Using Outcomes Information for Revalidation in Paediatric Surgery

December 2013

The Colleges and Surgical Specialty Associations believe that data on surgical outcomes is an important element of demonstrating that a surgeon meets the required standards of professionalism and practice. This framework provides guidance to surgeons working in paediatric surgery to help them produce relevant outcomes data for appraisal and revalidation.

Any queries relating to this framework should be addressed to revalidation@rcseng.ac.uk.

Section 1: Introduction and Explanation

Background

Revalidation is the new approach to the regulation of doctors, it commenced in December 2012. The process is centred on local annual appraisal. All doctors will need to be revalidated every 5 years in order to retain their licence to practise.

The Surgical Specialty Associations and Surgical Royal Colleges have developed the standards for surgical revalidation and specified the supporting information that paediatric surgeons will need to provide to their appraiser to facilitate a positive assurance of their fitness to practice and, at the end of the 5 year cycle, a recommendation for revalidation to the GMC. An important component of the supporting information required for revalidation is that relating to outcomes.

An important landmark in relation to transparency and openness in the NHS was achieved in 2013 with the publication of surgeon-level data from nine surgical audits. We see national clinical audit as the "gold standard" in relation to collection of data and measurement of outcome. We fully support the continuation and expansion of NHS England's programme of data transparency.

The British Association of Paediatric Surgeons has defined the following measures for surgeons working within the specialty. Surgeons will only need to demonstrate their outcomes in their area(s) of practice. There is no requirement for paediatric surgeons to undertake common 'index procedures'.

You should note the following points:

National Clinical Audit

- Where there are identified national clinical audit(s) that cover your area(s) of practice, it is essential that you participate. This will be mandatory for revalidation.
- If there is a national clinical audit that falls within NHS England's programme of consultant-level outcomes publication, your results will be made available publically.
- Your employer will need to facilitate the submission of data to the audit(s).
- It will be your responsibility to gather the relevant information from the audit (eg. reports/downloads) to present at appraisal.

Routinely Collected Data (HES, PEDW, HIS, ISD)

- These data are already collected by your NHS organisation and brought together on a national basis.
- We have identified key procedures in each sub-specialty area which should cover the majority of surgeons' practice.
- We have identified what should be measured and how.
- We expect that analyses of these data will be provided by your employer.
- Wherever possible your individual outcomes should be presented alongside all other surgeons in the country performing that procedure(s) (eg. in a funnel plot).
- We have identified the process of further investigation if it appears from these analyses that your outcomes are outside accepted norms (see below).

Local Audit

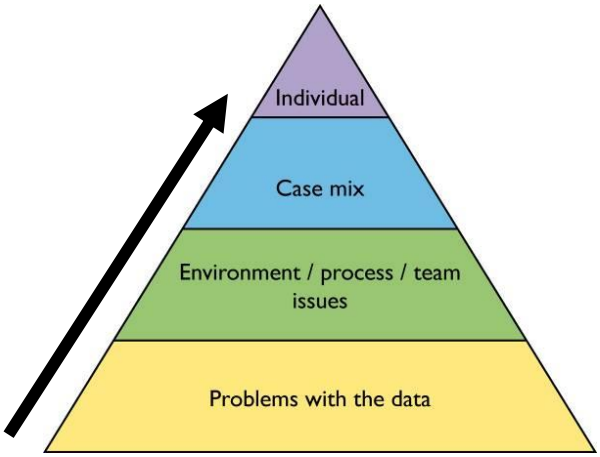
- Where your area of practice is not appropriately covered by a national audit or where routinely collected data will not assist in measuring outcomes, we recommend some form of local audit.
- This may be conducted by you personally, or form part of a wider unit/region-based audit.
- It will be your responsibility to conduct/participate in the audit and present the results at appraisal.
- Where you are obliged to undertake local audit, you are advised to audit a practice or procedure that is representative of your practice both in the NHS and in the private sector. The subject should be something that you undertake on a routine basis.

Structured Peer Review (of outcomes)

- For some highly specialised/low volume areas of practice which cannot be appropriately measured using the above methods, it may be necessary to have some form of structured peer review. Where this is identified as necessary, we will work with the relevant specialties to identify the methodology required so that the peer review process is fit for purpose for revalidation.

