Monitoring and improving Quality through Clinical Audit

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www.hqip.org.uk
Clinical Audit and Service Improvement

Service Improvement Methodologies:

- Clinical Audit (local and national)
- Registries
- Clinical Outcomes Review Programme (Confidential Enquiries)
- Mortality and Morbidity Reviews
- Peer review
- Accreditation Schemes
- “Industrial” Techniques
- Safety Campaigns
- Reviews of Incidents
- Complaints
- Review of litigation
Clinical Audit and Service Improvement

The National Clinical Audit & Patient Outcomes Programme (NCAPOP)

**National Clinical Audit Programme**
34 national audits covering:
- Acute
- Cancer
- Children and Women’s Health
- Heart
- Long-term Conditions
- Mental Health
- Older People

**Clinical Outcome Review Programmes**
4 national programmes:
- Maternal, Newborn and Infant
- Medical & Surgical
- Mental Health
- Child Health Programme

Audits collect and analyse data supplied by local clinicians to provide a national picture of care standards for that specific condition.

On a local level, NCAPOP audits aim to provide local trusts with individual benchmarked reports on their compliance and performance, feeding back comparative findings to help services identify necessary improvements for patients in pathways of care.

Clinical outcome review programmes help assess the quality of healthcare and stimulate improvement by enabling clinicians, managers and policy makers to learn from adverse events and other relevant data.

**Other National Programmes**
- National Learning Disability Mortality Review Programme
- National Mortality Case Record Review Programme
- National Perinatal Mortality Review Programme
- Child Death Review Database Project

**National Joint Registry**
Collects joint replacement information, monitoring implant, hospital and surgeon performance.
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What is clinical audit?

‘Clinical audit: a quality improvement cycle measuring effectiveness of healthcare against standards, & taking action to bring practice in line with these standards.’

New Principles of Best Practice in Clinical Audit (HQIP, January 2011)
What is national clinical audit?

Clinical Audit and Service Improvement

- unique internationally
- commissioning mechanism to drive improvement against standards
- support quality dissemination, transparency
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Our structure and funding

NHS England
(Policy maker and commissioner)

Welsh Government

Healthcare Quality Improvement Partnership
(Commissioner and contract manager)

Health departments of Scotland, Northern Ireland and Channel Islands

NCAPOP

Local quality improvement support

National clinical audit programme

Clinical outcome review programmes

National Joint Registry
Clinical Audit and Service Improvement

- Monitoring and improving quality through clinical audit
- Trust reporting and action planning
- National and local developments
- Clinical audit in Trusts: what needs to change?
Clinical Audit and Service Improvement

• Monitoring and improving quality through clinical audit
  – Quality Assurance
    • Compliance with standards
    • Mortality rates
    • Readmissions
    • Infections
  – Quality Improvement
    • Recommendations
    • Longitudinal monitoring
    • SPC work
    • Workshops
Clinical Audit and Service Improvement

Rheumatoid arthritis in...
Clinical Audit and Service Improvement

Figure 8: Percentage of eligible patients who were prescribed clozapine. N=109

- Yes: 22%
- No, valid reason: 14%
- No, invalid reason: 64%
Clinical Audit and Service Improvement

• Monitoring and improving quality through clinical audit
  – Quality Assurance
    • Compliance with standards
    • Mortality rates
    • Readmissions
    • Infections
  – Quality Improvement
    • Recommendations
    • Longitudinal monitoring
    • SPC work
    • Workshops
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Stroke in adults

Mortality at 90 days

Actual minus expected mortality (%)

2008 2012

Rest of England
London
Greater Manchester
Greater Manchester
London

Timing of reconfiguration
Clinical Audit and Service Improvement

Recommendations

6
RECOMMENDATION
Pathological confirmation rates below 75% should be reviewed to determine whether best practice is being followed and whether patients have access to the whole range of biopsy techniques. ALIGNS TO NICE Q57
Nationally, 69% of cases submitted were recorded to have a pathological confirmation of their cancer. Overall, 102 trusts (approximately 70%) did not achieve this standard.

