Outpatients count: results of a census on outpatient activity  
A report to the Scottish Parliament by the Auditor General for Scotland.

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Acknowledgments  
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Audit Scotland is a statutory body set up in April 2000 under the Public Finance and Accountability (Scotland) Act 2000. It provides services to 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.
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Main findings

Outpatient services in Scotland are important and complex...
Outpatient services in Scotland are important and complex. We carried out a week-long census of outpatient activity in acute and primary care trusts in collaboration with the Information and Statistics Division of NHSScotland (ISD). We found that:

- A lot of outpatient activity is not recorded nationally. National patient-based data collection systems only record consultant-led clinics but, in reality, other healthcare professionals run many clinics. We asked trusts to record all clinics and tell us who was actually running them. For example, doctors ran only 52% of acute outpatient clinics during the week of the census.

- Many trusts had problems providing basic information on their outpatient clinics.

- Most outpatients are attending for return appointments – 69% of attendances in the acute sector and 86% in the primary care sector.

- One in seven patients did not attend their outpatient appointment.

- Around one in every 100 clinics was cancelled. This affected less than 1% of outpatients.

- Most acute trust clinics are run in hospitals during traditional office hours (approximately 9am - 5 pm, Monday - Friday). Most primary care clinics are run in community settings but they too are held during traditional hours.

- Clinics are held in over 1,500 locations throughout Scotland.
**Part 1. Setting the scene**

### What is the issue?

1.1 Most people who attend hospital are seen as outpatients. There have been significant changes in outpatient services. Nowadays some patients can be treated in outpatient clinics where a few years ago they would have been admitted to hospital. Many tests and treatments can now be carried out during an outpatient visit. Some trusts undertake particular procedures, such as some endoscopies, as an outpatient activity rather than as day-case or inpatient procedures.

1.2 Every year around £300 million is spent on consultant-led outpatient services in Scotland. This represents 11% of total hospital running costs. But we do not know much about the efficiency and effectiveness of these services. Nor do we know much about clinics run by other healthcare professionals. Limited information is available at both national and local levels. Without good management information it is difficult to manage these services well and demonstrate that resources are being used effectively.

1.3 The national data collection schemes used to describe outpatient activity have not kept pace with the rapid changes to outpatient services. Because of this they do not give a comprehensive picture of activity. In addition, they create perverse incentives for trusts which may want to broaden the range of clinics run by healthcare professionals other than consultants. This is because these clinics would not be counted as part of the trusts’ activity levels.

1.4 The Health Department recognises this and is taking action to improve the management and national recording of outpatient services:

- ISD has a data development project looking at how to provide a more accurate and up-to-date reflection of activity.
- National targets have been set for waiting times for outpatient appointments – a maximum 26 week wait by 2005.
- The Health Department has launched an outpatient action plan aimed at improving management and waiting times for outpatient appointments. Both the Centre for Change and Innovation in the Health Department and the National Waiting Times Unit will be working on this over the next year. The Centre for Change and Innovation has published practical measures to improve outpatient services. The National Waiting Times Unit has also published a good practice guide to achieve sustainable reductions in waiting times and planning services through a ‘whole systems approach’.

1.5 These initiatives present the opportunity to address both the immediate symptoms of the problem (waiting times) and their underlying causes (system design, demand and capacity) in the longer term.

### What did we do?

1.6 Audit Scotland, working with ISD, carried out a census of outpatient activity over a typical full week in Spring 2002. The census covered outpatient clinics run by all healthcare professionals, not just consultants, and aimed to identify the full range of outpatient activity in both acute and primary care trusts.

1.7 We collected a core set of information from all trusts on clinics run during the census week. The details of the information requested are given in Appendix 2. We did not collect waiting times information by clinic.

1.8 Despite the limited information required for the census, trusts reported considerable difficulty in providing the information from local management information systems. This raises doubts about whether trusts have adequate information to manage their outpatient services effectively.

1.9 This bulletin outlines our key national findings. We have also provided all trusts with comparative information from the census. This should help them identify local areas where they may need to make improvements.

1.10 In 2002, Audit Scotland issued trusts with a self-assessment handbook on managing outpatient services. This handbook uses a whole systems approach to help trusts identify bottlenecks in their outpatient services and better manage the patient experience. It also provides good practice examples which should help trusts respond to the recent Outpatient Action Plan issued by the Scottish Executive Health Department. As part of our audit programme during 2003/04 we shall review trusts’ progress.

