RESTART

Interoperable Digital Care

RESTART CASE STUDY

AN INTEROPERABILITY PARTNERSHIP FOR CROSS-BORDER COLLABORATION

NHS

Bedfordshire Hospitals

NHS Foundation Trust

AN INTEROPERABILITY PARTNERSHIP IN THE NHS – THE FOUNDATION FOR DATA SHARING AND COLLABORATION

On Wednesday 1st April 2020, the new Bedfordshire NHS Foundation Trust was formed from the merger of Bedford Hospital NHS Trust and the Luton and Dunstable University Hospital NHS Foundation Trust. Caring for a population of around 620,000 people in and around Bedfordshire, the combined Trust brings together a workforce of approximately 8,000 staff and is the largest NHS employer in Bedfordshire. The new organisation delivers a full range of services on both sites, including key services such as A&E, Obstetrics-led Maternity and Paediatrics at Bedford.

Prior to the merger, the two Trusts had already been working closely on a number of initiatives, including digital transformation. Luton and Dunstable University Hospital was one of 16 Acute Trusts selected as a Global Digital Exemplar (GDE) by NHS England, while Bedford Hospital is part of the GDE Fast Follower Programme.

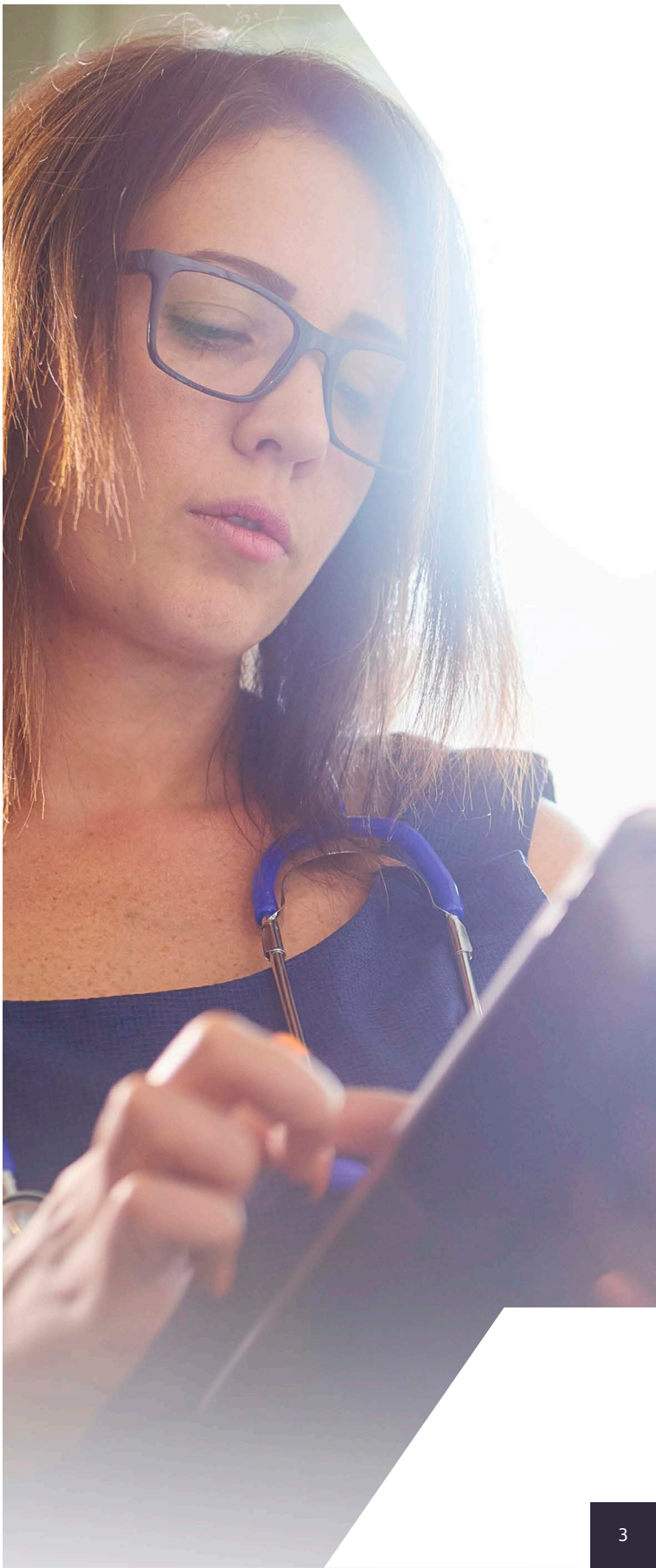
Josh Chandler, Associate Director of IT, confirms the injection of finance associated with the GDE programme has been transformational for the Trust, supporting the implementation of a number of priority projects including the IMX-IR interoperable clinical record, eDischarge and the forthcoming EDRMS deployment. “GDE has enabled us to focus the funding on clinical system developments that are delivering clinical benefit to the Trust – which has meant the internal finance of the hospital could be concentrated on infrastructure improvements and underlying systems to increase speed and resilience,” he says.

INTRODUCTION: CHALLENGING LACK OF DATA

Before taking part on this programme, Bedford had been struggling with many of the issues familiar to Trusts across the NHS: multiple disparate data sources making it difficult for clinicians to gain access to the required data in a timely fashion. In addition to the delays caused by the need to log in to multiple systems, a lack of access to critical information such as pathology and radiology results led to duplicate tests being undertaken and patients being asked repeatedly for the same information.

