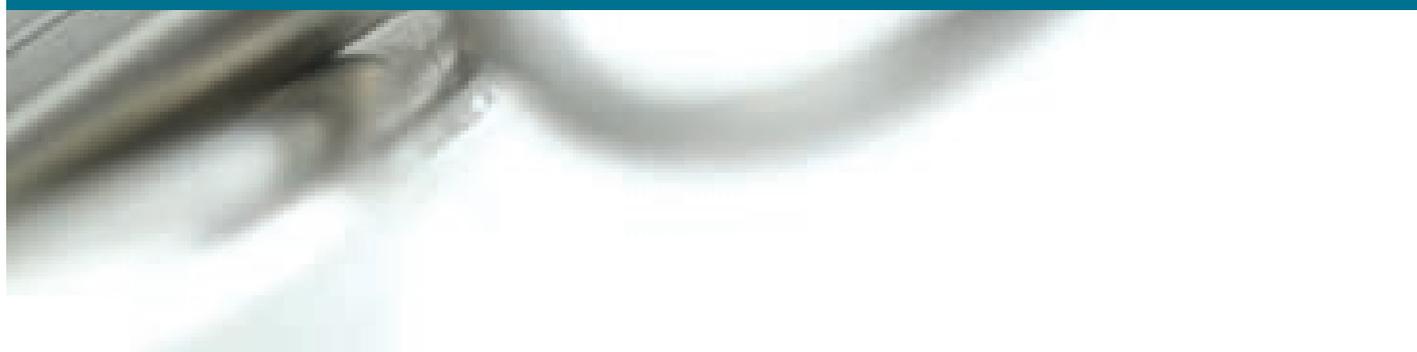


# Day surgery in Scotland

Reviewing progress



Prepared for the Auditor General for Scotland  
September 2008



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# Contents

## **Summary**

**Page 2**

Background

**Page 3**

Key messages

Our study

**Page 5**

## **Part 1. Changes in rates of same-day care and progress against targets**

**Page 6**

Key messages

The rates of same-day care are increasing

NHS boards have made progress against the Scottish Executive's 1998 targets

There remains wide variation in performance among NHS boards

**Page 7**

Geographical location does not explain the variation in rates of same-day care

**Page 8**

Rates of same-day care in Scotland are lower than in England

**Page 9**

Recommendation

**Page 10**

## **Part 2. Cost-effectiveness of same-day care**

**Page 11**

Key message

The NHS in Scotland could potentially free up around £8 million of resources per year

**Page 12**

## **Part 3. Recent developments to improve performance in same-day care**

**Page 13**

Key messages

The British Association of Day Surgery Directory promotes the move to same-day procedures

Better benchmarking information is available but the NHS needs to improve recording of outpatient procedures

**Page 14**

Recommendations

**Page 15**

## **Appendix 1. The 'basket' of day surgery procedures**

**Page 16**

## **Appendix 2. NHS board performance for 11 of the more common procedures in the basket**

**Page 18**

## **Appendix 3. Examples of findings using BADS Information System**

**Page 20**

## **Appendix 4. Comparison of the definitions used by the BADS Directory and the BADS Information System**

**Page 22**

# Summary



Day surgery promotes more efficient use of resources and benefits for patients and staff.



## Background

### Benefits of day surgery

**1.** In 1992, the Royal College of Surgeons of England concluded that day surgery is better than inpatient care for many conditions and that it can be an effective way of reducing waiting times.<sup>1</sup> Day surgery should be the preferred option where it provides better and more acceptable care for patients, or where the care is of the same standard but the cost is lower.

The Scottish Government has set out its aim of delivering efficiency savings in the NHS through improving day surgery performance.<sup>2</sup> Under this efficiency programme, the Scottish Government aims to achieve a one per cent improvement in consultant-led productivity partly through day surgery being supported as the norm.

**2.** There are a range of benefits from day surgery ([Exhibit 1](#)).

**3.** We use the terms day surgery and same-day care in this report:

- Day surgery is surgery where the patient is admitted and discharged on the same day – there is no overnight stay.
- Same-day care incorporates both day surgery and surgical procedures carried out in an outpatient setting. The Scottish Executive issued targets for same-day care and

## Exhibit 1

### Benefits of day surgery

Day surgery promotes more efficient use of resources, improved clinical outcomes and benefits for both patients and staff.

<p><b>More efficient use of resources</b></p> <ul style="list-style-type: none"> <li>• Greater theatre utilisation as day surgery is planned well in advance and has a high proportion of 'standard' cases</li> <li>• Reduction in cost as no overnight stay is required. This has been estimated as £237 per patient<sup>1</sup></li> <li>• Frees up inpatient beds</li> <li>• Reduced waiting lists</li> <li>• Improved utilisation of operating units</li> <li>• Reduced cancellations</li> <li>• Increased capacity (more bed days available)</li> </ul>	<p><b>Improved clinical outcomes</b></p> <ul style="list-style-type: none"> <li>• Promotes speedier recovery</li> <li>• Leads to better outcomes as patients are more likely to receive care that has been acknowledged as best practice</li> <li>• The risk of hospital acquired infection is reduced (there is evidence of lower infection rates in day case units)</li> </ul>
<p><b>Patient experience</b></p> <ul style="list-style-type: none"> <li>• Patients prefer to be treated on a day case basis with minimum disruption to their lives</li> <li>• Waiting times are reduced due to better use of hospital capacity</li> <li>• Care provided through a patient-focused pathway</li> <li>• Minimally invasive procedures</li> <li>• Much lower risk of hospital cancellations and guaranteed admission dates</li> <li>• Increased patient satisfaction</li> </ul>	<p><b>Benefits for staff</b></p> <ul style="list-style-type: none"> <li>• Flexible working</li> <li>• Improved training opportunities</li> <li>• Involved in all aspects of the patient pathway</li> <li>• Enhanced roles in pre-operative assessment and nurse-led discharge</li> <li>• Improved job satisfaction</li> <li>• Clear start and finish times for shifts</li> <li>• Operating lists are organised in advance</li> <li>• Reduced delays and cancellations due to lack of beds</li> </ul>

<sup>1</sup> This cost was estimated by Information Services Division (ISD) and the Scottish Executive's Improvement and Support Team and reported in *The Planned Care Improvement Programme – Day Surgery in Scotland*, Scottish Executive, November 2006. This cost is broadly in line with the £200 per patient estimated by the Department of Health using Reference Cost returns in 2002/03.

Source: *Planned Care Improvement Programme – Day Surgery in Scotland*, Scottish Executive, November 2006. The evidence was obtained from the Healthcare Commission and the Modernisation Agency.

<sup>1</sup> *Guidelines for Day Case Surgery*, Royal College of Surgeons of England, revised edition March 1992.

<sup>2</sup> *Efficient Delivery Plans – March 2008, for the 2008-11 Efficiency Programme*, Scottish Government, 15 April 2008.

