

DATAWELL: PATHOLOGY PILOT

GREATER MANCHESTER PARTNERS

INTRODUCTION

The Greater Manchester Academic Science Network Partners (AHSN) have implemented a Lumira data sharing solution to support the devolution of health and care services to Greater Manchester. This is part of the regional interoperability programme called DataWell. At the current scale, the solution enables sharing of pathology information between healthcare organisations, viewable through mobile devices.

The solution implementation is in progress with a final Go-Live date of May 2018.

SCALE

S

COMPLEXITY

L

- ✓ 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



INVESTMENT OBJECTIVES



ACCELERATE DELIVERY OF IMPROVEMENTS IN HEALTH OUTCOMES AND COST EFFECTIVENESS AND THEREFORE SUPPORTS THE AIMS OF EVERY HEALTHCARE ORGANISATION ACROSS GREATER MANCHESTER, EAST CHESHIRE AND EAST LANCASHIRE.



2 organisations supplying data in pilot phase

30 expected end users for pilot

Approx. **2.8 million** population

SOLUTION

- The Lumira solution enables information sharing of pathology information between acute NHS Trusts and GPs in 2 localities.
- Health and care professionals access the patient's information through a portal application from tablet devices.
- On access data requests are distributed to all participating sites. Based on information sharing agreements the relevant data will be retrieved and shown to the requesting site.
- The pilot currently includes 2 sites. Each site has Lumira deployed locally which allows them to communicate with any other participating site, based on open standards.
- In the future, DataWell will be rolled out to health and social care organisations across the 10 localities of Greater Manchester.
- In addition to this pathology pilot there is other pilots in progress for:
 - Genomics: Support the Genomes research by developing a mechanism to transfer study data. between 100k Genomes Study Centre and their partner sites.

BUSINESS CAPABILITIES

RECORDS ACCESS

- Provides a read-only, single-view of a patient's pathology results within a vanilla portal called "Consult".
- The solution currently enables access to 100 types of test results from 3 sites.
- These are displayed graphically as a consolidated view.

INFORMATION SHARING RULES

- Uses the individual nodes to store and manage data sharing agreements.
- Individual organisations can manage their sharing agreements through the admin console of their site.

TECHNICAL SOLUTION



PEER TO PEER ARCHITECTURE

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	⊘

- The DataWell Exchange acts as an information broker across organisations in Greater Manchester.
- It is a peer-to-peer architecture using an off-the-shelf product from Lumira.
- There is a front end portal to access the data.
- The design is based on nodes deployed at each site which communicate with each other on a request basis.
- Individual organisations maintain local control of the data they hold and who it is shared with.
- An Information Governance tool is used to streamline Data Sharing Agreements.

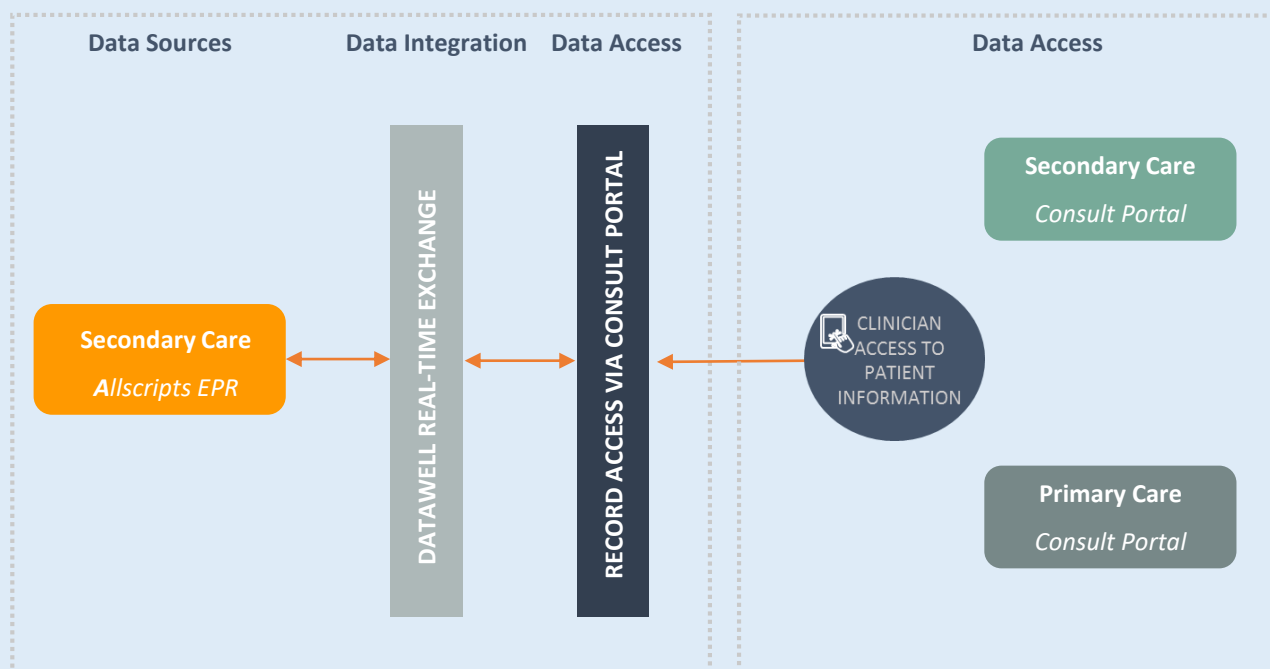
HEALTH AND CARE IT SYSTEMS IN THE REGION

