

Waiting list accuracy

Assessing the accuracy of waiting list information in NHS hospitals in England

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As an independent watchdog, we provide important information on the quality of public services. As a driving force for improvement in those services, we provide practical recommendations and spread best practice. As an independent auditor, we monitor spending to ensure public services are good value for money.

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Executive summary

The Department of Health asked the Audit Commission to make arrangements for auditors to undertake a five-year rolling programme of spot checks to reassure the public that published waiting list statistics are robust.

Auditors completed 'spot checks' at 41 trusts between June and November 2002, many of them chosen because they appeared to be at risk of having errors in reporting. The methodology was designed by the Audit Commission and agreed with the Department of Health. Up to six waiting list performance indicators (PIs) were reviewed in up to five clinical specialties at each trust.

- **There was evidence of deliberate misreporting of waiting list information at three trusts. These have all taken prompt action to investigate and deal with the issues identified, including suspending staff.**
- **In a further 19 trusts, auditors found evidence of reporting errors in at least one PI. Altogether, they found evidence of reporting errors in 30 per cent of PIs.**
- **In three trusts, the spot checks revealed no significant problems. In the other trusts, auditors considered that weaknesses in the systems increased the risk of errors in at least one PI. One trust could not provide all the information needed for the review.**
- **Waiting lists for patients with possible breast cancer were generally well managed.**

In most cases the level of inaccuracy was unlikely to affect the care of individual patients significantly. However, trusts can operate practices which are not patient-centred, for example offering short notice appointments and restarting the waiting time if patients cannot attend.

Spot checks provide a quick way of establishing whether there is evidence of problems in a system, such as deliberate manipulation or inadvertent errors. They can highlight areas for improvement in the management systems, but cannot quantify the accuracy of waiting lists, or the overall impact on patients. Not all errors will be identified by spot checks.

Most problems arose from system weaknesses caused by inadequate management arrangements for recording data, and ineffective or poorly integrated IT systems. Most trusts have quickly taken action to improve.

All NHS trusts should now review their approach to collecting waiting list information drawing on the lessons in this report. These include the need for Board level commitment, effective procedures and training, and specifications for new IT systems which enable them to provide the required information.

The Department of Health could help improve waiting list information by:

- **investigating why there has been widespread misreporting, including deliberate misreporting;**
- **ensuring the process for patient cancellations is reasonable from the patients' perspective;**
- **being clear how changes in clinical practice should be reflected in waiting lists, for example as more procedures become day cases; and**
- **incorporating data quality standards into the controls assurance framework used by trusts to manage risks.**

The Audit Commission and auditors will continue to contribute constructively to the long-term agenda for improvement.

Introduction

- 1 In early 2002 the Department of Health requested that the Audit Commission carry out spot checks on the accuracy of waiting list information at a sample of NHS trusts. Between June and November 2002, auditors undertook these checks, which looked at both inpatient and outpatient waiting lists, as part of the Audit Commission's wider programme of investigations into the quality of patient-based information in the NHS. Because of the importance of this issue to the public, the NHS and the Government, we are publishing this separate report on the waiting list spot checks in advance of our main national report on data quality. This is so the lessons from this work are learned and improvements made as soon as possible.
- 2 Summaries of auditors' judgements at each trust checked are included in this report (see Appendix 1, page 26). Each trust will have an individual report setting out auditors' findings and any recommendations for improvement. Trusts will be developing local action plans to address any issues raised and their implementation will be monitored by auditors.
- 3 This report explains:
 - why it is important for waiting list information to be accurate if services are to improve;
 - how the checks were carried out and what they looked at;
 - what our findings show and how this affects patients;
 - what the NHS should do in order to improve this aspect of the service; and
 - what action the Department of Health should consider to help trusts improve waiting list accuracy.
- 4 The report explains the types of problem found by the checks but also highlights examples of good practice to illustrate how improvements might be made.
- 5 A more detailed report on the full findings of our Data Quality Review, which covers all NHS trusts, will be published in mid-2003.

Background to this report

Audit Commission's previous work on data quality

- 6 In 2001 the Commission was asked by the Department of Health and the Commission for Health Improvement to develop and deliver a 'light-touch' review of the management of systems and processes producing data in secondary care trusts. In undertaking this review, the Audit Commission embarked on a long-term programme of work to help the NHS improve the quality of data it uses in delivering health services. This is because reliable information about performance is the bedrock of service improvement.

- 7 The light-touch review looked at 279 acute, mental health and community NHS trusts and auditors reported their findings locally. Subsequently, early in 2002 the Audit Commission published a management paper on how to improve data quality: *Data Remember*.¹
- 8 *Data Remember* reported that the quality of NHS data needed to be improved with nearly all NHS trusts needing to take action to get the basics right. Recommendations included making better use of information, involving board members in the process, improved training and development of staff, and keeping systems up to date. In October 2002 the Audit Commission, the Commission for Health Improvement, the Department of Health and leading clinicians shared the main messages from *Data Remember* with a wider audience at a national conference of NHS delegates. This reflected the commitment of a number of different agencies to work together to promote improvements in data quality.
- 9 In 2002 the Audit Commission asked auditors to undertake more extensive and rigorous reviews of data quality in all NHS trusts in England. They covered more national targets in acute trusts (13 compared with the 5 in 2001), in greater depth, and looked at clinical coding – the method used by the NHS to record patients’ illnesses, how they were treated and what happened to them. These reviews will provide further helpful information which the Audit Commission will publish in a sequel to *Data Remember* in mid-2003.

