The Audit Commission's national report on accident and emergency services, *By Accident or Design*, published in 1996, identified key areas for improvement.

- waiting times for patients in accident and emergency departments, both to see a doctor and, if necessary, to be admitted to hospital, were too long and in many trusts could be reduced
- most departments did not have sufficient doctors and their deployment could be better matched to demand
- many departments did not monitor their own performance adequately, usually because they lacked the information systems to do so

This update examines the main changes that have taken place between the audit in 1995/96 and a follow-up survey in 1997/98. Problems remain in all of these areas...

- waiting times have increased in nearly three-quarters of departments where the number of patients waiting more than one hour to see a doctor has increased by 18 per cent
- there is still scope for better deployment of staff
- nurse practitioners are employed in only one-third of departments, and in most of those they see fewer than 10 per cent of patients
- many trusts are not monitoring their own performance because they still lack the necessary information systems, or are not making full use of the systems they already have

...and this is despite an increase in staff in most A&E departments since the original report.

A further area of concern has emerged...

- only 25 per cent of heart attack patients receive thrombolytic drugs (which dissolve blood clots) within the proposed target time of 30 minutes from arrival at hospital

...but other quality of care indicators paint a more favourable picture.

- access to CT scanning is now almost universal
- specially qualified doctors are available in more than a half of A&E departments
- there is better access to qualified children's nurses in A&E departments

Trusts should assess their performance and produce an action plan where it is below standard or deteriorating. Health authorities should set realistic targets for trusts within a framework, as recommended by the national report, and monitor trusts' performance against these targets.
Background

1. In 1996 the Audit Commission published a national report, *By Accident or Design*, which examined a wide range of issues relating to the organisation and management of A&E departments. This update reviews the changes that have taken place since then in the key areas of waiting times, staffing and performance monitoring, where improvement was most needed. It also introduces numerical indicators for some of the quality issues that were identified in the report.

2. At the time of the national report, the number of people attending A&E departments was rising, but since then growth has been modest [EXHIBIT 1]. Moreover, this update survey shows that the percentage of patients coming into A&E who were subsequently admitted to hospital dropped slightly, from 20 per cent of new attendances in 1995/96 to 18 per cent in 1997/98. Although the pressure from growth has not been sustained at the same rate, the need for change has not diminished.

EXHIBIT 1


Growth in attendances has been modest in recent years.

![Graph showing attendances at A&E departments from 1991/92 to 1997/98.]

Source: Department of Health

Waiting times

3. Patients' waiting times have been measured in two ways:
   - the percentage of patients seeing a doctor or nurse practitioner, for full examination or treatment, within one hour; and
   - the percentage of patients needing admission to hospital from A&E who were admitted within four hours.

4. Both figures are calculated from the time that people arrive in the A&E department and so are clearly related to patients' perceptions of the speed of service. This approach differs from the Patient's Charter, where waiting times involve intermediate points in the process, such as the point when a patient is first seen by a nurse for initial assessment (triage) or the point at which a decision to admit is taken. Although many A&E departments base their waiting time measures on these intermediate points, the resulting figures are of less relevance to patients and, as the national report pointed out, are also open to manipulation.
5. Since the national report waiting times have, on average, increased, although in a small minority of departments they have decreased [EXHIBIT 2]. The average percentage of patients seeing a doctor within one hour has fallen - from 72 per cent at the time of the audit in 1995/96 to 67 per cent at the follow-up in 1997/98. The percentage of patients needing admission who were admitted within four hours has fallen from 89 per cent to 87 per cent.

6. Small departments tend to have shorter waiting times, whereas the longer waiting times are all seen in larger departments [EXHIBIT 3]. The slowest group is the London teaching hospitals. However, waiting times in similar sizes of departments vary over a wide range. In all size groups, including the largest, the best departments see 90 per cent or more of their patients within one hour and provide a standard to which the others should aspire [EXHIBIT 4, overleaf]. The national report recommended that A&E services should be concentrated in fewer, larger departments because they offer the potential for improved patient care and operational advantages. The figures show that it should be possible to obtain the benefits of size combined with short waiting times.

EXHIBIT 2
Change in the percentage of patients seeing a doctor within one hour of arrival, England and Wales 1995/96 – 1997/98
Waiting times have increased in most departments, but in some they have decreased.

Source: Audit Commission

EXHIBIT 3
Time to see a doctor compared with size of A&E department, England and Wales 1997/1998
Waiting times tend to be shorter in small departments.

Source: Audit Commission
It should be possible to obtain the benefits of size combined with short waiting times.

EXHIBIT 4
Variations in time to see a doctor for three sizes of departments, England and Wales 1997/98
The best examples in each size of department see 90 per cent, or more, of their patients within one hour.

Note: Size of departments refers to number of patients per year.
Source: Audit Commission

Staffing

7. Staff shortages were a significant problem in A&E departments at the time of the national report, with most departments falling below the standards set by the British Association of Emergency Medicine (BAEM). Since then, the number of doctors has increased significantly, with 85 per cent of trusts reporting an increase and only 15 per cent reporting a decrease or no change [EXHIBIT 5]. Increases at a national level apply to all grades, but are proportionately greater at consultant and higher junior doctor grades.