SITE	IT SYSTEM
Salford Royal Foundation Trust	Allscripts EPR
University Hospital South Manchester	Allscripts EPR

OPEN STANDARDS

STANDARD	COMPLIANT
HL7 v2, v3, FHIR; IHE XDS, XML, ADT	✓

HIGH LEVEL TECHNICAL ARCHITECTURE DIAGRAM

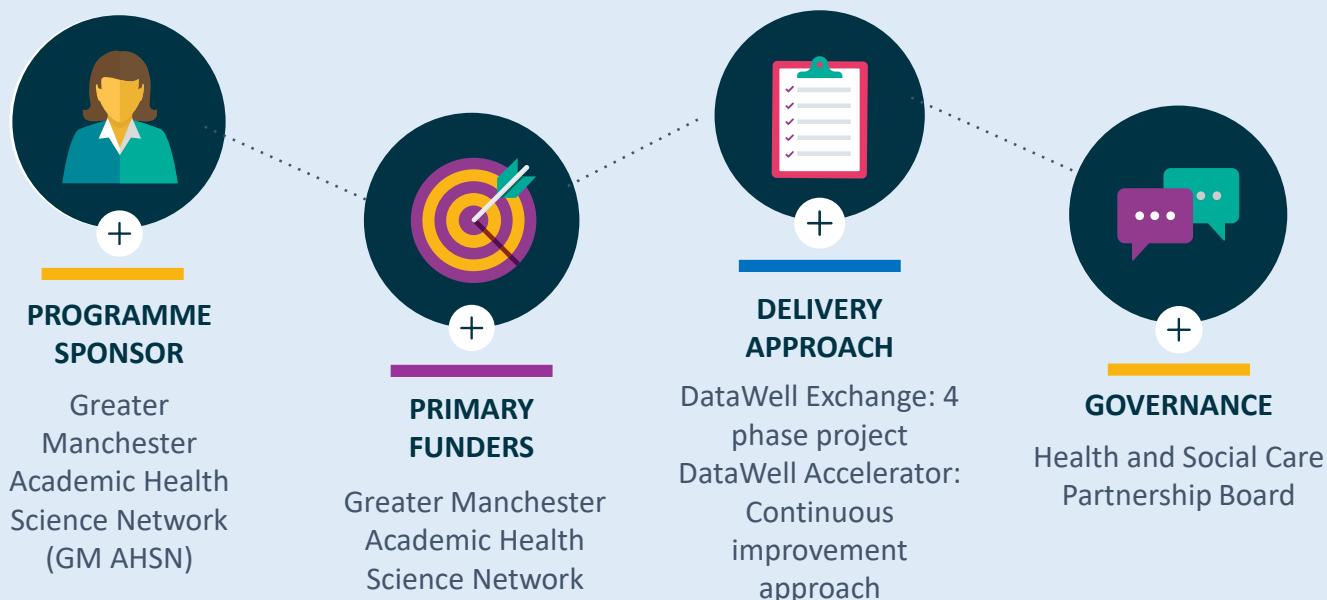


IMPLEMENTATION

Implementation at each site had 3 key steps:

- Deployment of a node
- Configurations of the node
- Set up of information governance

Each implementation took 1 month and was done by the delivery consortium who worked with the local IT teams. In the roll out local IT teams will manage the deployment.



GOVERNANCE

The project sits within the Health and Social Care Partnership Board. Programme governance is through the GMAHSN board, who represent 37 member organization.

The DataWell Accelerator Oversight Board reviews Accelerator proposals to assess their suitability for development. Accepts both outline early-stage proposals as well as fully worked up propositions. It includes clinical and patient representation.



