Introduction
This document summarises the results of the first consultant sign-off audit, undertaken by the College of Emergency Medicine.

In December 2010 the College of Emergency Medicine (CEM) published a consensus-based clinical standard for consultant sign-off. This was subsequently adopted by the Department of Health as one of eight quality indicators introduced in England in April 2011. All English EDs are required to collect and publish headline data relating to this quality indicator (the percentage “signed off” by a consultant for each of the three conditions) as detailed in the NHS Operating Framework and national indicators guidance.

The purpose of this audit was to identify current levels of compliance with the College standard and its impact on current practice, in order to inform subsequent review. In total, 9142 cases from 134 EDs, of which 126 were in England (64% of English EDs), were included in the audit.

The CEM Standard
The following patient groups should be reviewed by a consultant in Emergency Medicine (EM) prior to discharge (i.e. discharge home or to their usual place of residence) from the ED:

- Adults (over 17 years of age) with non-traumatic chest pain
- Febrile children less than 1 year old
- Patients making an unscheduled return to the ED with the same condition within 72 hours of discharge from the ED.

If, due to insufficient numbers of consultant staff, an EM consultant is not immediately available on the “shop floor” of the ED, then review may be carried out by a senior trainee in EM (ST4 or above), or by a staff grade or similar substantive career grade doctor with sufficient ED experience to be designated to undertake this role by the EM consultant medical staff.

Methods
Participating departments were asked to collect data consecutively between Monday 5th September 2011 (9 am) and Monday 19th September 2011 (9 am) on up to 40 patients in each of the sign-off groups. They were requested to include all patients in each of the three diagnostic groups seen in the ED during this period, regardless of whether they were admitted or discharged, in order to identify where variations in admission rate might have an effect on the audit results.

The audit tool developed by the CEM summarised the data entered automatically and the summaries were then e-mailed to the CEM for analysis.

The tables and charts show UK averages and distributions. Figures for England alone are very similar since only eight non-English Emergency Departments returned data.
Seniority of doctors seeing audited patients

Table 1

<table>
<thead>
<tr>
<th>% of discharged patients</th>
<th>seen by</th>
<th>discussed with</th>
<th>ED notes reviewed after discharge by</th>
</tr>
</thead>
<tbody>
<tr>
<td>a consultant / associate specialist</td>
<td>12%</td>
<td>12%</td>
<td>7%</td>
</tr>
<tr>
<td>a ST4 or more senior doctor*</td>
<td>44%</td>
<td>31%</td>
<td>12%</td>
</tr>
</tbody>
</table>

Chart 1: Percentages of discharged patients (only) seen … … by a consultant or associate specialist … by a doctor of seniority ST4 or above*

Table 2

<table>
<thead>
<tr>
<th>% of all audited patients</th>
<th>seen by</th>
<th>discussed with</th>
<th>ED notes reviewed after discharge by</th>
</tr>
</thead>
<tbody>
<tr>
<td>a consultant / associate specialist</td>
<td>11%</td>
<td>11%</td>
<td>7%</td>
</tr>
<tr>
<td>a ST4 or more senior doctor*</td>
<td>41%</td>
<td>30%</td>
<td>12%</td>
</tr>
</tbody>
</table>

Chart 2: Percentages of all audited patients seen … … by a consultant or associate specialist … by a doctor of seniority ST4 or above*

* consultant, associate specialist, staff grade, specialty doctor, senior clinical fellow, or ST4-7+
Overall 12% of discharged patients (Table 1) and 11% of all admitted and discharged patients (Table 2) were seen by a consultant/associate specialist. 44% of discharged patients and 41% of all audited patients were seen by an ED doctor of ST4 seniority or above. In total, 22% were seen by or discussed with a consultant/associate specialist.

The percentages of audited patients seen by a consultant/associate specialist or senior doctor varied markedly between participating EDs. For consultants the range was from 0% to 54% of discharged patients and 0% to 40% of all audited patients. For doctors of seniority ST4 or above, the ranges were 0% to 89% of discharged patients and 0% to 88% of all audited patients. Although patients were slightly more likely to be seen by a senior doctor at larger ED’s than at smaller ones, the correlation was not statistically significant.

The percentages of patients seen by locum doctors ranged from zero to 52%, with an average of 14%.