For the IT team, the need to tie together multiple systems resulted in a complex mix of point of point connections, creating an environment that was hard to monitor and support. An investment in a Trust Integration Engine (TIE) resolved some issues but the ageing solution was unstable and simply unable to cope with the volume of messaging. With a desire to rapidly scale up the collaborative model, an upgrade of the TIE was key to achieve a robust, managed environment that supported far broader interoperability across a wide range of clinical systems.

Expectations of NHS Digital have also encouraged the Trust to rapidly increase its skillsets and escalate digital maturity. Dedicated teams and tight requirements have fast tracked the digital transformation journey.



SOLUTION:
FAST TRACK INTEGRATION MODEL

A core component of the Trust's digital transformation programme has been the creation of a single source of real-time information to support both clinical and administrative roles. Working in Partnership with ReStart over the past seven years, Bedfordshire has replaced limited point to point integrations between systems with an upgraded TIE - in this case, HealthShare Health Connect. Starting with simple ADT interfaces, the TIE was quickly expanded to include Radiology and Pathology reports, clinical documents and interoperability with PACS, as well as the recent additions of cancer data and cardiology reports. Over 40 systems are now integrated through the Bedford TIE.

The Trust has also added ReStart's IMX-IR interoperable clinical record to provide staff across the Trust with rapid access to patient information. The IMX-IR architecture is inherently scalable – with no need for an expensive or time consuming data repository development, information is simply pulled on demand from various systems. This has enabled Bedford Hospital to add new systems rapidly to IMX-IR and scale up to deliver a greater depth of patient information throughout the Trust.

Using the single sign-on provided by IMX-IR, staff have access to up to date patient information throughout the Trust – from test results to medication, outpatient appointments to consultant letters.

According to Dean Pates, IT Systems Integration Manager at the Trust, the speed of the integration model delivered by ReStart has been key to retaining momentum throughout each phase of the Viper project and delivering rapid ROI. "Working with ReStart on both the integration and IMX-IR is a huge benefit to Bedford Hospital ," he says. "ReStart handles our integration: having built it into the TIE, it is now a quick and simple task to make that data available in Viper. The development process is rapid."

The Trust is also in the process of migrating to the latest version of IMX-IR – Version 3 – which will deliver not only an updated user interface and even faster access times, but also an enhanced architecture that will make the addition of further data and systems even quicker.

BENEFITS: IMPROVING TIME TO CARE

Bedford records over 23,000 patient searches each month in IMX-IR. The system is used across the organisation, from A&E onwards, with clinicians gaining immediate access to key patient information in one place, including radiology results as well as GP information, medication reviews, discharge documents and consultant letters.

IMX-IR's single sign-on is delivering significant clinical time saving – with no need to log in and out of multiple systems or worry about being timed out in one system while searching for data in another.

Josh explains, "The need for multiple passwords to access patient information across different systems can be overwhelming; it is the patient who should be front of mind, not the many passwords clinicians are trying to remember. Viper gives rapid log in to all that data via a single interface, speeding up the time it takes to access the information. With Viper, a clinician can see key events and information in a patient's history, including discharge letters, in one page, instantly, providing all the information needed to help make the best possible decision for the patient."

For patients, there is no need to repeat information for every single clinician and with an up to date view of all test information – including tests undertaken but still awaiting results – patients do not have to endure the duplicate testing that can often occur, for example, when clinicians on a ward lack visibility of information from other care settings. In addition to improving the patient experience, reducing the number of unnecessary tests also cuts waiting times and minimises delay.

A recent survey of IMX-IR users at Bedfordshire has confirmed the benefits, with 100% confirming paper reduction, 94% time savings.

For Dr Nick Morrish, Consultant Diabetologist and CCIO at Bedford Hospital, IMX-IR really proved its worth during the initial phases of the Covid-19 pandemic, when infection control measures restricted the use of paper patient records. "Rather than having to check a patient's name across several systems, Viper provides rapid access to patient information from one portal. Access to test results, appointments, correspondence, discharge summaries, and so on, means you can quickly find helpful information. The time savings are significant." Adding, "Anything that improves the clinician experience should have a good effect on the patient experience."

CONCLUSION: FOUNDATION FOR CHANGE

Attitudes towards data sharing have changed significantly in recent months, with the NHS encouraging ever greater shared service delivery to cope with both the Covid-19 pandemic and the on-going backlog in core service delivery. The digital transformation enabled by the use of both the TIE and IMX-IR has provided Bedfordshire Trust with the foundation for rapidly expanding its collaboration and data sharing.

As the Trust moves forward with the merger, ReStart continues to work in partnership with Bedford to futureproof interoperability and support further expansion of data driven collaboration. As Dean explains, “We are already sharing our pathology results from our TIE with East & North Herts Trust and we are currently in discussion with some neighbouring organisations about data sharing to overcome cross-county border limitations and enable better shared service delivery,” he says. “Looking ahead, we can consider opening up IMX-IR to GPs, to people at home and other trusts. We have a good platform to support further data sharing in the future.”

ABOUT RESTART

Our mission is to give healthcare professionals in any care setting access to the right information they need, when they need it, in the format they need it.

Interoperability is consistently one of the key priorities for NHS leaders. ReStart has been helping Bedford with their interoperability challenges for the last 7 years with accessing data from siloed systems, sharing and viewing data at the point of care. For Bedford to successfully do this, we provide IMX.

Whether you want to integrate all your systems at once or add them one by one, you can rely on our interoperability tool kit (IMX) to provide the right combination to scale at your pace. IMX allows you to think big, start small and scale fast.

IMX
Interoperability
Matrix

IMX is designed with multiple entry points to meet any level of digital maturity, comprising of five complementary services.

- Interoperable clinical record
- Integration
- Technical consulting
- Support
- Partners (not ships)

For help with your interoperability
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