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1. NHSScotland, Scottish Health Service Costs (“Blue Book”), CSA online, 2002.
2. SNPRD and ISD21. These are described more fully in Appendix 1.
Part 2. Outpatient activity

How many people are seen in outpatients?

2.1 The scale of outpatient activity in Scotland is higher than national data suggest. The census suggests that around 1.3 million clinics are held annually, with more than 10 million attendances\(^8\). By contrast, the existing national returns recorded 4.76 million\(^9\) attendances in 2001/2002. Appendix 3 gives a summary of the trust returns for the census.

2.2 Taking the census week as typical, acute trusts run approximately 618,000 outpatient clinics a year with over 6.5 million attendances. During the census week the number of outpatients seen was approximately 13% greater than the number scheduled. There are two main reasons for this:

- Some clinics are run on a direct access or drop-in basis. No patients are given appointments for these.
- Most clinicians add patients to clinics as emergencies or as the result of special requests from GPs.

2.3 Medical and surgical specialties see 75% of outpatients in the acute sector (Exhibit 1, page 6).

2.4 Primary care trusts (PCTs) run approximately 637,000 outpatient clinics a year, with almost 3.5 million attendances. Our census is likely to underestimate primary care activity because we excluded some types of care, such as patients seen in their own homes.

2.5 Physiotherapy, podiatry and chiropody services account for half the outpatients seen in primary care clinics (Exhibit 2, page 6).

2.6 During the census week the number of scheduled patients for primary care clinics was 11% higher than actual patients seen. The reasons for this are unclear in dietetics, psychology and speech therapy clinics as the number of patients who did not attend does not explain the difference.

Managing return attendances

2.7 Most people seen in outpatient clinics are ‘return’ patients. During the census week, just over two in three attendances in the acute sector and four in five attendances in the primary care sector were return visits. Over the course of a full year this would mean that there are around 4.5 million return attendances (69%) in the acute sector and almost 3 million (86%) in the primary care sector. But we cannot say how many patients this represents from routine information systems.

2.8 The percentage of return attendances varies according to specialty (Exhibits 3 and 4, page 7). Approximately three-quarters of attendances in the medical specialty group are return attendances. The proportion is nearer two-thirds for the other acute specialty groups. Primary care clinics tend to have a higher percentage of return attendances, for example chiropody services. This is likely to reflect the nature of their clinics where many patients will be treated on a long-term basis.

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\(^8\) ‘Attendances’ is used instead of ‘patients’ as it is not possible to say how many patients attend annually. Many have ‘repeat’ appointments.

Exhibit 1
Number of scheduled and seen patients in acute trusts

Source: Audit Scotland/ISD census, April 2002

Exhibit 2
Number of scheduled and seen patients in primary care trusts

Source: Audit Scotland/ISD census, April 2002
Exhibit 3
Number of new and return patients by specialty group in acute trusts

Source: Audit Scotland/ISD census, April 2002

Exhibit 4
Number of new and return patients by specialty group in primary care trusts

Source: Audit Scotland/ISD census, April 2002
In the acute sector, the percentage of return attendances also varies according to who runs the clinic (Exhibit 5). But overall the proportion of return attendances is high. It is important that patients do not attend outpatients for longer than clinically required. Unnecessary return attendances can waste patient and staff time and take up appointments that could be used for others. Patients should be returned to the care of their GP when clinically appropriate to ensure that specialist secondary services are well targeted. The use of discharge protocols could help ensure that only those patients who need specialist follow up come back to the outpatient clinic.

Who runs the clinics?
In addition to consultants, many different healthcare staff run clinics. We asked trusts to tell us who was actually running the clinics and, for the purpose of the census, to ignore the rules for completing the national data collection systems.

In the acute sector we collected information about clinics run by:
- consultants
- nurses
- allied health professions (AHPs) – such as physiotherapists and occupational therapists
- technicians
- others.

Consultants run the majority of clinics in medical and surgical specialties. Other specialties have a higher proportion run by other healthcare professionals (Exhibit 6, opposite).

