

PERFORMANCE AUDIT

Mind the gap

Management information for outpatient services



PREPARED BY AUDIT SCOTLAND

SEPTEMBER 2001

Contents

| Introduction | 1 |
|---|-----|
| Background | 3 |
| Features of a good outpatient service | 7 |
| Conclusion | 20 |
| Future Audit Scotland work | 21 |
| Appendix 1: Breakdown of the specialty groupings | 22 |
| Appendix 2: Analysis of the Ear, Nose and Throat surgical specialty, by trust group 1999/2000 | 23 |
| Appendix 3: Advisory panel | ibc |

Auditor General for Scotland

The Auditor General for Scotland is the Parliament's watchdog for ensuring propriety and value for money in the spending of public funds.

He is responsible for investigating whether public spending bodies achieve the best possible value for money and adhere to the highest standards of financial management.

He is independent and not subject to the control of any member of the Scottish Executive or the Parliament.

The Auditor General is responsible for securing the audit of the Scottish Executive and most other public sector bodies except local authorities and fire and police boards.

The following bodies fall within the remit of the Auditor General:

- departments of the Scottish Executive eg the Department of Health
- executive agencies eg the Prison Service, Historic Scotland
- NHS boards and trusts
- further education colleges
- water authorities
- NDPBs and others eg Scottish Enterprise.

Audit Scotland

Audit Scotland is a statutory body set up in April 2000, under the Public Finance and Accountability (Scotland) Act 2000. It provides services to both the Auditor General for Scotland and the Accounts Commission. Together they ensure that the Scottish Executive and public sector bodies in Scotland are held to account for the proper, efficient and effective use of public funds.

Acknowledgements

We are grateful for the provision of base data and advice from the Information and Statistics Division (ISD). We would also like to thank the members of the advisory panel for their advice and comments, and the other individuals who generously offered their time and comments at various stages in the development of this study and on the drafts of this report.

Audit Scotland takes sole responsibility for the contents of this report.

Introduction

More people encounter secondary care in an outpatient clinic than in any other setting. During 1999/2000 there were 1.3 million new outpatients and 4.8 million total outpatient attendances in Scotland (excluding patients presenting at A&E departments), significantly outnumbering the 879,000 inpatient and 434,000 day cases¹. The cost of outpatient attendances in Scotland was approximately £296 million in 1999/2000, representing 11% of total hospital running costs².

'Our National Health'³ emphasises the need for NHSScotland to transform the whole patient experience by making the best use of the skills of all members of the healthcare team, adopting a 'whole systems' approach and challenging traditional ways of working to improve the speed, responsiveness and quality of care.

Given the number of patients and the resources involved, it is important that outpatient services are managed well. Managers therefore require robust data and sound information upon which to base their decision-making and performance monitoring. Where performance monitoring involves comparisons between trusts, it is vital that:

- information requirements are specified
- minimum data sets and data definitions are agreed
- an appropriate method for capturing data is determined for those items not already covered by a national scheme (eg SMR00)⁴ or a local system (eg the Patient Adminstration System)
- the appropriate point for undertaking analyses is agreed. For example, this may be undertaken at local or national level depending on the information required and the use to which it will be put.

This work requires a national lead to ensure consistency.

Data issues

This baseline study reviews the routinely available national statistics on outpatient activity in acute NHS trusts in Scotland. In order to present an overview of outpatient activity, specialty-level data has been aggregated into six specialty groupings: surgical, medical, dental, mental health, obstetrics & gynaecology and other. Appendix 1 provides a detailed breakdown of individual specialties within each grouping. An example of the comparative specialty-level national data available for Ear, Nose and Throat (ENT) is shown in Appendix 2. Different data sets, provided by the Information and Statistics Division (ISD), collect complementary information on outpatients. The data sources used are SMR00, ISD(S)1⁵ and Scottish Health Service Costs⁶.

1

¹ Scottish Health Statistics, 1999/2000.

² Scottish Health Service Costs, 1999/2000.

 ^{&#}x27;Our National Health. A plan for action, a plan for change', Scottish Executive Health Department, 2000.
SMR00 collects information at patient level for new patients only on a mandatory basis, although some hospitals do elect to record return visits.

⁵ ISD(S)1 collects activity at aggregate or summary level by specialty for new and total attendances.

⁶ Scottish Health Service costs collects costs and activity information, taking into consideration to whom the activity belongs.

However, there are concerns about the adequacy of the data. Firstly, there are concerns about 'gaps' in data. Some data are not mandatory for the national data sets (eg ethnicity), whilst other data may not be collected at all (eg paramedic clinics). Secondly, there are issues surrounding data quality due to problems with definitions and coding errors (eg data for patients seen in an outreach setting are frequently miscoded). Finally, there is concern regarding the adequacy of the method of data production, with scope to extend the use of Information Management & Technology (IM&T) to ensure that data collection and management are effective. Despite the importance of outpatient services, there is only limited information available to measure their performance, as illustrated by the ENT example in Appendix 2. Recognising this, the Scottish Executive has recently tasked ISD to take steps to improve data quality.

Background

For the purposes of this baseline study, outpatient services are defined as services for patients who may attend a consultant or other medical clinic, or who have an arranged meeting with a consultant or a senior member of their team outwith a clinic session. Outpatients are categorised as new outpatients or follow-up (return) outpatients⁷. The number of outpatients attending consultant-led clinics has been relatively stable during the last five years, with 4.79 million attendances in 1995/96 and 4.85 million attendances in 1999/2000⁸. Overall, the outpatient return:new ratio has been a steady 2.6 in the years 1995/96 to 1999/2000.

