

9. Limitations of the audit

There are several limitations of this audit, they include the following:

- Case ascertainment may be difficult in those young people aged 16 to less than 18 years because of the structure of paediatric services, whereby some young people in this age group are seen in adult settings.
- Clinicians may fail to recognise that presenting patients may meet the decreased conscious level criteria because of an over-emphasis on the diagnosis.

How to contact

If you would like to know more about this audit, have any comments or require assistance: Please contact-

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Project Board Members

The project board members supervising the conduct of this audit are highlighted below:

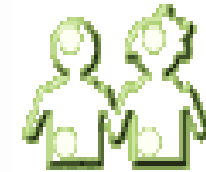
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DeCon Multi-site Audit

RCPCH

Royal College of
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Leading the way in Children's Health



Royal College of Paediatrics and Child Health in partnership with
the National Reyes Syndrome Foundation

Clinician Information Leaflet

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1. Background

The Decreased Conscious Level in Children and Young People Multi-site Audit evaluates the recommendations in the guideline-*The Management of a Child with a Decreased Conscious Level*- produced by the Paediatric Accident and Emergency Research Group in 2005 and endorsed by the Royal College of Paediatrics and Child Health (RCPCH).

In children and young people, many conditions resulting from traumatic or non-traumatic causes may lead to a decreased conscious level. The numbers affected are difficult to estimate because in the United Kingdom the epidemiological data in this area is sparse. However, 2008-2009 Health Episodes Statistics data reports 33,410 admissions to hospital with head injury in children and young people less than 15 years of age in England¹. If it is assumed that these cases may also potentially present with a decreased conscious level, that would suggest that the prevalence of decreased conscious level due to traumatic causes could potentially be in the region of at least 358 children per 100,000. A population study in the North of England reports an estimate of 30 children per 100,000 for 0-16 year olds presenting to hospital with a decreased conscious level due to non-traumatic causes lasting more than 6 hours².

1. NHS Health and Social Care Information Centre Hospital Episode Statistics Department of Health 2009 London www.hesonline.nhs.uk
2. Wong CP; Forsyth RJ; Kelly TP; Eyre JA (2001) Incidence, aetiology, and outcome of non-traumatic coma: a population based study Archives of Diseases in Child and young personhood; 84:193-199

8. What happens to the data once it is collected?

On a monthly basis, the data collected from the hospitals is checked for missing, inconsistent or erroneous data items, which is highlighted to the audit leads by means of a monthly data quality report. They are asked to check this data and provide the relevant corrections. Hospitals may also be asked to re-audit a subset of notes to ensure data quality.

The cleaned data is analysed using two formats: hospital specific and aggregated analyses. The anonymised aggregated data analyses will be made available to all hospitals registered on the clinical audit via the audit's website and also as an email attachment to the registered hospitals' representatives. The hospital specific data analyses is only be available to the pertinent hospitals and will be sent to the audit leads via an email attachment. There will also be case mix and subgroup analyses by traumatic, metabolic and other causes of decreased conscious level.

After six months of data collection, there will be an interim review of each hospital's data and depending on the number of cases (at least 50 cases), data collection will be discontinued and followed by a period of action planning and additional data collection as required.

A final report will be prepared summarising the findings and making recommendations about the next steps to improve the care of children and young people with a decreased conscious level. The report will also be disseminated to participating and other interested units. Data will be handled and stored in accordance with the RCPCH and NHS Security and Confidentiality Policies.

7. Data Collection

Data collection during this audit focuses on episodes of care. Hospitals have been asked to prospectively identify all consecutive presenting cases of decreased conscious level and to record their details in the Audit logbook.

The Audit logbook is kept at the local level and contains data such as the name of the patient, hospital number, NHS number (if known) and date of birth. This information allows clinicians to identify and validate the data they have submitted and to provide an estimate of case ascertainment.

Hospital audit leads submit anonymised data for the eligible patients via a web portal online data collection questionnaire on a monthly basis. A paper proforma is also available to aid data collection.

Data on patients are anonymised at the point of data submission through the use of encryption of patient identifiable data such as the NHS or hospital number and date of birth. The use of anonymised data in this audit means that NIGB approval is not required.

The duplication of patients is avoided by the web portal's features. It possesses an in-built validation rule which evaluates the following parameters: NHS or hospital number, date of birth and date of presentation and flags up where duplicate details are entered and prevents this from being done.

2. Aims of the Audit

The aims of the audit are:

- To assess whether children and young people with a decreased conscious level are receiving appropriate care in line with the guideline.
- To identify how the guideline is currently being implemented in different settings and identify any barriers to change.
- To use the findings to inform the development of a quality improvement programme which has the potential to improve the care of children and young people with a decreased conscious level nationally.

3. Audit Time period and duration

Data collection commenced from the 1 November 2010 and will end on 31 October 2011. Hospitals will be expected at least undertake data collection for at least 6 months with the aim of collecting at least 50 cases per trust.

4. Audit Tools

There are three audit tools or questionnaires.

- i. Service Description Questionnaire- this comprises questions about the hospital and its facilities, resources and services.
- ii. Clinician Survey on Barriers and Facilitators for Use of Guidelines- this consists of quantitative and qualitative questions which examine the barriers and facilitators impacting on clinicians use and adoption of the recommendations of the guideline.
- iii. Clinical Audit Questionnaire- this consists of the patient information which relate to the audit criteria and standards being measured.

5. Audit Standards

The audit standards measure the percentage of children and young people with a decreased conscious level presenting to hospital who have the following:

- their vital signs recorded in their clinical records
- their AVPU assessment or Glasgow Coma Score (GCS) documented in their clinical records
- their GCS documented in their clinical records every 15 minutes if ≤ 12 or every hour if >12 at presentation to hospital
- the presence or absence of the recommended features of the clinical history documented in their clinical records
- the recommended core investigations conducted within at least 1 hour of presentation to hospital
- a working diagnosis within four hours of presentation to hospital
- a management plan in place within four hours of presentation to hospital
- During the initial resuscitation and management, there is documentation in their clinical records that their parents or guardians were:
 - allowed to stay with them, if they wished
 - kept informed of the possible underlying diagnoses and treatments required
 - kept informed of the possible prognosis if it was known

Positive evidence of the standards being achieved is taken as any documented evidence whether in the form of written or electronic documentation, family tree drawings, plotted observations in observation charts or other charts and specimen pathology and any other reports by any member of the health care team in the patient's clinical record.

6. Audit population and sample

The inclusion criteria for the children and young people in the audit include the following:

- Aged- 0 to less than 18 years
- Presents to hospital (Emergency department, Paediatric Intensive Care Unit or Paediatric Assessment Unit)
- Decreased conscious level defined as a Glasgow Coma Score (GCS) of 14 or less or being responsive only to voice, pain, or being unresponsive on the AVPU scale.

Children and young people with any of the following features are excluded from the audit:

- A previously diagnosed condition which is known to be the cause of the decreased conscious level such as previously diagnosed epilepsy, possessing a ventriculo-peritoneal shunt or a previously diagnosed metabolic condition with an agreed plan of care for acute admissions.
- A Glasgow Coma Score less than 15 on a day to day basis
- Preterm infants on a NICU or full term infants who have a decreased conscious level from the moment of birth onwards (except where these children present to hospital after discharge home and meet all audit criteria).
- Transfers from another hospital NHS or otherwise.
- Any child who presents to hospital with a normal GCS (15) and/or AVPU assessment (Alert) whose condition then deteriorates while in hospital.