

EAST LONDON PATIENT RECORD

LONDON

INTRODUCTION

The east London Patient Record (eLPR) shares 'read-only' patient records across health and community organisations in the 5 London boroughs of Waltham Forest, Newham, Tower Hamlets, Hackney and City of London, as well as with GPs in West Essex.

The Health Information Exchange (HIE) has been implemented to facilitate continuous improvement in the delivery of direct patient care.

SCALE

M

COMPLEXITY

M

- ✓ ACUTE CARE
- ✓ PRIMARY CARE
- ✓ MENTAL HEALTH CARE
- ✓ COMMUNITY CARE
- ✗ SOCIAL CARE

Scale:

S = < 5 organisations
M = 5-10 organisations
L = 10+ organisations

Complexity:

L = Healthcare (HC) only
M = HC + community or social care
H = HC + community + social care

TIMELINE

2012

2012

Waltham Forest and East London (WEL) create a joint IT strategy

2014

Barts Health NHS Trust, and Homerton University Hospital start sharing information with GPs

2016

Barts Health NHS Trust and Homerton Hospital NHS Trust start sharing information with each other

Plan for 2017+

Integrate social care and expand to the STP region and beyond

INVESTMENT OBJECTIVES



TO ENSURE PROFESSIONALS HAVE ACCESS TO ALL OF THE RELEVANT INFORMATION ABOUT A PATIENT AT THE POINT OF CARE REGARDLESS AS TO WHICH SYSTEM THAT INFORMATION IS STORED IN.



7 healthcare organisations & **183** GPs

Approx. **10,000** accesses per week

Approx. **1.5m** population

SOLUTION

- The East London Patient Record shares patient information across different organisations in the network using the Medical Interoperability Gateway (MIG) and Cerner's Health Information Exchange (HIE).
- Health and care professionals view patient records through existing clinical systems, with no additional log on process.
- The information is shared at the point of request and provides an up-to-date view of the record.
- Patients give their consent to view the record at the point of care.

BUSINESS CAPABILITIES

RECORDS ACCESS

- Provides a read-only, single-view of the patient within the existing clinical systems
- The record includes access to:
 - Patient medications
 - Hospital attendances
 - Diagnoses
 - Discharge summaries
 - Outpatient letters
 - Immunisations
 - Allergies
 - Test results
 - Future appointments