## Exhibit 2

### Developments in day surgery and same-day care in Scotland

Early 1990s	The Audit Commission in England developed a basket of 20 common surgical procedures which were at that time being treated as either day surgery or inpatient surgery. <sup>1</sup> The Scottish Office Audit Unit issued a report on day surgery in Scotland and suggested targets that the NHS in Scotland should adopt for the basket of common procedures.
1994	The Scottish Health Service Management Executive issued targets for day surgery rates to be achieved by 1997. Targets were set for individual procedures.
1997 and 1998	The Accounts Commission published reports on day surgery in 1997 and 1998. These looked at day surgery rates for a Scottish basket of 19 common surgical procedures against their 1997 targets and identified scope for improvement. <sup>2</sup>
1998	The Scottish Office Health Department adopted the revised targets recommended in the Accounts Commission's 1997 report. <sup>3</sup>
2000	The Audit Commission basket was revised to include 25 procedures (see Exhibit 8 on page 10).
2004	Audit Scotland issued a progress report on performance against the Scottish basket of 19 procedures, 18 of which were in the original basket developed by the Audit Commission. Responsibility for monitoring the English basket of procedures transferred from the Audit Commission to the Healthcare Commission.
2005	<i>Delivering for Health</i> identified day surgery treatment (rather than inpatient surgery) as the norm for planned procedures. <sup>4</sup>
2006	In September 2006, the then Health Minister restated the Scottish Executive's commitment to a 75 per cent same-day care target across Scotland. <sup>5</sup> This was led by the Scottish Government Health Directorates' Planned Care Programme.

#### Notes:

- 1 The Audit Commission developed the basket of procedures, with help from the British Association of Day Surgery (BADs).
- 2 The Scottish basket did not include Dilatation & Curettage (D&C) and Myringotomy as there was a body of opinion that the two are often used when alternative treatments would be more appropriate. The Scottish basket also splits Inguinal hernia between procedures undertaken on adults and those undertaken on children.
- 3 The targets, a description of the various procedures and the Office of Population Censuses and Surveys' Classification of Surgical Operations and Procedure (OPCS) and International Classification of Disease (ICD) codes are given in Appendix 1.
- 4 *Delivering for Health*, Scottish Executive, 2005.
- 5 Seventy-five per cent is a long accepted figure. It was first highlighted in the Department of Health's 2000 NHS Plan and subsequently used in the Department of Health's Day Surgery Operational Guide 2002, the Healthcare Commission report of 2005 and, most recently, by the Scottish Executive in *The Planned Care Improvement Programme – Day Surgery in Scotland*, 2006.

Source: Audit Scotland

the HEAT target for 2007/08 onwards covers both day surgery and outpatient procedures. HEAT targets are the national performance indicators for the NHS.<sup>3</sup>

4. Previous reports by Audit Scotland examined the rates of day surgery in Scotland but did not consider procedures carried out in an outpatient setting. In this report we compare performance in same-day care and therefore include both day surgery and surgical procedures carried out in an outpatient setting. This is to reflect change in clinical practice. To ensure we make like-for-like comparisons with performance in previous years, we have revised figures from previous reports to include surgical procedures undertaken in outpatient settings. The rest of this report therefore makes comment on the performance of surgical procedures carried out as same-day care. This report is based on the best information available although the recording of outpatient activity has historically been patchy and needs to urgently improve (Part 3). Audit Scotland has commented on this in previous reports.

More surgical procedures are being carried out in outpatient settings

5. There have been a number of developments in day surgery and a move towards same-day care over the past few years (Exhibit 2). Three reports on day surgery have been published by the Accounts Commission and Audit Scotland since 1997 which compare performance against targets for a basket of surgical procedures.<sup>4,5</sup>

3 HEAT's key objectives are Health Improvement for the people of Scotland, Efficiency and Governance Improvements, Access to Services, and Treatment Appropriate to Individuals. HEAT consists of a number of key targets and performance measures aimed at helping to deliver the four overall objectives.

4 *Better by the day? Day surgery in Scotland*, Accounts Commission, 1997 and *Better by the day - update*, Accounts Commission, 1998.

5 *Day surgery in Scotland – reviewing progress*, Audit Scotland, 2004.

A 75 per cent target has been set for a wider group of procedures

**6.** In 2006, the British Association of Day Surgery (BADs) developed a Directory of Procedures. This is much wider than Scotland's existing basket of 19 surgical procedures and consists of about 160 procedures. The basket of procedures represents about 30 per cent of all surgical procedures while the Directory represents about 50 per cent. A proportion of each procedure can be carried out in a procedure room on an outpatient basis or as day surgery. The Scottish Government now has an overall target of 75 per cent of elective surgical procedures being carried out as same-day care and monitors this through the NHS national performance system.

**7.** In 2007, the Scottish Government Health Directorates' Improvement and Support Team developed a BADs Information System which allows easy analysis of performance using the BADs Directory. These initiatives are discussed in [Part 3](#). As they are still under development, this report measures progress against the individual targets for the existing Scottish basket of 19 procedures.

### Key messages

- The percentage of surgery undertaken as same-day care continues to rise. In 2006/07, the 1998 targets were achieved for ten of the basket of 19 procedures across Scotland. This is an improvement on the 2004 figures.
- The percentage of surgical procedures carried out as same-day care varies considerably among NHS boards and is not explained by differences in location or

in patients' circumstances. There is also considerable variation within NHS boards in the performance of different procedures.

- In general, Scotland continues to have lower rates of same-day care than England.
- If the Scottish target of 75 per cent of surgical procedures being carried out as same-day care procedures were achieved, we estimate that over 34,000 extra same-day procedures would be carried out, freeing up around £8 million per year.
- Over the last two years the Scottish Government Health Directorates have taken a more active approach to encouraging NHS boards to increase same-day care. It has adopted the British Association of Day Surgery Directory of Procedures suitable for day surgery and produced an information system to allow benchmarking. With the introduction of same-day care as the main measure there is an urgent need for NHS boards to improve their recording of outpatient activity.

### Our study

**8.** The purpose of this data review is to compare levels of same-day care for the existing basket of 19 procedures against:

- previous performance
- Scottish Executive targets set in 1998
- levels of same-day care in England.

**9.** The report also comments on how the Health Directorates have been developing same-day care since our last report in 2004.

**10.** The basket of procedures referred to in this report is the basket adopted by the Scottish Health Service Management Executive in 1994. The exception is where we compare Scotland's performance with England using the wider basket of procedures adopted by the Healthcare Commission ([paragraph 22](#)).<sup>6</sup>

**11.** The Information Services Division (ISD) of NHS National Services Scotland provided the data for the review. We report on performance across the 14 NHS boards.<sup>7</sup> While surgical procedures are carried out in the Golden Jubilee National Hospital, we have not compared this hospital's performance with other NHS boards as they are not directly comparable.<sup>8</sup>

**12.** Prior to September 2007, the Scottish Administration was generally referred to as the Scottish Executive. It is now called the Scottish Government. When dealing with the earlier period this report refers to the Scottish Executive. Recommendations for the future refer to the Scottish Government.

<sup>6</sup> When it was established in 2004, the Healthcare Commission took over responsibility for measuring the rates of day surgery in England and Wales from the Audit Commission.

<sup>7</sup> For individual boards, performance is noted in this report where a board carried out more than 100 operations during 2006/07 for each of the surgical procedures in the basket.

<sup>8</sup> The Golden Jubilee National Hospital is a special health board. It supports other NHS boards in reducing their waiting times by receiving referrals from across the country.

# Part 1. Changes in rates of same-day care and progress against targets



The rates of same-day care are increasing but there is still variation among NHS boards.



## Key messages

- The percentage of surgery undertaken as same-day care continues to rise. In 2006/07, the 1998 targets were achieved for ten of the basket of 19 procedures across Scotland. This is an improvement on the 2004 figures.
- The percentage of surgical procedures carried out as same-day care varies considerably among NHS boards and is not explained by differences in location or in patients' circumstances. There is also considerable variation within NHS boards in the performance of different procedures.
- In general, Scotland continues to have lower rates of same-day care than England.

### The rates of same-day care are increasing

**13.** Since our 2004 report, the Health Directorates have issued targets for same-day care cases rather than day surgery. In this report we have adjusted day case rates reported previously to include outpatients so that we can compare performance over time (paragraph 4). Our data therefore include surgical procedures carried out as day surgery or in an outpatient setting.

