Day Case and Short-stay Surgery Benchmarking Review

Taunton and Somerset NHS Foundation Trust
December 2009
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Introduction

1 There is a wide range of non-emergency surgical operations that can be carried out as ‘traditional’ day surgery, that is when a patient is admitted to hospital, has surgery and is discharged on the same day. This has considerable advantages for patients, the public and the NHS in that:

- waiting times are usually shorter and there is less risk of cancellation;
- there is less disruption to patients' lives and the comfort of recovering at home;
- there is reduced risk of cross infection and less stress for patients if they are not mixed with the acutely ill;
- it is cheaper and more efficient because procedures can be scheduled more predictably; and
- outcomes are at least as good as for the same procedures carried out on in-patients.

2 As well as optimising day surgery, an increasing number of trusts have now expanded their horizons and are focusing on the ‘short-stay’ elective pathway. They then plan to manage the majority of their elective patients with stays of 72 hours or less.

3 Despite the above benefits and the progress made in leading organisations, national HES (Hospital Episode Statistics) data suggest that many NHS providers could use day case and short stay surgery far more widely than at present.

4 The Audit Commission reviewed day surgery several times between 1991 and 2005. Since 2005 clinical practices have changed and the advent of independent treatment centres has had an impact on NHS provider activities. In addition, the NHS faces increasing pressure to identify efficiency opportunities. For these reasons, the Commission decided that it would be beneficial and timely to revisit the topic and liaised with the British Association of Day Surgery (BADS) to produce a new, jointly-agreed review methodology. The methodology covers both day case and short stay surgery procedures; for the first time, our benchmarking brings together in one place comparative data covering both length of stay and day case rates. Following detailed discussions with BADS the Commission decided to review performance against all 188 procedures listed in the 2009 BADS Directory of Procedures; this, therefore, is the basis for the data and conclusions contained within this report.

5 The objectives of our review are to:

- provide high level trust-wide and specialty-level comparative performance data for day case and short stay surgery;
- produce detailed performance analyses for 188 procedures accepted as suitable for day case and short stay surgery, such as oophorectomy and tonsillectomy;
- identify key opportunities for releasing pressure on in-patient beds; and
- estimate financial savings from increasing day case rates and reducing length of stay for in-patient procedures.
Audit approach

6 We have extracted and analysed Hospital Episode Statistics (HES) data for the financial year 2008/09, for all NHS providers in England.

7 We have compared your Trust’s performance with best quartile levels and analysed this at organisation-wide, specialty and individual procedure-levels to identify key improvement opportunities.

8 Conclusions have been discussed with relevant trust staff and we have summarised our main findings within this report. The report is supported by a separate, detailed data pack.
Main conclusions

Based on our analysis of 2008/09 HES data, our main conclusions are as follows.

- Trust-wide length of stay for the 188 procedures contained in the 2009 BADS Directory significantly exceeded best quartile levels by 3,830 bed days in 2008/09. This equates to approximately £1.1m per annum in cash terms (based on an average bed day cost of £300).

- The specialties which face the biggest challenges in terms of increasing their current day case and short-stay surgery rates and reducing length of stay are as follows.
  - Medicine (947 days)
  - General surgery (567 days)
  - ENT (549 days)
  - Orthopaedics (460 days)
  - Gynaecology (458 days)

- The individual procedures which contribute most significantly to the above overall bed day savings figure are as follows.
## Table 1

