

How can nursing services increase day case rates for elective surgery?

The NHS Modernisation Agency recommended that “...day surgery (rather than inpatient surgery) should be the norm for elective surgery”⁽¹⁾. Despite this advocacy, uptake of this approach has been very slow for some procedures identified as suitable by the British Association of Day Surgery. In this Policy+ we use a Cochrane Review and data from the NHS Commissioning Dataset to examine the uptake of day surgery, focussing on laparoscopic cholecystectomy (gall bladder removal) as an example with high variation in day case rates, in order to explore the potential for increasing rates and the implications for nursing services.

Context

While over 70% of all eligible surgical procedures are now undertaken as day cases for some, such as cholecystectomy, rates remain low with fewer than 20% of patients treated as day cases⁽²⁾. The Audit Commission has identified several factors contributing to low day case rate including poor management and organisation of day surgery units and clinicians’ worries about adverse patient outcomes⁽²⁾.

The NHS Institute for Innovation concluded that an effective, standardised pre-assessment service is essential for trusts to achieve high day case rates and good clinical outcomes for cholecystectomy⁽³⁾. They found that giving patients clear written information about what to expect after discharge was particularly important.

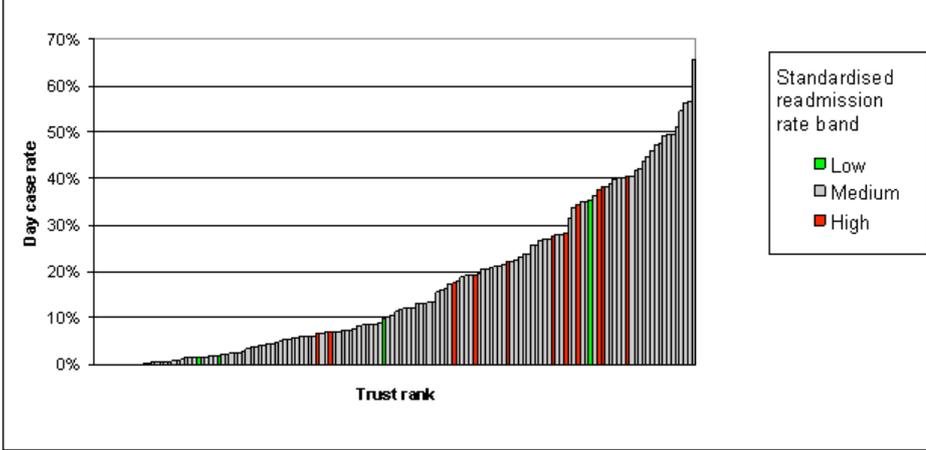
Nurses generally play key roles in pre-assessment and information giving for day surgery patients. A study in a UK elective surgery centre concluded that a nurse-led pre-assessment clinic minimised cancellations and admissions⁽⁴⁾. However, a recent study indicated that most nurses in day surgery units received little preparation for meeting the specific needs of their client group⁽⁵⁾.

The evidence

A Cochrane systematic review of 5 trials (429 patients) suggests that day-case elective laparoscopic cholecystectomy seems to be safe and effective in selected patients. There was no difference in patient satisfaction or recommendation between patients treated as day case or with an overnight stay⁽⁶⁾. Over the period from 1996-2008 the number of readmissions for laparoscopic cholecystectomy have grown from 4% to 6% as day case rates rose from 1% to 17%⁽⁷⁾. The simultaneous rise in day case and readmission rates might indicate that inappropriate patients are now being treated as day cases. However, examination of data from individual trusts paints a more complicated picture.

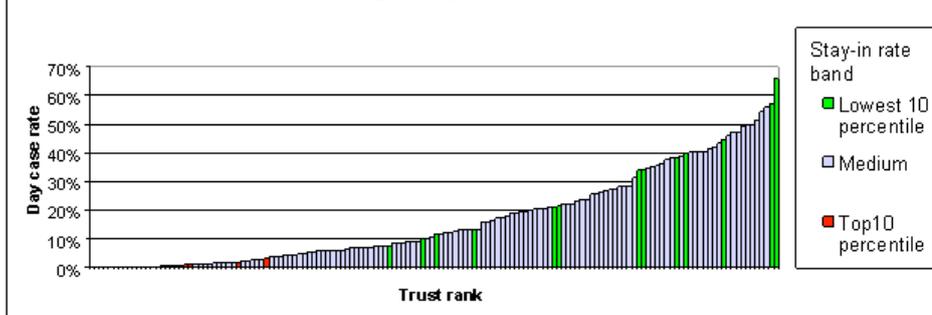
Figure 1 compares trusts’ day case rates for elective laparoscopic cholecystectomy and 28 day emergency readmission rate (standardised for age, gender, deprivation and co-morbidity) for the same procedure⁽⁷⁾. Trusts with high day case rates tend to have average readmission rates.

Figure 1: Day case rate for elective laparoscopic cholecystectomy compared with standardized emergency readmission rate (SAR)



Trusts with higher day case rates also tend to have either average or low day case conversion to inpatient stay-in rates (Figure 2) which further suggests that day case surgery is appropriate. Trusts with the highest conversion rates are among those with the lowest day case rates.

Figure 2: Day Case rate for elective laparoscopic cholecystectomy compared with number of patients who were admitted for day surgery but required an overnight stay, April 2007 to March 2008



Conclusions and implications

Since high day case rates are neither associated with worse outcomes nor a higher proportion of conversion to overnight stays we conclude that there is considerable scope to increase rates of day surgery safely and effectively among trusts with low uptake. Trusts can achieve good clinical outcomes whilst having high day case rates. There is no evidence that low uptake of day case surgery is justified as a result of appropriate and careful selection and some evidence that those with low uptake may have worse outcomes. The high day surgery to overnight stay conversion rates in some trusts with low uptake suggest that services there may be less well developed.

Successful increase in rates requires the development of an effective pre-assessment process and systems for delivering high quality patient information. Nurse-led pre-assessment services may be a key component of a strategy to increase day case capacity but nurses must be properly trained to fulfil the role. As trusts increase their day case rates, they must monitor readmissions, stay-ins and number of planned procedures not carried out.

References and information

1. NHS Modernisation Agency. 10 High Impact Changes Coventry: NHS Institute for Innovation and Improvement, 2004.
2. Audit Commission. Day Surgery - Review of National Findings: HMSO, 2001.
3. NHS Institute. Delivering Value and Quality: Focus on: Cholecystectomy A Guide for Commissioners. Coventry: NHS Institute for Improvement and Innovation, 2006.
4. Rai MR, Pandit JJ. Day of surgery cancellations after nurse-led pre-assessment in an elective surgical centre: the first 2 years. *Anaesthesia* 2003;58:692.
5. Mitchell M. Nursing knowledge and the expansion of day surgery in the United Kingdom. *Ambulatory Surgery* 2006;12(3):131.
6. Gurusamy KS, Junnarkar S, Farouk M, Davidson BR. Day-case versus overnight stay in laparoscopic cholecystectomy. *Cochrane Database of Systematic Reviews* Chichester: Wiley, 2008.
7. Anonymous. Data supplied by Dr Foster Intelligence based on the NHS Commissioning Dataset. 2008.

Key issues for policy

- Good clinical outcomes can be achieved with high day case rates, provided there is an effective pre-assessment process and high quality patient information is given.
- Low uptake of day case surgery seems to result from less developed services, not careful selection and assessment
- Nurses can fulfil this role
- Clinical staff undertaking pre-assessments should be appropriately trained and supported.
- Current nurse education does not fully prepare practitioners for this role.