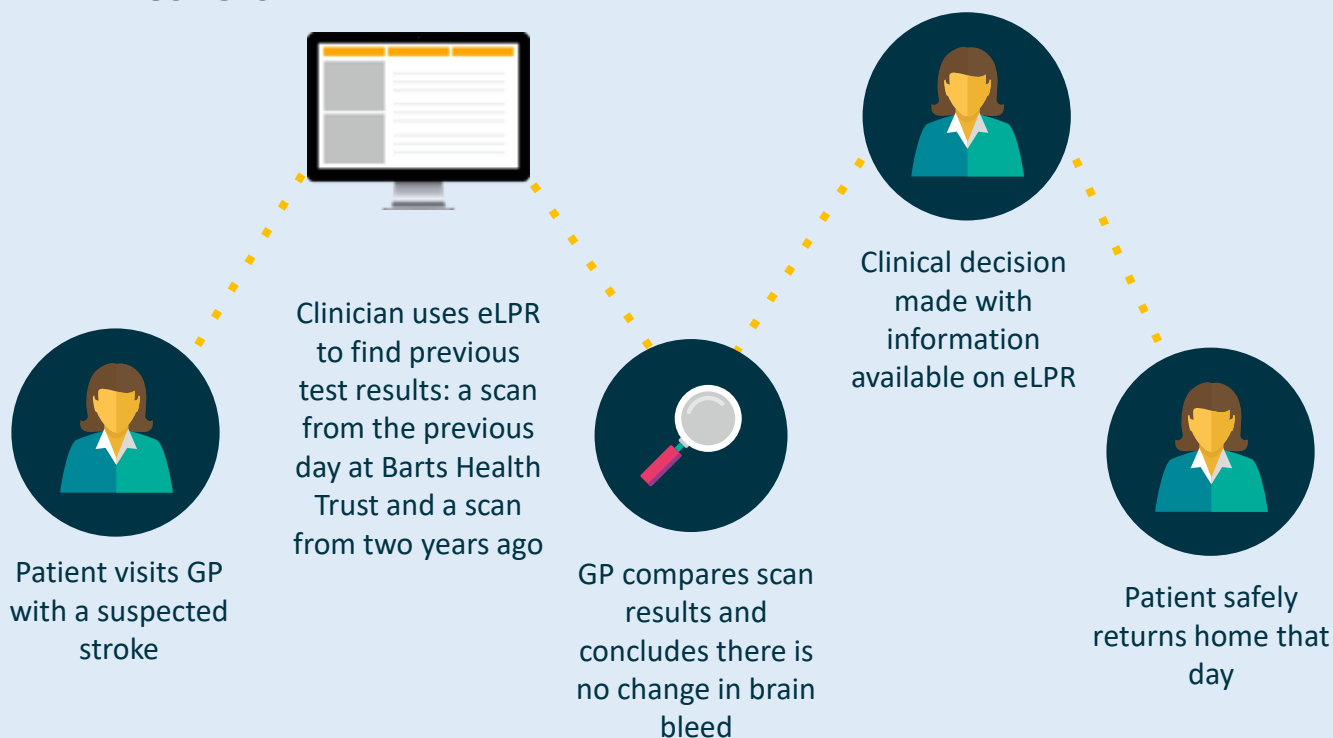
INFORMATION SHARING RULES

- A cross community information governance agreement was chartered.
- A Waltham Forest East London and City (WELC) information governance committee has been established.

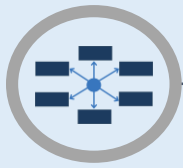
TRANSFERS OF CARE

- Patient letters shared with GPs using Messaging Exchange for Social Care and Health (MESH), a complimentary solution.

PATIENT USE CASE



TECHNICAL SOLUTION



FEDERATED RECORD LOCATOR MODEL

- The MIG and HIE share information using a hub and spoke model.
- Enables real-time information sharing without changes to local systems (e.g. at GP practices) using a record locator.
- There is no central data repository.
- Records can be viewed in context by clicking a link. within the core clinical systems with no additional log-in.

SOLUTION FEATURES IN USE

FEATURE	IN USE
Coded data	✓
Free text data	∅
Bi-directional	✓
Real time	✓
Role-based access	∅
Clinical Portal	∅
Analytics	∅
Write access	∅
Notifications/Alerts	∅
Patient Portal	∅