Why waiting list accuracy is important

- 10 Waiting lists of one form or another are used commonly in the NHS as a way of managing the demand for some services. Whether for inpatient treatment or outpatient consultations, it is important that the information about a patient’s place on a waiting list and how long they have waited is reliable.
- 11 This is because many different groups depend on the information. These include:
- Patients, who want confidence that they will wait no longer than necessary and that their progress on the waiting list will be handled properly and fairly.
 - Hospital doctors and other staff, who use the waiting list as a way of ensuring patients are given the right level of priority for their conditions.
 - GPs, who need to know when their patients are likely to be treated in order to plan other aspects of their care.
 - Health service managers, who need to monitor progress towards targets for reducing waiting lists and make decisions about where to target resources for improvement.
 - Politicians and regulators, who need to know that targets for improvement are being met and that public money is being spent effectively, especially when decisions to award more freedom and flexibility to the best performing trusts or intervene in poor performing trusts may be partly based on this information.

¹ Audit Commission, *Data Remember: Improving the Quality of Patient-Based Information in the NHS, 2002*. Available from Audit Commission publications, 0800 502030.

- The wider public, which needs confidence that the waiting list performance of their local hospital is reported accurately and honestly.

12 Trusts have to report waiting list performance via their Strategic Health Authorities – 28 new bodies responsible for strategic direction and monitoring performance in local NHS communities. These reports are aggregated to provide a picture of regional and national performance against waiting list targets and used in the Government’s ‘star rating’ system for trusts. The importance of data quality will only increase in the future as more information is made available to patients about the performance of their hospitals and even specific departments or consultants.

Why the Audit Commission added spot checks to its data quality reviews

13 The National Audit Office (NAO) published a report on *Inappropriate Adjustments to NHS Waiting Lists*¹ on 19 December 2001, naming nine NHS trusts as having manipulated waiting list information. The NAO subsequently published a list of 13 trusts that it considered to be most at risk of misreporting waiting times. Following these two publications, the Department of Health announced that it had asked the Audit Commission to make arrangements for its appointed auditors to undertake a series of spot checks on individual hospitals ‘...to ensure the waiting lists and waiting time information is free from manipulation’. The Department went on to say that the aim of the spot checks would be to:

- identify any further cases of bad practice or deliberate manipulation that may exist;
- introduce a strong deterrent to any manager considering inappropriate action; and
- reassure the public that the published statistics are robust.

14 Following this announcement, Sir Nigel Crisp, the Permanent Secretary of the Department of Health appeared before the Public Accounts Committee confirming the role of the Audit Commission in undertaking spot checks and that both organisations were discussing how the programme would work in practice.

15 The Department of Health and the Audit Commission worked closely to agree the scope, content, and process for selecting trusts for the in-depth reviews. This included agreeing the number of trusts involved each year, the overall audit approach, and the detailed method. The Audit Commission also asked auditors to follow up ‘whistle blowers’ that came to the NAO following its report.

How waiting lists become inaccurate

16 In England, an acute general hospital typically has about 4,800 people on its waiting list for admission and admits about 360 each week. It has some 12,000 people waiting for a first outpatient appointment and sees over 1,000 ‘first attender’ outpatients a week. This indicates the large scale of the work carried out in hospitals on a daily basis.

¹ National Audit Office, *Inappropriate Adjustments to NHS Waiting Lists*, 2001.

- 17 Maintaining accurate waiting list information is not as straightforward as it may seem. This is because waiting lists are complex and dynamic systems and not just run on a 'first come, first served' basis. Accuracy depends on recording correctly the constant changes that are made to information, for example as patients:
- are added to the list;
 - are offered appointments;
 - are treated or seen as planned;
 - have their treatment postponed or brought forward;
 - cancel appointments they are unable to attend;
 - become unavailable for treatment (for example, because of another illness); or
 - no longer need an appointment because they have obtained treatment through another route (for example, as a private patient or an emergency admission).
- 18 In many hospitals these changes are not made by one person or even one team of people, but often by relatively junior staff in many different departments. If each of these changes is not made carefully and precisely (for example wrongly setting or re-setting the 'clock' that counts total waiting time), the actual time waited could be different from the time recorded. If policies and procedures for this work are not very robust or if the training of staff involved is inadequate, errors can creep into the system which may not become apparent in the normal course of events.
- 19 Because clinical practice and ways of working change all the time (for example, the use of endoscopy for many procedures that used to need an operation), it is not always clear whether certain patients should be reported as being on a waiting list at all. To help trusts with these 'grey areas', there are detailed definitions and guidance from the Department of Health. These can be complicated and may be difficult to understand or apply. If these are not clear enough, become out of date or are not used properly, trusts could be reporting waiting lists inconsistently (some higher and some lower).
- 20 Some IT systems used to support this process are quite old and not originally designed to handle such a complicated set of circumstances. Also, in some trusts (usually where there has been a recent merger) more than one system is present, leading to possible errors as data are combined. Even some newer systems can fail to work properly or be set up incorrectly and so introduce errors.
- 21 Waiting lists will inevitably contain a few errors, but in a well managed trust these will have little impact on the overall waiting lists reported and decisions taken based upon them. In less well managed trusts, inaccuracies in day-to-day recording of data can build up to cause errors that are repeated across large numbers of patients. In extreme cases, waiting list information may be deliberately manipulated by hospital staff in order to report a more favourable waiting list position than is really the case.

Box A**What auditors mean by risk**

The *risk* is the likelihood that the systems and processes in place are not reliable and will produce inaccurate information.

