Hospitals Forum
briefing
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The non-executive directors' guide to hospital data

Part two: Elective hospital admissions, waiting times and patient experience

Key points

- Elective hospital admissions is an area where data can be used as an indicator of hospital performance.
- Length of stay, pre-operative admissions and variation in procedure by day of the week should be monitored.
- Assessing compliance with waiting times targets is not straightforward. The 18-week pathway requires joining primary care and hospital data sets. Local factors also need to be considered.
- Patient experience is increasingly used as a quality indicator. The friends and family test is now being implemented and trust scores will be monitored.

Understanding your organisation's data is an essential part of providing effective oversight. But data may not always give you the complete picture and it is important to first understand what data is available, how it is recorded and what these records are used for.

This *Briefing* will help non-executive directors (NEDs) better understand NHS data and how it can be used to determine what is going on in their hospital. For the purposes of this *Briefing* we examine data in the acute care setting only. Data is of course collected in primary care by GPs, pharmacists, dentists and opticians, but the various datasets are not linked by the NHS.

This *Briefing* looks at elective hospital admissions, waiting times and patient experience.

Elective hospital admissions

An elective hospital admission is usually a planned procedure that has been booked either by the GP and the patient, or the patient has been on a waiting list. An elective admission occurs when the decision to admit can be separated in time from the actual admission. Elective admissions do not include transfers from another hospital.

Elective admissions account for around 50 per cent of admitted hospital activity in the UK, with emergencies accounting for 35 per cent and maternity and babies

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the other 15 per cent. The vast majority (just over 80 per cent) of elective admissions are day cases, where a patient is admitted to hospital, has surgery and is discharged on the same day, without having to stay overnight.

Elective admissions and efficiency

1. Length of stay

One of the key metrics that can be used by hospitals as an indicator of performance is length of stay. A hospital that is able to reduce length of stay for a given procedure can either use fewer beds or make better use of existing bed capacity. There are many factors that contribute to variation in length of stay, such as age, sex and co-morbidities. The annual CHKS '40 Top Hospital' awards regularly finds that those in the top 40 use on average 1.5 fewer wards than those outside the top 40 (for a matched casemix). This is why benchmarking against other hospitals is helpful, because it is possible to adjust for each of these.

Anyone monitoring and benchmarking length of stay should also look at the percentage of patients who are admitted on the day of procedure. There may be good clinical reasons for admitting prior to procedure but, for the majority of patients, pre-operative length of stay should be zero (days).

Figure 1. Admitted hospital activity in the UK

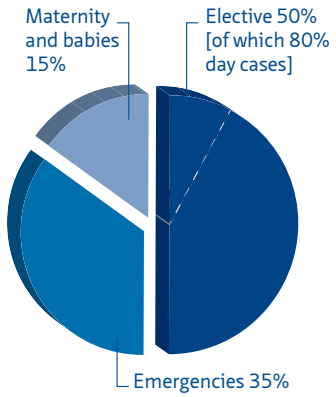
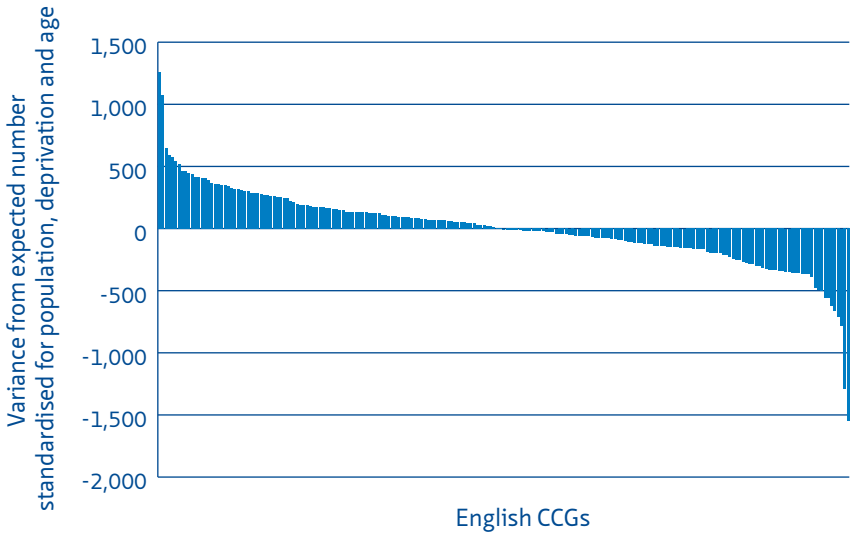