<table>
<thead>
<tr>
<th>BADS Procedure ref</th>
<th>Procedure</th>
<th>Specialty</th>
<th>Bed days in excess of best quartile levels</th>
<th>Total Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical 05</td>
<td>Implantation of cardiac pacemaker</td>
<td>Medicine</td>
<td>373</td>
<td>183</td>
</tr>
<tr>
<td>Medical 04</td>
<td>ERCP</td>
<td>Medicine</td>
<td>289</td>
<td>126</td>
</tr>
<tr>
<td>Medical 03</td>
<td>Bone marrow biopsy</td>
<td>Medicine</td>
<td>255</td>
<td>36</td>
</tr>
<tr>
<td>Gen 22</td>
<td>Repair of other abdominal hernia</td>
<td>General surgery</td>
<td>80</td>
<td>45</td>
</tr>
<tr>
<td>Gen 17</td>
<td>Primary repair of inguinal hernia</td>
<td>General surgery</td>
<td>79</td>
<td>302</td>
</tr>
<tr>
<td>Gen 02</td>
<td>Excision biopsy of lymph node for diagnosis (cervical, inguinal, axillary)</td>
<td>General surgery</td>
<td>77</td>
<td>101</td>
</tr>
<tr>
<td>Gen 03</td>
<td>Closure of colostomy</td>
<td>General surgery</td>
<td>60</td>
<td>14</td>
</tr>
<tr>
<td>Gen 21</td>
<td>Repair of incisional hernia</td>
<td>General surgery</td>
<td>60</td>
<td>45</td>
</tr>
<tr>
<td>ENT 24</td>
<td>Tonsillectomy</td>
<td>ENT</td>
<td>150</td>
<td>292</td>
</tr>
<tr>
<td>ENT 13</td>
<td>Septoplasty of nose</td>
<td>ENT</td>
<td>68</td>
<td>154</td>
</tr>
<tr>
<td>ENT 20</td>
<td>Adenoid Surgery</td>
<td>ENT</td>
<td>67</td>
<td>109</td>
</tr>
<tr>
<td>ENT 23</td>
<td>Diagnostic endoscopic examination of pharynx/larynx + biopsy</td>
<td>ENT</td>
<td>61</td>
<td>134</td>
</tr>
<tr>
<td>ENT 15</td>
<td>Operations on turbinates of nose (laser, diathermy, out fracture etc)</td>
<td>ENT</td>
<td>59</td>
<td>172</td>
</tr>
<tr>
<td>Ortho 20</td>
<td>Minimally invasive knee replacement</td>
<td>Orthopaedics</td>
<td>122</td>
<td>152</td>
</tr>
<tr>
<td>Ortho 18</td>
<td>Minimally invasive hip replacement (two incisions)</td>
<td>Orthopaedics</td>
<td>100</td>
<td>182</td>
</tr>
<tr>
<td>Ortho 16</td>
<td>Bunion operations with or without internal fixation and soft tissue correction</td>
<td>Orthopaedics</td>
<td>61</td>
<td>124</td>
</tr>
<tr>
<td>Ortho 05</td>
<td>Removal of internal fixation from bone/joint, excluding K-wires</td>
<td>Orthopaedics</td>
<td>49</td>
<td>191</td>
</tr>
<tr>
<td>Gynae 06</td>
<td>Oophorectomy and salpingectomy (including bilateral)</td>
<td>Gynaecology</td>
<td>211</td>
<td>227</td>
</tr>
</tbody>
</table>
Way forward

We suggest that the Trust should address the following key issues.

- The need for regular monitoring of performance against the BADS procedures at both specialty and individual-procedure levels.
- The scope for increasing day case and short-stay surgery rates, particularly in those specialties with the greatest improvement potential. If addressed, this will free-up in-patient beds and reduce costs.
Appendix 1 – Day case and short-stay surgery performance

Trust-wide performance

The chart opposite shows the overall bed day variance for the Trust as a whole ie the number of bed days by which your Trust’s overall length of stay exceeds best quartile performance levels for all 174 procedures in the BADS Directory. The figure for the Trust as a whole is 3,830 bed days in excess of best quartile performance levels.

In all these charts, Taunton and Somerset NHS Foundation Trust is represented by a yellow bar and an asterisk. Other acutes are identified by green bars.
The above, overall length of stay variance can be split into two main components:

- the element which is attributable to day-case rates which fall below best quartile levels; and
- the residual proportion which is due to length of stay for in-patient work which exceeds best quartile levels.

The top chart opposite shows the overall, Trust-wide day-case rate for all 188 procedures in the BADS directory.

The bottom chart opposite shows the overall, Trust-wide length of stay for the proportion of the 188 procedures that was undertaken as in-patient work.
Specialty-level Performance

The main specialties which contribute to the above, overall Trust-wide variances are:

- Medicine
- General surgery
- ENT
- Orthopaedics
- Gynaecology

Medicine

Length of stay in Medicine exceeded best quartile levels by 947 bed days per annum. The top chart opposite shows the overall day-case rate in Medicine and the bottom chart opposite shows length of stay for the residual element of the six medical procedures included in the 2009 BADS Directory that were performed as in-patient work.