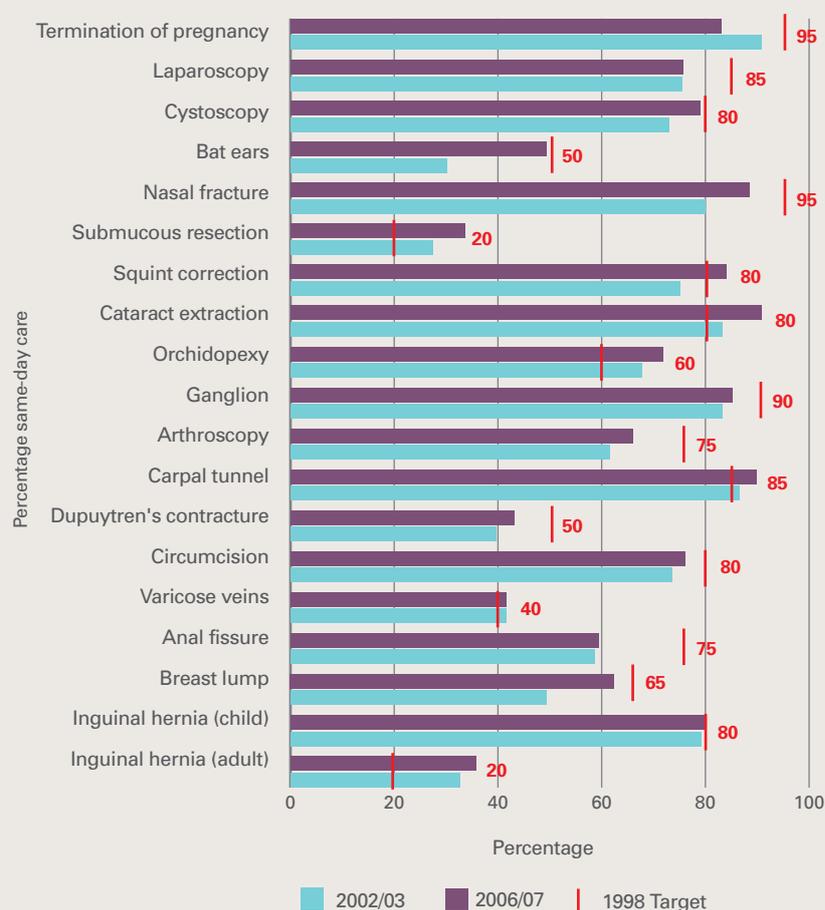
**14.** The rates of same-day care continue to increase (Exhibit 3). The percentage of procedures performed as same-day care:

- reduced for two procedures (varicose veins and termination of pregnancy)
- increased for 17 procedures, seven of which increased by more than five per cent.

## Exhibit 3

Change in rates of surgical procedures undertaken as same-day care between 2002/03 and 2006/07

The rates of same-day care have improved for most procedures.



Source: ISD

### NHS boards have made progress against the Scottish Executive's 1998 targets

**15.** In 2006/07, the NHS in Scotland as a whole met the targets set by the Scottish Executive in 1998 for ten of the 19 procedures.<sup>9</sup> This compares with seven procedures in 2002/03. All NHS boards improved compared against 2002/03 performance.

### There remains wide variation in performance among NHS boards

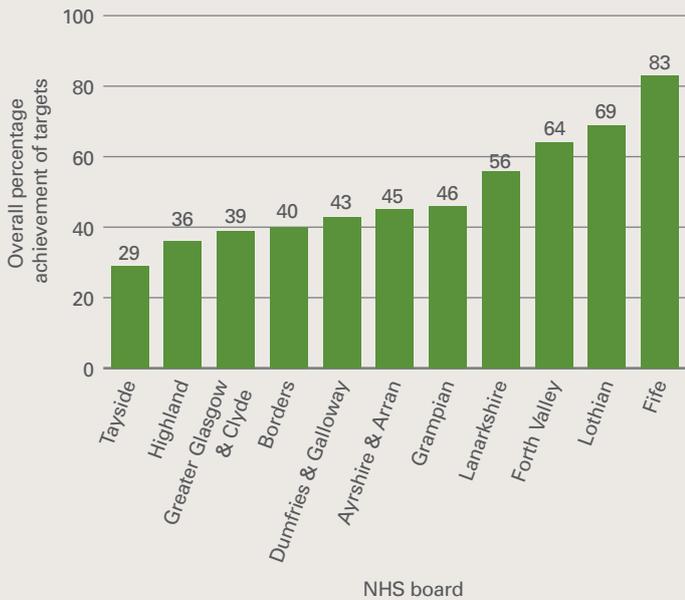
**16.** The Scotland-wide position disguises wide variation among NHS boards in achieving targets for same-day care in 2006/07. The best performing board, NHS Fife, achieved over 80 per cent of relevant targets. NHS Tayside achieved less than 30 per cent (Exhibit 4, overleaf). Appendix 2 shows individual board performance for 11 of the more common operations in the basket of procedures. The figures include only those procedures where a board undertook more than 100 operations in 2006/07.

<sup>9</sup> Seven of the procedures have fully met their percentage targets and a further three procedures are within one per cent of their targets. Allowing for small margins of error in the data we have considered any procedure within one per cent of its target to have met that target.

### Exhibit 4

#### Performance against 1998 targets for same-day care

The exhibit shows, for each NHS board, the percentage of procedures where 1998 targets for same-day care have been met, and highlights the wide variation in performance.



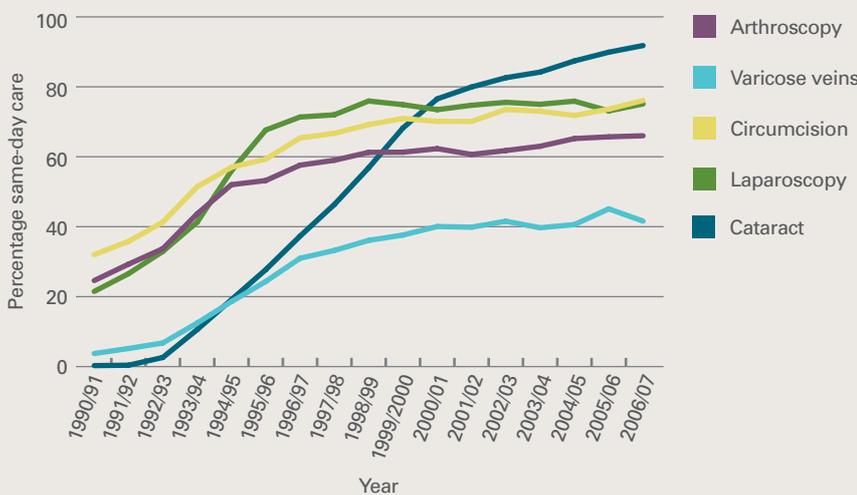
Note: These figures include only those procedures where a board undertook more than 100 operations in 2006/07. This means that the number of procedures reported above for each board varies.

Source: ISD

### Exhibit 5

#### Trends in same-day care rates for selected procedures

Increases in the rates of same-day care are slowing down for some selected procedures.



Note: These five procedures have been highlighted here as they are done in relatively large numbers and led by different specialties.

Source: ISD

**17.** The variation is considerable and it cannot be fully explained by location or differences in patients' circumstances. There is also considerable variation within boards in performance between procedures, for example, NHS Dumfries and Galloway has the highest rate for cataract extraction but the lowest for arthroscopy (Appendix 2).

**18.** The general trend is an increase in same-day care (Exhibit 3). Same-day care for some procedures is still increasing but the rate of increase is slower than in the 1990s (Exhibit 5).