Managing Outliers

- Analysis of your outcomes provides one piece of the supporting information required for revalidation.
- If it appears that your outcomes are outside of the accepted norm, this should trigger a local investigation that closely examines the data for anomalies, looks at the environment and structure of the team/unit and your case mix before considering you as an individual (see diagram 1).
- We will be able to assist in the early stages of such an investigation.


Individual
Case mix
Environment / process / team issues
Problems with the data
Diagram 1

Section 2: Measuring Outcomes

We would expect that all paediatric surgical outcomes are measured using routinely collected data (HES, PEDW, ISD, HIS) against the criteria set out in this document. At appraisal we would expect that a surgeon's outcomes would be presented in a funnel plot showing comparison of their practice to all other surgeons in the country performing the same procedure(s). We have set out the measurement criteria for general and sub-specialist practice in the following sections:

2.1 General Surgery of Childhood

2.2 Sub-specialist Paediatric Surgical Practice:

- 2.2.1 Neonatal Surgery
- 2.2.2 Paediatric Urology
- 2.2.3 Gastro-intestinal Surgery
- 2.2.4 Thoracic
- 2.2.5 Hepatobiliary
- 2.2.6 Oncological Surgery

2.1 General Paediatric Surgery

The vast majority of paediatric surgeons will perform 'general surgery of childhood' procedures. The analyses resulting from the outcome measurement set out below should provide a broad picture of a surgeon's practice. At appraisal, the previous year's performance should be examined, however, to be meaningful, it will be necessary to view performance over the previous 5 years.

Key Procedures	OPCS Codes	Measurement Criteria
Medical Circumcision	N303	• Unplanned readmissions at 28 days • Reoperation / reintervention at 28 days
One Stage Inguinal Orchidopexy	N08.2 , N09.2 Y75	• Unplanned readmissions at 28 days • Reoperation / reintervention at 28 days
Emergency Appendicectomy	H01.1, H01.2, H01.3, H01.8, H01.9, H02.8, H02.9, Y75.1 Y75.2	• Length of stay (median) • Unplanned readmissions at 28 days • Reoperation / reintervention at 28 days • 30 day Mortality
Hydrocele	N11, N11.1, N11.2, N11.3, N11.4, N11.5, N11.6, N11.8, N11.9	• Unplanned readmissions at 28 days • Reoperation / reintervention at 28 days
Umbilical Hernia	T24, T24.1, T24.2,T24.3, T24.4, T24.8, T24.9, T97, T97.1, T97.2, T97.3, T97.8, T97.9	• Unplanned readmissions at 28 days • Reoperation / reintervention at 28 days
Infant Herniotomy	T19.1, T19.2	• Unplanned readmissions at 28 days • Reoperation / reintervention at 28 days
Pyloromyotomy (Ramstedt's)	G40.1	• Length of stay (median) • Unplanned readmissions at 28 days • Reoperation / reintervention at 28 days
Splenectomy	J692, J701 Y75.1, Y75.2	• Length of stay (median) • Unplanned readmissions at 28 days • Reoperation / reintervention at 28 days
Cholecystectomy	J181, J182, J183, J184, J185	• Length of stay (median) • Unplanned readmissions at 28 days • Reoperation / reintervention at 28 days

2.2 Sub-specialist Paediatric Surgical Practice

While the vast majority of paediatric surgeons will measure their outcomes of general surgery of childhood procedures as detailed above, each surgeon should also select their sub-specialist area(s) from those listed in the tables below and have their outcomes analysed.

2.2.1 Neonatal Surgery

At appraisal, the previous year's performance should be examined, however, to be meaningful, it will be necessary to view performance over the previous 5 years.