We also collected information about who runs clinics in the primary care sector. Nurses, consultant doctors and psychologists all run clinics for people with learning difficulties and mental health problems. Other professionals, such as speech therapists, chiropodists, physiotherapists and dieticians run their own clinics (Exhibit 7, opposite).

How many patients are seen at a clinic?
The average number of patients seen is 11 in acute clinics and five in primary care clinics. In the acute sector, doctors see more patients on average than other healthcare professionals (Exhibit 8, page 10). This pattern is true for all specialties except obstetrics and gynaecology (obs and gyn) where technicians see the largest average number of patients. This is possibly because of the number of screening procedures which are carried out.

In the primary care sector, the average number of patients seen varies by specialty (Exhibit 9, page 10). Variations in the average number of patients seen are expected given the different type of work undertaken. But trusts should keep under review clinic and staff workloads and should be managing these to achieve value for money.
Exhibit 6
Percentage of clinics by specialty group run by different healthcare professionals – acute trusts

![Chart showing percentage of clinics by specialty group run by different healthcare professionals in acute trusts.]

Source: Audit Scotland/ISD census, April 2002

Note: Total numbers in mental health are very small in the acute sector (365 clinics in the census week).

Exhibit 7
Percentage of clinics by specialty group run by different healthcare professionals – primary care trusts

![Chart showing percentage of clinics by specialty group run by different healthcare professionals in primary care trusts.]

Source: Audit Scotland/ISD census, April 2002
Exhibit 8
Average number of patients seen by different healthcare professionals – acute trusts

- Doctor: 12.7
- Technician: 8.6
- AHP: 6.7
- Nurse: 7.5
- Other: 4.8

Source: Audit Scotland/ISD census, April 2002

Exhibit 9
Average number of patients seen by specialty – primary care trusts

- Family planning: 13.1
- Podiatry/Chiropody: 6.8
- Other: 6.3
- Physiotherapy: 4.0
- Dietetics: 3.6
- Psychiatry: 3.0
- Occupational therapy: 2.9
- Speech therapy: 2.3
- Psychology: 2.3
- Learning difficulties: 2.1

Source: Audit Scotland/ISD census, April 2002
Part 3. Patients not attending their appointments

3.1 Nearly 30,000 outpatients – one in seven – did not turn up for their appointments in the week of the census. This element of unpredictability makes managing clinics difficult and can lead to a poorer service and longer waiting times.

3.2 Based on an average estimated cost of attendance for outpatients\(^ {11}\) of £65 for a consultant appointment and £31 for those run by other healthcare professionals, these non-attendances accounted for approximately £20 million. This figure is indicative to illustrate the scale of the problem and should not be taken to represent the potential for cash releasing savings.

3.3 In both acute and primary care trusts the percentage of people who do not attend their outpatient appointment varies by specialty (Exhibits 10 and 11, page 12).

3.4 In practice, trusts often increase the numbers of patients given appointments to compensate for the ‘wasted’ slots. This can create problems for patients and staff, with longer waits at clinics where the ‘did not attend’ rate (DNA) is lower than expected. A better approach would be for trusts to examine the causes of DNA rates for their clinics and take action to reduce these. In some instances high DNA rates may be linked to the poor management of outpatient bookings or out-of-date patient details. In other cases patients themselves may be responsible for failing to inform the trust that they cannot attend.

11. NHSScotland, Scottish Health Service Costs (“Blue Book”), CSA online, 2002
Exhibit 10
Percentage of patients who did not attend their appointment – acute trusts

Source: Audit Scotland/ISD census, April 2002

Exhibit 11
Percentage of patients who did not attend their appointment – primary care trusts

Source: Audit Scotland/ISD census, April 2002
4.1 During the census week 306 (around one in every 100) scheduled clinics were cancelled. Of these 244 were cancelled with more than 24 hours notice; 62 were cancelled with less than 24 hours notice. This affected 1660 patients (less than 1% of those with booked outpatient appointments). Exhibits 12 and 13 (page 14) show the percentage of patients whose appointments were cancelled by specialty.