**19.** The slowing of the increase in same-day care may be because some hospitals have reached an optimum level. However, some boards with low rates of same-day care have achieved little improvement, while others with high rates have continued to increase. The change in rates of same-day care for varicose veins and arthroscopy between 1998/99 and 2006/07 are shown in Exhibits 6 and 7. This suggests that some boards have not reached their optimum level of same-day care. These two procedures were chosen for illustrative purposes as they are carried out in large numbers (3,700 and 8,300 cases per year respectively) and are from different specialties.

#### Geographical location does not explain the variation in rates of same-day care

**20.** The rural nature of some boards in Scotland could potentially be a barrier to achieving high rates of same-day care, since extra travel time means some people may need to be treated as inpatients rather than day cases. However, there are examples of rural boards undertaking high percentages of procedures as same-day care and exceeding the Scottish average. For example, NHS Dumfries and Galloway's and NHS Orkney's same-day care percentages for cataracts are among the highest in Scotland (Appendix 2). The variation in performance among rural boards,

including some high performers, suggests that geographical location is not the major determinant of performance.

**21.** Previous audits found that the main barriers to optimum rates of day surgery are:

- inappropriate and inadequate use of day surgery units
- poor management and organisation of day surgery units
- some clinicians' preferences for inpatient surgery.<sup>10</sup>

### Rates of same-day care in Scotland are lower than in England

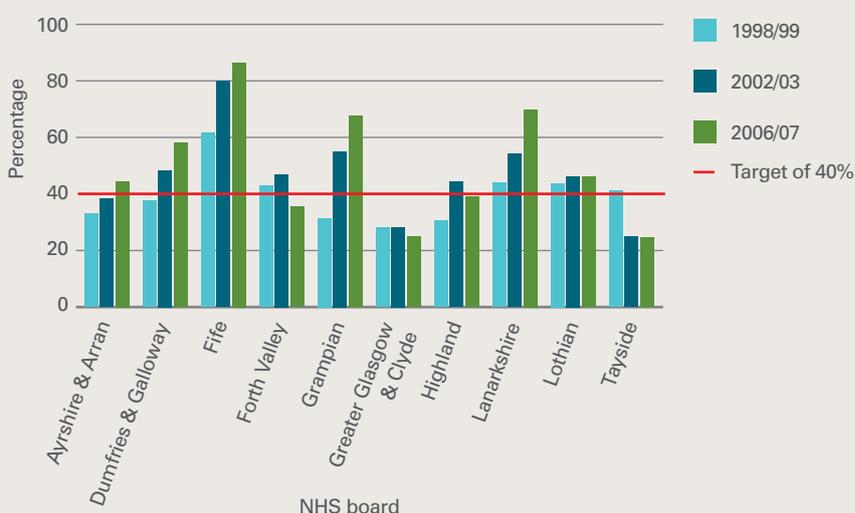
**22.** We compared the 2006/07 same-day care performance of Scottish hospitals with English hospitals for the 25 procedures which make up the current basket of day surgery procedures used by the Healthcare Commission (Exhibit 8, overleaf).<sup>11</sup> Few of the procedures are conducted as outpatient procedures and, where they are, it makes little difference to the variation between Scotland and England. For most procedures, Scottish same-day care rates are lower than those for England which indicates that there is still considerable opportunity for increasing same-day care rates in Scotland. Overall, Scotland has lower rates of same-day care than England:

- The percentage of same-day care was similar for eight procedures.<sup>12</sup>
- English hospitals carry out a higher percentage of same-day care in 15 procedures.
- Scottish hospitals carry out a higher percentage of same-day care in two procedures.

### Exhibit 6

#### Change in rates of same-day care for varicose veins

There is variation among boards in the change in rates of same-day care for varicose veins.



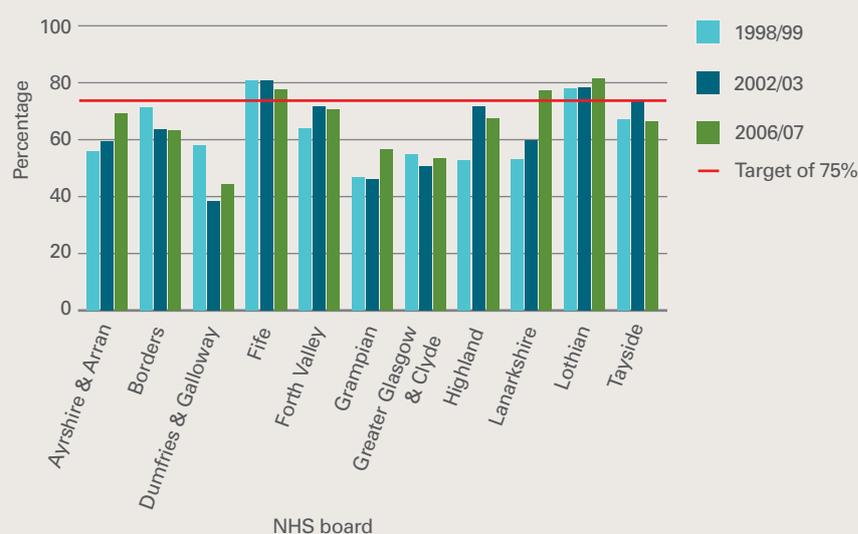
Note: These figures include only boards that undertook more than 100 operations in 2006/07.

Source: ISD

### Exhibit 7

#### Change in rates of same-day care for arthroscopy

There is variation among boards in the change in rates of same-day care for arthroscopy.



Note: These figures include only boards that undertook more than 100 operations in 2006/07.

Source: ISD

10 *Day surgery in Scotland: reviewing progress*, Audit Scotland, 2004; *Better by the day – update*, Accounts Commission, 1998; *Better by the day? Day surgery in Scotland*, Accounts Commission, 1997.

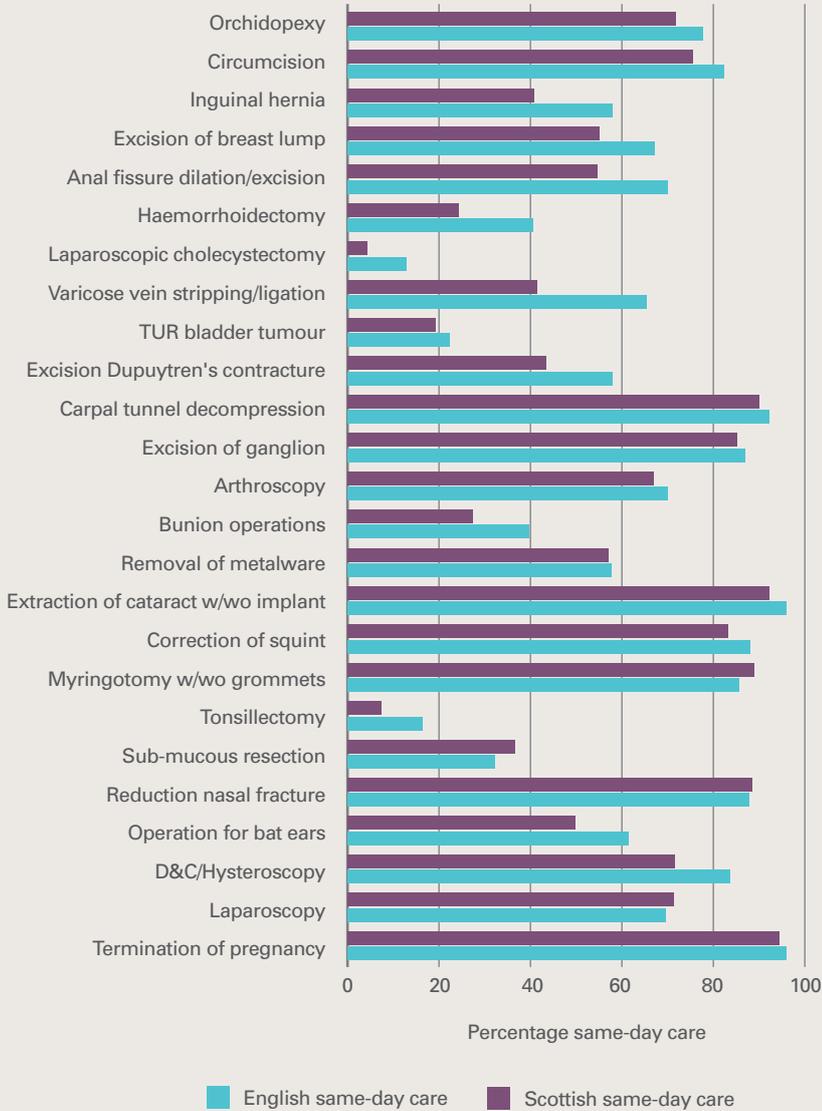
11 In addition to the 19 procedures in the Scottish basket (Appendix 1), the Healthcare Commission also measures performance against: removal of metalware; bunion operations; TUR bladder; laparoscopic cholecystectomy; haemorrhoidectomy; dilatation and curettage; and myringotomy. It does not split inguinal hernia between adults and children.