Referral from a general practictioner (GP) to an outpatient service for assessment and treatment within the NHS is the normal route for accessing specialist services, with one in 16 GP consultations resulting in a new referral. This means that there are, on average, 20 new referrals per 100 patients on a GP's list⁹. Increasingly, however, referrals are also made by other primary care professionals or by patients themselves.

The reasons most commonly cited in the literature for referral to outpatient clinics are summarised below¹⁰, although these may not be expressed explicitly in the referral letter:

- investigation and diagnosis
- advice on treatment/management
- specialist treatment
- reassurance for the patient and second opinions
- sharing the load, or risk, of treating a difficult or demanding patient
- deterioration in the relationship between the GP and patient, leading to the desire to involve someone else in managing the problem
- direct requests by patients or their relatives
- referral for a service to which the GP has no direct access.

In recent years, outpatient services have become increasingly varied as GPs have gained direct access to diagnostic tests and procedures; patients attend clinics run by nurses or therapists; and outpatient services are provided in locations other than the hospital clinic. Consultant outpatient clinics have traditionally been held in the hospital where the specialty is based, but clinics are now held in a variety of other settings. A key objective is to bring services as close to individual members of the public as possible¹¹. Alternative approaches to improving patient access include outpatient clinics conducted by hospital staff on general practice premises, in clinics, in health centres or at cottage hospitals.

⁷ ISD Definitions & Codes for the NHS in Scotland – 5th update, February 1997.

⁸ ISD(S)1.

⁹ ISD, based on 1998/99 data.

¹⁰ See for example, '*Patterns of referral*', Bradlow, Coulter & Brooks, 1992.

^{11 &#}x27;Our National Health. A plan for action, a plan for change', Scottish Executive Health Department, 2000.

Source of referrals

GPs¹² are the main source of referral to outpatient clinics ranging from 73% to 100% of referrals (Exhibit 1). Patients are often referred from one consultant clinic to another, or referred as a result of an inpatient admission or previous outpatient referral. There are also a number of other healthcare professionals (including dentists, clinical medical officers, health visitors, orthoptists, and social workers) who initiate outpatient referrals to the appropriate clinics. Patients can refer themselves to A&E departments, from which they may be referred to a specialist clinic. Certain clinics may also operate an 'open-door' policy allowing patients the right of direct access to specialist advice (eg family planning clinics).





Specialty grouping

Source: SMR00 (provisional as at April 2001). Figures exclude patients who did not attend (DNAs) and ward attenders. 'Other' referral source includes referrals from prison, local authority organisations, judicial, or community health officers. The Dental category is made up of referrals from general dental practitioners.

Attendances by specialty groupings

Surgical, medical and obstetrics & gynaecology activity represents approximately 84% of total attendances at consultant-led clinics (Exhibit 2). This trend has changed little between 1995/96 and 1999/2000.

| Specialty grouping | New outpatient attendances | Total outpatient attendances | Return:New |
|-----------------------------|-------------------------------|---------------------------------|-----------------|
| All specialty groupings | 1,337,653 | 4,849,393 | 2.6 |
| Surgical | 657,035 | 1,875,816 | 1.9 |
| Medical | 366,368 | 1,753,720 | 3.8 |
| Dental | 96,548 | 387,984 | 3.0 |
| Obstetrics & Gynaecology | 159,160 | 460,257 | 1.9 |
| Mental health | 56,862 | 366,106 | 5.4 |
| Other | 1,680 | 5,510 | 2.3 |
| | • | | Source: ISD(S)1 |

Exhibit 2: Attendance figures at consultant-led outpatient clinics in 1999/2000

Location of clinics

Outpatient referrals from GPs are mainly to hospitals or clinics within the health board area where the general practice is situated. In the majority of cases where the patient is referred across boundaries, this is explained by geographical or clinical factors. Practices can vary widely in the range and number of referral locations used. The referral patterns observed for a random sample of 35 general practices in Scotland show that the average number of referral locations per general practice is 21, with a range of between seven and 31 locations¹³.

Across all specialty groupings the most common facility used for delivering consultant-led outpatient services in Scotland is the 'traditional' outpatient department (accounting for 73% of attendances in 1999/2000). There are also alternative outpatient settings and these vary substantially among specialty groupings (Exhibit 3).

¹³ Source: SMR00 (new outpatient referrals), 1998/99.



Exhibit 3: Analysis of the 'Other' outpatient setting, by specialty groupings | 1999/2000

Source: SMR00 (provisional as at April 2001). Excludes patients who did not attend (DNA).

Features of a good outpatient service

A good outpatient service will have a number of different elements, including:

- an effective referral system
- equity of access regardless of factors like age, sex, socio-economic status and ethnicity
- short waiting times at each stage of the process
- low did not attend (DNA) rates
- appropriate management of care in the outpatient clinic setting
- appropriate staffing mix
- cost effective use of resources
- an emphasis on quality and patient focussed service delivery
- appropriate information to support performance management.

Referral system

Clinicians need high quality, timely information about patients referred in order to determine the appropriateness of the referral, the appropriate provision of services for each patient and the urgency with which they should be seen.

