London standards, like
  – Sharing Protocols
  – Common Standards
  – Infrastructure Blueprint for Polyclinics
• Work alongside NHS organisations to articulate:
  – What is locally developed?
  – What is pan-London defined?
  – What is Nationally defined?
• Work closely with suppliers
• Develop an IT and Information vision, strategy, and roadmap for London to underpin this work
Health Informatics Review

• Sets out a vision for the future of an NHS that is information enabled
• Emphasis on pragmatic, responsive and timely delivery of solutions
• Focus on
  – Organisational structure for IT and Information
  – Exploitation of existing investment
  – Information governance
  – Standards
  – Developing the capabilities of the workforce
To outline an information and IT architecture capable of supporting the world-class NHS envisaged in the NHS Next Stage Review
Strategic Vision

• Patient information available at the point of need
• Cross-care setting sharing is key for delivery of the strategy
• People need access to their own record and to accurate information to enable informed choice
• Information should be collected once only
• Data should be secure

• Standards
  – Review of data model
  – Exchange data with other sectors
  – Set standards so local products can integrate
  – Develop enterprise architecture supported by common standards
  – Ensure existing standards are fully adopted
Responding to clinical priorities

- **Achieving the strategic vision:**
  - Investigate scope for interim solutions including feasibility of widening choice of LSP solutions
  - Trusts to develop a roadmap by April 2009 – describing how the strategic vision will be achieved

- **Acute care - priority functionality**
  - Patient Administration System (PAS)
  - Order Communications
  - Clinical letters
  - Scheduling
  - e-Prescribing, including ‘To Take Out’ (TTO) medicines
Changing landscape…

- Patient
- Healthcare Provider
- Healthcare System
Challenges moving forwards

• The Patient
  – Access by patients to their own records – giving them a sense of ownership and control will help to address concerns over confidentiality

• The Healthcare Provider
  – NHS organisations want to use IT to drive competitive advantage

• The Health System
  – A whole new health care system is being created driven by Choice
  – Real thought needs to be given to the IT and information systems needed to support this new system
Shift in IT policy as trusts are told they can develop their own system

IT STRATEGY
Connecting for Health denies move indicates end of IT programme

Sally Gainsbury
sally.gainsbury@emap.com

The Department of Health has signalled a shift in the national programme for IT that will see it supporting NHS organisations that want to develop their own systems.

"Today's long-awaited informatics review recognises that progress on the NHS care records service has been so slow that trusts should now be helped to procure their own interim systems."

Connecting for Health director of informatics Gordon Hextall denied the change meant the end of the national programme.

The strategic vision remains, but there is now "a greater emphasis on the standards and interoperability so that patient information can be made available wherever it's needed," Mr Hextall said.

He added: "We need to make that information flow in the meantime, rather than something that's done at the end (implementation of the national programme)."

Impatient acute trusts have been hesitant about investing in interim systems because of fears they would have to scrap them when the national programme became available.

CfI will now support trusts looking at interim systems that will realise benefits more quickly and will therefore be best for them," Mr Hextall said.

CfI will consider whether economies of scale could be gained through NHS-wide procurements of interim systems, but the money will have to come from the local NHS.

The review says CfI should see itself as "the source of technical, commercial, service and programme management support expertise to the health service."

Connecting for Health should now see itself as "the source of technical, commercial, service and programme management support expertise to the NHS", not simply as the implementer of the national programme.

Earlier this year CfI established a framework of approved interim IT suppliers that have reported a surge in interest from trusts.

that the DH is trying to deliver, by which I mean the spine and the ability to exchange patient records," he said. "But once we have that there are big benefits in recognising local and regional differences."

The review outlines the five essential elements of a future national IT system which clinicians say they want. They include the ability to schedule beds, tests and theatres and e-prescribing. Local implementers will now need to work those into their programmes.

DH interim director general for informatics and NHS medical director Sir Bruce Keogh said he was optimistic about future clinical applications in this way on NHS Choices from today. A "methodologies" document will reveal the underlying figures, which...
Any Questions?