

Six years transforming care

Orion Health Case Study:
Northern Ireland
Electronic Care Record

Northern Ireland

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Northern Ireland Electronic Care Record
Information for better care

Customer Name

Health and Social Care Northern Ireland

Location

Northern Ireland

Annual Budget

£5 billion

Population

1.8 million

Employees

Over 56,000

Number of Active Users

Over 20,000

Products Implemented

Orion Health Open Platform,
Orion Health Coordinate,
Orion Health Engage Citizen Portal

Key Benefits

- Reduced time wasted trying to access or confirm patient information
- Enhanced patient care with decisions based on a holistic patient record
- Fewer avoidable duplicate laboratory and radiology tests
- Faster, trackable and more reliable referrals from primary to acute
- More efficient and standardised workflows

The Customer

Northern Ireland operates under a national Health and Social Care system, which is responsible for commissioning services, resource management, performance management, and service improvement to meet the needs of the population of Northern Ireland. Within the system there are a total of six Health and Social Care (HSC) Trusts. The Northern Ireland Electronic Care Record (NIECR) was delivered by the regional Business Services Organisation (BSO) to enable information sharing for the entire region.

The Challenge

Faced with many disparate clinical systems Health and Social Care Northern Ireland (HSCNI) recognised the ever-increasing amount of clinical time devoted to locating patient information, which prevented effective and timely decision-making.

HSCNI had a vision to provide care professionals with a comprehensive care record, for every patient using HSCNI services. The solution was to include clinically relevant information, assembled from electronic systems located anywhere in the service and presented in real-time via a single, web-based, easy-to-use solution accessible from anywhere in HSCNI.

The Solution

A proof of concept went live for the NIECR in 2009, with the full roll-out taking place in July 2013. The NIECR is designed to sit on top of current HSC information systems, providing health and social care professionals with a single view of key patient information, wherever the patient is in Northern Ireland. This information includes demographics, lab results, medications, allergies, diagnoses, encounters, clinical correspondence and much more.

Over the years, much additional functionality has been added to the NIECR solution to further support patient care:

- eTriage – Electronic primary to secondary care referrals for fully auditable, faster and more reliable referrals
- Radiology Order Comms – For standardised data collection, reduction in duplicated tests, better order tracking and a single approach to radiology ordering across the region
- Regional Mortality and Morbidity System – To create a single pathway for recording patient deaths in Northern Ireland for standardised process and improved scrutiny
- Results Sign Off – Ability to review and sign off laboratory and radiology reports within NIECR, for increased quality and safety and reduced variation in processes
- Diabetes Care Pathway – A single, region-

wide pathway for adult and paediatric diabetes patients, enabling multi-disciplinary, collaborative recording of clinical encounters and treatments

- Patient Portal Pathfinder - Focusing on dementia sufferers, this currently provides functionality including appointment booking, file sharing, goals and the ability for those in a patient's Circle of Care to securely access their information. Further functionality including questionnaires, patient recorded outcomes and remote monitoring is under consideration.



The Electronic Care Record [has made the most difference to the field in my lifetime]: there's no need to worry about letters not in the chart, and most of our hospital specialties now use this, so it saves a lot of time and effort. DNA testing is second

Prof Patrick Morrison,
Clinical Geneticist

Additional data integrations have also been added over time for example social care encounters including Children at Risk Register and Looked After Children.

Access to the NIECR has also been extended out into the community, including to Optometrists. User feedback has been overwhelmingly positive, with one consultant in Belfast describing the system as 'the single-most-useful IT advance in healthcare'.

The Results So Far

The NIECR is producing wide-ranging benefits across quality, efficiency, safety and experience.

- Over 700,000 user log-ins per month
- 80,643 patients enrolled in the Diabetes Care Pathway as of June 2019
- 165,598 clinical encounters through the Diabetes Care Pathway as of June 2019
- 4,600+ GP referrals electronically triaged per month, saving 18,400 pages of paper being printed

- In use by >98% of the medical workforce
- >95% of users say that NIECR saves them time

The Northern Ireland Electronic Care Record has won many awards for the overall solution as well as the eTriage functionality specifically. These include:

- Public Sector Paperless Awards 2018 - MostFlexible Digital System of the Year
- Building Better Healthcare Awards 2016 - BestAdministration, Information or Data System(eTriage)
- HSJ Awards & EHI Awards 2014

The region has also hosted reference visits from healthcare systems all over the world interested in replicating their success.



The requirement for high quality and timely diabetes treatment is imperative. The new Diabetes Pathway provides clinicians such as myself with this level of information, allowing us to be proactive in our care and provide a much better journey for patients.

Dr Roy Harper,
Senior Endocrinologist

Future Developments

The ECR programme continues to evolve and mature with new functionality being added regularly. Currently in the pipeline is Medicines Reconciliation, to provide a single, standard interface to support medicines optimisation processes throughout HSCNI allowing curation of medicines on admission and discharge and integration with the discharge template. There are also plans to develop a Patient Portal for diabetes cohort. This initially provides functionality including appointment booking, file sharing and the ability for those in a patient's Circle of Care to securely access their information. Further functionality including goal setting, medication tracking and access to laboratory results will be subsequently added.

Also in the pipeline is Medicines Reconciliation, to provide a single, standard interface to support medicines optimisation processes throughout HSCNI allowing curation of medicines on admission and discharge and integration with the discharge template. This is due to be completed during 2019.

Orion Health

Orion Health is a global leader in healthcare technology with over 17 years' experience working across the UK & Ireland. Globally, hundreds of thousands of clinicians in 15 countries use our healthcare information technology solutions every day to improve clinical workflow, decision- making and patient care for more than 100 million patients in our award-winning systems. We offer population health solutions across the whole health and care landscape, from integrated digital care records to care pathways and medicines management.

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