Where an auditor's assessment is that systems are adequate and reliable, then the likelihood (and therefore the risk) of incorrect information is low. Where, on the other hand, evidence points to systems being unreliable and likely to result in inaccuracy, then the risk is high.

If auditors have actual evidence that there have been reporting errors, then the assessment moves beyond one of risk to that of whether the evidence points to the misreporting being deliberate or not.

Source: Audit Commission

Methods

What spot checks involved and how we selected sites

- 22 The Audit Commission and Department of Health agreed that the spot check work would entail a rolling five-year programme of around 50 NHS trusts per year, eventually covering all NHS trusts running waiting lists.
- 23 Trusts were selected by the Audit Commission for the first phase of spot checks on the basis of a risk assessment **[Box A]**. This used the auditors' risk assessment from the previous year's 'light-touch' review to select sites that appeared more likely to have problems. Also included were 13 trusts that the National Audit Office thought possibly at risk of misreporting waiting times. The Department of Health asked the Audit Commission to include some community, mental health and learning disability trusts.
- 24 Each spot check covered:
- the trust's policies and procedures for reporting its waiting times;
 - whether the systems and processes used for gathering and reporting information were appropriate; and
 - on the basis of detailed testing, whether there was evidence that the data underlying reported information were inaccurate.
- 25 Trusts were not informed in advance about the checks, but were told about them at the first meetings with auditors to discuss the wider data quality review being carried out at all trusts.
- 26 The method looked at 6 performance indicators (PIs) in up to 5 clinical specialties at each trust. The specific specialties chosen at each site varied depending on local circumstances. The indicators **[Table 1, overleaf]** were selected to reflect the top priorities of the NHS to reduce waiting times for inpatients and outpatients. 'Did not attends' (DNAs) were included because the number of DNAs as a percentage of patients attending their first outpatient appointment is used as a performance indicator by the NHS. It is also important that DNAs are recorded accurately if a trust's total waiting list is to be recorded correctly. The way DNAs are recorded can also affect the calculation of individual patients' waiting time.

Table 1
Performance indicators (PIs) for the spot check reviews

	PIs	Long wait PIs
Outpatients	% of outpatients seen within 13 weeks of GP referral	% of outpatients seen within 26 weeks of GP referral
	% of breast cancer referrals seen within 2 weeks	
	Number of patients who 'did not attend' (DNA)	
Inpatients	% of inpatients waiting 6 months or less for admission	% of inpatients waiting 12 months or more for admission

Source: Audit Commission

- 27 Auditors assessed the policies, systems and practices surrounding the production of waiting list information as well as comparing figures reported externally with internal reports to see if they matched. They interviewed staff at all levels in the trust, from the most senior board-level members, through to staff in the trust's central offices for recording, maintaining and reporting waiting list information.
- 28 The checks in each specialty included:
- at least 5 tests which followed patients through the system;
 - audit trails between databases;
 - reconciliation tests of reported data and internal databases; and
 - reviews of individual patient case notes to check that documentation matched computer records.
- 29 Consistency in how auditors' judgements were derived was important. The Audit Commission established a Consistency Panel to review all auditors' judgements and, where necessary, highlight apparent anomalies. However, the ultimate judgements in each case were made by auditors **[Box B]**.
- 30 As well as reporting findings to the Audit Commission, auditors will provide individual reports to trusts and work with them to produce an action plan for improvement where required. In some cases, trusts have invited auditors to talk to wider groups of staff (including clinicians and clerical staff) to help them implement best practice.

Box B

How auditors assessed trusts

Auditors were asked to assess sites against *each* performance indicator as being in one of four categories:

- a. Evidence of deliberate misreporting (where active steps have been taken to record or gather data in a way that leads to misreported waiting list figures).
- b. Evidence of reporting errors (where significant errors in reported figures have been identified).
- c. No evidence of reporting errors but system weaknesses increase risk of poor data quality (where no significant errors have been identified but management and/or operational systems give cause for concern).
- d. No significant problems found (where no significant errors identified and management and operational systems appear robust).

Source: Audit Commission

What can spot checks show (and what they cannot)

- 31 Spot checks are an effective way of establishing relatively quickly whether there is evidence of problems with a given system. They offer a 'risk assessment' (see Box A, page 6) of systems and processes. They are especially valuable in circumstances where a comprehensive investigation would be too costly or time consuming. By definition, spot checks provide a snapshot of a particular set of circumstances. They do not offer a complete picture of what is happening, but do identify where improvement work or further investigation might be needed.
- 32 In this exercise, spot checks provide a snapshot of the accuracy of waiting list information, and of the reliability of trusts' arrangements for producing it. They can:
 - expose deliberate misreporting;
 - identify inadvertent errors; and
 - highlight areas for improvement in the systems for managing the lists.
- 33 The process has clearly been successful in raising the profile of the issue, and auditors report that trusts are responding properly to identified problems.
- 34 However, it is important to be aware of the limitations of the process to avoid drawing the wrong conclusions. The spot check approach cannot provide an absolute measure of the accuracy of waiting lists that can be generalised (either locally or across the NHS as a whole). Neither can they measure the overall impact on patients because:
 - The spot checks have looked at a maximum of 6 performance indicators in a sample of up to 5 clinical specialties (for example general surgery or orthopaedics) in each trust. Auditors have targeted these specialties using a

‘risk-based’ approach (ie, they have looked at high-volume specialties or those where local knowledge indicated more likelihood of problems – but not at *all* specialties).