Figure 2. Standardised variation in NHS cataract operations performed over 12 months



Source: CHKS analysis of HES data, 12 months to Sept 2012

Reviewing the standardised rate for procedures (adjusted for age, sex and deprivation) per head of the population can also be used as a benchmark to see whether the hospital is carrying out more procedures than peers. An example of this kind of analysis is shown in Figure 2. It demonstrates the wide variation in the number of cataract procedures that were carried out when compared to the expected number for the population, analysed by clinical commissioning group (CCG).

Major advances in surgical and anaesthetic techniques have enabled the vast majority of surgery, perhaps 80 per cent or more, to be carried out on a day surgery basis.[1] Day surgery has a better safety record (for example, patients are less exposed to the risk of infection on wards).

For non-day cases there are few reasons why a patient needs to be admitted the day before – a practice that has become less common as hospitals strive for greater efficiency. As well as day cases and non-day cases there are a number of admissions that are recorded for diagnostic tests. These are carried out on the same day of admission although the scale of this activity is difficult to determine because some trusts record it in the outpatient data set and others in the inpatient data set.

NEDs faced with data on elective admissions should consider the percentage of elective admissions that are day cases. They should be looking at the recommended percentage of elective admissions for a given procedure produced

Key questions for NEDs to ask

- How does our day case rate compare nationally?
- How does our day case rate compare with our peers?
- What is the proportion of patients with a pre-operative length of stay greater than zero?
- How many patients who were intended day cases stayed overnight and what was the reason?
- How do we ask the friends and family test question?
- What do we do with responses to the friends and family test?
- How do we manage the cost associated with administering the friends and family test?

by the British Association of Day Surgery (BADS).[2]

However, caution is needed when looking at the figures because the counting varies from hospital to hospital. The variation is a result of the way the trusts intend to manage a particular patient. For example, in some hospitals zero length of stay is not counted as a day case.

One additional day case rate analysis that can be conducted is a review of day case overstays – these are planned day case patients who end up being admitted to hospital. It is worth taking into account that this can be as much about how the system records the intended management of elective admissions (i.e. whether they are planned day cases or admissions requiring one or more overnight stays).

As outlined in the first *Briefing* in this series, there are three separate major datasets recorded in a hospital: the dataset for outpatients; data that is specific to A&E; and data for admitted patients. Data on elective admissions can be found in the dataset for admitted patient care. One of the fields that is completed by hospital staff is the date on list – this is when the decision is made for a patient to undergo a given procedure. The date of procedure and date of discharge is also recorded. Surgeons also rate patients on the list according to urgency.

2. Variation in hospital activity

Previous research has found considerable variation in hospital activity throughout the week.[3] It has revealed that Mondays tend to have the highest volume of inpatient elective admissions – the same day as the highest number of emergency admissions, with consequent problems of bed availability. Variation in discharge rates has also been found, with the highest proportion of patients being discharged on Fridays and the lowest at the weekend, so although there are few admissions bed availability can be reduced.

Smoothing the flow of weekly activity can help to improve operational efficiency, and many trusts are addressing daily variation by moving some procedures to the weekend – a time when hospital activity has traditionally slowed.

One of the key challenges facing hospitals is how to ensure patients are discharged on time. Hospitals that send patients home late in the day are missing the opportunity to make use of a bed for another patient. The target many hospitals have therefore adopted is to discharge before 11am, but in most cases, especially with the elderly, other factors are at play, such as the responsiveness of social services and the existence of dedicated day case units.