The organisational structure for referring medical problems from primary care professionals to specialists is known as the referral system. Referrals can be made manually using traditional mailing systems or in some instances electronically where specific referral software is being used.

The Scottish Intercollegiate Guidelines Network (SIGN) has undertaken work to identify good practice in terms of the content of referral documents¹⁴. The proportion of referrers fully or partially complying with this guidance is unknown, but anecdotal evidence suggests that the quality is variable and the information contained in the referral letters is still inconsistent. Future plans to integrate structured electronic clinical communications with the Patient Administration System (PAS) to achieve on-line booking provide an opportunity to enhance data quality.

Inappropriate referrals increase health service costs, and increase waiting times when someone else could have taken that patient's place in the clinic. The latest estimates by the National Audit Office¹⁵ relating to England and Wales suggest that between 25% and 29% of referrals from GPs are considered to be 'inappropriate' by hospital consultants. The position is unlikely to differ significantly in Scotland. Trusts should have systems/processes to identify inappropriate referrals and, where necessary, produce joint referral protocols with primary care.

Referral patterns

Referral and access to outpatient services should be on the basis of need, regardless of the patient's age, gender, socio-economic circumstances, geographic location or ethnic background. To plan efficient outpatient services and address equity of access, trusts need information about the referrals they receive, including information about the reasons for referral and the socio-economic circumstances of those referred.

⁴ 'Report on a recommended referral document', SIGN guideline number 31, November 1998.

⁵ 'Inpatient and outpatient waiting in the NHS: Report by the Comptroller and Auditor General', National Audit Office, July 2001.

One of the core aims of NHSScotland is to reduce inequalities in health¹⁶. This includes fair access to services for all members of society. Referrals are affected by a number of factors; the best documented is the patient's socioeconomic group¹⁷. Trusts should routinely analyse referral patterns by a number of different factors, including age, gender, social circumstances and ethnicity. This would enable targeting of services, the development and use of referral protocols where necessary, and other initiatives to address inequity of access to services. However, ISD indicate that this type of question cannot be readily answered without a considerable amount of ad hoc work and is also dependent on the analytical capacity within the trust concerned.

At present, referral rates can only be calculated on the basis of historical data. Information on attendances has to be used as a proxy for referrals, on the assumption that there is no difference between the patients referred for outpatients and those who actually attend. Attendance data are also used as a proxy for need when services are being planned for the local population.

Referral rates by age and gender

Attendances at outpatient clinics vary with age and gender (Exhibit 4). Across all age groups, the rate is 211 per 1,000 population for males and 284 per 1,000 population for females. Rates for new outpatient attendances are greater for males in the 0-4 and 5-14 age groups. In contrast, the rate of new outpatient attendances is significantly greater for females in the 15-24, 25-44 and 45-64 age ranges, (with rates of 243, 311 and 307 per 1,000 population respectively), primarily because of gynaecology and maternity services. For the 75-84 and 85+ age groups, the rate of new outpatient attendances is greater for males than for females.

Using attendance data as a proxy for need, however, may lead to spurious conclusions. For instance, if men are less likely to consult their GP, then their referral rates to outpatient clinics are likely to be lower but their surgical emergency admissions may be higher.



Exhibit 4: Rate per 1000 population of total new outpatient attendances, by age | group and gender, 1999/2000

Source: SMR00 (provisional as at April 2001). Excludes patients who did not attend (DNA).

 ¹⁶ 'Our National Health. A plan for action, a plan for change', Scottish Executive Health Department, 2000.
¹⁷ See for example, 'The effect of deprivation on variations in general practitioners referral rates'. Hippisley-Cox J, et al, BMJ 1997.

Within specialty groupings there is variation in the rates of attendance. For the surgical specialty grouping (males and females), the 75-84 and 85+ age groups have the highest attendance rates at new outpatient clinics. At medical clinics, the highest rate of attendance is in the 75-84 age group (for both sexes). In the dental specialty grouping, the pattern of attendance is very similar for both sexes, with the highest rates of attendance in the 5-14 and 15-24 age groups. The mental health specialty grouping indicates fairly low and consistent rates of attendance for both men and women, until a marked increase in the 75-84 and 85+ age bands. As expected, the rate of attendance to new outpatient clinics for obstetrics and gynaecology is highest in the 25-44 age group.

Referral rates by reason for referral

It is not mandatory to record the reasons for referral at hospital level, so this information is not available at a national level.

Referral rates by socio-economic group, geographical area and ethnicity

Analysis of these other factors influencing referral rates is possible at present only through ad hoc analyses of data collection returns¹⁸. Also, ethnicity is not collected as a mandatory data item.

Waiting times

The amount of time people spend waiting for a hospital appointment is very important to them. Recent initiatives at a national level, including the Health Plan, have sought to set maximum waiting times for certain groups of patients. To assess the length of time patients wait to be seen at a hospital clinic, trusts need information about waiting times for each stage of the process. This allows them to review areas where delays are occurring and plan services to minimise delays.

The Health Plan reiterated that minimising delays and reducing the time patients have to wait for treatment and care is a major priority. Each health board has a duty to ensure that patients are treated within the national guarantees or within other shorter, locally defined waiting times. The responsibility for monitoring waiting lists and waiting times is shared between health boards and trusts.

