NCEPOD audit pack

NCEPOD

Emergency Admissions: A journey in the right direction?

A report of the National Confidential Enquiry into Patient Outcome and Death (2007)

What is clinical audit?

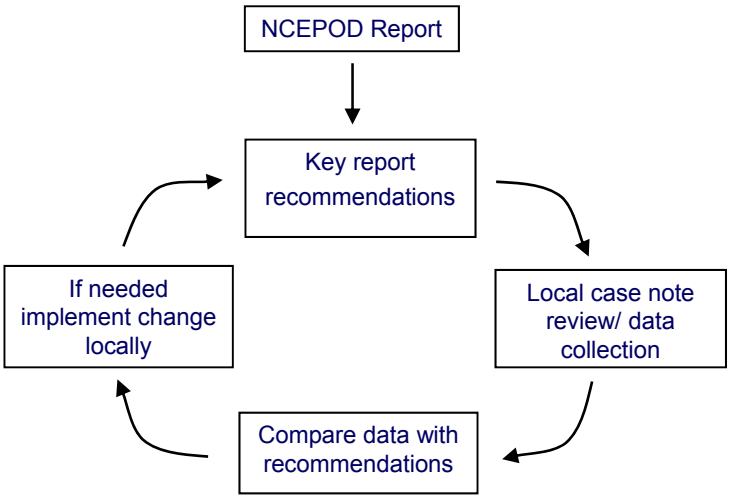
The National Institute for Clinical Excellence (NICE) endorsed definition of clinical audit is: 'A quality improvement process that seeks to improve patient care and outcomes through systematic review of care against explicit criteria and the implementation of change. Aspects of the structure, processes, and outcomes of care are selected and systematically evaluated against explicit criteria. Where indicated, changes are implemented at an individual, team, or service level and further monitoring is used to confirm improvement in healthcare delivery'. Please refer to the Health Quality Improvement Partnership (HQIP) www.hqip.org.uk for more details.

NCEPOD – "Improving the quality of medical and surgical care".

The overall aim of NCEPOD is to assist in maintaining and improving standards of medical and surgical care.

This is achieved by undertaking confidential questionnaire and peer review based studies, the findings of which are disseminated back to the medical profession and wider audience in the form of a report. Each NCEPOD report makes a number of key recommendations related to both clinical and organisational aspects of care. It is only when these recommendations are implemented that NCEPOD realises its function and overall aim.

The purpose of the NCEPOD audit pack is to provide clinicians with a tool to carry out local audits based on the findings of specific NCEPOD reports. Where appropriate report recommendations have been adapted to become more relevant to front line clinicians and case note review.



Introduction

Emergency admissions to hospital are, by definition, unpredictable and unexpected in the individual case, even where the system has been properly set up to cater for them. Such admissions account for approximately one third of all admissions and in 2004-2005 increased by 6.5% on the previous year to 4.43 million[1].

The volume and unpredictability of these admissions is a signifi cant part of the health service. Consequently, there has been considerable interest within both governmental and non-governmental organisations as to how to manage these demands[2-6]. Previous reports have concentrated on the initial care of patients: primarily on access to emergency care and the organisational and clinical management of emergency admissions. Moreover, a national audit of emergency medical admissions reported that the most significant problems at admission were sub-optimal involvement of consultants in acute care and the fact that the admitting specialty is frequently inappropriate to the patient's condition[7]. While the first response on admission is certainly an important point of focus, it is equally important to look at the organisation of subsequent care. To date, very little work has been reported in this area.

In this study, NCEPOD has assessed organisational and clinical aspects of both the immediate and ongoing care of patients admitted as emergencies. The report highlights remediable factors in existing care pathways, particularly the appropriateness, timeliness and frequency of investigations and reviews, the experience of staff and the availability of results, protocols and procedures.

NCEPOD deliberately sampled an acutely ill group of patients because remediable factors in their care are likely to be more obvious, giving insights into the inherent problems and inefficiencies within the acute sector.

Method

Study aim

The aim of this study was to identify remediable factors in the organisation of care of adult patients who were admitted as emergencies.

The specific objectives of this study were to evaluate care in the following areas:

1. Emergency admissions systems
2. Access to investigations
3. Bed management
4. Time and timing of
5. Communication and information
6. Quality and quantity of staff

Hospital participation

All relevant National Health Service hospitals in England, Wales and Northern Ireland were expected to participate, as well as relevant hospitals in the independent sector, public hospitals in the Isle of Man, Guernsey and the Defence Secondary Care Agency.