8. The potential for the increased number of junior doctors to reduce both the workload in A&E departments and patients’ waiting times has been offset, to some extent, by the reductions in working hours as a result of the ’New Deal’ for junior doctors.
9. There is also evidence that increasing the number of doctors, on its own, will not necessarily improve waiting times. The update survey shows no relationship between waiting times and doctors’ workloads [EXHIBIT 6]. This finding suggests that any moves to reduce waiting times must address the deployment of doctors as well as the numbers employed.

10. There has also been an increase in nursing staff, with the average number of whole-time equivalents rising by 8 per cent. However, very little use is being made of nurse practitioners (nurses who have the authority to treat, refer and discharge patients within agreed protocols, without reference to a doctor). There are very few hospitals where such nurses see and treat more than 10 per cent of new attendances. The national report pointed out that nurse practitioners can provide added flexibility, ease pressure on doctors and speed up patient flow.
Performance framework

11. The original report recommended that a national framework of performance indicators for A&E services should be established and that trusts, in consultation with their health authorities, should agree realistic targets and then monitor subsequent performance.

12. However, performance monitoring is an area where progress has been slow. For this update survey, trusts were asked for waiting times for one calendar month only, to minimise the burden of data collection. Nevertheless, many departments could not provide all the information. Although 82 per cent of trusts gave the percentage of patients seeing a doctor within one hour, only 55 per cent gave the percentage admitted within four hours [EXHIBIT 7].

13. The update survey also contained eight questions about performance monitoring. For example, ‘are reports on waiting times to admission/departure produced monthly?’ Trusts were placed on an 8-point scale with 8 indicating very comprehensive monitoring and 0 indicating no monitoring at all [EXHIBIT 8]. The median figure was 5 out of 8, and 24 per cent of trusts reported 0.

EXHIBIT 7
Trusts’ ability to report waiting times, England and Wales 1997/98
Many trusts could not provide data on waiting times.

Source: Audit Commission

EXHIBIT 8
Trusts that regularly monitor management information, England and Wales 1997/98
Only a small proportion of trusts monitor performance comprehensively.

Source: Audit Commission
14. While some trusts do monitor effectively, many still lack the information to assess adequately how their A&E department is performing. Efforts to bring about any general improvement in A&E services will continue to be hampered without universal performance monitoring and the information systems to match.

Many trusts still lack the information to assess... how their A&E department is performing.

Quality

15. While the quality of care cannot be assessed by numerical performance measures alone, the original study identified some elements of good practice that could be measured in this way:

- access to computerised tomography (CT) scanning facilities for speedy diagnosis;
- availability of experienced A&E doctors; and
- the percentage of resuscitations carried out by doctors with the Advanced Trauma Life Support (ATLS) qualification.

16. Virtually all A&E departments now have access to round-the-clock CT scanning. Over half have a doctor with six months’ A&E experience either in the department, or who can reach it within five minutes, for 15 hours a day (the standard recommended in the national report). One-third have an experienced doctor available for 24 hours a day. Most resuscitations (88 per cent) are carried out by an ATLS-qualified doctor.

17. Two-thirds of the departments surveyed have one or more full-time children’s nurses, compared with less than half at the time of the national report. Seven trusts reported that a children’s nurse is available continuously - a target that only one had met before.

18. Thrombolytic drugs should be administered to heart attack patients as soon as possible after diagnosis. *The Health of the Nation*¹ document proposed a target of administration within 30 minutes of arrival at the hospital. Some trusts administer thrombolytics in parts of the hospital other than A&E - typically the coronary care unit. However, for those trusts which administer thrombolytic drugs in A&E and which audit their performance, the average percentage of patients receiving thrombolytic drugs within the 30 minute target was only 25 per cent.

The next steps

19. Some trusts have achieved improvements in the key areas, but the majority have either not improved or deteriorated. Most trusts, therefore, need to bring their A&E services up to the standard of the best.

20. A first step is to ensure that all A&E departments have sound performance monitoring in place, with the requisite computer systems. Trusts should then monitor their waiting times and seek to improve them; for example, by better deployment of doctors and the use of nurse practitioners. Other issues raised in the national report, such as ensuring that there is adequate access to psychiatric support, should be reviewed at the same time.

21. Trusts should consult their auditors to identify how they compare with other, similar, trusts, from whom they may be able to learn. Realistic targets for trusts should be set by their health authorities and performance against them monitored.

Following up value-for-money studies and audits

Each year the Audit Commission follows up selected national studies and associated local audits that it has carried out to see what changes have taken place. It does this by identifying key indicators - value-for-money indicators (VFMIs) - which are based on the recommendations made by the study. New data for these indicators is compared against the data collected at the time of the original audit. The choice of studies depends on the continued relevance of the topic and recommendations, and the scope for change. The results provide not only a valuable national picture of change, but also allow individual trusts to gauge their own progress against that of other, similar trusts. Separate results are produced by auditors for each individual trust using computer software that allows them to select indicators and tailor comparative groups to particular local needs. This information for A&E services has recently been given to auditors, and chief executives should discuss the mechanisms for local feedback with their auditor if they have not already done so.