Considerable investment in national initiatives to reduce the number of people on waiting lists has been made over recent years. For example, £44.5million was allocated specifically for this purpose in April 1998. However, progress in terms of reduced waiting times tends to be variable. This suggests that managers and clinical teams need to review the factors that influence waiting at each stage of the referral process, to ensure that they deal with the causes rather than the symptoms of any problems in the system.

Wait to receive an outpatient appointment

Routinely, the length of time that patients have to wait to discover when they can be seen at an outpatient clinic will vary depending on the system in use at their GP's practice. The introduction of electronic booking of appointments should eliminate this initial wait for an appointment date, since patients will be given an appointment at the GP's surgery. However, the use of electronic booking systems may not always be appropriate – for example, GPs will telephone consultants or clinics when they consider a

patient requires a very urgent outpatient appointment. At present, the waiting time for a routine first outpatient is measured from the date the GP referral letter is received at the consultant's office.

Exhibit 5 shows an increase in the percentage of patients waiting for a first outpatient appointment with a consultant, following a referral from a general medical (or dental) practitioner. The graph illustrates that in June 1998, 8% of referrals waited more than 18 weeks for outpatient appointments; by December 2000 the figure had risen to 15%. However, comparisons between figures for 1998 should be made with caution, since the data relates only to consultant clinics and takes no account of the numbers of patients seen or treated at clinics led by nurses, professions allied to medicine (PAMs) or other specialist staff.

Exhibit 5: Percentage of patients waiting more than 18 weeks for a first outpatient appointment with a consultant, following GP/GDP¹⁹ referral, across all specialities in Scotland, by quarter



¹⁹ General medical practitioner or general dental practitioner.

Wait from referral to clinic attendance

Exhibit 6 illustrates the median wait across all specialties for outpatient referrals (excluding guarantee exceptions).



Exhibit 6: Median waiting time for a first outpatient appointment with a consultant, following GP/GDP²⁰ referral, across all specialities in Scotland, by quarter

The median wait remained fairly constant, at between 40 and 44 days, during the period March 1998 to June 1999. However, the figures show a gradual increase in waiting times over the last three years, with a peak of 47 days in September 1999 and also for the last two quarters of September and December 2000. Again, comparisons between figures for 1998 or earlier should be made with care, since the data relates only to consultant-led clinics.

Each health board sets waiting time 'guaranteed performance' for six key surgical specialties. Exhibit 7 shows performance against these guarantees for the years 1998-2000. Overall, the percentage of patients seen within the health board specified guarantees decreased from 78% (quarter ended December 1998) to 73% (quarter ended December 2000), although this varies among health boards.

²⁰ General medical practitioner or general dental practitioner.



Exhibit 7: Percentage of new outpatient consultant referrals seen within the performance guarantees²¹ set by health boards, 1998-2000

Waiting in the clinic

One of the aims of the National Charter²² was to ensure that patients should not have to wait long past their appointment time when attending an outpatient clinic. The Charter commitment is that "*if you have not been seen within 30 minutes of your appointment time, you should expect to be given a reason for the delay and an idea of how much longer the waiting is likely to be*". Although it is not possible to assess the extent to which this National Charter guarantee is achieved, since data on clinic waits are not held centrally, recent research shows²³ that 32% of new patients felt that their wait had been excessive.

Attendance rates

Non-attendance at clinics is a widespread problem. Trusts should be able to review DNA rates by clinic and patient type, to identify how best to address problems and ensure that there are no operational factors contributing to DNA rates.

Non-attendance at clinics brings a significant financial burden to the NHS²⁴ and can also affect the patient's health. Non-attendance for hospital outpatient appointments for both new and follow-up patients is approximately 12% in the UK²⁵. This is in line with the percentage of Scottish new patients who fail to attend their first outpatient appointment.

Analysis relates only to those specialties which have guarantees (ie six key surgical specialties).
'The patient's charter: a charter for health', The Scottish Office, 1991.

²³ 'Understanding patients views of a surgical outpatient clinic', Waghorn A, Mackee M, Journal of Health Services Research and Policy, 2000.

²⁴ See for example, 'The effect of remainder calls in reducing non-attendance rates at care of the elderly clinics'. Dockery F, et al, Postgraduate Medical Journal, 2001.

²⁵ 'Effect on hospital attendance rates of giving patients a copy of their referral letter', Hamilton W et al, BMJ 1999; 318.

Across all specialty groupings, the average DNA rate in Scotland is 11%. An estimated 161,000 new outpatients therefore failed to attend their appointment in 1999/2000. Based on an average cost of attendance of £63²⁶, non-attendances accounted for approximately £10 million in 1999/2000. The percentage of DNAs for new outpatients is similar across the specialty groupings, with the exception of the mental health and other groupings (Exhibit 8). In 1999/2000, the DNA figures for the specialty groupings were as follows:

| Exhibit 8: Percentage of | new outpatients | who did not attend | , by specialty |
|--------------------------|-----------------|--------------------|----------------|
| groupings, 1999/2000 | - | | |

| Specialty groupings | % DNA |
|--------------------------|-------|
| Surgical | 11% |
| Medical | 10% |
| Dental | 11% |
| Obstetrics & Gynaecology | 9% |
| Mental health | 18% |
| Other | 2% |

Source: ISD(S)1

Patients may fail to attend an outpatient appointment for a range of reasons, including work commitments, illness, forgetting their appointment, and difficulty in contacting or reaching the clinic. The way in which the hospital is organised can also contribute to non-attendance, including poor communication between hospital departments, the lack of an effective reminder system, inadequately organised patient transport, clerical errors, and inflexible clinic times.