Another set of figures that provides an insight into efficiency is how many operations are cancelled by the hospital. High cancellation rates are a sign of bottlenecks or an indication that straightforward procedures are not working. For example, a patient with a complex procedure is likely to need a bed in an intensive care unit (ICU) following the operation. However, if there is no ICU bed available on the day of admission, the operation will be cancelled.

Understanding the reasons for cancellations gives a good insight into what is happening at ward level. NEDs might ask what sort of pressure is put on elective admissions when there is a bed crisis and whether these happen routinely.

Comparison with peers is a useful way to monitor performance. However, information on theatre usage is rarely shared outside a hospital's four walls because data is not collected centrally.

Waiting times

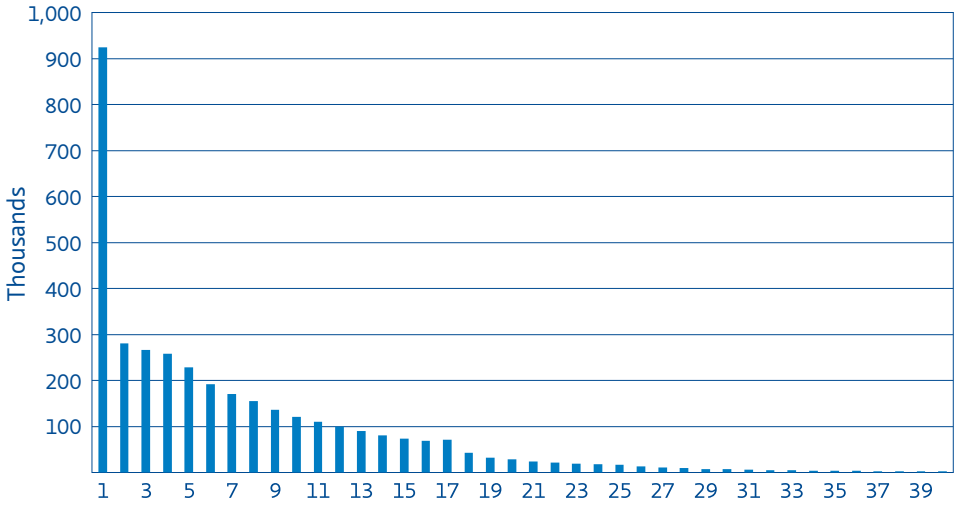
Since the introduction of targets in the 1990s, the issue of waiting times has moved up the political agenda. One target was that by 2008 no one should wait more than 18 weeks from GP referral to hospital treatment. In 2009, data showed that 93 per cent of admitted patients and 98 per cent of non-admitted patients began treatment within 18 weeks.

The emphasis was then changed to delivering an 18-week pathway from GP referral to start of treatment. This was included in the NHS Constitution, which gives patients the right to start consultant-led treatment within a maximum of 18 weeks from referral, unless they choose to wait longer or it is clinically appropriate to wait longer.

The 18-week pathway presents challenges for hospitals, for example, joining up primary care data and hospital data. As a result, different parts of the healthcare system now have to work together more closely than they have before.

The complexity of the pathway is clearly a factor in whether the 18-week target is met. For example, a patient may require multiple diagnostic tests before a decision can be made about treatment. From the hospital's point of view, there has to be adequate visibility around the number of referrals and theatre capacity because decisions will have to be made about the types of procedures that are carried out. For example, dermatology procedures do not take as long as those in orthopaedics.

Figure 3. Weeks between 'put on list' and 'procedure carried out'



Source: CHKS analysis of HES data, 12 months to Sept 2012

In addition, some hospitals have their own way of interpreting the time at which waiting starts and stops. The impact of this is mitigated by the various rules around when the clock stops and starts and when it can be stopped altogether, or suspended. For instance, a patient may not be available for a procedure because they are on holiday.[4] In this case the clock would stop for the period of time they were away.

Elective treatment is the area where patients are most likely to exercise choice and, as a result of waiting times, the two are linked. However, this is less evident now most hospitals are meeting the waiting time objective.

One of the measures NEDs could look at to ascertain performance against target is consultant-led referral to treatment time.