4.2 Given the scale of outpatient activity some cancellations are unavoidable. But the reasons for cancelling clinics should be monitored, particularly where patients have already been scheduled to attend. A high cancellation rate will reduce the availability of care and lengthens waiting times.
Exhibit 12
Percentage of patients with cancelled appointments – acute trusts

Source: Audit Scotland/ISD census, April 2002

Exhibit 13
Percentage of patients with cancelled appointments – primary care trusts

Source: Audit Scotland/ISD census, April 2002
Part 5. Developing more flexible services

5.1 Health policy highlights the need for patient centred services through a major programme of service redesign. This includes expanding one-stop clinics and reviewing whether some treatments can be carried out in primary care rather than a hospital setting, or by a different member of the healthcare team.

Time of clinics
5.2 Few clinics are scheduled outside ‘normal’ working hours. Acute services held only 0.5% of clinics outwith the working day (approximately 9 am - 5 pm) and the same percentage of clinics were held at weekends. Primary care services held 2% of clinics outwith the working day, and 0.4% of clinics at weekends.

5.3 Trusts should be able to demonstrate that they are taking account of patient preferences about the timing of appointments. They also need to demonstrate that they are seeking to balance costs and staff constraints.

Location of clinics
5.4 During the census week over 1,500 locations across Scotland were used for outpatient clinics. These locations included hospitals, health centres, GP surgeries, clinics and schools.

5.5 Sixty-five percent of clinics in primary care were held outside a hospital setting with some variation among specialties (Exhibit 14, page 16).

5.6 But more than 90% of acute service clinics took place in hospitals. This may reflect the need to be near equipment for diagnostic tests. In the main, staff other than doctors held the clinics outwith the main hospital setting.

Phasing of clinics through the week
5.7 Everything else being equal, it would be reasonable to expect that one-fifth of weekday clinics would be held on each day of the traditional working week. In practice this is not the case. Clinics across all specialties and all healthcare professionals show a dip in activity on Fridays (Exhibits 15 and 16, pages 16 and 17). In addition, in the acute sector the pattern for obstetrics and gynaecology shows a larger percentage of clinics held on Wednesdays (Exhibit 17, page 17). Clinic managers need to be able to demonstrate that existing patterns of delivery represent the most efficient and effective use of resources.

Exhibit 14
Location of clinics in primary care trusts

Source: Audit Scotland/ISD census, April 2002

Exhibit 15
Day of the week when clinics are held – acute trusts

Source: Audit Scotland/ISD census, April 2002
Exhibit 16
Day of the week when clinics are held – primary care trusts

Percentage of clinics

<table>
<thead>
<tr>
<th>Day of the week</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of clinics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Audit Scotland/ISD census, April 2002

Exhibit 17
Day of the week when clinics are held – acute trusts (obstetrics & gynaecology)

Percentage of clinics

<table>
<thead>
<tr>
<th>Healthcare professional</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of clinics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Audit Scotland/ISD census, April 2002
Part 6. Recommendations

6.1 The data requirements for managing outpatients should be reviewed nationally to develop a minimum data set capable of supporting strategic and operational management needs (para 1.3).

6.2 Trusts should identify their local information requirements and put systems in place to address these. This should be done in the context of the national review (paras 1.7 and 1.8). We recognise that this will be particularly challenging for primary care trusts since they still have many locations without access to electronic systems.

6.3 Trusts should review their follow up arrangements and discharge policies for patients to reduce unnecessary visits to specialist clinics (para 2.9).

6.4 Managers should examine the efficiency of their clinics, for example, through benchmarking (paras 1.7, 1.8 and 2.16).

6.5 Trusts should examine their booking and communication systems to ensure that their administrative processes are fit for purpose. Trusts should also introduce policies for patients who repeatedly do not attend without giving prior notice (para 3.4).

6.6 Trusts should monitor reasons for cancelled clinics and take appropriate action (para 4.2).

6.7 Trusts should review where and when they hold clinics and consider whether some clinics could be organised differently taking into account patients’ needs and preferences. This may involve the use of different approaches to care such as looking at the potential for using specialist GPs, telemedicine or outreach clinics (para 5.3).

6.8 Trusts should examine the phasing of their clinics to ensure best use of their resources (para 5.7).
Appendix 1: National data collection schemes which describe outpatient activity

There are two main sources for data describing outpatient activity – SMR00 and ISD(S).

**SMR00**
The SMR00 scheme is patient based but is required to collect data only about new referrals to consultant-led clinics. There is presently no requirement to collect data about return patient visits excepting, from 1 April 2003, where a procedure is carried out. No data are collected where clinics are led by anyone other than a consultant. This is presently being changed to collect data where the clinic is run by a nurse but only in the special case where the nurse has full legal responsibility for the clinic.