Given the scale of non-attendance, outpatient clinics tend to be organised to take this into account. It is common practice to double-book some appointments to compensate for those patients who are expected to fail to attend. Although this practice can help ensure there are no vacant slots during clinics, it also leads to long waits for patients and overloads staff if most patients do turn up. The knock-on effect can be that outpatient clinics over-run their schedule and disrupt other hospital activities such as theatre sessions.

In order to take effective action to reduce DNA rates, managers need routine data to highlight those patient groups with particularly high DNA rates, and the reasons for their non-attendance. Recent evidence suggests that DNA rates at outpatient clinics are highest among people from the most deprived areas (Exhibit 9)²⁷. In the most affluent category (Carstairs deprivation category 1), the percentage of people who do not keep outpatient appointments is just over 6%. By contrast, among people in the most deprived category (Carstairs deprivation category 7), the percentage of those who do not attend is almost three times as high. However, people from

²⁶ Based on specialty costs in 'Scottish Health Service Costs', 1999/2000.

^{&#}x27;Fair Shares for all. Report of the National Review of Resource Allocation for the NHS in Scotland', Scottish Executive Health Department, July 1999.

deprived areas suffer proportionately more mental illness, therefore further statistical analyses need to be undertaken so that managers can take appropriate action to target significant problems.



Exhibit 9: Percentage of patients who do not attend new outpatient appointments, by Carstairs deprivation category

Appropriate management of care at outpatient clinics

Hospitals need mechanisms to ensure that the care provided in the clinic setting is appropriate and that unnecessary follow-up appointments are avoided. This is reinforced by the emphasis on 'one stop' clinics in recent policy documents. To determine appropriate and effective care, trusts need information about the number of follow up attendances, the procedures carried out, and the effect of treatment. They also need to address the issue of continuity of care.

Some patients with severe and complex health problems may require repeated follow-up appointments, while for others a single visit is sufficient. This depends on the individual patient's condition. Trusts should ensure that patients are discharged as soon as it is appropriate, through the use of one-stop clinics, promoted in *'Designed to Care²²⁸*, and the use of discharge protocols. Exhibit 10 demonstrates the variation across specialty groupings in the number of attendances that a new outpatient will make. These have remained constant over time, and can involve continued attendance at one or more clinics over a period of several years. Return attendance recording is difficult without a computerised outpatient system.

^{&#}x27;Designed to care: Renewing the NHS in Scotland', The Scottish Office Department of Health, 1997.

| Specialty groupings | Average number of total attendances |
|--------------------------|-------------------------------------|
| Surgical | 2.9 |
| Medical | 4.8 |
| Dental | 3.9 |
| Obstetrics & Gynaecology | 2.9 |
| Mental health | 6.3 |
| Other | 3.3 |

Exhibit 10: Average number of total attendances made by an outpatient, by specialty grouping, 1999/2000

More and more procedures are carried out in the outpatient setting, replacing day case or even inpatient procedures. Data relating to these outpatient procedures is problematic, since we are advised by ISD that those recording the data do not always follow rules regarding the setting or definitions concerning the patient type. Furthermore, although the data collection return²⁹ includes a field to record outpatient procedures, its use is not mandatory and many trusts do not collect these data.

Continuity of care is important for efficient and effective service delivery. Clinicians need access to case notes and test results to support their decisionmaking. However, no national data are available to monitor the performance of this aspect of clinic management.

From the patient perspective, contacts with outpatient staff are vitally important. Patients want to be put at ease when they attend a clinic, whether it is their first appointment or a repeat attendance. They want staff to be friendly, informative and to treat patients with dignity. On subsequent clinic visits, continuity of care by the same clinical staff is also important. Again, no national data are available to monitor these features of the outpatient service, or patient satisfaction with the service they receive.

Finally, the effectiveness of outpatient interventions is the key question. Without data on what outpatient treatments are being used, the benefits they are expected to yield, and the actual outcome, it is impossible to assess effectiveness.

Appropriate staffing mix

Outpatient services are delivered by multidisciplinary teams, which are increasingly led by specialists other than consultants. Trusts need information about the mix of staff providing outpatient services to assess the most appropriate mix of services to meet the needs of patients.

A notable development in outpatient care is the increasing involvement of specialist non-medical staff. This reflects a number of factors: the expanded roles which many nurses and PAMs are taking on in clinical teams; the impact of national agreements to reduce junior doctors' hours; and the increasing realisation that care should encompass non-medical factors such as counselling, education and support.

At present, the definition of an outpatient is a person who is referred to a consultant-led clinic only. This excludes all those patients seen in clinics led by nurses (eg, clinics for stoma care or diabetic patients), and PAMs (eg, dieticians and physiotherapists). ISD estimate that these other clinics could account for as many as 12 million attendances a year. Trusts need information on all outpatient clinics, regardless of the designation of the person leading the clinic, to allow them to plan the most appropriate mix of services to meet patients' needs.

Cost effective use of resources

Outpatient clinics represent approximately 11% of total hospital running costs. Trusts need to review the costs of outpatient services to ensure that they provide the most cost effective use of resources.