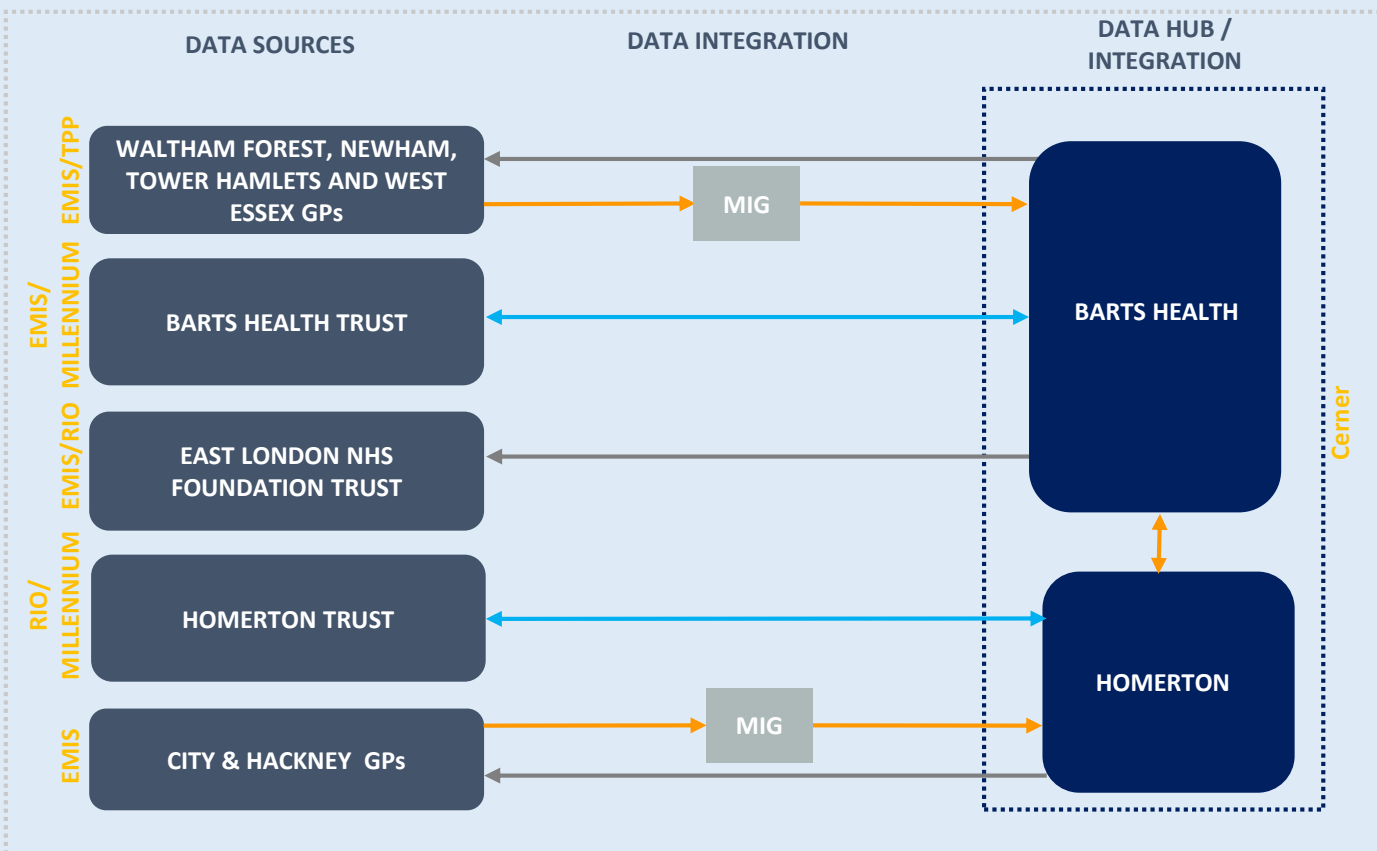
HEALTH AND CARE IT SYSTEMS IN THE REGION

SITE	IT SYSTEM
Barts Health NHS Trust	CERNER/EMIS/TPP
Homerton Trust	RIO/MILLENNIUM
Homerton University Hospital	CERNER
East London Foundation Trust	RIO/EMIS
179 GP Practices	EMIS
4 GP Practices	SYSTEMONE

OPEN STANDARDS

STANDARD	COMPLIANT
HL7v.2, v.3, FHIR, XDS.a, XDS.b	✓

HIGH LEVEL TECHNICAL ARCHITECTURE DIAGRAM



IMPLEMENTATION

The East London Patient Record was delivered incrementally over 3 years through a process of continuous improvement. The Cerner team worked with the individual IT teams at each site. The programme was originally sponsored and funded by Barts Health NHS Trust and Homerton University Hospital, and has now transitioned to joint funding from the Waltham Forest and East London CCGs.



PROGRAMME SPONSOR

Originally Barts Health NHS Trust Group for WEL CCGs, Homerton for C&H CCGs, currently WELC CCGs



PRIMARY FUNDERS

Health NHS Trust Group for WEL CCGs, Homerton for C&H CCGs, currently WELC CCGs



DELIVERY APPROACH

Incremental approach over 3 years



GOVERNANCE

Core team of 4 FTE resources. Supported by IT teams in each organisation

GOVERNANCE

The Organisational IT Committees are responsible for communicating information to their own organisations governance.

The Information Governance Committee focuses on Governance issues that will support the Information Steering Group.



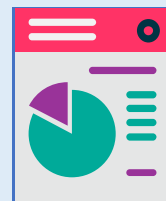
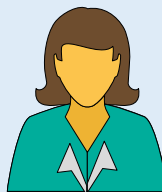
FUTURE AMBITIONS

In the future there are specific milestones and plans to:

- Integrate additional data sets for example social care (Azeus and Mosaic) in 2017.
- Bring additional GPs from the wider geographic region such as Hertfordshire and West Essex in 2017.
- Population Health Advanced Analytics through the Discovery project in 2017.
- Integrate with the London Digital Programme to share data with other London organisations.

