



The College of Emergency Medicine

CLINICAL AUDITS

EXECUTIVE SUMMARY 2010

This report summarises the results from the three 2009 CEM national audits (pain in children, fractured neck of femur and asthma). It also compares the results with previous audits and incorporates the Executive summary of December 2008, which summarised the entire 2003 to 2008 audit programme.

The audits were conducted against the standards of the College of Emergency Medicine which have been developed and refined over the last eight years by the College's Clinical Effectiveness Committee.

All participating Emergency Departments (EDs) have received individualised reports of their audit results and direct comparisons with national results so their performance is clearly seen.

Key results are detailed below:

PAIN IN CHILDREN

This audit has been completed in 2003, 2004, 2005, 2007, 2008 and 2009.

Severity of pain

- In 2009 33% of patients had severe pain and 67% had moderate pain on arrival at EDs. In earlier audits the percentages of patients in severe pain varied from 26% to 38% and there has been no consistent trend.

Recording of pain score on arrival

- There has been a progressive improvement in the recording of pain scores between 2003 and 2009 (in 2003, the national median¹ was 12%, which has risen to 56% in 2009).

Analgesia within 60min

- Between 2003 and 2007 there was a considerable improvement in the proportion of patients receiving analgesia within 60 min, but this has since fallen (in 2003 the national median was 56%; in 2007 it was 77%, falling to 74% in 2008 and 72% in 2009).

Analgesia within 20min

- There has been a modest improvement in the proportion of patients receiving analgesia within 20 min over the 6-year period (in 2003 the national median was 29%; in 2008 it was 42% although this fell to 40% in 2009).

Prescribing appropriate analgesic

- There has been a modest improvement in the administration of recommended analgesics, at the correct dose and via the correct route (in 2003, the national median was 46%, rising to 63% in 2007 but falling to 58% in 2008 and 60% in 2009).

FRACTURED NECK OF FEMUR

This audit has been completed in 2004, 2005, 2007, 2008 and 2009.

Severity of pain

- In 2009 35% of patients had severe pain, 34% had moderate pain and 31% minor pain. In earlier audits the percentages of patients in severe pain varied from 26% to 43% and there has been no consistent trend.

Recording of pain score on arrival

- There has been a progressive improvement in the recording of pain scores between 2004 and 2008 (in 2004 the national median was 28%, which rose to 66% in 2008 but fell to 62% in 2009).

Analgesia within 60min

- The proportion of patients receiving analgesia within 60 min rose between 2004 (43%) and 2007(53%) but in 2009 had fallen back to 46%.

Analgesia within 20min

- There was a modest improvement in the proportion of patients receiving analgesia within 20 min between 2004 and 2008 (in 2004 the national median was 10%; in 2008 it was 18%) but in 2009 this fell back to 14%.

Prescribing appropriate analgesic

- There has been no significant change in the administration of recommended analgesics (the national median has risen by 2% overall, from 70% in 2004 to 72% in 2009).

Time to X-ray

- There has been a 10% improvement in the proportion of patients who have an X-ray within 60 min (in 2004 the national median was 32%; in 2009 it was 42%).

Re-evaluation of pain

- 28% of patients had their pain re-evaluated in the 2009 audit. This is the first time that we have collected this data so no comparative data is available.

Time to admission

- There was a dramatic improvement in the percentage of patients admitted within 4 hours between 2004 and 2005 (72% - 89%), but this has remained broadly unchanged for the last 4 years (90% in 2009). There has been a fall in the number of patients admitted within 2 hours over the same time period (13% in 2004, 9% in 2009), which is likely to be attributable to the 4-hour standard (target).

Time to operation

There has been steady improvement in how soon after admission #NOF patients have their first operation:

- 56% of patients have their operation on the day of admission or the following day (2009 national mean) compared to 52% in 2007
- 81% have their operation within 2 days (74% in 2007)
- 19% of patients wait 3 days or longer (26% in 2007)
- There are concerns that hospitals which did not or cannot return this data are more likely to have poor performance, but there is no way of demonstrating this.

ASTHMA IN ADULTS

This audit has been completed in 2007 and 2009.

Ambulance notes available

- In 2009 71% of ED notes had the ambulance record with them (73% national mean in 2007).
- Oxygen saturation measurement in ambulances has risen from 89% to 98% (national means) but oxygen delivery is recorded as having fallen from 85% to 81%. Recording of peak flow in 2009 was 29% (up from 23% in 2007) and beta 2 agonist use up from 83% to 85%.