Outpatient clinics constitute approximately 11% of hospital running costs. Trusts need information about the relative costs of different types and locations of clinics to ensure the most effective mix of services are provided. Exhibit 11 highlights the total costs of outpatient attendances by the six specialty groupings.

| Specialty groupings | Total costs of outpatient attendances (£'000s) |
|--------------------------|--|
| Surgical | 90,943 |
| Medical | 128,616 |
| Obstetrics & Gynaecology | 30,589 |
| Mental health | 20,682 |
| Dental | 24,892 |
| Other | 361 |
| Total | 296,082 |

Exhibit 11: Total costs of outpatient attendances by specialty groupings, 1999/2000

Source: Scottish Health Service Costs, 1999/2000

The average total cost of an outpatient attendance varies significantly among specialty groupings, from £39 (other) to £86 (mental health), with an average total cost of £63 across all specialty groupings. The proportion of direct costs per outpatient attendance varies between specialty groupings from 59% (other) to 71% (medical).

These data show the importance of outpatient services in terms of the resources involved. More significantly, there appears to be substantial variation in specialty grouping costs among peer groups (as demonstrated by ENT, in Appendix 2). They highlight the need for trusts to undertake benchmarking exercises on a like-for-like basis, dealing with any data problems and concentrating on addressing the reasons underlying real cost differences. For example, cost differences may result from casemix, the outpatient setting or economies of scale; however, they may also indicate where there is scope to improve value for money.

Quality and patient focused service delivery

In order to deliver a quality and patient-focused service, trusts need to manage the outpatient system as a whole, rather than focusing on its separate elements.

A recent report by the NHS Confederation³⁰ criticises the traditional model of outpatient services and calls for a more radical approach to be adopted in the future. The report suggests guidelines for the successful management of the outpatient process, including:

- a clear focus on managing the whole of the patient experience
- better organisation of outpatient services, based on proven best practice rather than historical ways of working
- to achieve optimal efficiency, run the system at less than 100% capacity
- simplifying appointment times
- reducing the number of times patients pass between professionals
- organising by process, not function
- protecting resources
- maximising the value of the outpatient visit.

Some hospitals have already reviewed and improved their outpatient services in response to a variety of national initiatives, and professional concern to raise clinical standards and meet rising demand. There can be many different approaches to improvement, including monitoring quality, obtaining patients' views on services, improving access and communications, and improving the capacity of outpatient services. Small-scale improvements can make a significant difference to service provision. However, more substantial improvements often require a "whole-systems" approach to change, and depend upon collaboration between hospital and primary care.

In order to support this process, Audit Scotland has produced a selfassessment tool to help clinics to identify potential improvements in the quality of service and the cost of service delivery. The material is designed for outpatient teams to use in reviewing their clinics at a local level, following the patient's journey through the system and identifying relevant issues along the way. It should help teams to review their current performance, and then monitor improvements.

The self-assessment tool allows users to:

- identify the main issues at each element of the outpatient process
- highlight the potential impact of the issues raised
- provide evidence to demonstrate that they are pursuing good practice.

³⁰ 'Modernising outpatients – developing effective services', NHS Confederation, 2001.

It also:

- highlights examples of good practice
- enables trusts to collect evidence to demonstrate their own good practice
- suggests some performance indicators (PIs), criteria and standards to begin monitoring performance and progress.

Another method of ensuring that quality standards are established and maintained in an organisation is to participate in a formal accreditation programme (such as Health Quality Standards). This process allows the service to determine where they stand, what action needs to be undertaken, and what evidence needs to be produced to confirm their achievement. The accrediting body then carries out external validation of the evidence. At present, there is no national data which indicates whether outpatient clinics have been accredited. Given the increasing focus on quality and accountability, it is likely that, in future, stakeholders will seek assurances that accreditation has been achieved or is at least being sought.

Although the Clinical Standards Board for Scotland is not looking at outpatient services in isolation, elements of outpatient services are found in some of their current work (eg on cancer services). It should be an integral part of setting standards across services covering all aspects of the patient's experience.

Assessing the performance of outpatient services

Managers require information that allows them to monitor the overall performance of their outpatient services, but there are significant gaps in the data. There are initiatives underway to address some of these issues, but these are still at an early stage.

Outpatient services are a crucial component of the health service. They have attracted national attention in relation to performance guarantees for waiting times and new developments such as one-stop clinics. There has, however, been relatively little focus nationally on overall performance.

The national data collection schemes allow comparisons to be made of some elements of outpatient services. This baseline study has, however, identified gaps in these data collection systems, which greatly limit the ability of trusts to critically review their outpatient performance and make improvements.

There are a number of national initiatives aimed at addressing the data shortcomings and improved clinical communications, which need to be progressed as a matter of priority. These national initiatives are welcomed but they are all at an early stage. These include:

- The Definitions & Quality Issues group, whose remit covers data quality, robustness and the definitions advisory process
- The Scottish Care Information (SCI) programme, which aims to deliver IM&T products and standards across NHSScotland (underpinning the development of the Electronic Patient Record and the Electronic Health Record)

- The Electronic Clinical Communications Initiative (ECCI), which is a Scotland-wide programme to ensure the development of electronic clinical communications between primary and secondary care throughout NHSScotland. By 2003 it is expected that extensive implementation of clinical communications will be in place, including:
 - clinical e-mail
 - referral information
 - electronic outpatient booking protocol based where appropriate
 - test ordering and results receiving
 - discharge letters and summaries, and clinic letters
 - information in support of shared care.