- Even where there is evidence of significant reporting errors, the total extent of this has not been established during the spot check process – although in some cases further work has been done locally to gain a more detailed understanding.
- The spot checks may not have identified all reporting errors present.
- The process has not measured the impact on patients (for example, the impact on waiting times, or the clinical consequences), although some inferences about this can be made from the type and extent of inaccuracies. This is covered further in the section of this bulletin, ‘Impact of reporting findings’, page 20.

35 This means that where problems were found in the specialties examined, it cannot be assumed that those problems are necessarily reflected across the board. Neither can it be assumed that if no problems were found, this is necessarily the case everywhere.

Results

- 36 This report covers 41 spot checks. Of an original list of 47, two will be in the next wave; two were modified and delayed pending Department of Health investigations and two have not yet been completed.
- 37 Auditors’ findings for each performance indicator at the trusts checked are set out in the table in Appendix 1, pages 26-27.
- 38 The majority of sites checked were acute or specialist hospital trusts; the remainder were mental health or learning disabilities trusts. In these latter trusts, the issues for patients and ways of working are very different from acute trusts. Also, the numbers of patients waiting can be relatively small (though there can be a significant number of outpatients). Nevertheless, these trusts still need efficient systems for managing the progress of patients’ care and should have reliable information about who is waiting and for how long. Therefore, the general lessons from this exercise are equally valid.

Findings

- 39 The overall findings are summarised below **[Table 2]**. This section sets out the key issues identified by auditors.
- 40 Spot checks revealed evidence of deliberate misreporting of waiting list information at three trusts. These were:
- East and North Hertfordshire NHS Trust;
 - Scarborough and North East Yorkshire Healthcare NHS Trust; and
 - South Manchester University Hospitals NHS Trust.

- 41 In each of these cases, the trusts have publicised auditors' findings and have all taken prompt action to investigate the causes and deal with the consequences of the misreporting, including suspending staff. Local auditors will continue to work with these trusts to ensure that their arrangements are robust in the future.

Table 2
Summary of overall findings

Category	Number of trusts	Percentage of trusts checked	Number of PIs	Percentage of PIs assessed
No assessment possible: trust could not provide information	1	3%		
Deliberate misreporting	3	7%	10	5%
Evidence of reporting errors	19	46%	51	25%
System weaknesses increase risk of reporting errors	15	37%	73	36%
No significant problems found	3	7%	68	34%
Total included in this report	41	100%	202	100%

Source: Audit Commission

- 42 In a further 19 trusts, auditors found evidence of reporting errors in at least one PI.
- 43 Therefore, auditors identified evidence of reporting errors for at least one PI in over half of the trusts – this affected 30 per cent of the PIs investigated.
- 44 In three trusts, the spot checks revealed no significant problems.
- 45 In total, there were no significant problems found in 34 per cent of PIs.
- 46 Over 90 per cent of trusts checked had system weaknesses that gave cause for concern over the accuracy of waiting list information in at least one PI.
- 47 Auditors also found that:
- Information about patients referred with suspected breast cancer was well managed in the large majority of trusts.
 - Some practices did not seem patient centred (for example, frequently offering short notice appointments followed by resetting the waiting time to zero when patients could not attend).
 - At many trusts, internal work had already identified system problems and action was underway to make improvements.
 - Examples of good practice were found in many trusts, including in some where other problems were identified.

- 48 In one trust, the Patient Administration System (the computer system used to manage waiting lists and other patient information) was unable to provide much of the information needed for the review. This meant that auditors were unable to run the full range of diagnostic tests necessary to allow them to make an assessment against the performance indicators. This was an extreme example of a recurring theme in auditors' investigations – that of ineffective or poorly integrated IT systems. This issue is discussed further in the following section, 'Causes of poor data quality', page 16.
- 49 Auditors found wide variation in the causes and severity of reporting errors at different trusts. In some examples the errors were as likely to be over-stating the numbers waiting as under-stating them. In all cases auditors will be working with trusts to agree action plans for improvement.
- 50 However, aside from the few sites with evidence of deliberate misreporting, the errors found generally arose from system weaknesses caused by combinations of:
- inadequate policies, procedures or operational systems for collecting or recording data; and
 - ineffective, wrongly set up or poorly integrated IT systems.
- 51 In some trusts there was clearly a culture of promoting data quality that ran from the top to the bottom of the organisation. However, around half of trusts had out-of-date or inadequate written policies and procedures for handling waiting list information. This suggests insufficient priority was being given to the issue of data quality at a corporate level and this sets the tone for the organisation as a whole. This underlines the importance of effective leadership in ensuring trusts are well placed to deliver future improvements in data quality [Case study 1].

Case study 1

Leadership, policies and procedures

James Paget Healthcare – has regular, well-structured internal meetings to allow proactive delivery of waiting list strategies. They have a specialist waiting list team with clearly communicated roles and responsibilities.

Winchester and Eastleigh Hospitals – has a waiting list policy that gives all staff clear guidance on accurate reporting and definitions. The policy document details data quality as the responsibility of all staff in the trust. All staff are asked to sign for named copies of procedure notes to ensure everyone understands their part in the process.

West Hertfordshire Healthcare – has an Operational Patient Access Team that meets weekly and includes representatives from primary care trusts. They discuss what information and resources are needed to meet waiting list targets by looking at referral trends, reasons for clinic cancellations and detailed lists of patients nearing the maximum waiting times (called Primary Target Lists).

South Tyneside Healthcare – has a well-organised, central team for processing outpatient referrals. The team processes referrals quickly and accurately.

Royal Orthopaedic Hospital – has detailed policies and procedures in place. A Waiting List Task Group, chaired by the chief executive, considers in detail what actions are needed to improve waiting lists and waiting times.