7
RECOMMENDATION
Non-small-cell lung cancer, not otherwise specified (NSCLC NOS) rates of more than 20% should be reviewed to ensure that best practice pathological diagnostic techniques including immunohistochemistry are being followed, in order that patients receive appropriate chemotherapy regimens. ALIGNS TO NICE Q57
Nationally, 12% of NSCLC cases submitted were recorded to have a SNOMED code of M8046/3 (NSCLC NOS). Overall, 22 trusts (approximately 15%) did not achieve this standard.

8
RECOMMENDATION
At least 80% of patients are seen by a lung cancer nurse specialist (LCNS); at least 80% of patients should have an LCNS present at the time of diagnosis (note that these data are not available for Wales). ALIGNS TO NICE Q54
Nationally, 78% of patients were recorded to have seen a specialist nurse, although data were missing in 13% of cases, so the true proportion may be higher. Overall, 51 trusts (approximately 35%) did not achieve this standard. We were unable to analyse the proportion having an LCNS present at diagnosis.
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Run Charts
Clinical Audit and Service Improvement
Communicating key messages

Infographics
Communicating key messages

Screening for Retinopathy of Prematurity

93% of eligible babies were screened “on time” in accordance with the timeframes set out in national guidelines rising from 67% in 2012 and 87% in 2013.
Throughout March 2015, seven workshops were held throughout England and Wales, with one further workshop held in Scotland in September 2015. The overall aim of the workshops was to provide IBD teams with dedicated time away from day-to-day practice to review their service and plan for necessary improvement, with the following specific objectives:

- To reflect on their service using their own data to identify areas for change
- To network with colleagues to share expertise and examples of best practice
- To leave the workshop with an action plan to implement and evaluate improvement in their IBD service.

The most common actions by workshop:

Teams were provided with an action plan template and given the opportunity to establish between one and three action points. There were 125 actions recorded in total. The most common action point themes from each workshop are shown on the map. These are analysed in further detail later in the report.

- Glasgow: psychological support
- Darlington: patient pathways – biologics
- Warrington: multidisciplinary team meetings
- Birmingham: patient pathways
  - London adult IBD nurses
  - London paediatric: annual review
- Cardiff: IBD nurses
- Taunton: patient pathways – biologics

Who attended?

109 consultants
87 nurses
26 patients / patient charity representatives
12 managers
8 pharmacists
8 dieticians
5 commissioner / policy / government
3 audit staff
Clinical Audit and Service Improvement

- Monitoring and improving quality through clinical audit
- Trust reporting and action planning
- National and local developments
- Clinical audit in Trusts: what needs to change?
Clinical Audit and Service Improvement

Trust reporting and action planning

• Getting the results to the Trust (to those who can make a difference)
  – Medical Director
  – Nursing Director
  – Directorates
  – The Board

• Benchmarking
• Audit Report Action Plans
• The Role of the Commissioners
• Quality Accounts
Clinical Audit and Service Improvement

The Annual Report
## Wythenshawe Hospital
### Acute Intensive Care Unit

### Intensive Care Audit

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Case Ascertainment All eligible patients</td>
<td>Well Led</td>
<td>Not reported for this audit</td>
<td>none</td>
<td>n/a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crude non-clinical transfers</td>
<td>Responsive</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.5%</td>
<td>0%*</td>
<td>Within expected range ²³</td>
</tr>
<tr>
<td>Crude, non-delayed, out-of-hours discharge to ward proportion</td>
<td>Responsive</td>
<td>0.1%</td>
<td>0.6%</td>
<td>2.8%</td>
<td>0%*</td>
<td>Within expected range ²³</td>
</tr>
<tr>
<td>Crude delayed discharge (proportion bed-days occupied by patients with discharge delayed &gt;8 hours)</td>
<td>Responsive</td>
<td>Not reported</td>
<td>5.6%</td>
<td>5.2%</td>
<td>0%*</td>
<td>Not in the worst 5% of units</td>
</tr>
<tr>
<td>Risk-adjusted hospital mortality ratio (all patients)</td>
<td>Effective</td>
<td>1.1</td>
<td>1.1</td>
<td>1.0</td>
<td>none</td>
<td>0.5</td>
</tr>
<tr>
<td>Risk-adjusted hospital mortality ratio (for low risk patients)</td>
<td>Effective</td>
<td>0.8</td>
<td>1.3</td>
<td>1.0</td>
<td>none</td>
<td>0.2</td>
</tr>
</tbody>
</table>
Examples of uses of NCAPOP data by organisation / audience