These initiatives are still at an early stage, and need to be planned, managed, monitored and reviewed to ensure that they deliver their full potential.

Conclusion

This baseline study has provided baseline information on outpatient services in Scotland and has identified areas where performance information on outpatient services is limited. It has highlighted three key areas that give cause for concern.

- Despite the fact that more people encounter secondary care in this setting than in any other, there is a lack of robust data and information upon which to plan and manage outpatient services
- From the information that is available there are some worrying patterns. For example, there are doubts about whether the available costing data are sufficiently robust to support benchmarking and more work needs to be done to ensure variations do not simply reflect different accounting treatments
- In order to improve outpatient services in line with the Health Plan, a review of the system is required. Audit Scotland's self-assessment tool is designed to assist this process.

Future Audit Scotland work

Audit Scotland will follow up this review of the management of outpatients on two levels. Firstly, we will seek to ensure that the gaps in management information are identified and the most appropriate way of responding to these are agreed by NHSScotland at a national level. Secondly, we will agree a local self-assessment programme of specialties and conditions to be reviewed on a rolling programme basis with trust chief executives. This will seek to ensure that the self-assessment process is robust, with action plans that can be successfully implemented and monitored. We also intend to undertake a short baseline census based on two questionnaires, covering patients' experiences of outpatient services and clinician support processes.

Appendix 1 Breakdown of the specialty groupings

| Specialty groupings | Included specialty |
|-------------------------|--|
| Surgical | General surgery Orthopaedics ENT Ophthalmology Urology Neurosurgery Cardiothoracic surgery Plastic surgery Surgical paediatrics |
| Medical | General medicine Cardiology Clinical genetics Endocrinology & diabetes Gastroenterology Genito-urinary medicine Homeopathy Medical oncology Clinical chemistry Palliative medicine Haematology Neurology Rheumatology Dermatology Dermatology Nephrology Rehabilitation medicine Respiratory medicine Communicable diseases Spinal paralysis Medical paediatrics Geriatric Medicine Occupational health Diagnostic radiology Clinical oncology |
| Mental health | General psychiatry (Mental illness) Forensic psychiatry Psychotherapy Psychiatry of old age Child psychiatry Adolescent psychiatry Learning disabilities |
| Obstetrics & Gynecology | Gynaecology Obstetrics - ante natal Obstetrics - post natal Obstetrics Midwifery Community midwifery Obstetrics GP |
| Dental | Oral surgery Oral medicine Orthodontics Paediatric dentistry Restorative dentistry Community dental practice General dental practice |
| Other | General practice (excluding obstetrics) |

Appendix 2 Analysis of the Ear, Nose and Throat surgical specialty, by trust group 1999/2000^{31,32}

| | | ENT | | | | | | | |
|--|-------|----------------------------|-----------------|-----------------|-----------------|------------------------|----------------|----------------|--------------|
| Referrals | | Acute Teaching Mixed/Other | | /Other | Islands | | | | |
| Number (%) Referred by GP | | 45,148 (85%) | | 47,278 (87%) | | 6,020 (85%) | | 1,253 (91%) | |
| Number (%) Referred by another healthcare specialist | | 7,820 (15%) | | 6,847 (13%) | | 1,095 (15%) | | 128 (9%) | |
| Age/sex | | Female | Male | Female | Male | Female | Male | Female | Male |
| Number (%) of referrals | | 26,635 (50%) | 26,333 (50%) | 28,316 (52%) | 25,809 (48%) | 3,377 (47%) | 3,738 (53%) | 693 (50%) | 688 (50%) |
| Number (%) by age | 0-4 | 1,316 (5%) | 1,983 (8%) | 956 (3%) | 1,320 (5%) | 620 (18%) | 1,014 (27%) | 30 (4%) | 40 (6%) |
| group | 5-24 | 5,861 (22%) | 6,590 (25%) | 5,412 (19%) | 5,702 (22%) | 1,304 (39%) | 1,486 (40%) | 155 (22%) | 157 (23%) |
| | 25-44 | 6,144 (23%) | 6,223 (24%) | 6,927 (24%) | 6,727 (26%) | 477 (14%) | 413 (11%) | 167 (24%) | 149 (22%) |
| | 45-64 | 6,851 (26%) | 6,692 (25%) | 7,004 (25%) | 6,581 (25%) | 519 (15%) | 485 (13%) | 181 (26%) | 199 (29%) |
| | 65+ | 6,463 (24%) | 4,845 (18%) | 8,017 (28%) | 5,479 (21%) | 457 (14%) | 340 (9%) | 160 (23%) | 143 (21%) |
| | | | | | | | | | |
| Deprivation | | Ac | ute | Teaching | | Mixed/Other | | Islands | |
| Number (%) from Carstairs categories 1 & | 2 | 7,0 (13 | 018 3%) | 12,8 (24 | 366 %) | 1,093 11 (15%) (1%) | | 1 %) | |
| Number (%) from Carstairs categories 3 - 5 | 5 | 39, (74 | 302 1%) | 26, (48 | 126 %) | 4,3 (62 | 78 %) | 1,2 (93 | 91 %) |
| Number (%) from Carstairs categories 6 & 7 | | 6,591 (12%) | | 15,074 (28%) | | 1,638 (23%) | | 79 (6%) | |
| | | | | | | | | | |
| DNAs | | Ac | ute | Teac | hing | Mixed | /Other | Islaı | nds |
| Number (%) of total attendance | | 5,701 (11%) | | 7,793 (14%) | | 778 (11%) | | 89 (6%) | |
| Across all trusts, there we | | vere 14,36 | 51 DNAs, c | orrespond | ling to a ' | 12% DNA | rate | | |
| Number (%) of DNAs by | 1 & 2 | 5 (9 | 14 %) | 1,128 (14%) | | 82 (11%) | | 0 (0%) | |
| Carstairs deprivation category: | 3 - 5 | 4,2 (75 | 268 5%) | 3,4 (44 | 47 %) | 51 (66 | 2 %) | 8 (91 | 1 %) |
| category. | 6&7 | 911 (16%) | | 3,206 (41%) | | 182 (23%) | | 8 (9%) | |