Sample selection

A sample of patients was selected that were thought most likely to test the processes of care during their hospital stay. All adult medical and surgical patients (≥16 years) who were admitted to hospital as an emergency admission on seven pre-determined days in February 2005 were considered and included if they met one of the following inclusion criteria:

- Died on or before midnight on day 7 (the first day of admission being recorded as Day 1); or
- Were transferred to adult critical care on or before midnight on day 7; or
- Were discharged on or before midnight on day 7 and subsequently died in the community within 7 days of discharge.

Data collection

Data for the study was obtained from questionnaires sent to clinicians involved in the care of the patient. Additionally, extracts of the casenotes were photocopied and returned to NCEPOD. One questionnaire per hospital was also completed to indicate the facilities available at each site.

Advisor group

A multidisciplinary group of advisors was recruited to review the questionnaires and associated casenotes. The group of advisors comprised physicians, surgeons, emergency department physicians, intensive care physicians and nurses.

Hospital participation

There were 173 acute trusts which were expected to participate. Of these, 158 submitted patient data. Additionally 18 trusts or equivalent independent units contributed data to the study totalling 363 hospitals. Of the 363 hospitals that submitted patient data, 233 had patients that were eligible for the study. Additionally 201 organisational questionnaires were returned from sites that may or may not have had patients eligible for the study.

Data returned

A total of 1609 admission and 1617 ongoing care questionnaires were returned to NCEPOD. Of these, 71 admission and 148 ongoing care questionnaires were excluded from the data analysis as they were either returned blank or were very poorly completed.

Key findings and recommendations

Initial assessment

Key findings

Of those hospitals that had an EAU 97.7% (169/173) had a medical EAU and 60.1% (104/173) a surgical EAU.

The majority of initial assessments were made in the emergency department.

The overall standard of initial assessment of emergency admissions was good or adequate but 7.1% (90/1275) were poor or unacceptable in the advisors' opinions.

In 5.7% (17/298) of EAUs there was no designated lead clinician or clinical manager in charge of the EAU.

In a signifi cant number of EAUs there was a lack of policies related to clinical management, admission and discharge.

The initial assessment of patients was frequently undertaken by SHOs.

There were examples of poor medical documentation particularly in respect of basic information on the dates, times or designation of the person making an entry in the casenotes.

The use of proformae in the casenotes aided the initial assessment but there was a lack of standardisation of the information recorded

Recommendations

Patients admitted to hospital as an emergency should be assessed in an area which has appropriate staff and facilities to allow early decision making and initiation of treatment. (Clinical directors)

Emergency Admission Units should have a designated clinical and administrative lead and have policies for clinical management, admission and discharge of patients. (Clinical directors)

The initial assessment of patients admitted as an emergency should include a doctor of sufficient experience and authority to implement a management plan. This should include triage of patients as well as formal clerking. The involvement of a more senior doctor should be clearly and recognisably documented within the notes. (Clinical leads and heads of service)

The quality of medical note-keeping needs to improve. All entries in notes should be legible, contemporaneous and prompt. In addition, they should be legibly signed, dated and timed with a clear designation attached. (Medical directors)

Key findings and recommendations

First consultant review

Key findings

60.1% (298/496) of patients were seen by a consultant within 12 hours of admission; 92.3% (458/496) were seen within the fi rst 24 hours.

In 12.4% (158/1275) of cases there was a lack of documentary evidence of patients being reviewed by consultants following admission to hospital.

It was not possible to determine the time to the first consultant review in 47.8% (609/1275) of cases due to lack of documentation of time or date in the casenotes.

Where times could be determined, the time to the first consultant review was unacceptable in 16.1% (100/621) of cases and, in the advisors' view, this had a detrimental effect on diagnosis and outcome in many of these patients.

Early review by a consultant following admission to hospital is more important than being reviewed by a consultant of a specific specialty.

Recommendations

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. Compliance with this standard will inevitably vary with case complexity. (Clinical directors)

Documentation of the first consultant review should be clearly indicated in the casenotes and should be subject to local audit. (Clinical directors)

Trainees need to have adequate training and experience to recognise critically ill patients and make clinical decisions. This is an issue not only of medical education but also of ensuring an appropriate balance between a training and service role; exposing trainees to real acute clinical problems with appropriate mid-level and senior support for their decision making. (Clinical directors)

Key findings and recommendations

Consultant commitments while on-take

Key findings

68.8% (943/1370) of patients were under the care of consultants who had more than one duty when on call. These may be consistent with their on call activity but even so, 21.2% (298/1370) of consultants were undertaking more than three duties.

Some consultants undertake non-emergency clinical care while on-take and this may have delayed their response to the management of emergency admissions.