Vital signs measurement and recording on arrival in ED

- 97% of audited patients had O₂ saturation, pulse and respiratory rate measured and recorded on arrival (94% national mean in 2007). Measurement of peak flow on arrival occurred in 52% of those audited in 2009 compared to 54% in 2007.

Beta 2 agonist administration in ED

- In 2009 85% of patients presenting with moderate or severe asthma received beta 2 agonist (little change from national mean in 2007) and in 27% of patients this was within 20min of arrival.

Steroid administration in ED

- In 2009 the national mean for steroid administration was 67% (up by 4%) and 33% of patients received this within 60min of arrival.

Repeat vital sign measurement and recording in ED

- There was an impressive rise in the repeat measurement and recording of O₂ saturation, pulse and respiratory rate from 50% to 66% between 2007 and 2009. Peak flow repeat measurement was 45% (no change from 2007).

Discharge prescription of oral steroids

- 67% of patients were discharged with a prescription for oral steroids (63% national mean in 2007). The lower quartile of departmental results rose from 48% to 57% in 2009.

Appropriate follow up arrangements

- It is documented that 64% of patients had appropriate follow up arrangements made (66% national mean in 2007). The lower quartile of departmental results rose from 43% to 50% in 2009).

RECOMMENDATIONS

1. The College of Emergency Medicine recommends commissioners, Trust Boards and Emergency Departments review the results of their audit performance and how they compare with national results.

Managers and clinicians should work together to address issues and make necessary changes.

2. The NHS has passed through a period when the time target in Emergency Departments has been the main focus of attention. This was very much needed as the long waits were a serious clinical risk and patient care was compromised as a result. We have now entered a period when the quality of care for patients during their time in the ED is becoming the focus of attention, while maintaining good patient flows. This is timely, because the early quality gains from the College audit programme have levelled off.

A new impetus is needed to raise standards and improve patient experience.

3. We have seen that a concerted effort can improve the quality of care for patients by setting standards and undertaking national audit. The College recommends that all EDs participate in the CEM national clinical audit programme.

A three year audit programme is in place to support this.

SPECIFIC CONCERNS

1. **Wide variations** across the country are very noticeable when the 3 audit reports are studied. The difference between the better performing trusts and those below the 25th centile is very large. *If your hospital lies at or below the lower performance quartile on any standard you should review this as a priority.*
2. **Analysis of trend charts** reveals that many trusts are 'stuck' at a standard of care below the level that has been agreed within our speciality after wide consultation. *If there has been no improvement over time this suggests that there is a need for renewed focus on quality.*
3. **Pain in children.** The national mean for the recording of pain score has risen from 12% to 56% in 6 years. This is pleasing and we should aim to maintain this upward trend. In 2003 56% of children received analgesia within 60min, which rose to 77% in 2007 but has now *fallen to 69%.* This is disappointing and hard to explain as the pain scores are being taken more consistently.
4. **Fractured neck of femur.** Elderly patients often do not complain so a national median pain score recording at 62% should be addressed as should the 42% receiving analgesia within 60min. The 'fast track' process, which has been introduced in many hospitals, appears to work well in some Trusts but not all. The College hopes that all hospitals are working hard on the entire patient pathway to increase the proportion of patients who have both adequate pain control and early surgery. *There is an upward trend in operation within 24hrs nationally.*
5. **Asthma in adults.** It is excellent that the reception of patients and the recording of vital signs have improved to 97% and repeat recording has risen to 66%. *Attention needs to be made to recording the peak flow before discharge even if the patient was too short of breath to do this on arrival. Prescription of steroids on discharge is still inconsistent* but there has been a good improvement in this measure among the less well performing hospitals.
6. **Hospitals not participating** in the audit programme (73% of EDs made audit returns) are also likely to be poorly performing departments but we cannot demonstrate this. The current focus on quality indicators means that a failure to participate in audit is likely to be viewed as unacceptable by the public, the commissioners and the Care Quality Commission.

Dr Stephen Nash (Chair)

On behalf of the Standards and Audit sub-Committee
Clinical Effectiveness Committee
The College of Emergency Medicine
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ⁱ The median value of each indicator is that where equal numbers of participating EDs had results above and below that value. These median figures may differ from the "national" results quoted in the body of the reports which are the mean values for all audited patients. Figures are mean values unless stated otherwise.