³¹ Source of data (unless otherwise indicated): ISD Scotland, SMR00 (at May 2001).

³² Data on Primary Care Trusts (PCTs) were excluded from the analysis even though the SMR00 analysis includes these figures. This is probably explained by outreach clinics being held at PCTs by specialists from eg, acute hospitals, which are subsequently not being coded correctly. However, some PCTs do have surgical consultants (and other staff) attributed to them, and this may explain a certain amount of the activity recorded to PCTs.

| Costs ³³ , £ (range) | Acute | Teaching | Mixed/Other | Islands | | | |
|--|----------------------|--|-------------------|---------------|--|--|--|
| Direct costs per attendance | 28 (18-42) | 37 37 (31-44) (25-46) | | 24 (19-32) | | | |
| Allocated costs per attendance | 17 (3-27) | 18 (7-30) | 28 (13-40) | 12 (8-21) | | | |
| Total costs per attendance | 44 (34-60) | 55 (39-71) | 64 (38-86) | 36 (29-42) | | | |
| Direct costs per new outpatient | 62 (33-102) | 88 (81-98) | 67 (44-87) | 50 (42-55) | | | |
| Allocated costs per new outpatient | 38 (8-82) | 42 (20-59) | 50 (22-75) | 25 (16-47) | | | |
| Total costs per new outpatient | 100 (72-149) | 130 (107-139) | 117 (66-162) | 75 (67-88) | | | |
| Across all trust groups, th | ne average costs are | as follows: | | | | | |
| Cost per atte | ndance | Cost | t per new outpati | ent | | | |
| Direct cost = $£33$ Allocated cost = $£18$ Total cost = $£50$ | | Direct cost = $f74$ Allocated cost = $f40$ Total cost = $f114$ | | | | | |
| Waiting Times ³⁴ | Acute | Teaching | Mixed/Other | Islands | | | |
| FYE March 2000 | | | | | | | |
| % waiting <=9 weeks | 68% | 51% | 43% | 88% | | | |
| % waiting >21 weeks | 5% | 24% | 27% | 1% | | | |
| Median wait (days) | 50 | 59 | 78 | 33 | | | |
| Across all trust groups, 62% of ENT outpatients waited <=9 weeks; 15% waited >21 weeks, and the median wait is 54 days | | | | | | | |
| FYE March 1999 | | | | | | | |
| % waiting <=9 weeks | 63% | 53% | 37% | 73% | | | |
| % waiting >21 weeks | 6% | 10% | 8% | 2% | | | |
| Median wait (days) | 55 | 58 | 82 | 47 | | | |
| Across all trust groups, 58% of ENT outpatients waited <=9 weeks; 7% waited >21 weeks, and the median wait is 59 days | | | | | | | |
| FYE March 1998 | | | | | | | |
| % waiting <=9 weeks | 63% | 57% | 60% | 86% | | | |
| % waiting >21 weeks | 8% | 9% | 7% | 3% | | | |
| Median wait (days) | 51 | 58 | 67 | 34 | | | |
| Across all trust groups, 64% of ENT outpatients waited <=9 weeks; 8% waited >21 weeks, and the median wait is 53 days | | | | | | | |

 ^{&#}x27;Scottish Health Service Costs', ISD Scotland 1999/2000.
SMR00, from SKIPPER (3) version 5.6, based on averages for Scotland, March 2001.

Appendix 3 Advisory panel

Mrs Alison Forrest, Outpatient Services Manager, Aberdeen Royal Infirmary

Mr Peter Hamilton, SAHC Council member

Mr Tim Brett, General Manager, Tayside Health Board

Mr John Robertson, Performance Management Division, Department of Health

Dr Erik Jesperson, GP, Oban

Dr Diana Webster, Consultant in Public Health Medicine, Grampian Health Board

Dr Mike Jones, Clinical Director for General Medicine, Ninewells Hospital and Medical School

Ms Vanessa Gaskill, NHS Management Executive

Mr Mike Lyall, Medical Director, Ninewells Hospital & Medical School

Prof Ross Lorimer, Professor in Medicine & Cardiology, Glasgow Royal Infirmary

Mr Tom Divers, Board General Manager, Lanarkshire Health Board



110 GEORGE STREET EDINBURGH EH2 4LH

T. 0131 477 1234 F. 0131 477 4567

www.audit-scotland.gov.uk

ISBN 1 903433 48 7