Countess of Chester Hospital – the Performance Group, chaired by the Deputy Chief Executive, meets monthly to review performance reports. There is a good waiting list policy and waiting lists are regularly discussed at Board meetings. There is a clear division between the roles of staff reporting on the waiting list and times and those responsible for meeting targets.

Source: Audit Commission

- 52 Many auditors commented on inadequate training for staff working with waiting lists (including hospital consultants) as a source of problems [**Case study 2**]. Clearer roles and responsibilities for staff were also needed in many places. Good practice indicates that, wherever practicable, there should be a clear separation between the roles of staff responsible for meeting targets and those reporting on performance. This was not always found to be the case.

Case study 2

Taking action to improve

Portsmouth Hospitals – the spot check highlighted that the most junior staff were still at times not following the golden rules of waiting list management. The Trust will be making available a small laminated list of these ‘golden rules’ for all staff involved in waiting list management.

Source: Audit Commission

- 53 The problems of accurate reporting at a national level are made worse by inconsistent handling of certain procedures. An example of this is endoscopy (the use of a flexible fibre-optic camera) which in some trusts is recorded as an outpatient procedure (and not included in inpatient waiting list reports) and in others as a day case (and so included in inpatient waiting list reports). This would seem to arise from inconsistent or out-of-date data definitions.
- 54 The NHS Information Authority issues changes in the data definitions which the NHS needs in order to gather the right information. These are in turn implemented on IT systems. However, trusts can find it difficult to collect the information correctly if the definitions are not updated to reflect changes in clinical practice or guidance on best practice from bodies such as the NHS Modernisation Agency (for example, referrals to a specialty rather than to specific consultants). This points to a need for clearer guidance on some procedures and a more ‘joined-up’ approach to providing up-to-date data definitions for trusts. It is also important that new IT systems have the flexibility to implement future changes in definitions.

Case study 3

Referral of patients with suspected breast cancer

Worcestershire Acute Hospitals, University Hospitals of Coventry and Warwickshire and South Buckinghamshire Hospitals – were among many trusts with good systems for dealing with urgent cancer referrals. These included:

- clear protocols and referral criteria agreed with GPs;
- the use of dedicated communication lines with GPs for example by fax or email; and
- standardised proformas for doctors to use when referring patients, making sure all relevant information is gathered first time.

Source: Audit Commission

- 55 With the increasing use of computer-based systems, there need to be clear policies in place to ensure that a record is kept available of patients' waiting list status – in particular the reasons for any changes. Auditors found variation in the reliance different trusts place on computer records (as opposed to patient case notes) for recording changes in patients' waiting list status. If IT systems are not robust, this could lead to changes being made without a full explanation of the reason ever being recorded. A consistent approach is needed.
- 56 The target for patients to be seen within two weeks from urgent GP referral to outpatient appointment for suspected breast cancer was the subject of a centrally funded national initiative in the late 1990s. Many trusts have set up self-contained, dedicated processes based on the use of faxes, email or other methods to speed up receipt of referrals direct from GPs. These initiatives have had considerable success and may hold lessons that could be applied more widely **[Case study 3]**.
- 57 However, it is not cost-effective to develop a bespoke system for each individual specialty. In some cases, trusts had already implemented improved general systems, but these were yet to have their full impact. In many other cases trusts have since made changes that will lead to improvements in the near future **[Case study 4]**.

Case study 4

Overcoming problems by changing organisational focus

Dartford & Gravesham NHS Trust

Much has been achieved in a relatively short period of time to strengthen management arrangements and capacity to focus attention on the need to meet targets. This has resulted in performance improving in a number of areas, although there is still much to do.

Some key factors in the Trust's strategy to improve performance have been:

- establishing a Clinical Directors Board and putting this at the heart of the decision-making process at the Trust to ensure medical staff work alongside the management team;
- creating a Directorate of Service Development to provide a focus on continual service improvement and performance management; and
- developing a new integrated waiting list policy covering outpatients and inpatients.

Where concern about performance is identified, action is taken to identify the issues and resolve them either with the support of outside agencies or staff at their franchise partner Trust. Projects currently in progress include:

- a NHS Modernisation Agency review into outpatient services;
- an overhaul of the waiting list with support from the Waiting List Manager at their franchise partner Trust;
- reviewing pre-assessment arrangements to try to understand why 'other' removals from the waiting list were so high;
- a booked admissions pilot in day surgery;

- continued development of the urgent cancer referral process;
- creation of an emergency care directorate integrating A&E within general management arrangements; and
- work on the level of cancelled operations under the umbrella of the NHS Modernisation Agency's 'Tackling Cancelled Operations Project'.

Source: Audit Commission

Causes of poor data quality

- 58 As already mentioned, the causes and severity of errors varied greatly between trusts. This section describes examples of the factors that led to problems, along with some examples of good practice which, if implemented widely, would help to improve data quality. The following key definitions help to explain why these problems affect reported waiting times [Box C].

Box C

Some important definitions

Decision to Admit date (DTA) – the date on which a consultant decides a patient needs to be admitted for an operation. This date should be recorded in the patient's case-notes and used to calculate total waiting time.

Date Referral Received (DRR) – the date on which a hospital receives a referral letter from a GP. The waiting time for outpatients should be calculated from this date.

Suspension – a period during which a patient is not available for attendance (for example, due to another illness). Patients on suspension are not reported in waiting list figures but the reason for and duration of the suspension should be recorded clearly.