Were audited patients seen by an ED doctor?

Patients were more likely to be discharged if they were seen by an ED doctor. This is likely to reflect the case-mix of patients seen by ED and other doctors as well as their respective propensities to admit, refer or discharge.

Disposition

Overall, 31% of audited patients were admitted to a ward and 4% to a CDU. With one exception, ED’s where very low percentages of patients were admitted had comparatively high rates of referral or transfer. The highest admission rate recorded for these categories of patient was 77%. Referral/transfer rates varied from 0% to 58%; discharges from 15% to 88%.

Overall, audited patients seen at night (or during the evening) were more likely to be admitted than those arriving during the daytime (between 8 a.m. and 6 p.m.). However, markedly lower percentages of daytime patients arriving at weekends were admitted than on weekdays (and conversely higher percentages of patients were discharged); this may reflect differences in casemix, lack of senior presence in the ED or reduced access to primary care.

50% of those consultants surveyed who expressed a view thought that the sign-off standard had led to improved decisions on whether or not patients should be admitted, a further 15% that it should do when it was possible to implement it and 14% that it might improve such decisions. However, there were mixed views as to whether there would be a consequential reduction or increase in the numbers of admissions. 46% of those who expressed an opinion thought that the
net effect would be fewer admissions, 19% that there would be more admissions, and 35% that reductions and increases in admissions would be balanced. 20% of those surveyed thought that the standard would have no impact on such decisions.

Similar proportions of respondents thought that the standard improved clinical management: 54% yes, 14% that it should do so when implemented, 13% that it might, and 18% that it would have no effect.

Consultation with a more senior doctor
The percentages of discharged patients who, according to the notes, were first discussed with a consultant or senior doctor varied markedly between EDs: from 0% up to 54% for discussion with a consultant/associate specialist, and from 0% to 95% for discussion with a doctor of grade ST4 grade or more senior.

Retrospective review
Overall, 12% of audited cases where the patient was discharged were reviewed. Five ED’s claimed to have reviewed all such cases, but the majority had no records of having conducted these reviews.

Conclusion
The College of Emergency Medicine hopes that these audit data will be useful to all EDs in further developing their service. In working towards the consultant sign-off standard the College recommends that EDs have in place a plan to both address the clinical risk and work towards achievement of the standard, through an increase in Emergency Medicine consultant numbers. It is important to note that staff supervision and sign-off is only one aspect of the consultant’s role: too much emphasis on sign-off could lead to other important areas, such as management of the sickest patients and service development, being neglected. Similarly, this national audit and report is intended to stimulate discussion between clinicians, managers and commissioners, with a view to service improvement, rather than being used as a crude measure of performance or a basis for imposing financial penalties. We hope to disseminate examples of good practice soon.

Overall, data from 134 EDs show that only 12% of patients in the identified high risk groups are seen by a consultant prior to discharge, but nearly half are seen by a ST4 trainee or more senior doctor, which is encouraging. The current gaps in consultant cover are clearly demonstrated, particularly in the evenings and overnight, and progressive expansion within the consultant tier should work to address this. It is encouraging to note that patients are generally more likely to be discharged if they are seen by an ED doctor, and that senior ED doctors have a lower admission rate than juniors, though these findings are complicated by the effects of casemix: consultant staff would be expected to see the most seriously ill and injured patients, so their rate of hospital admission in unselected cases may be even lower than the overall figure of 34% found in this audit. 60% of EDs returning data found the information problematic or difficult to collect, which indicates the need to further improve data collection and coding systems. Ideally, such systems should be implemented using a fully automated process that places minimal demands on the practicing clinician. More information on informatics relevant to Emergency Medicine can be found at: http://www.collemergencymed.ac.uk/Shop-Floor/Informatics/default.asp

The CEM Consultant sign-off standard will be reviewed annually, particularly in relation to the conditions to which it applies. Several suggestions for development have already been received, but there will be no modification until 2013 at the earliest, and following at least one repeat audit. This is in keeping with the NHS Operating Framework for 2012-13.

Further details of CEM national audit programme can be found at: http://www.collemergencymed.ac.uk/Shop-Floor/Clinical Audit/Current Audits

Dr Stephen Nash  
Chair, Standards & Audit Subcommittee

Prof Jonathan Benger  
Chair, Clinical Effectiveness Committee