• Multiple siloed systems
• Multiple passwords
• Fragmented Patient Records
Approx. 23,000 active users

Wide range of users across multiple disciplines

- Nurse: 29%
- Doctor: 16%
- Dentist: 8%
- Pharmacist: 3%
- Midwife: 2%
- Receptionist: 1%
- Social Worker: 4%
- Health Records: 1%
- Consultant: 8%
- AHP: 14%
- Other: 1%
- Clinical Psychologist: 0%
- Clinical Admin: 15%
- Other: 1%

NIECR Usage
High percentage of the intended user base actively using NIECR

<table>
<thead>
<tr>
<th>Admin &amp; Clerical</th>
<th>Nursing &amp; Midwifery</th>
<th>Social Services (excluding Home Helps)</th>
<th>Professional &amp; Technical</th>
<th>Medical &amp; Dental</th>
<th>GPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>33%</td>
<td>44%</td>
<td>10%</td>
<td>48%</td>
<td>133%*</td>
<td>110%*</td>
</tr>
</tbody>
</table>

* Denotes higher number than WTE due to locum coverage
NIECR Service

• 100 million plus interface messages per month
• 99.98% uptime during 2018
• 450 new users added per month in 2018
• 3000 + service requests per quarter
• 20 Tb Oracle database
• 20 production Servers, 40 + non production servers
NIECR Figures

• 46000 Lab & Rad reports signed off Oct 2018
• 35000 Radiology Orders placed Oct 2018
• All trusts recording and reviewing deaths in ECR (545 for October)
• Over 25000 referrals triaged in Oct 2018
• 62 Systems with 92 Interfaces
• Over 50,000 documents electronically transferred to primary care systems per month
eTriage – Electronic Referrals Management

- Electronic receipt and triage of Primary to Secondary Care referrals
- Developed in conjunction with Clinical staff
- Live in Northern Ireland since December 2015
- Award Wining Solution – Public Sector Paperless Awards 2018

Benefits:
- Fully Paperless process
- Registration automatically completed on Patient Administration System
- Triaging in the context of the full Patient record
- Fully auditable, no loss of paper
Radiology Order Comms

- Enables Radiology requests to be placed from within the patient context and provides a view of orders placed against the patient record.

Benefits:
- Enabled a regional approach to Radiology Ordering across three Radiology Information Systems (RIS)
- Standardised approach to data collection
- Reduction in unnecessary duplicated tests
- Status updates from RIS enables greater ability to track orders.
Regional Mortality & Morbidity System

Single pathway for recording patient deaths in NI
Provides functionality for reviewing and learning from patient deaths
Live in Northern Ireland since 2016

Benefits:

- Increased and improved scrutiny of all hospital deaths in Northern Ireland.
- Standardisation of process for doctors in relation to Death Certification.
- Greater assurance that deaths in hospital are appropriately scrutinised and referred to appropriate bodies e.g. Coroner.
Results Sign Off

Ability to review and sign off Laboratory & Radiology reports within NIECR, removing the need for paper reports to be issued and filed.

Benefits:

- Reduced clinical risk associated with unacknowledged results
- Reduced variation in processes for clinical staff, especially Junior Doctors
- Increased quality and safety
- Reduction in printing, paper and admin resources that are currently needed.
Diabetes pathway

Creation of a single, region wide pathway for Adult and Paediatric diabetes patients, enabling multi-disciplinary, collaborative recording of clinical encounters and treatments

Benefits:

• Single record for patient diabetes treatment, regardless of where they are being treated.
• Data can be used across other pathways and functions in NIECR
• Cost savings with the shutdown of 10 legacy systems.
• Standardised processes across the region
Key Information Summary

Ability to share care plans for patients with long term conditions and provide key information about their treatment and wishes in the later stages of life.

**Benefits:**

- Improved communication between Primary and Secondary Care regarding patient treatment and choices
- Improved patient safety through the standard collection and sharing of key information in NIECR
- Improved continuity of care for patients with long term conditions
Medicines Reconciliation

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.

Benefits:

• Reduced risk associated with transcription of medications
• More complete view of medications to enable more appropriate prescribing and safer transfer between secondary and primary care
Electronic Document Transfer (EDT)

Ability to transfer electronic documents quickly, securely and reliably from Secondary to Primary care, automatically attach them to the patient record in General Practice, improving workflow and clinical decision making and reducing errors and administrative time.

- One HSC Trust no longer printing and posting letters to primary care.

“This is fantastic – documents are received within 3 hours with a number of clinic letters received on date that patient is seen.”

“It makes things so much easier.”

“It is great not having to send the letters in internal mail”
## Benefits

### Hospital
- Faster Communications
- Reduction in transport costs
- Efficient, auditable transfer of documents
- Reduction in printing
- Reassurance that documents are reaching the correct practice

### GP Practice
- Faster Communications
- Reduction in letter handling costs
- Efficient, auditable transfer of documents
- Reduction in printing
- Reassurance that documents are reaching the correct practice
Immediate Discharge Letter

Provide a single, regionally standardised Immediate discharge letter that is automatically populated from NIECR, and that can be electronically sent to the GP on discharge.

Benefits:

• Significant reduction in the time taken to produce the letter, improving workflow and reducing discharge delays
• Reduced safety risk associated with transcribing information
• Time savings by reusing information already contained in NIECR such as coded problems, results, medicines, episode details and patient demographics.

• A clear, standardised, GAIN compliant letter electronically sent to Primary Care as soon as the patient is discharged.
Cross Border Radiotherapy Referrals

Provide a mechanism for referring Republic of Ireland (ROI) patients for Radiotherapy treatment in Northern Ireland. Sharing of information regarding patients who attend for treatment on both sides of the border.

Benefits:

• Increased collaboration between Republic of Ireland and Northern Ireland
• Electronic transmission of referrals with full auditability
• Real-time sharing of clinical information such as laboratory results or treatment outcomes
• Framework for additional collaborative healthcare projects
Patient Portal

- Pathfinder Project – Dementia
- Live December 2018
- Evaluation for wider implementation

Key Features:
- Patient / Clinician Communication
- Appointment Information
- Laboratory Results
- Clinical Documents
- Condition specific advice and support
- Goals and Targets
THE EMOTIONAL JOURNEY OF CREATING ANYTHING GREAT

This is the best idea ever!!
This will be fun
This is harder than I thought
This is going to be a lot of work
This sucks I have no idea what I’m doing

99% of what outsiders see
Belief/Persistence
Family+Humour

Dark swamp of despair
Ok but it still sucks
Quick, let’s call it a day and say we learned something

Hey!
Wow
Hmm...

This is one of the things I am most proud of
Family+Humour

THE EMOTIONAL JOURNEY IS INEVITABLE AND PERHAPS NECESSARY