12 Similar in this comparison is where the difference is less than three per cent.

### Exhibit 8

#### Rates of same-day care in Scotland and England 2006/07

For most procedures, Scottish same-day care rates are lower than those for England.



Source: Scotland figures from ISD; England figures based on figures supplied by Hospital Episode Statistics, The NHS Information Centre for Health and Social Care

### Recommendation

- NHS boards should monitor the levels of same-day surgery by hospital and specialty, establish where same-day case rates are low and take action as appropriate.

# Part 2. Cost-effectiveness of same-day care



About £8 million of resources could be freed up each year if boards met the 75 per cent target for same-day care.



### Key message

- If the Scottish target of 75 per cent of surgical procedures being carried out as same-day care procedures was achieved, we estimate that over 34,000 extra same-day care procedures would be carried out, freeing up around £8 million per year.

**23.** For appropriate procedures same-day care can provide better care and be more cost-effective than inpatient treatment. A number of studies since the 1970s have shown that, managed well, day surgery is cheaper than inpatient surgery.

### The NHS in Scotland could potentially free up around £8 million of resources per year

**24.** The potential for savings with increased use of same-day care is sizeable. The Scottish Executive calculated that around an extra 40,000 inpatient cases would need to be converted to day cases or outpatients to achieve the target of 75 per cent of procedures carried out on a same-day basis. This target was set by both the Scottish Executive and the Department of Health in England. The Scottish Executive calculated that achieving the 75 per cent target would result in efficiency savings of around £9.5 million per annum in Scotland.<sup>13, 14</sup> These savings are based on 2004/05 figures.<sup>15</sup>

**25.** Using the same methodology as the Scottish Executive but updating this with 2006/07 figures, we estimate around an extra 34,000 inpatient cases would need to be converted to day cases or outpatients to achieve the 75 per cent target. This could potentially free up £8.1 million annually. Achieving this saving could make a significant contribution to the Scottish

Government's aim of delivering efficiency savings in the NHS by increasing consultant-related activity through supporting day surgery as the norm.<sup>16</sup>

### Releasing resources

**26.** If same-day care directly substitutes for inpatient surgery and inpatient beds are reduced, then cost savings will be achieved. However, in many cases these beds will be made available for other patients. If this happens, although cost savings are not achieved, resources are released that can be put to alternative use. For example, much of the surgical team's time will transfer from inpatient to day case treatment. In this situation total costs may stay the same or rise but more patients will have been treated in a less expensive way so the cost per case will fall. Both these scenarios are cost-effective; the reduction in the use of inpatient beds achieves a real cost reduction and the substitution of day case treatment for inpatient treatment makes the hospital more efficient.

**27.** A good example of how day surgery leads to greater efficiency is cataract removal. Between 1990/91 and 1996/97 the number of cataract removals increased from 10,000 to 16,000. Patients receiving day surgery accounted for the 6,000 increase while the number of inpatients remained at 10,000. In other words, there was no substitution of day surgery for inpatient activity but all the increase was day surgery activity.

**28.** Between 1998/99 and 2006/07 the number of cataract removals increased from 19,000 to 30,000, while the number of inpatient cases dropped from 8,500 to 2,300. The increase in day surgery cases in this period therefore not only accounted for the total increase in cases but also directly substituted for inpatient cases, allowing inpatient numbers to drop by over 6,000.

13 The readily identifiable difference in costs between inpatient and day cases is estimated at £237 for overnight accommodation.

14 *The Planned Care Improvement Programme – Day Surgery in Scotland*, Scottish Executive, November 2006.

15 *The Planned Care Improvement Programme – Day Surgery in Scotland*, Scottish Executive, November 2006.

16 *Efficient Delivery Plans – March 2008, for the 2008-11 Efficiency Programme*, Scottish Government, 15 April 2008.

# Part 3. Recent developments to improve performance in same-day care



Boards need to get better at recording outpatient activity.



## Key messages

- Over the last two years the Health Directorates have taken a more active approach to encouraging NHS boards to increase same-day care. They have adopted the British Association of Day Surgery Directory and produced an information system to allow benchmarking.
- With the introduction of same-day surgery as the main measure in the BADS Information System and in the HEAT targets, there is an urgent need for NHS boards to improve their recording of outpatient activity.

### The British Association of Day Surgery Directory promotes the move to same-day procedures

**29.** Since Audit Scotland's last update report in 2004, both the British Association of Day Surgery (BADS) and the Health Directorates have taken action to promote the use of same-day care. The Health Directorates have also worked to improve recording and performance management.

**30.** BADS produced its first Directory of Procedures which are suitable for same-day care in 2006. This covers approximately 160 procedures and sets challenging targets for the percentage of procedures carried out in a wider variety of day care settings such as procedure rooms. The Directory is updated annually and so reflects changes in practice.

**31.** The Directory is one of the tools that the Health Directorates' Improvement and Support Team

promoted through its Planned Care Improvement Programme. One of the objectives of the programme was for same-day care rather than inpatient surgery to be the norm for planned procedures. While the Planned Care Improvement Programme ended in March 2008, new programmes are now under way which aim to build on this.<sup>17</sup>

### Better benchmarking information is available but the NHS needs to improve recording of outpatient procedures

**32.** In November 2006, the Improvement and Support Team published *The Planned Care Improvement Programme – Day Surgery in Scotland*.<sup>18</sup> This introduced the BADS Directory and included comments on understanding and measuring current performance (making use of both the existing baskets of procedures and the BADS Directory). The guidance recognised that 'Essential to increasing the day case rate in Scotland to 75 per cent is the ability to demonstrate the improvements that have taken place and where these improvements have been made'.

**33.** The Planned Care Improvement Programme promoted improvements in gathering data for planning and performance management. This included gathering information on outpatients, day case and inpatient treatment on a consistent basis and measuring same-day care, which combines day surgery and outpatient rates. These developments will allow the boards' progress in shifting activity from inpatient to day case and day case to outpatient to be monitored.

**34.** The Improvement and Support Team developed and refined the BADS Information System and issued

it to NHS boards. It provides analysis of all the Directory procedures including baseline performance in relation to the targets in the 2006 Directory. The system allows comparison at Scotland, board, hospital, specialty and individual procedure levels. It also allows comparison against case mix adjusted targets. Appendix 3 gives two examples of the types of information that can be produced using this information system.