**ISD(S)**
The ISD(S) schemes record the number of attendances by specialty, both new and return, to consultant-led clinics. (The number of new attendances in this scheme should equal the number in the SMR00 scheme.)

For the acute sector, the ISD(S) scheme records the number of new and return contacts with AHPs but not nurses. There is no way of distinguishing contacts as part of a consultant-led clinic from contacts where the clinic is AHP led.

In the PCT contacts may be made with patients on their own, in groups or as family groups. The contact may take place in a health centre, other community setting or in the patient’s home. Each registered patient present counts as an attendance for the purpose of ISD(S) statistical counts. For Psychiatry the counts are extended to include one for every member of a multidisciplinary team seen by the patient and if a relative attends at a psychiatric (and only psychiatric) clinic on behalf of a patient then that counts as an attendance.
Appendix 2: Census data set

Over the week of the census we asked each trust to collect the following information for each clinic:

- location of clinic
- health care professional leading the clinic
- day on which the clinic is held
- timing of the clinic
- clinic specialty group
- number of clinics scheduled
- number of clinics cancelled
  - with more than 24 hours’ notice
  - with less than 24 hours’ notice
- number of patients scheduled to attend – new & all
- number of patients who actually attended – new & all
- number of patients who did not attend – new & all

1. There are two types of clinic:
   - where patients are scheduled to attend an appointment within a distinct time period
   - where patients are able to “drop in” to direct access clinics within a distinct period

Within that definition, we left it to individual trusts to decide how many clinics they ran during the census week.
## Appendix 3: Summary of trust returns

<table>
<thead>
<tr>
<th>Category</th>
<th>Acute</th>
<th>PCT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of clinics scheduled to take place</td>
<td>12,936</td>
<td>13,499</td>
</tr>
<tr>
<td>Number of clinics which took place</td>
<td>12,875</td>
<td>13,254</td>
</tr>
<tr>
<td>Number of patients scheduled to attend</td>
<td>120,451</td>
<td>80,481</td>
</tr>
<tr>
<td>Number of patients who attended</td>
<td>136,694</td>
<td>71,528</td>
</tr>
<tr>
<td>Number of DNAs reported - total patients</td>
<td>16,775</td>
<td>11,736</td>
</tr>
<tr>
<td>Number of new patients scheduled to attend</td>
<td>32,612</td>
<td>9,633</td>
</tr>
<tr>
<td>Number of new patients who attended</td>
<td>42,404</td>
<td>10,448</td>
</tr>
<tr>
<td>Number of DNAs reported - new patients</td>
<td>4,751</td>
<td>1,959</td>
</tr>
<tr>
<td>Number of clinics cancelled with:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; 24 hours notice</td>
<td>52</td>
<td>192</td>
</tr>
<tr>
<td>&lt; 24 hours notice</td>
<td>9</td>
<td>53</td>
</tr>
<tr>
<td>Number of clinics held outwith normal working hours</td>
<td>61</td>
<td>277</td>
</tr>
<tr>
<td>Number of clinics held at weekends</td>
<td>65</td>
<td>52</td>
</tr>
<tr>
<td>Number of clinics held at locations other than main NHS hospitals</td>
<td>808</td>
<td>8,578</td>
</tr>
<tr>
<td>Proportion of clinics held on:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mondays</td>
<td>22.7</td>
<td>20.2</td>
</tr>
<tr>
<td>Tuesdays</td>
<td>20.4</td>
<td>21.8</td>
</tr>
<tr>
<td>Wednesdays</td>
<td>20.5</td>
<td>20.8</td>
</tr>
<tr>
<td>Thursdays</td>
<td>20.4</td>
<td>20.8</td>
</tr>
<tr>
<td>Fridays</td>
<td>16.0</td>
<td>16.4</td>
</tr>
</tbody>
</table>

The percentage of usable information was high – 99% for the acute sector and 95% for the primary care sector. But this does not guarantee either the completeness or accuracy of these data. In particular, we have some reservations about the quality of information on the number of people who did not attend their outpatient appointments in dietetics, psychology and speech therapy clinics.
Outpatients count
Results of a census on outpatient activity