Quality Street
– A NOCA Story of Data Quality ……. 

Marina Cronin
Data for National Clinical Audit

2017 Activity-Based Funding Conference

“The Quality Agenda”
‘a cyclical process that aims to improve patient care and outcomes by systematic, structured review and evaluation of clinical care against explicit clinical standards on a national basis.’

(NCEC)
About NOCA

- Established in 2012
- HSE QID Funded
- Based in RCSI

- Produce hospital and national level reports, recommendations for improvement
- Inform & escalate outliers within HSE Accountability Framework
- Promote use of national clinical audit data

- Design, implement & manage new national audit
- Set governance standards for NOCA audits – meetings, data protection/security, data set, data quality, PIA, reporting

- Training programmes
- Research studies
- Sharing of learnings arising from national audits
### Current Audit Portfolio

<table>
<thead>
<tr>
<th>#</th>
<th>Audit</th>
<th>National Report</th>
<th>Public Hospitals</th>
<th>Live</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>National Audit of Hospital Mortality (NAHM)</td>
<td>2016</td>
<td>44</td>
<td>44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Major Trauma Audit (MTA)</td>
<td>2016</td>
<td>26</td>
<td>26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Irish Hip Fracture Database (IHFD)</td>
<td>2013</td>
<td>16</td>
<td>16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>NPEC Severe Maternal Morbidity</td>
<td>2011</td>
<td>19</td>
<td>19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>NPEC Perinatal Mortality</td>
<td>2008</td>
<td>19</td>
<td>19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>NPEC- Vermont Oxford Network</td>
<td>2016</td>
<td>19</td>
<td>19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Intensive Care Unit Audit (ICU)</td>
<td>NA</td>
<td>22</td>
<td>6</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>8</td>
<td>Irish National Orthopedic Register (INOR)*</td>
<td>NA</td>
<td>12</td>
<td>1</td>
<td>4</td>
<td>7</td>
</tr>
</tbody>
</table>

*Phase 2 Private Hospitals*
NOCA Governance Approach

DESIGN
- Audit Aim & Objectives
- Clinical Standards
- Methodology/Methods
- Data set & dictionary
- Identify Data Sources
- Data protection
- National Governance Structure

IMPLEMENTATION
- Local Governance Structures
- Local resources
- Testing
- Training
- Data validation
- On going support

MANAGEMENT
- Data Quality
- Outlier Management
- Governance: National Audit Annual Review
- Audit Annual Plan
- Share learnings
- NOCA Board Approval
- Annual Reports

NOCA AUDIT OUTPUTS
- Quarterly Hospital Reports
- Annual National Report – Key findings & recommendations
- Key recommendations to system
Designing, Implementing and Managing

NOCA audits
Identify, map and potentially improve current practice & care pathways for the seriously injured population.

Provide high quality data to enable peer reviewed research and to drive clinical change.

Promote reflective clinical practice and to encourage peer performance review at local and national level.

National baseline of clinical practice and performance.

Audit Design: MTA Aim & Objectives

- Improve patient care
- Identify, map and potentially improve current practice & care pathways for the seriously injured population
- Promote reflective clinical practice and to encourage peer performance review at local and national level
- Provide high quality data to enable peer reviewed research and to drive clinical change
Information Governance

**COMPLIANCE WITH AGREED DEFINITIONS:**
- HL7 Message Standard: INOR, ICU.
- SNOMED: ICU
- ICD10AM: NAHM, INOR, IHFD, MTA

**DATA QUALITY**
- Data Quality Frameworks
- Data Dictionary
- Collaboration with Key stakeholders
- Training

**DATA ACCESS**
- Access to data in accessible and usable format for patients and clinicians

**DISSEMINATES & REPORTS INFORMATION**
- Hospital Level
- National
- Patient & Public
Managing IT Resources

Governance

3rd party Vendor Agreements

Security testing

Data Security - Industry Standard products

Testing

Applications go through rigorous testing

NOCA Audit
1 national clinical audit = 16 local audits

Irish Hip Fracture Database (IHFD)
Audit Implementation in hospitals

Audit Coordinator
- Data Collection
- Data Analysis
- Audit Reports
- Audit Governance

Dedicated Clinical Lead
- Oversight of data collection process
- Data analysis
- Audit Reports
- Audit Governance

Hospital Governance
- Audit (eg Trauma) Committee (across Directorates)
- Hospital Q & S Committee
- Hospital Group
- Q & S Committee
• John- 84 years, Fell at home.
• ED -complaining of severe chest pain
• Chest x-ray - fractured ribs and a chest infection. He was treated as a traumatic chest injury.
• Later that day, John developed an irregular heart rhythm which was treated but he became progressively more unwell. He was given antibiotics and later intravenous fluids.
• Condition did not improve, he died six days after admission.

• Several important findings: recommendations - sepsis screening and appropriate escalation of care.

• Individual case reviews: Reviewing these cases leads to systems changes and improving care, not only for trauma patients but for all patients.

• Case for review....
Enabled Workforce

Hospital Audit Staff

NOCA staff

In house Training & Updates

Education

Evaluation of Training

Sharing of Learning

Continuous Improvement

Annual Audit Review

National Collaborations – NCEC, HPO, HIU

International Collaboration-TARN, ICNARC, FFN, ISAR, HQIP
Audit Management: NOCA Governance Structures

NOCA GOVERNANCE BOARD

NOCA Executive Director

Clinical Director

National Clinical Audit Governance Committees

National Perinatal Epidemiology Centre (NPEC)
Prof Richard Greene

Irish National Orthopaedic Register (INOR)
Mr P.Kenny
Mr D.Moore
Mr J.Cashman

Intensive Care Audit (ICU) PICANet
Dr R.Dwyer
Dr M.Healy

National Audit Hospital Mortality (NAHM)
Dr B.Creedon

Major Trauma Audit (MTA)
Dr C Deasy

Irish Hip Fracture Database (IHFD)
Mr C.Hurson
Dr E.Ahern

NOCA Executive Director
Clinical Director
NOCA Operational Support
Audit Management: NOCA Monitoring & Escalation

DATA QUALITY

Data completeness target ≥ 80%

Data Accreditation - 95%

HOSPITAL WS SCORE

Graph showing data trends and accreditation metrics.
Value of NOCA Audits

Improving Patient Care
DoH Endorsement of MTA 2016
National ICU Audit

Clinical Hospital Reports

Support HIPE and ABF
National ICU Audit

- PICANet
- Reports to Organ Donation and Transplant Ireland
- Development of Key Performance Indicators
- Bed Information System
INOR

• Live SIVUH, MRH Tullamore

• Planning & Implementation in Cappagh, Croom
Being person centered

NOCA Audit
‘Behind ..this report lies the everyday drama of life and death of real people. Every incremental improvement however small in every hospital and in this and every future report will be a small victory ... for the individual who survives, their families and loved ones.’

Mr Brian O Mahony, 
NAHM Public Representative
Consent in INOR

Print INOR Consent Form
Please print out the INOR Consent Form. Ensure that the patient signs the form before progressing.

Consent to INOR:  ○ Yes  ○ No

Form is incomplete
Contact Us

+353 1 4028577  auditinfo@noca.ie  @noca_irl  www.noca.ie