**35.** The Information System groups procedures as same-day care (outpatient and day case), reflecting moves to carry out more procedures in outpatient settings.<sup>19</sup> Recording of inpatient and day case procedures is generally accurate but recording in outpatient and some other settings has historically been patchy. With the introduction of same-day care as the main measure in the information system, NHS boards must improve recording of outpatient activity as a matter of urgency.

**36.** In 2003, Audit Scotland published a report which stated that much of the outpatient activity of the NHS was not being recorded and our 2004 report on day surgery again highlighted this as an area for action.<sup>20</sup> ISD has undertaken work since then to improve recording of outpatient activity. In October 2006 it provided guidance to the NHS on procedure recording and offers continuing support and guidance as and when required.<sup>21</sup>

**37.** In 2008, the Scottish Government updated the national performance target for 2008/09 to 2010/11 to 75 per cent of all elective surgical procedures to be carried out as same-day care. It has worked with ISD to ensure that the same data set and

<sup>17</sup> This was one of four programmes being led by the Health Directorates' Improvement and Support Team until the end of March 2008 to take forward issues raised under *Delivering for Health*. Three new programmes are now under way including the 18 Weeks Service Redesign and Transformation Programme which will continue to develop the work on same-day care undertaken as part of the Planned Care Improvement Programme.

<sup>18</sup> *The Planned Care Improvement Programme – Day Surgery in Scotland*, Scottish Executive, November 2006.

<sup>19</sup> A comparison of categories used by the BADS Information System and the BADS Directory is shown in Appendix 4.

<sup>20</sup> *Outpatients count – results of a census on outpatient activity*, Audit Scotland, August 2003.

<sup>21</sup> *Recording of procedures and operations performed on outpatients*, ISD, 30 September 2006.

definitions exist both in the national performance target and the BADS Information System.

**38.** The BADS Information System is the first major change in performance measurement of day surgery rates for over ten years and provides more comprehensive measurement of same-day care. It allows managers and clinicians to monitor performance and identify where changes in practice/management have resulted in positive change and where potential for improvement still exists. This should help boards to meet the new 75 per cent national performance target.

### Recommendations

- There is an urgent need for the Scottish Government Health Directorates, NHS boards and ISD to agree how best to ensure accurate and complete recording of surgical procedures undertaken in an outpatient setting.
- All NHS boards should adopt the BADS Information System.
- To keep up the momentum in improving performance in same-day care, the Scottish Government Health Directorates should continue to:
  - maintain and develop the BADS Information System
  - monitor the progress of individual NHS boards in developing same-day care
  - monitor performance using both BADS Information System and the basket of procedure

# Appendix 1.

## The 'basket' of day surgery procedures

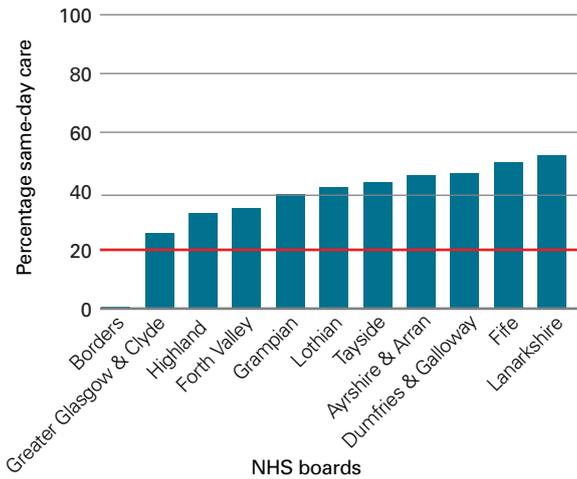
Current Scottish basket of 19 day surgery procedures	
1 and 2. Inguinal hernia operations: repair of a rupture in the groin (adults and children)	This operation is to remove an outpouching of the abdominal sack. In children it is usually sufficient to tie off the sack (herniotomy) but in adults it is also necessary to repair the weakness in the muscles by using a darn of strong thread or wire (herniorraphy). Although these are technically correct terms, both operations are commonly referred to as 'hernia repair'. Specialties usually performing this procedure are General Surgery and Paediatric Surgery. <i>Main Operation is T19, T20 or T21</i>
3. Excision of breast lump	The operation may consist of removing the whole lump or only part of it. Sometimes, if it is thought likely to be cancer, the biopsy can be examined immediately using a microscopy technique called 'frozen section'. In this case, the intention may be to proceed straightaway to a mastectomy (breast removal) if the result confirms cancer, and such cases will not be day cases. The specialty usually performing this procedure is General Surgery. <i>Main Operation is B32 or B283</i>
4. Anal fissure dilatation or excision	Treatment for a tear of the bowel lining just inside the anus. Anal dilatation is also used in the absence of a fissure as a treatment for haemorrhoids. The specialty usually performing this procedure is General Surgery. <i>Main Operation is H54, H562 or H564</i>
5. Varicose vein stripping or ligation	The removal or tying off of tortuous veins in the leg. The specialty usually performing this procedure is General Surgery. <i>Main Operation is L85 or L87</i>
6. Cystoscopy, diagnostic and operative	Inspection of the inside of the bladder to establish a diagnosis and/or carry out simple procedures. The specialty usually performing this procedure is Urological Surgery. <i>Main Operation is M28, M29, M30, M42, M43, M44, M45, M76, M77, M32.1, M32.2 or M32.3</i>
7. Circumcision	The cutting off of the foreskin or prepuce. Specialties usually performing this procedure are General Surgery, Urological Surgery and Paediatric Surgery. <i>Main Operation is N303</i>
8. Excision of Dupuytren's contracture	Removal of contracted fibrous tissue (fascia) under the skin of the palm. The specialty usually performing this procedure is Orthopaedic Surgery. <i>Main Condition is M720 with Main Operation T52 or T54</i>
9. Carpal tunnel decompression	A nerve, called the median nerve, runs down the arm to supply some of the muscles and skin sensation in the hand. Sometimes it becomes compressed where it passes through the wrist, under a band of fibrous tissue. The treatment is to make an incision at the wrist and release the nerve. The specialty usually performing this procedure is Orthopaedic Surgery. <i>Main Operation is A65</i>

10. Arthroscopy – any joint diagnostic and operative	Inspection of the inside of a joint, most commonly the knee. The specialty usually performing this procedure is Orthopaedic Surgery. <i>Main Operation is W82, W83, W84, W85, W86, W87 or W88</i>
11. Excision of ganglion	Removal of the outpouching of the lining of a small joint. The specialty usually performing this procedure is Orthopaedic Surgery. <i>Main Operation is T59 or T60</i>
12. Orchidopexy	An operation to correct undescended testes, usually in children aged 2-8 years. It is very rare in adults. Specialties usually performing this procedure are General Surgery, Urological Surgery and Paediatric Surgery. <i>Main Operation is N08 or N09</i>
13. Cataract extraction, with or without implant	Removal of an opacified lens from the eye sometimes including the insertion of an artificial lens. The specialty usually performing this procedure is Ophthalmology. <i>Main Condition is H25, H26, H280, H281 or H282 with Main Operation C71, C72, C73, C74, C75 or C77</i>
14. Correction of squint	A squint is caused by disturbance to the balance of pull of the six muscles which move the eyeball in its socket. Correction involves re-positioning of the muscles on the eyeball to reduce the effect of some by recession and increase the effect of others by resection or shortening. The specialty usually performing this procedure is Ophthalmology. <i>Main Condition is H49 or H50 with Main Operation C31, C32, C33, C34 or C35</i>
15. Submucous resection	An incision is made in the mucous membrane covering the septum and misplaced cartilage and bone are then cut away. The specialty usually performing this procedure is ENT Surgery. <i>Main Operation is E04, E031 or E036</i>
16. Reduction of nasal fracture	The realignment of displaced bones following a broken nose. The specialty usually performing this procedure is ENT Surgery. <i>Main Operation is V092</i>
17. Operation for 'bat' ears	The removal of skin and soft tissue from behind the ears to allow the ear to sit back flatter against the head. The specialty usually performing this procedure is Plastic Surgery. <i>Main Operation is D033</i>
18. Laparoscopy, with or without sterilisation	The inspection of the abdominal cavity sometimes including blocking the 'tubes' from the ovaries to the womb. The specialty usually performing this procedure is Gynaecology. <i>Main Operation is Q35, Q36, Q38, Q39, Q41, Q49, Q50, Q371 or T439</i>
19. Termination of pregnancy	Removal of an intra-uterine pregnancy through the neck of the womb. The specialty usually performing this procedure is Gynaecology. <i>Main Condition is O045, O046, O047, O048 or O049 with Q10, Q11 or Q14 as Main Operation or Other Operation 1</i>