The following three charts overleaf show the main individual procedures which contributed significantly to the overall position in this specialty.
The three charts in this section show the main individual procedures which contribute to the above total variance in Medicine.

All the following charts in this format show the potential for moving from current performance to best quartile levels for the specified procedures. Day case rates are shown along the horizontal axes and average lengths of stay for the remaining in-patients are shown along the vertical axes. Current Trust performance is represented by large black squares and best quartile performance is represented by blue lines (teaching hospitals are represented by red circles).

To achieve best quartile performance, the Trust needs to increase its day case rate, reduce length of stay for in-patient work or, more realistically, work towards a combination of the two. With this in mind, it would be reasonable for the Trust to target the day-case rate and length of stay for this procedure which has already been achieved by other acute trusts (represented by crosses) ie the point on the charts at which the highest number of crosses is on or close to the blue line. For example, in the case of the top procedure opposite, a target day case rate of around 40 per cent and a length of stay of around one day.
Appendix 1 – Day case and short-stay surgery performance

Medical03: Bone marrow biopsy (opportunity = 255 BDs pa)
Appendix 1 – Day case and short-stay surgery performance

General Surgery

Length of stay in General Surgery exceeded best quartile levels by 567 bed days per annum. The top chart opposite shows the overall day-case rate in Surgery and the bottom chart opposite shows length of stay for the residual element of the 24 surgical procedures included in the 2009 BADS Directory that were performed as in-patient work.

The subsequent five charts overleaf show the main individual procedures which contributed significantly to the overall position in this specialty.
Appendix 1 – Day case and short-stay surgery performance

Gen22: Repair of other abdominal hernia
(opportunity = 80 BDs pa)

Gen17: Primary repair of inguinal hernia
(opportunity = 79 BDs pa)
Appendix 1 – Day case and short-stay surgery performance

Gen21: Repair of incisional hernia (see note) (opportunity = 60 BDs pa)
Appendix 1 – Day case and short-stay surgery performance

**ENT**

Length of stay in ENT exceeded best quartile levels by 550 bed days per annum. The top chart opposite shows the overall day-case rate in ENT and the bottom chart opposite shows length of stay for residual element of the 25 ENT procedures included in the 2009 BADS Directory that were performed as in-patient work.

The subsequent five charts overleaf show the main individual procedures which contributed significantly to the overall position in this specialty.
Appendix 1 – Day case and short-stay surgery performance

ENT24: Tonsillectomy (opportunity = 150 BDs pa)

ENT13: Septoplasty of nose (opportunity = 68 BDs pa)
Appendix 1 – Day case and short-stay surgery performance

ENT20: Adenoid Surgery (opportunity = 67 BDs pa)

ENT23: Diagnostic endoscopic examination of pharynx/larynx + biopsy (opportunity = 61 BDs pa)
Appendix 1 – Day case and short-stay surgery performance

ENT15: Operations on turbinates of nose (laser, diathermy, cut fracture etc) (opportunity = 59 BDs pa)
Orthopaedics

Length of stay in Orthopaedics exceeded best quartile levels by 460 bed days per annum. The top chart opposite shows the overall day-case rate in Orthopaedics and the bottom chart opposite shows length of stay for the residual element of the 20 Orthopaedic procedures included in the 2009 BADS Directory that were performed as in-patient work.

The subsequent four charts overleaf show the main individual procedures which contributed significantly to the overall position in this specialty.
Orth20: Minimally invasive knee replacement (opportunity = 122 BDs pa)

Orth18: Minimally invasive hip replacement (2 incisions) (opportunity = 100 BDs pa)
Orth16: Bunion operations with or without internal fixation and soft tissue correction (opportunity = 61 BDs pa)

Orth05: Removal of internal fixation from bone/joint, excluding K-wires (opportunity = 49 BDs pa)
Gynaecology

Length of stay in Gynaecology exceeded best quartile levels by 458 bed days per annum. The top chart opposite shows the overall day-case rate in Gynaecology and the bottom chart opposite shows length of stay for the residual element of the 18 gynaecological procedures included in the 2009 BADS Directory that were performed as in-patient work.

The subsequent two charts overleaf show the main individual procedures which contributed significantly to the overall position in this specialty.
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