**Clinical Audit and Service Improvement**

- **NHSE & WG**
  - NHS OF; 5YFV; CSQM; 7DS; CQUINs; NHS RightCare; SSCRG; Diabetes prevention prog; COP; QA

- **NICE**
  - Development of G & QS Compliance with G & QS

- **NHSD**
  - Linkage to / validation of HES/ONS;
    - support of mandated data flows e.g. Maternity Services Dataset;

- **BPT; GIRFT; Model Hospital**
  - Comparative data for pre-inspection packs;
    - pre-publication outlier notification

- **NHSI**
  - NHS Choices; service mapping; patient charity campaigns; patient guides

- **CQC**
  - PATIENTS & THE PUBLIC
Clinical Audit and Service Improvement

- Monitoring and improving quality through clinical audit
- Trust reporting and action planning
- National and local developments
- Clinical audit in Trusts: what needs to change?
What are national clinical audits?

National and local developments

• Audit provider action plans
• NCAB
• What are the roles of NHS E, NHS I and CQC

Local:

• NQICAN
• Role of the Commissioners
• Role of the Trust
• Role of the Clinicians
• Media
An example from the National Emergency Laparotomy Audit

**RECOMMENDATIONS**

- Consultant surgeon rota patterns and job plans should be reviewed to ensure a consultant surgeon is always available to see patients within 12 hours of emergency admission, seven days a week (Clinical Directors).
- Departments of surgery should use local NELA data to determine if the availability of on-call consultant surgeons should be improved by relieving them of elective duties (Clinical and Medical Directors).
- Local protocols should be developed which ensure a consultant delivered service for emergency laparotomy patients. This includes consultant-delivered preoperative decision making and direct intraoperative management. Rotas, job plans and staffing levels for surgeons and anaesthetists should allow a consultant delivered service 24 hours a day, seven days per week (Clinical and Medical Directors).
- Pathways for the identification and escalation of care of patients who would benefit from the opinion of a consultant surgeon before the next scheduled ward round should be implemented. In almost all units, this will require daily consultant surgeons to be freed of routine commitments such as clinics or elective operating lists (Clinical and Medical Directors).

**Additional analyses**

The proportion of patients who were reviewed by a consultant surgeon within 12 hours of emergency admission to hospital was also assessed against patient age. ASA and preoperatively documented risk (Table 25).

**Elizabeth’s story**

It wasn’t until the next morning, that Elizabeth was seen by the on-call surgical consultant. Her Early Warning Score had gone up to four, signifying a deterioration in her clinical condition. Her abdomen was slightly more tender. She had continued intravenous fluids and an urgent CT scan was requested.

**Why is this important?**

Emergency general surgical admissions constitute a large workload in comparison to the number of patients requiring surgery. Only one in every ten patients who are admitted with acute abdominal pain ultimately undergo an emergency laparotomy, and it is not always immediately apparent which patients require surgery at admission. Prompt senior review of emergency general surgical patients is vital because this complex decision making and treatment planning may be required within hours of presenting to hospital. Timely review has been shown to be associated with improved outcomes. Sicker patients require early review, but it is good practice for all patients to be reviewed within 12 hours and not longer than 24 hours.