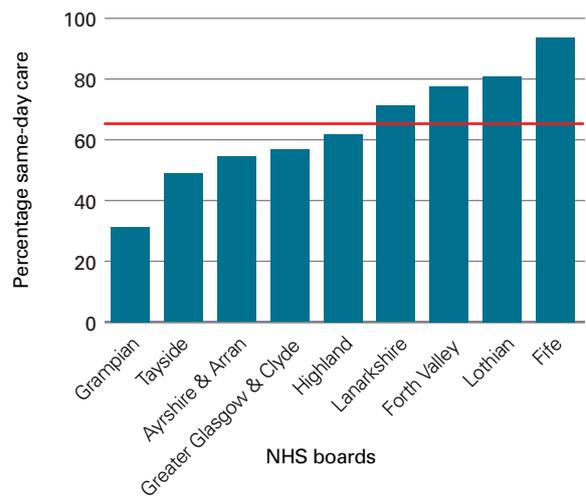
# Appendix 2.

## NHS board performance for 11 of the more common procedures in the basket<sup>1</sup>

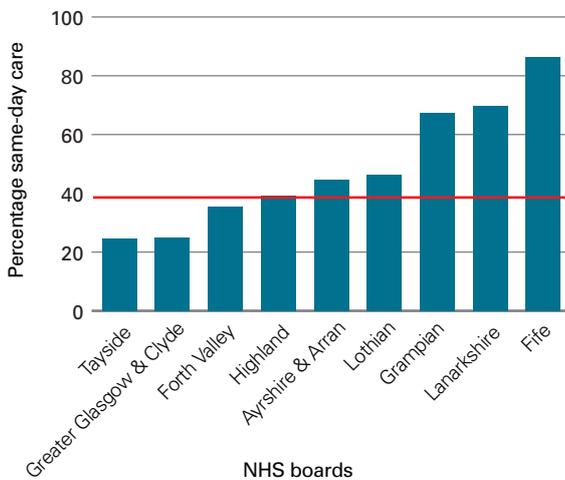
Inguinal hernia - adult (1998 target 20%)



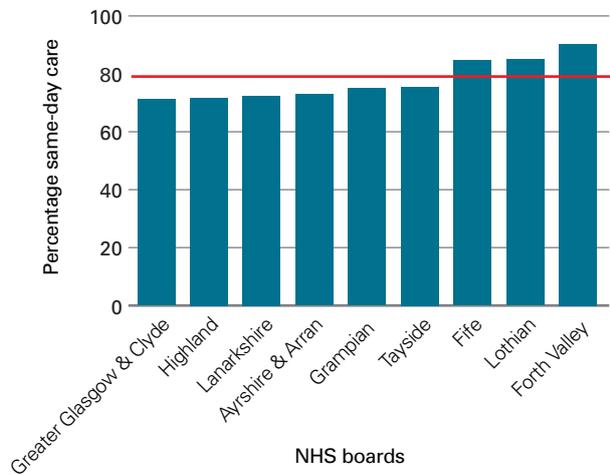
Breast lump (1998 target 65%)



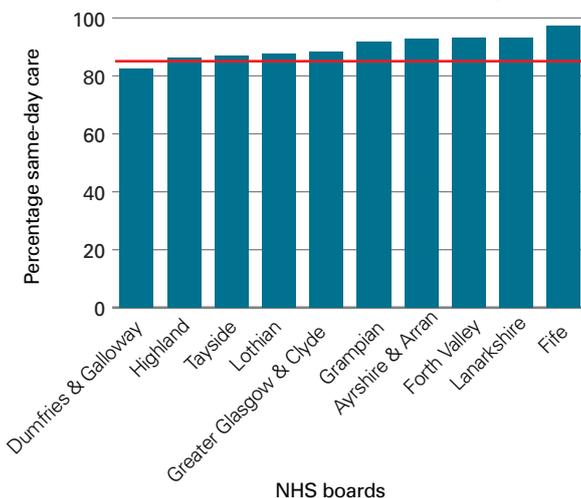
Varicose veins (1998 target 40%)



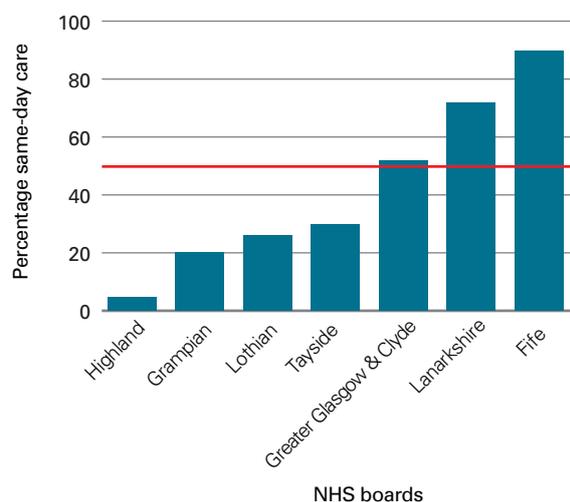
Circumcision (1998 target 80%)



Carpal tunnel decompression (1998 target 85%)

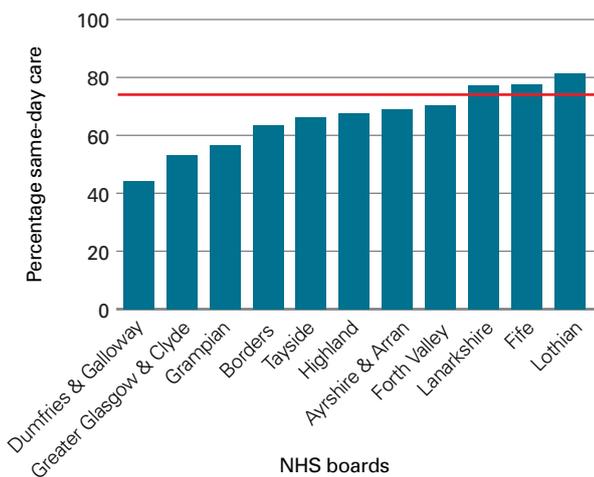


Excision of Dupuytren's contracture (1998 target 50%)

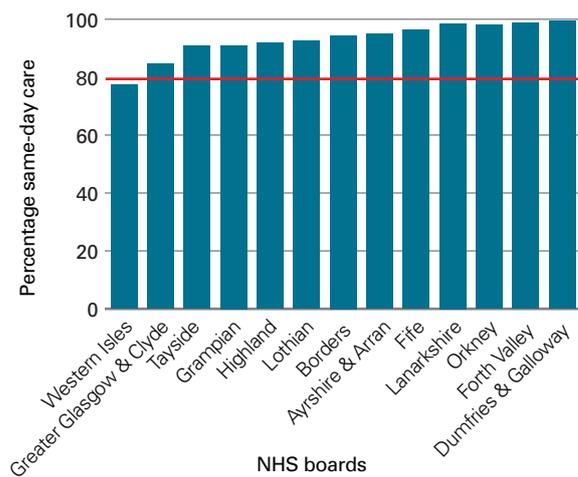


<sup>1</sup> Data for charts provided by ISD. The details in the charts include only boards that undertook more than 100 operations in 2006/07.