Hospitals have to find their own way of combining the three data sets to monitor compliance against the 18-week target. It is therefore not always possible to be precise about how waiting times should be measured. However, as is common with most targets, the key is to ensure there is a good process around the management of patients who are most at risk of breaching the 18-week wait. There is a complex set of rules about meeting this target, with a number of financial penalties for failure(s).

For most urgent procedures, NHS data tells us that the average waiting time will be around two weeks. Figure 3 shows that an increasingly small proportion of patients end up waiting longer and it is on the 'tail' in this distribution chart where effort needs to be focused.

Patient experience

The three most commonly used questionnaires to measure patient experience are:

- the EQ-5D (European Quality Of Life – 5 Dimensions) – used to provide a simple, generic

measure of health for clinical and financial appraisal

- the SF-6D (Short Form six dimension) – used to judge the effectiveness of healthcare interventions
- the HUI (Health Utilities Index) – used to measure health status and health-related quality of life.

The NHS has adopted the EQ-5D questionnaire model to produce patient reported outcome measures (PROMs) for four clinical procedures: hip replacement; knee replacement; cataract surgery; and hernia operations. PROMs assess the quality of care from the patient's perspective and calculate the health gains after surgical treatment using pre- and post-operative surveys.

PROMs

PROMs data is collected, processed, analysed and reported by a number of organisations, including hospital trusts, the Health and Social Care Information Centre and contractors. The Health and Social Care Information Centre is responsible for scoring and publishing PROMs data as well as linking it to other data sets such as hospital episodes statistics (HES). Hospitals can request data, which can be presented at individual consultant level.

The collection and reporting of PROMs was a key priority previously set out in the NHS Operating Framework. This committed to "extending the use, collection and validity of PROMs across the NHS, wherever practicable". The framework identifies PROMs as a key source of information about the outcomes of planned procedures and they will form a core part of Quality Accounts. As a result, PROMs are becoming a key tool for hospitals.

The NHS inpatient survey

The NHS inpatient survey is carried out by the Care Quality Commission and looks at the experiences of people who are admitted to hospital with at least one overnight stay. Each hospital is provided with a report on its scores in the survey, which enables them to compare their performance against all other trusts and identify areas for improvement. The results can be used by hospitals to gain a better understanding of their patients' experiences, and are used by the Care Quality Commission for regulatory, compliance and monitoring activities.

The friends and family test

The friends and family test is currently being introduced across the NHS. Every patient will be given the opportunity to share their views on their experiences. It will initially ask patients one question: whether they would recommend hospital wards and A&E units to a friend or relative based on their treatment. The test aims to allow the public to compare healthcare services in a completely new way, and it is hoped that publishing the responses to the test will "drive other hospitals to raise their games." This approach is reflected in the NHS annual staff survey which asks whether staff would be happy with the standard of care provided by their organisation if a friend or relative was being treated there.

The initial focus of the friends and family test will be on providers of acute inpatient services and A&E departments. It will in time be rolled out to all NHS settings. It is hoped that trusts will ask a broader range of questions about patients' experiences in order that improvement opportunities can be identified and explored.

Data collected from friends and family tests will be published on a locally determined basis, with providers and commissioners able to upload their friends and family score via their local profiles on NHS Choices.

References

1. The British Association of Day Surgery (2012) *Commissioning day surgery: a guide for clinical commissioning groups.*
2. The British Association of Day Surgery (2012) *BADS directory of procedures, fourth edition.*
3. CHKS (June 2012) *The weekly pulse: an analysis of hospital activity by day of the week.*
4. Department of Health (2012) *Referral to treatment consultant-led waiting times.*

The non-executive directors' guide to hospital data

This *Briefing* is the second in a series of four – the 'Non-executive directors' guide to hospital data' – which have been developed to increase the non-executive director's understanding of NHS data and give them the confidence to ask the right questions about it. All the *Briefings* will be available from the NHS Confederation and CHKS websites.

The Hospitals Forum

The Hospitals Forum aims to identify the most important issues for hospital service providers, and then work to influence national policy and support and inform members on those priorities.

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50 Broadway London SW1H 0DB
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