SOLUTION BENEFITS

The East London Patient Record project identified the following potential indirect benefits:



DESCRIPTION

Healthcare professionals have access to patient's previous test results:

- This reduces the number of unnecessary duplicate tests
- This reduces the need to find information held elsewhere

PATIENT

Experience improves

Outcomes may improve as action can be taken without delay

CLINICIAN

Saves time doing duplicate tests

Saves time chasing information

Estimated time saved by 1 GP surgery is 482 hours per year

OPERATIONAL

Reduces costs from duplicate tests

ACCESS TO RESULTS

Clinicians in A&E and hospital have access to a patient's GP record

Safety improves as timely and safe decisions are made

Experience improves as may not have to recall information

Saves time chasing information

None

ACCESS TO RECORD

BENEFITS MONITORING

- A study in one GP surgery showed time saving due to use of the eLPR. This was extrapolated to 56 GP surgeries to calculate an estimated annual time saving of:
 - 5891 hours viewing future appointments.
 - 10,310 hours viewing radiology reports.
 - 10,310 hours viewing laboratory results.
 - 839 hours dealing with enquires from acute trusts.

Note: The remaining benefits are assumption based and there are no supporting data or metrics to quantify the benefits described.

SUCCESS FACTORS



GOVERNANCE

A CORE CENTRAL TEAM TO MANAGE DELIVERY

- The eLPR has a central, core team to manage the programme.
- This has prevented localisation and reduced conflict between different stakeholders.
- Delivery of the IT work is then done by the individual teams.
- The East London leadership team has been supportive of the programme, thus accelerating programme implementation.



EXISTING TECHNOLOGY

THE PLAN FOR A SIMPLE LANDSCAPE ALLOWED PRIORITISATION

- A strategic drive to encourage all GPs to use the same system.
- The majority of GPs in the region moved to a single system (EMIS).
- The project agreed to prioritise the integration of this system first.



DELIVERY APPROACH

INCREMENTAL APPROACH FOCUSED ON NEEDS

- The delivery approach prioritised health and care professional needs and use cases one by one.
- This was attractive to sponsors as incremental costs are more manageable and could be more easily agreed.
- Given the challenge of building a credible quantifiable benefits case for interoperability this increased the level of project assurance.



ENGAGEMENT

CLINICALLY LED PROJECT TEAM

- The eLPR group has high clinical engagement within its members.
- The health and care professionals helped communicate the case for change and potential benefits.

LESSONS LEARNED

REQUIREMENTS

Challenge: Large amounts of GP data stored in the user interface caused a latency of up to 2 minutes in pages loading in the shared care record.

Approach: The latency issue was resolved by reviewing the user interface requirements and reducing the volume of unnecessary data pulled from the core system.

Latency
> 2 minutes

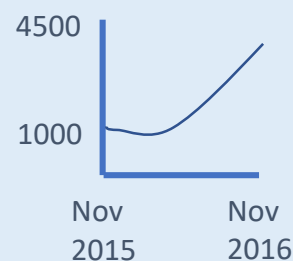


Resolved by **reducing volume** of data

CHANGE MANAGEMENT

Challenge: Low initial uptake by health and care professionals using the record identified through monitoring.

Approach: Identified the reasons for the low usage and promoted a culture of change by encouraging the CCGs to employ extra IT facilitators to embed the change.



TECHNOLOGY LIMITATIONS

Challenge: There are limitations to the scope of information sharing as GPs can only share information with the main organisation in the exchange [1:1 mapping]. This restricts the range of information some organisations can access. For example, the East London Foundation Trust is currently unable to access GP data even though they are both integrated with Barts Health NHS Trust via the HIE.

Approach: Work is in progress to set up additional HIE data profiles in EMIS and RIO to enable non-local data exchanges. This will be the first of kind for EMIS and RIO and will enable sharing between the East London Foundation Trust and GPs.

SOCIAL CARE

Challenge: Coordinating the implementation of social care data was difficult because of the number of different local systems and the existing plans for system upgrades.

Approach: An organisation by organisation approach was taken. Work is in progress to enable sharing with Hackney, City of London, Newham, Waltham Forest and Tower Hamlets Council through individual Azeus, Cerner and Mosaic integrations.

FURTHER INFORMATION

CONTACT

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Produced in collaboration with NECS and Accenture

INFORMATION CORRECT AS OF 06/04/2017

REFERENCES

Pioneer February 2017 slides

NEL LDR - City & Hackney

NEL LDR - Waltham Forest & East London CCG