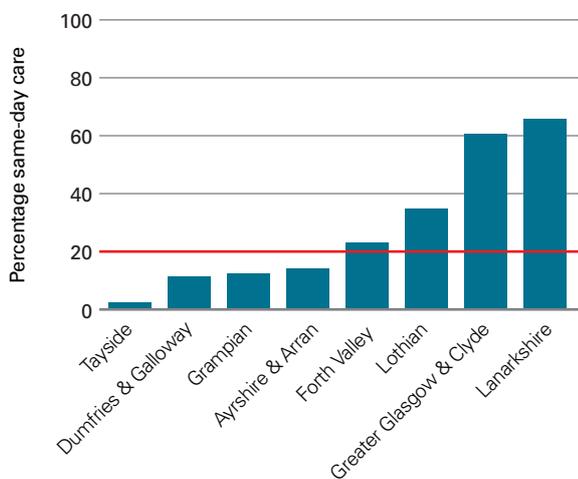
Arthroscopy (1998 target 75%)



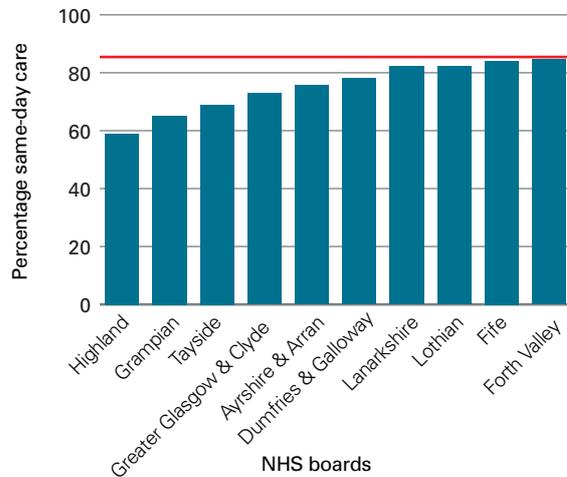
Cataract extraction (1998 target 80%)



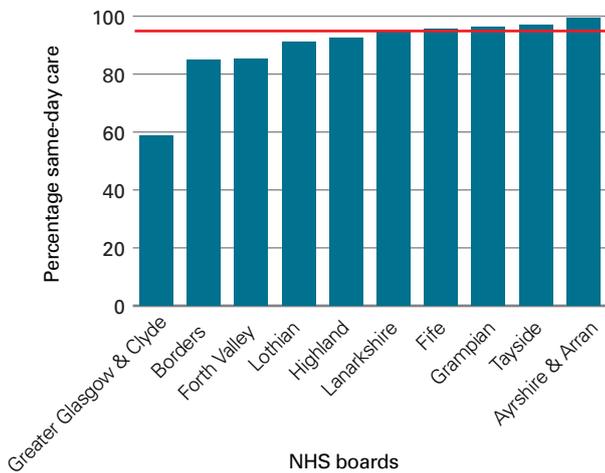
Submucous resection (1998 target 20%)



Laparoscopy (1998 target 85%)



Termination of pregnancy (1998 target 95%)



# Appendix 3.

## Examples of findings using BADS Information System

This report has used the basket of 19 procedures to measure progress in day surgery rates in Scotland. The BADS Information System has not been used for the main analysis in this report because we have concerns over the current accuracy of recording outpatient procedures.

Below are two examples of the types of analysis which is easily available from the BADS Information System. These examples illustrate the potential of the system for future monitoring and planning by identifying specific areas for improvement.

**Table 1** shows performance against case mix adjusted targets. The same information can be provided at hospital, specialty and procedure level.

**Table 2** highlights the change in performance required to achieve the BADS 2006 targets. Again it is possible to easily drill down to hospital, specialty and procedure level.

**Table 1**

April 2006-December 2006 activity compared with case-mix adjusted BADS 2006 targets

NHS board	Activity				Targets			
	Same day (%)	23 hour (%)	<72 hours (%)	4+ days (%)	Same day (%)	23 hour (%)	<72 hours (%)	4+ days (%)
Ayrshire & Arran	72	14	10	4	82	14	4	0
Borders	76	13	7	4	79	18	2	0
Dumfries & Galloway	74	12	10	4	78	19	3	0
Fife	80	11	7	3	78	19	3	0
Forth Valley	76	16	4	3	84	13	3	0
Grampian	66	14	13	7	80	17	4	0
Greater Glasgow & Clyde	63	17	15	6	81	15	4	0
Highland	62	13	17	7	81	14	4	0
Lanarkshire	70	16	10	4	80	17	3	0
Lothian	69	19	8	4	78	17	5	0
Orkney	78	14	5	3	86	11	3	0
Shetland	77	15	5	3	85	13	2	0
Tayside	60	17	18	5	80	15	5	0
Western Isles	60	14	19	7	87	11	2	0
Golden Jubilee	67	32	1	1	90	9	1	0
<b>Total</b>	<b>68</b>	<b>16</b>	<b>11</b>	<b>5</b>	<b>80</b>	<b>16</b>	<b>4</b>	<b>0</b>

**Table 2**  
2005/06 activity change required to conform with BADS 2006 targets

NHS board	Same day	23 hour	<72 hours	4+ days
Ayrshire & Arran	1,262	-10	-726	-525
Borders	131	220	-184	-168
Dumfries & Galloway	191	292	-297	-186
Fife	-253	1,018	-432	-333
Forth Valley	520	-231	-92	-198
Grampian	2,367	481	-1,700	-1,148
Greater Glasgow & Clyde	6,610	-628	-3,893	-2,088
Highland	1,484	90	-1,003	-571
Lanarkshire	1,160	38	-745	-454
Lothian	1,539	-358	-483	-698
Orkney	43	-18	-12	-13
Shetland	44	-14	-13	-17
Tayside	2,321	-268	-1,488	-565
Western Isles	167	-19	-107	-41
Golden Jubilee	958	-927	-6	-25
<b>Total</b>	<b>18,545</b>	<b>-335</b>	<b>-11,181</b>	<b>-7,029</b>

# Appendix 4.

## Comparison of the definitions used by the BADS Directory and the BADS Information System

The BADS Information System categorises procedures slightly differently to the BADS Directory. The table below shows the relationships.

BADS directory	BADS definitions	BADS Information System Groupings
Procedure room	Operations that may be performed in a suitable clean environment outside of theatres	Same-day (outpatient + day case)
Day surgery	Traditional day surgery	Same-day (outpatient + day case)
23 hour stay	Patient admitted and discharged within 24 hours	Inpatient length of stay 0 or 1
Under 72 hour stay	Patient admitted and discharged within 72 hours	Inpatient length of stay 2 or 3
Over 72 hour stay	Patient admitted and discharged over 72 hours	Inpatient length of stay 4 or above

Source: BADS Information System Companion Document

# Day surgery in Scotland

## Reviewing progress

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