Cancellation – when a **patient** cancels an appointment, the waiting time should be reset to start from the date of the cancelled appointment. If the **hospital** cancels an appointment, the waiting time should continue to be calculated from the original DTA/DRR date at this trust.

Planned admission – when a patient has been given a date, or approximate date, for admission at the time that the decision to admit was made, usually as part of a planned sequence of clinical care determined mainly on social or clinical criteria. These patients are excluded from waiting list reports.

Source: Audit Commission

Absent or out-of-date policies and procedures

- 59 Because the rules surrounding waiting list information about patients are so complicated and large numbers of staff are involved in handling it, there have to be clear, up-to-date policies and procedures in place. These must be backed up by senior management commitment to ensuring that they are put into practice effectively. In most trusts, improvements were possible in this area and many of the problems described in this section could have been reduced if this was addressed.

Wrong handling of additions to waiting lists

- 60 In many cases, when patients were added to a waiting list, the wrong date was used as the start date. Instead of counting from the date of the Decision to Admit (DTA) or Date Referral Received (DRR), another date would be used, often because the IT system would default to today's date if the correct date was not entered. This type of error usually means the actual time waited is longer than the time recorded.
- 61 A typical example of this would be in a trust that had no policies or guidelines available for key definitions. Consequently, for inpatients, the wrong DTA was used and the date when the information was added was recorded instead. For outpatients, instead of the wait being measured correctly from the date the trust received the GP referral letter, the date when the system was updated with that information was used as the starting point to measure the wait. Auditors found that this could be up to 14 days later than the date when the trust received the GP referral letter. Considering that large numbers of patients attend outpatient appointments, this could result in substantial under-reporting of waiting times overall.

Poor control of removals and suspensions

- 62 If a patient is unavailable for an appointment (for example, due to another illness) they can be suspended from the waiting list. This means they do not appear in reported figures. There need to be strict rules in place to ensure patients are not wrongly suspended and to prevent patients being left as suspended longer than necessary.
- 63 Some spot checks identified a significant number of patients that should have been on the active waiting list but were classed as 'planned' or 'suspended'. These patients were not reported in waiting list figures. In extreme cases, this included hundreds of patients whose total waiting time may not be measured accurately.
- 64 Auditors' investigations also found examples where patients' period of suspension ended the day before they were treated, which was unlikely to be true. This again indicates that suspensions were not being managed properly.
- 65 The reason often highlighted for the misclassifications was a lack of understanding by consultants and medical secretaries about national definitions and reporting requirements.

Incorrect handling of DNAs and cancellations

- 66 Many trusts had incorrect or confused policies for how to record DNAs and cancellations. A typical example would be where, when recording outpatient appointments cancelled by the trust, the waiting time was reset incorrectly to the cancellation date rather than being left as the date the referral was received originally. Auditors found examples where this materially affected the reported number of patients waiting over 26 weeks. In one case, the trust's explanation was that the medical secretaries who input the data would not have been aware of the implications of their actions – there were no written procedures.

Poor IT systems

- 67 In over half of the sites checked, problems with the information technology systems were identified as a contributory factor potentially leading to reporting errors. These problems ranged in scale from relatively minor to an inability to produce the data required (good practice is identified in **Case study 5**).

Case study 5

Information systems

Nuffield Orthopaedic Centre – has an IT system that automatically sends out letters to all patients at four-monthly intervals, checking their information and asking if they still wish to go ahead with their operation. Trust staff follow up patients who do not respond.

Epsom and St Helier Hospitals – generates a weekly set of waiting list reports from their IT system which ensure that appointments are made for patients approaching the maximum waiting time.

James Paget Healthcare – produces reports direct from the main Patient Administration System (PAS) which ensures consistency of information to support internal and external reporting needs.

Wirral Hospital – has an open audit trail for changes to the PAS and has a good Executive Information System for consultants to review their performance and that of colleagues.

Source: Audit Commission

- 68 Some trusts had ageing IT systems (in one case nearly 20 years old) that were not originally designed to report some of the information now required and with some systems no longer receiving technical support from the IT system supplier. However, not all of the problems identified were with old systems. In some cases, new systems had been implemented and were yet to produce all the information required. In one example, a system was unable to re-adjust the dates for patients whose treatment was deferred or suspended and it was unable to remove patients treated as an emergency for the same condition as the one for which they were waiting.
- 69 Problems with IT systems were made worse in some trusts that had been formed from mergers and were trying to integrate the information from a number of different systems. Typically, this led to trusts running parallel computer and manual systems that increased the likelihood of reporting errors.
- 70 Many trusts are engaged in commissioning new information systems. Trusts need to ensure that adequate reporting capability is reflected in system specifications. This will be easier if the system of definitions used by the NHS is up to date and reflects the requirements of current practice for waiting list management (see Recommendations, page 23).