**KEY STANDARDS**

- Patients admitted as an emergency should be seen by a consultant at the earliest opportunity. Ideally this should be within 12 hours and should not be longer than 24 hours.
- NCEPOD EA

**AUDIT QUESTIONS**

- What proportion of patients was reviewed by a consultant surgeon within 12 hours of emergency presentation at hospital?
- What variation existed in the proportion of patients reviewed by a consultant surgeon within 12 hours of emergency presentation, by:
  1. Hospital?
  2. Day and time of admission to hospital?
  3. Urgency of surgery?

**KEY FINDINGS**

- Half (48%) of patients who were admitted as an emergency and subsequently underwent an emergency laparotomy were reviewed by a consultant surgeon within 12 hours of presentation at hospital.
- At only one hospital were more than 80% of patients reviewed within 12 hours of admission, and at 28% of hospitals fewer than 40% of patients were reviewed within 12 hours of admission (Figure 1).
- The proportion of these patients who were reviewed by a consultant surgeon within 12 hours of emergency admission varied by the time of day that they were admitted to hospital (Table 8).
- A greater number of patients requiring more urgent surgery were reviewed by a consultant surgeon within 12 hours of admission, compared to those requiring less urgent surgery (Table 9).
## Sacred Heart Hospital Emergency Laparotomy Audit

<table>
<thead>
<tr>
<th>Metric</th>
<th>CQC Key Question</th>
<th>N/a¹</th>
<th>2015 Report²</th>
<th>National Aggregate (England &amp; Wales)</th>
<th>National Aspirational Standard</th>
<th>Comparison to other hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case Ascertainment</td>
<td>E WL</td>
<td>n/a</td>
<td>72% 132 cases</td>
<td>83%*</td>
<td>60%</td>
<td></td>
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<tr>
<td>Crude pre-operative documentation of risk of death</td>
<td>WL</td>
<td>n/a</td>
<td>45%</td>
<td>57%</td>
<td>100%**</td>
<td></td>
</tr>
<tr>
<td>Crude access to theatres within timeframes appropriate to clinical urgency</td>
<td>WL</td>
<td>n/a</td>
<td>57%</td>
<td>84%</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Crude presence of consultant surgeon in theatre</td>
<td>WL</td>
<td>n/a</td>
<td>82%</td>
<td>85%</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Crude presence of consultant anaesthetist in theatre</td>
<td>WL</td>
<td>n/a</td>
<td>46%</td>
<td>74%</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Crude post-operative admission to critical care for patients with a risk of death &gt;10%</td>
<td>R</td>
<td>n/a</td>
<td>87%</td>
<td>88%</td>
<td>100%**</td>
<td></td>
</tr>
</tbody>
</table>

### Symbols

- **Green Triangle**: 80-100% (70-100% for case ascertainment)
- **Gray Square**: 50-79% (50-69%)
- **Red Circle**: 0-49% (0-49%)

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1. No previous year’s data
2. Apr 13- Mar 14
3. **England only**
4. **RSCEng**

Anticipated date of next data feed is mm/yy: 80-100% (70-100% for case ascertainment)
# Wythenshawe Hospital Hip Fracture Audit

<table>
<thead>
<tr>
<th>Metric</th>
<th>CQC Key Question</th>
<th>2014¹ Report</th>
<th>2015² Report</th>
<th>National Aggregate (England)</th>
<th>National Aspirational Standard</th>
<th>Comparison to other hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case ascertainment</td>
<td>Well Led</td>
<td>n/a</td>
<td>110.0%</td>
<td>93.5%</td>
<td>none</td>
<td>Higher than national aggregate</td>
</tr>
<tr>
<td>Crude proportion of patients having surgery on the day or day after admission</td>
<td>Effective</td>
<td>80.3%</td>
<td>77.6%</td>
<td>72.1%</td>
<td>85%*</td>
<td><strong>National Benchmark</strong></td>
</tr>
<tr>
<td>Crude perioperative medical assessment rate</td>
<td>Effective</td>
<td>90.1%</td>
<td>95.9%</td>
<td>85.3%</td>
<td>100%*</td>
<td></td>
</tr>
<tr>
<td>Crude proportion of patients documented as not developing a pressure ulcer</td>
<td>Safe</td>
<td>n/a</td>
<td>97.4%</td>
<td>97.2%</td>
<td>none</td>
<td></td>
</tr>
<tr>
<td>Crude overall hospital length of stay</td>
<td>Responsive</td>
<td>24.9 days</td>
<td>28.4 days</td>
<td>20.3 days</td>
<td>none</td>
<td></td>
</tr>
<tr>
<td>Risk-adjusted 30-day mortality rate</td>
<td>Effective</td>
<td>8.0%</td>
<td>6.2%</td>
<td>7.5%**</td>
<td>none</td>
<td></td>
</tr>
</tbody>
</table>