Key Procedures	OPCS Codes	Measurement Criteria
Gastroschisis	T28.1	• Length of stay (median) • Unplanned readmissions at 28 days • Reoperation / reintervention at 28 days • Mortality 30 days
Necrotizing enterocolitis	G74, H15, G69, H05, H06, H07, H08, H09, H10	• Length of stay (median) • Unplanned readmissions at 28 days • Reoperation / reintervention at 28 days • Mortality 30 days
Oesophageal atresia	G07.1, G07.3	• Length of stay (median) • Unplanned readmissions at 28 days • Reoperation / reintervention at 28 days • Mortality 30 days

2.2.2 Paediatric Urology

At appraisal, the previous year's performance should be examined, however, to be meaningful, it will be necessary to view performance over the previous 5 years.

Key Procedures	OPCS Codes	Measurement Criteria
Hypospadias	M73.1	• Reoperation in 3 years
Pyeloplasty for pelviuretetic junction obstruction	M05.1,M10.2 Y75.1, Y75.2 M10.5	• Length of stay (median) • Unplanned readmissions at 28 days • Reoperation / reintervention at 3 years • Mortality 30 days
Nephrectomy and hemi-nephrectomy	M02.4, M02.8, M02.9, M03.1, M03.8, M03.9, Y75.1, Y75.2	• Length of stay (median) • Unplanned readmissions at 28 days • Reoperation / reintervention at 28 days • Mortality 30 days

2.2.3 Gastrointestinal Surgery

At appraisal, the previous year's performance should be examined, however, to be meaningful, it will be necessary to view performance over the previous 5 years.

Key Procedures	OPCS Codes	Measurement Criteria
Fundoplication	G24.3, Y75.1, Y75.2	• Length of stay (median) • Unplanned readmissions at 28 days • Reoperation / reintervention at 28 days • Mortality 30 days
Correction of malrotation	G53.6	• Length of stay (median) • Unplanned readmissions at 28 days • Reoperation / reintervention at 28 days • Mortality 30 days
Pull through for Hirschsprung's	H41.8	• Length of stay (median) • Unplanned readmissions at 28 days • Reoperation / reintervention at 28 days • Mortality 30 days
Pull through for ano-rectal malformation	H50.4	• Length of stay (median) • Unplanned readmissions at 28 days • Reoperation / reintervention at 28 days • Mortality 30 days
Right hemi-colectomy +/- stricturoplasty	H06, H07, G76, G78, G82	• Length of stay (median) • Unplanned readmissions at 28 days • Reoperation / reintervention at 28 days • Mortality 30 days
Subtotal colectomy and ileostomy (+/- mucous fistula)	G74, H04,H05, H06,H08, H09, H10, H11,H19, H29,H30, H14, H15	• Length of stay (median) • Unplanned readmissions at 28 days • Reoperation / reintervention at 28 days • Mortality 30 days

2.2.4 Thoracic

At appraisal, the previous year's performance should be examined, however, to be meaningful, it will be necessary to view performance over the previous 5 years.

Key Procedures	OPCS Codes	Measurement Criteria
Correction of pectus deformity	T021	• Length of stay (median) • Unplanned readmissions at 28 days • Reoperation / reintervention at 28 days • Mortality 30 days
Lobectomy of lung Excision of segment of lung Partial lobectomy of lung NEC Open excision of lesion of lung	E543 E544 E545 E522	• Length of stay (median) • Unplanned readmissions at 28 days • Reoperation / reintervention at 28 days • Mortality 30 days

2.2.5 Hepatobiliary

At appraisal, the previous year's performance should be examined, however, to be meaningful, it will be necessary to view performance over the previous 5 years.

Key Procedures	OPCS Codes	Measurement Criteria
Kasai procedure	J29.1	• Length of stay (median) • Unplanned readmissions at 28 days • Reoperation / reintervention at 28 days • Mortality 30 days • Liver transplant Z94.4 within 3 years

2.2.6 Oncological Surgery

At appraisal, the previous year's performance should be examined, however, to be meaningful, it will be necessary to view performance over the previous 5 years.

Key Procedures	OPCS Codes	Measurement Criteria
Nephrectomy (Wilm's)	M02, M03	• Length of stay (median) • Unplanned readmissions at 28 days • Reoperation / reintervention at 28 days • Mortality 30 days
Neuroblastoma	B22, B23, B25	• Length of stay (median) • Unplanned readmissions at 28 days • Reoperation / reintervention at 28 days • Mortality 30 days