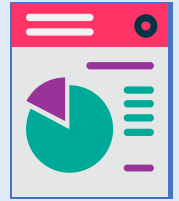
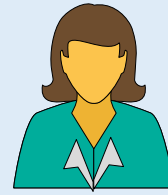
FUTURE AMBITIONS

In the future there are specific milestones and plans to:

- Complete the pilot for sharing pathology and genomics data – May 2017.
- Deploy a node at the GP interface to enable sharing with GPs – May 2017.
- Extend the technology platform to 14 organisations including an accelerator to share information between social services - October 2017.
- Develop additional accelerators including audit of stroke rehabilitation pathways, community pharmacy referrals and a locality based Care Coordination Centre.
- Roll out the DataWell exchange to 27 organisations – by January 2018.
- Share data with the Lancashire Patient Record Exchange (LPRES).

SOLUTION BENEFITS

The DataWell programme has identified the following direct and indirect benefits from the use of the solution for the pathology pilot:



DUPLICATE TESTS

DESCRIPTION

Healthcare professionals have access to patient's pathology test results from other organisations.

This reduces the number of unnecessary duplicate tests

PATIENT

Experience improves

Outcomes may improve as action can be taken without delay

CLINICIAN

Saves time chasing information

OPERATIONAL

Reduces costs from duplicate tests

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

SUCCESS FACTORS



PROCUREMENT

INNOVATION PARTNERSHIP

- Procured through an Innovation Partnership tender process within the OJEU, a new process that allows a project to be structured in successive phases with intermediate targets. The proof of concept was defined and then the rest of the project.
- Greater flexibility than a traditional fixed-scope, fixed-cost approach and means the solution can adapt to the customers needs and the lessons that are learned.
- The partnership can be between more than one vendor and this promotes collaborative working.
- Organisations can join the DataWell programme without the need for further procurement.



DESIGN

CLINICALLY LED DESIGN

- The DataWell team engaged clinicians and pathologists in the design phase to define the requirements for the user interface.
- DataWell found that clinicians needed to know the source of the test results to make clinically confident decisions.
- The portal user interface has been designed with these requirements so that the product is fit for purpose.



DELIVERY APPROACH

FOCUS ON THE OUTCOMES – EXCHANGE/ ACCELERATOR MODEL

- The division of the DataWell solution into a technological platform that is separate from the DataWell accelerator which develops applications that utilise the data, is a key feature.
- Encourages and facilitates the development of pilots at local sites which are focused on specific benefits cases.
- Each of the pilots will be able to diffuse the innovation and benefits to the whole Greater Manchester network.
- Stakeholders are aware that the benefits of the interoperability programme come from the use of the data, not just the provision of the technology.



GOVERNANCE

ACADEMIC HEALTH SCIENCE NETWORK

- The Academic Health Science Network acted on behalf of the 37 organisations and gave DataWell a governance home.
- As they are neither a commissioner or a providers they were neutral and gained the support and trust of the other organisation.

LESSONS LEARNED

STAKEHOLDER ENGAGEMENT

Challenge: The implementation of nodes in the pilot was delayed because local priorities were not aligned with the regional priorities, and there was not a history of working at a regional scale.

Approach: To align the priorities and improve the ways of working the team:

- Engaged the chief executives to escalate lack of progress and worked to understand the reasons for delays.
- Introduced visual progress reports that were circulated to all stakeholders. Used a RAG system to track technology and information governance progress.
- Re-evaluated the effort required for implementation and adapted the plans for future deployments.

STANDARDISATION

Challenge: Hospitals do not have standardised naming for pathology test results. It would have been challenging to standardise the names and structures across the organisations and it would have impacted organisation engagement and effort required.

Approach: Mapped existing test names to an international pathology coding standard, LOINC, which automatically standardises the test result names at the point of request. This was done in partnership with NHS Digital's Digital Pathology Programme.

ENGAGEMENT

Challenge: There was a risk that patients and organisations would not see the value of DataWell and be resistant to its introduction.

Approach: A widespread 'hearts and mind' engagement programme lasting several months was done to ensure people participated in the project and supported it. DataWell partnered with the GM AHSNs Public Members Group to develop views on platform use, and communications materials including a video capturing their views on the programme.

GOVERNANCE

Challenge: Governance structures need to adapt to the changing scope of the project to best represent all of the stakeholders involved.

Approach: The project are re-evaluating who will be impacted by the changes and revising the governance structure so that it is representative.

FURTHER INFORMATION

CONTACT

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INFORMATION CORRECT AS OF 06/04/2017

REFERENCES

DataWell Full Business Case
GM Strategic Plan