Recommendations

Consultants' job plans need to be arranged so that, when on-take, they are available to deal with emergency admissions without undue delay. Limiting the number of duties that consultants undertake when on-take should be a priority for acute trusts. (Medical directors)

Necessity for admission

Key findings

5.9% (75/1275) of emergency admissions were considered unnecessary.

Most of the unnecessary admissions were for patients who could have been cared for in the community.

Recommendations

Appropriate mechanisms, both in terms of community medicine and palliative care, should be in place so that unnecessary admissions can be avoided. (Primary care trusts and strategic health authorities)

Key findings and recommendations

Availability of investigations and notes

Key findings

Obtaining pre-existing notes did not seem to be a problem in this group of patients. This may be due to improvements in access to notes via medical records departments, or due to the fact that the pre-existing notes were not considered necessary.

15.1% (45/298) of EAUs that admitted patients as an emergency did not have access to CT scans 24 hours a day.

6.7% (20/298) of EAUs that admitted patients as an emergency did not have access to conventional radiology 24 hours a day.

In 4.8% (61/1275) of cases there was a delay in obtaining results of investigations, adversely affecting the overall quality of care of some of these patients.

In 7.5% (91/1218) of cases appropriate investigations were not performed.

In 7.4% (94/1275) of cases inappropriate investigations were performed.

Recommendations

Hospitals which admit patients as an emergency must have access to both conventional radiology and CT scanning 24 hours a day, with immediate reporting. (Medical directors and clinical directors)

There should be no systems delay in returning the results of investigations. (Clinical directors)

There should be a clear rationale for the ordering of investigations. Omission of appropriate investigations can have a deleterious effect on patient care. (Lead clinicians)

All investigation results should be recorded with a date and time in the patient notes. (Clinical audit)

Key findings and recommendations

Transfers

Key findings

The vast majority of emergency admissions in this study were sent to an appropriate inpatient ward.

The vast majority of patients were looked after by a consultant of an appropriate specialty.

However 12.9% (12/93) of patients placed on an inappropriate ward were thought to have received less than satisfactory care.

Excessive transfers were thought to affect diagnosis and outcome in a small cohort of patients.

Recommendations

Following the initial assessment and treatment of patients admitted as an emergency, subsequent inpatient transfer should be to a ward which is appropriate for their clinical condition; both in terms of required specialty and presenting complaint. (Clinical directors)

Excessive transfers should be avoided as these may be detrimental to patient care. (Clinical directors)

Handovers

Key findings

Half (102/201) of hospitals did not have a written handover protocol.

A proportion of clinicians were unaware of existing handover protocols.

92.8% (1322/1425) of emergency admissions had a clear and recognisable handover procedure between clinical shifts both during initial assessment and subsequent to this.

Handover-related problems appeared to be infrequent.

Recommendations

Robust systems need to be put in place for handover of patients between clinical teams with readily identifiable agreed protocol-based handover procedures. Clinicians should be made aware of these protocols and handover mechanisms. (Heads of service)

Key findings and recommendations

Reviews and observations

Key findings

The level of clinical review of emergency admissions was generally adequate.

Where the level of clinical review was inadequate this was judged to have affected the diagnosis in 27/76 cases and the outcome in 50/69 cases.

It was difficult to find clear evidence that emergency admissions received adequate clinical observations, both in type and frequency; moreover there was clear evidence that approximately 6.8% (82/1204) of patients did not.

Appropriateness of ward did not seem to have an impact on either appropriateness of type of observations or frequency of observations. However, this comment should be interpreted in the context of the denominator representing a large volume of insuffi cient/blank data.

Thus it is possible to suggest that not only are appropriate observations performed less often than is desirable, when they are performed, their frequency is inappropriately low in a signifi cant proportion of patients even if they are on a suitable sub-specialty ward.

Recommendations

All emergency admissions should receive adequate review in line with current national guidance. (Clinical directors)

A clear physiological monitoring plan should be made for each patient commensurate with their clinical condition. This should detail what is to be monitored, the desirable parameters and the frequency of observations. This should be regardless of the type of ward to which the patients are transferred. (Clinical directors)

Part of the treatment plan should be an explicit statement of parameters that should prompt a request for review by medical staff or expert multidisciplinary team (An Acute Problem?). (Clinical directors)

Adverse events

Key findings

The data provided to NCEPOD, particularly relating to drug administration was incomplete, and therefore it has proved difficult to identify adverse events. Further difficulties arose from the lack of consistency in interpretation of definitions surrounding adverse events.

Recommendations

Further work is required by the NPSA to educate and inform clinical staff about the definitions surrounding adverse events. There must be standardisation of reporting and audit of that reporting to ensure that accurate data is obtained. (National patient safety agency).

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