Impact of reporting findings

- 71 As highlighted earlier, information about waiting lists is used by many different groups for a variety of reasons. The significance of reporting errors identified by auditors will vary depending on how the information is being used.
- 72 In the majority of cases, the degree of inaccuracies found at trusts were of an order unlikely to affect seriously the care of individual patients. For example, a typical error in the recording of a DTA date was 7 to 14 days. This is not a significant error for a patient waiting a number of months for treatment, therefore the level of accuracy would generally be adequate for appropriate patient management. However, auditors found examples that suggest some of the problems with suspensions and the handling of cancellations could lead to individual patients waiting weeks longer than recorded on hospital systems.
- 73 The answer to the question: 'Are the reported figures reliable?' is that it depends on the purpose for which they are used. Auditors' work has shown that, in the main, the inaccuracies are of an order that will have a relatively small impact on patients as long as overall waiting times are proportionately long. However, the level of inaccuracy, as in the examples given above, is often enough to make the answer to the question: 'Do you have anyone waiting over 13 weeks for an appointment – yes or no?' much less certain.
- 74 Potentially of greater direct impact on patients is that a number of trusts were found to be operating in ways that seem weighted away from the interests of patients. These include the practice of offering appointments to patients at short notice and then, when they are unable to attend, recording this as a 'patient cancellation' and resetting the 'clock' measuring their waiting time to zero.
- 75 Although there may be good reasons for offering cancelled appointments at short notice to people on a waiting list, for instance to make best use of facilities, it would seem unfair for patients to be disadvantaged when they cannot attend. However, currently NHS rules allow this practice to continue and it is not classified as misreporting.
- 76 There would be less scope for this if trusts made maximum use of booked admissions and appointments as set out as a target in the NHS Plan and further impetus to this programme – especially for outpatients – would be beneficial.

Conclusions

- 77 The Department of Health and the NHS are engaged in wide-ranging work to improve data quality. Requesting this spot check exercise is a further indication of how seriously this important issue is regarded.
- 78 Having confidence in information used to assess how well health services are performing is fundamental to improving services. Whether it is used by individual patients to inform choices about their care, or by managers to check that invested resources are having the planned effect, people need to know that performance information is as accurate as possible. This will increase in importance as the Department of Health's policies on increasing openness and accountability in the NHS take further effect.
- 79 One reason for carrying out the spot checks was to reassure the public that waiting list information was being reported honestly. Though the work of auditors has not found widespread evidence of deliberate misreporting, it is disturbing that three further examples of potentially fraudulent action were exposed. It is clear that through this exercise and other measures such as the *Code of conduct for NHS Managers*, the Department of Health is sending a clear message that such deliberate manipulation of performance data is unacceptable. However, there needs to be an open debate within the NHS about what has led to this behaviour in the past so that lessons can be learned and measures taken to avoid it being repeated.
- 80 Given the scale and complexity of waiting lists, it is impossible for them to be perfectly accurate. The spot check exercise has shown, however, that data quality varies widely and there is a great deal more that most trusts could and should be doing to reduce the likelihood of reporting errors. The best managed trusts encourage an organisational culture based on the belief that the accuracy of information about patients is crucial, and more important than appearing to meet targets. This approach needs to become widespread.
- 81 This exercise raises wider questions about the way information can best be used for driving improvement. The Audit Commission will develop this theme more fully in our full data quality report due to be published in mid-2003.
- 82 Finally, given the importance of data quality for all concerned, there is a need to develop and apply minimum standards for which trusts can be reasonably held to account. For any system for measuring performance to be effective it must be part of an organisation's day-to-day business. The Department of Health has already shown this by introducing *controls assurance standards* for risk management, financial management, contracts, etc. As data quality for performance indicators is a core part of internal controls, it would make sense to define and police a key standard in this area. If this was enshrined in the regular internal and external audit of trusts, the need for one-off checks of data quality would reduce.

83 This exercise has shown that managing waiting lists is a difficult and complex process, but that much could be done both locally and nationally to improve the accuracy of reported figures. The recommendations have been designed to contribute to continuous improvement in services to patients.

Recommendations

In order to improve the accuracy of waiting lists, trusts should:

- Ensure high-level commitment to data quality by appointing a board-level officer to be responsible for it and having it as a standing item on board meeting agendas.
- Develop a strategy for how the trust plans to assess and improve data quality.
- Put in place policies and procedures for collecting and reporting waiting list data with a regular review to ensure that they are up to date.
- Ensure policies are supported by robust training for staff and include roles and responsibilities divided clearly between staff responsible for meeting service targets and staff responsible for reporting on performance.
- Introduce integrated policies, standards and training for record keeping on computer-based and manual systems to ensure a proper record of patients' waiting list status is kept.
- Increase the patient focus of waiting list management policies including regular consultation with users on their content – for example, via the Patient Advice and Liaison Service or user involvement groups.
- Ensure that newly procured IT systems can cope with current reporting requirements and can easily be updated as clinical practice and reporting requirements change.

To help the NHS address this issue, the Department of Health should consider:

- Investigating why there has been widespread misreporting, including deliberate misreporting, and then sharing lessons within the NHS to reduce the likelihood of this in the future.
- Improving systems for ensuring the data set definitions used in the NHS reflect the complex requirements of modern-day waiting list management, changes in clinical practice, and best practice guidance. Specifically, this should include providing clearer national guidance on reporting endoscopies and other 'grey area' procedures (for example, pain control).

- Ensuring the process for patient cancellations is 'reasonable' from the patients' perspective.
- Reaffirming with trusts the need to maximise the use of booked admissions and appointments.
- Incorporating data quality standards into mainstream management by making it part of the controls assurance framework. Principles underpinning this would be:
 - a mandatory set of the key performance indicators to be produced by trusts;
 - a clear definition of each performance indicator which is practical for collection and validation;
 - agreement on what is meant by 'accurate'. For example, 'in agreement with underlying records', or 'within certain tolerances';
 - the involvement of internal audit or other review bodies in reporting on the arrangements in place (as they do currently each year on trusts' performance against the controls assurance standards);
 - formal acceptance of the performance indicators by the trust board; and
 - external validation and reporting by the external auditor on the accuracy of all (or a sample) of the specified performance indicators.

