The Congenital Report

David Barron
The Congenital Audit

The NHS England Review

The SCTS Congenital Sub-Committee
National Congenital Heart Disease Audit (NCHDA)

All analysis done by NICOR
Strong Clinical Influence in Steering Group

One of six major cardiovascular disease projects:

*Adult Cardiac Surgery, Adult percutaneous interventions, cardiac rhythm management, heart failure and MINAP*

There are 57 separate funnel plots for procedures
AND a Risk Adjusted Aggregate outcome analysis for entire surgical caseload

All Paediatric an Adult Congenital Surgery
6,000 cases per year

nicor4.nicor.org.uk/CHD/an_paeds.nsf/vwContent/home
What is Published?

1. Overall Centre Activity

2. Individual Procedure Funnel Plots

3. Risk Adjusted Analysis of Entire Workload 2013

‘Partial Risk Adjustment in Surgery’
PRAiS
How do the adult and congenital audits differ?

1. Includes all Surgery AND Interventional Cardiology
   Joint involvement of SCTS and BCCA (British Congenital Cardiac Association)

2. There are 57 separate funnel plots for procedures

3. There is an aggregate analysis of ENTIRE CASELOAD
   Everything goes into the analysis: high risk / emergency caseload included

4. Every centre has a formal annual validation visit with publication of a
   Data Quality Score

5. All reporting is Unit Specific NOT surgeon specific
Validation Process

All centres receive an Annual Validation Visit:
NICOR analyst plus volunteer clinician

20 case notes randomly selected – every data-field validated

Theatre logbooks checked against returns

All deaths checked for accuracy

Produce a validation report for each centre:
includes a Data Quality Index which is published in the Annual Report

Expensive    Time Consuming

Adult Congenital Centres: too many to visit
? One random visit per year
Fifty Seven Individual Funnel Plots

Alarm 99.5%
1 in 1000 risk of hitting alarm by chance

Alert 98%
1 in 40 risk of hitting alert by chance
Aggregate Risk-Adjusted Analysis

**PRAiS Model:** Partial risk adjustment in Surgery

Derived from UK data

**Alert:** 97.5%

1 in 4 risk of an alert by chance

**Alarm:** 99.8%

1 in 100 risk of an alarm by chance
Real-Time VLAD Chart Monitoring

Part of PRAiS: Provided free-of-charge to all units
Outlier Management

Alert or Alarm Outlier Identified

Phone-call to audit lead

Letter to LEAD SURGEON, DATA MANAGER & GOVERNANCE LEAD

**JOINT** letter signed by Chair of NICOR Congenital Steering Group
President BCCA
President SCTS

Double-Check all data

Data Error, no case to answer

Data Correct – case to answer

Second Letter to LEAD SURGEON, DATA MANAGER & CHIEF MEDICAL OFFICER

**JOINT** letter signed by Chair of NICOR Congenital Steering Group
President BCCA
President SCTS
Outlier Management – Case to Answer

Typically: Internal review and analysis
Response to NICOR

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<th>Common Actions:</th>
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<td>Internal Review</td>
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<td>Peer review</td>
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<th>Common Outcomes:</th>
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<tr>
<td>Change in Protocols</td>
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<tr>
<td>Change in Case Selection</td>
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<td>Programme of mentorship</td>
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<td>Change in technique</td>
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<td>Change in workforce</td>
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Roles and Responsibilities of the SCTS, of NICOR and of HQIP still not clearly defined

? When is an external review merited?
? Role of the Independent Review Mechanism?
Detection and management of outliers

Guidance prepared by National Clinical Audit Advisory Group

2011 Guidance

-No distinction between alert and alarm

-No distinction between single procedure and aggregate outliers

NEW GUIDANCE SOON TO BE PUBLISHED
Maintaining Good Practice – Handling of Potential Consultant Outliers

A Joint Report from Cardiac Professional Societies

Annual Report

Good…. But not the Blue Book
2014-15 NCHDA Data

No outliers on aggregate analysis (PRAiS)

(two positive outliers)

Only one outlier on the 57 procedural funnel plots
Letter has not gone out yet, but the unit is aware

Lag time still too long: publication not due until January

Risk model is being updated (PRAiS 2): due April 2017
90 day survival now being published for some lesions
The Congenital Audit
Summary and Plans

Generally functioning well

- Coding and case definition constantly improving
- Need risk adjustment system for ACHD
- Need to upgrade current PRAiS model
- Plans for the congenital Blue Book
The NHS England Congenital Heart Review

- Standards approved by the NHSE Executive July 2015

- Minimum 4 surgeons per unit
- Minimum 125 index cases per surgeon per year
- Co-Location of all essential children’s services on-site

Network-based approach

Includes ALL Adult Congenital Cardiac Surgery
Planned Congenital Heart Networks

<table>
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<tr>
<th>Region</th>
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<tr>
<td>North East</td>
<td>Newcastle – Leeds</td>
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<tr>
<td>North West</td>
<td>Liverpool OR Manchester</td>
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<tr>
<td>Midlands</td>
<td>Birmingham – Leicester</td>
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<tr>
<td>South-West/Wales</td>
<td>Bristol – Cardiff</td>
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<tr>
<td>London/South</td>
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Cardiology Centres only. NO surgery
Standards ‘Live’ from April 2016

Derogations:

3 surgeons per unit is acceptable until 2021

Co-location must be achieved by 2019

Controversies

What happens if you don’t meet the standards?

Manchester/Liverpool

What about Scotland?
The Congenital Sub-Committee

Initially conceived as having two co chairs: Elected ‘Congenital’ Surgeon President SCTS

Plus 6 members from different units

From 2016

Elect new chair
Membership should be one representative from each of the 12 units
Becomes a ‘mini BOR’