Anticipated date of next update is 09/2016

*Audit recommendation based on NICE guideline

**England & Wales
## Sacred Heart Hospital - Paediatric Intensive Care Audit

### Metric

<table>
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<tr>
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<tbody>
<tr>
<td>Case Ascertainment</td>
<td>E</td>
<td></td>
<td></td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>All eligible patients</td>
<td>WL</td>
<td></td>
<td></td>
<td>Not reported for this audit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk-adjusted standardised mortality ratio</td>
<td>E</td>
<td>0.98</td>
<td>1.03</td>
<td>1.00</td>
<td>n/a</td>
<td>Within 99.8% control limits</td>
</tr>
<tr>
<td>Crude Nursing establishment (Wte per bed)</td>
<td>WL</td>
<td>5.40</td>
<td>5.50</td>
<td>n/a</td>
<td>7.01 Wte*</td>
<td></td>
</tr>
<tr>
<td>Emergency [relative] readmission within 48 hours</td>
<td>R</td>
<td>2.2% [1.29]</td>
<td>1.6% [0.95]</td>
<td>1.7% [1.00]</td>
<td>n/a</td>
<td>[Funnel-plot cross-section if using relative metric]</td>
</tr>
<tr>
<td>Crude number of retrievals performed within the agreed mobilisation time (1 hour)</td>
<td>R</td>
<td>n/a</td>
<td>72%</td>
<td>67.7%</td>
<td>95%*</td>
<td></td>
</tr>
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### Notes

- ¹Report dated Jan 13 - Dec 13
- ²Report dated Jan 14 - Dec 14
- *PICS target
### Sacred Heart Hospital - Trauma Audit

<table>
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<tr>
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<td>Case Ascertainment</td>
<td>E</td>
<td>WL</td>
<td>E</td>
<td>WL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All eligible patients</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data quality. Number of patients submitted to the Registry compared with an equivalent HES dataset</td>
<td>E</td>
<td>WL</td>
<td>E</td>
<td>WL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Case mix standardised rate of survival following injury</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CT imaging of the head within 1 hour of arrival for patients with a head injury and GCS less than 13</td>
<td>R</td>
<td></td>
<td></td>
<td>100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patients receive Transexamic Acid within 3 hours of incident for patients receiving blood products within 6 hours of incident</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>British Orthopaedic Association STANDARDS FOR TRAUMA (BOAST) BOAST 4</td>
<td>R</td>
<td></td>
<td></td>
<td>12.18 hrs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Anticipated date of next data feed is mm/yy**

1 Apr 12- Mar 13

1 Apr 13- Mar 14
Clinical Audit and Service Improvement

• Monitoring and improving quality through clinical audit
• Trust reporting and action planning
• National and local developments
• Clinical audit in Trusts: what needs to change?
### Clinical Audit and Service Improvement

**Clinical Audit in Trusts**

**What needs to change**

- Move from collecting data to using this data
- Increasingly better and faster feedback to all concerned
- Role of audit in appraisal/revalidation

**Clinical Audit and Service Improvement**

- Increasing use of routine data
- Electronic patient records
- IG issues
- Linkage
- Machine readable

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**Training in Quality Improvement**
Clinical Audit and Service Improvement

Thank You

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