Next steps

The Audit Commission is committed to helping the Health Service improve data quality as a way of promoting the improvement of patient services. To advance this our next steps will be:

- auditors providing trusts with individualised reports on their findings and supporting them in planning to address any problems;
- discussing how we can work with the Department of Health and other health regulators to implement the ideas put forward in our recommendations;
- undertaking another wave of around 50 spot checks during 2003;
- analysing findings and publishing a national report from our wider review of data quality at all NHS Trusts; and
- continuing further work on data quality, following up our first two years' work and exploring data quality underpinning trusts' information on clinical activity and service costs (Healthcare Resource Groups and Reference Costs).

Appendix 1: table of auditors' judgements

Trusts	Trust type	Performance indicator*					
		IP6	IP12	OP13	OP26	CA	DNA
Bedford Hospital NHS Trust	Acute	□	□	◇	◇	▲	◇
Berkshire Healthcare NHS Trust	Mental Health/LD			□	○		□
Bromley Hospitals NHS Trust	Acute					▲	
Central Manchester & Manchester Children's University Hospitals NHS Trust	Acute	□	□	□	□	▲	□
Cambridgeshire & Peterborough Mental Health Partnership NHS Trust	Mental Health			□	○		□
Countess of Chester Hospital NHS Trust	Acute	◇	◇	□	◇	▲	◇
Dartford & Gravesham NHS Trust	Acute	□	□	□	□	▲	□
East & North Hertfordshire NHS Trust	Acute/Community	✘	✘	□	○	✘	◇
Epsom & St Helier Hospitals NHS Trust	Acute	◇	◇	◇	◇	▲	◇
Hammersmith Hospitals NHS Trust	Acute/Community	□	□	□	□	▲	▲
Isle of Wight Healthcare NHS Trust	Acute/Community	Work still ongoing					
James Paget Healthcare NHS Trust	Acute	▲	▲	◇	◇	▲	▲
Leicestershire Partnership NHS Trust	Mental Health/LD			◇	○		◇
Local Health Partnerships NHS Trust	Mental Health			□	◇		□
Luton & Dunstable Hospital NHS Trust	Acute	□	▲	□	◇	▲	▲
Mid Yorkshire Hospitals NHS Trust	Acute	Work still ongoing					
Moorfields Eye Hospital NHS Trust	Acute specialist	▲	▲	□	□		▲
Northgate & Prudhoe NHS Trust	Community/LD	□	□	□	□		◇
Nottingham City Hospital NHS Trust	Acute	▲	○	▲	○	▲	▲
Nuffield Orthopaedic Centre NHS Trust	Acute specialist	▲	▲	◇	○		◇
Portsmouth Hospitals NHS Trust	Acute	□	□	□	○	□	▲
Royal Devon & Exeter Healthcare NHS Trust	Acute	▲	▲	▲	▲	▲	▲
Royal Liverpool & Broadgreen University Hospitals NHS Trust	Acute	◇	◇	◇	◇	▲	▲
Royal National Hospital for Rheumatic Diseases NHS Trust	Acute specialist	□	○	◇	○		◇

Trusts	Trust type	Performance indicator*					
		IP6	IP12	OP13	OP26	CA	DNA
Royal Orthopaedic Hospital NHS Trust	Acute specialist	◇	▲	□	○		▲
South Buckinghamshire NHS Trust	Acute/Community	◇	◇	◇	○	▲	◇
South Manchester University Hospitals NHS Trust	Acute	✘	✘	✘	✘	◇	◇
South of Tyne & Wearside Mental Health NHS Trust	Mental Health			◇	○		◇
South Tyneside Healthcare NHS Trust	Acute/Community	◇	▲	▲	▲		▲
Salisbury Health Care NHS Trust	Acute/Community	▲	▲	▲	▲	▲	▲
Scarborough & North East Yorkshire Healthcare NHS Trust	Acute	□	✘	✘	✘	□	◇
Surrey Oaklands NHS Trust	Mental Health/LD			◇	▲		◇
United Bristol Healthcare NHS Trust	Acute	□	▲	□	○	▲	□
United Lincolnshire NHS Trust	Acute	◇	◇	◇	◇	▲	◇
University Hospitals Coventry & Warwickshire NHS Trust	Acute	◇	◇	◇	◇	▲	◇
West Hertfordshire Hospitals NHS Trust	Acute	◇	◇	◇	◇	▲	▲
West Suffolk Hospitals NHS Trust	Acute	◇	◇	◇	◇	▲	◇
Walton Centre for Neurology & Neurosurgery NHS Trust	Acute specialist	◇	▲	□	□		▲
Winchester & Eastleigh Healthcare NHS Trust	Acute/Community	◇	▲	◇	▲	▲	▲
Wirral Hospital NHS Trust	Acute	◇	◇	◇	◇	▲	▲
Worcestershire Acute Hospitals NHS Trust	Acute	□	□	◇	◇	▲	▲
Wrightington, Wigan & Leigh NHS Trust	Acute/Community	□	◇	□	◇	▲	▲
York Health Services NHS Trust	Acute/Community	□	◇	□	◇	▲	▲

*PI description

IP6 % of inpatients waiting 6 months or less for admission

IP12 % of inpatients waiting 12 months or more for admission

OP13 % of outpatients seen within 13 weeks of GP referral

OP26 % of outpatients seen within 26 weeks of GP referral

CA % of breast cancer referrals seen within 2 weeks

DNA Number of patients who 'did not attend'

Key to data quality assessment

- No assessment possible
- ✘ Deliberate misreporting
- Evidence of reporting errors
- ◇ System weaknesses increasing risk of reporting errors
- ▲ No significant problems found
- Not assessed – no patients in this category
- Service not provided

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