



Orion Health | Case Study

Northern Ireland Electronic Care Record – five years transforming care

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



Northern Ireland Electronic Care Record
Information for better care

CUSTOMER Health and Social Care
Northern Ireland

LOCATION Northern Ireland

WEBSITE online.hscni.net

ANNUAL BUDGET £5 billion

POPULATION 1.8 million

EMPLOYEES Over 56,000

NUMBER OF ACTIVE USERS Over 20,000

PRODUCTS IMPLEMENTED: Orion Health Rhapsody,
Orion Health Consult,
Orion Health Coordinate

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

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

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

In the past five years system usage has exponentially grown and user feedback has been overwhelmingly positive, with one consultant in Belfast describing the system as 'the single-most-useful IT advance in healthcare.'

"The ECR has transformed how we run our clinics and wards. It makes our job of providing the best care we can to patients so much easier - cutting down on the wasted time and effort that we were spending chasing round for the bits of information we need to safely treat our patients."

Consultant, Ulster Hospital, Dundonald

The Results So Far

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

- Over 700,000 user log-ins in January 2018 alone
- 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:

- Building Better Healthcare Awards 2016 - Best Administration, Information or Data System (eTriage)
- HSJ Awards 2014 - Enhancing care by sharing data and information
- EHI Awards 2014 - Best use of IT to support integrated healthcare services

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

"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

Future Developments

The ECR programme continues to evolve and mature with new functionality being added regularly. There is currently a Patient Portal in development, which will go live for an initial pilot of 100 dementia sufferers in Summer 2018. This will initially provide 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 in the second half of 2018.

Orion Health

Orion Health is a global company that develops software to drive efficiency in healthcare and improve healthcare outcomes. We deliver technology solutions for interoperability, smarter hospitals, population health and precision medicine. Built on an open data platform, our end-to-end solution, aligned to the NHS Five Year Forward View, helps you to manage all types of patient information; identify and prioritise your patients' needs at a population and individual level; effectively coordinate and manage patient care, and proactively drive wellness across the community.

Find out more at: orionhealth.com

Rhapsody™ Integration Engine is intended only for the electronic transfer, storage, or display of medical device data, or the electronic conversion of such data from one format to another in accordance with a preset specification as specified in the product manual and/or related documentation. Rhapsody Integration Engine is not intended to be used for active patient monitoring, controlling or altering the functions or parameters of any medical device, or any other purpose relating to data obtained directly or indirectly from a medical device other than the transfer, storage, and conversion of such data from one format to another in accordance with preset specifications. Orion Health makes no warranties and the functionality described within may change without notice. Rhapsody™ is a registered trademark of Orion Health™ Limited, manufactured in New Zealand, by Orion Health Limited. All other trademarks displayed in this document are the property of Orion Health or their respective owners, and may not be used without written permission of the owner. Rhapsody Integration Engine is not intended to be used for diagnostic purposes, or to replace clinical judgment or responsibilities. All patient information shown in any imagery is for representation and demonstration purposes only and is not related to a real patient.