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Counting acute inpatient care. ABF Information Series No. 5

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Abstract
As outlined in ABF Information Paper Number 1, a critical element of Activity Based Funding (ABF) is the need to define, classify, count, cost and pay for each health care activity in a consistent manner. For acute patients who stay in hospital for more than a day, this is not an issue. These patients are classified as acute 'overnight admitted patients' and are counted by Diagnosis Related Group (DRG).

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ABF Information Series No. 5
Counting acute inpatient care

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As outlined in ABF Information Paper Number 1, a critical element of Activity Based Funding (ABF) is the need to define, classify, count, cost and pay for each health care activity in a consistent manner.

For acute patients who stay in hospital for more than a day, this is not an issue. These patients are classified as acute ‘overnight admitted patients’ and are counted by Diagnosis Related Group (DRG).

However, the definitions and counting rules are not consistent for patients who receive treatment and then go home on the same day (‘same day’ patients). The main focus of this paper is to highlight the issues faced when classifying the activity of these ‘same day’ patients.

There are several ways that a same day patient can be counted, classified and funded when they attend an Australian hospital. As shown in Figure 1, a same day visit may be described by:

- whether or not the patient is formally admitted,
- the nature of the hospital visit (emergency, medical or surgical), and
- the sector from which the patient was referred.

Figure 1 Different ways hospital patients can be classified

The defining factors in the flow diagram above (whether a patient is formally admitted, the nature of the visit and the source of referral) are key factors affecting how same day activity is funded. The implications of each of these decisions are discussed below.
Admission of same day patients

Australia is one of only a handful of countries that formally ‘admits’ same day patients as ‘inpatients’. Indeed, over half (56%) of all hospital admissions in Australian hospitals are now same day admissions. In most other comparable countries (eg, USA, Canada, UK) an ‘inpatient’ is a patient who stays in hospital for at least one night.

While there are national guidelines for what constitutes a same day admission, the guidelines are not definitive and are open to wide interpretation. Further, even if a patient meets the criteria for admission, there is no requirement that the patient actually be admitted. This leads to significant variations in admission practices and rates.

Visit type

Admission practices, and therefore classification and funding of same day patients, depend on whether the patients’ visit is considered emergency, surgical or medical.

Emergency Department (ED) patients

ED patients can be either formally admitted as a same day inpatient or classified as an outpatient.

- Same day inpatient care is usually (but not always) counted and classified by DRG (the same as overnight inpatient care)
- ED outpatient attendances are counted as an outpatient visit and not classified by DRG

There are no definitive or consistent rules to determine when an ED patient should be admitted. Whether or not a patient is admitted varies according to the hospital they attend, how the hospital is funded and the availability of clerical staff to fill out the ‘admission’ forms.

The likely financial incentive under the Rudd hospital reform plan will be to ‘admit’ more patients treated solely in the ED on the basis that the payment rate is likely to be higher than if the same patient is classified as an outpatient.

Same day surgery

Contrary to popular perceptions, patients having same day surgery represent just 14.7% of all same day admissions. When a patient has a general anaesthetic and same day surgery, the patient is usually counted as a same day admission and classified by DRG.

Medical, procedural and diagnostic services

This category is both the most diverse and numerically the largest group of same day patients. It includes patients attending hospital for non-surgical treatments such as chemotherapy for cancer and renal dialysis for kidney failure. It also includes patients having diagnostic tests such as cardiac and liver function tests, patients attending clinics such as antenatal and physiotherapy clinics and patients participating in day programs (eg, mental health, cardiac rehabilitation).

How each activity is classified and counted is easily manipulated according to the incentives in different funding models. There are three possibilities, with the costs borne by the Commonwealth, the state or territory and the patient varying according to how the patient is classified:

- The patient is admitted as a same day inpatient, in which case the attendance is usually (but not always) counted and classified by DRG and all costs are met by the hospital

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1 AIHW (2009) Australian Hospital Statistics. Health services series no. 3
2 AIHW (2009) Australian Hospital Statistics. Health services series no. 3
- The patient is classified as a **public outpatient**, in which case the attendance is counted as an outpatient visit and all costs are met by the hospital.

- The patient is classified as a **privately referred outpatient**, in which case the medical costs of the care can be billed to the Commonwealth Medicare Benefits Schedule and the patient may be given a prescription to be filled at the local pharmacy. All other costs are met by the hospital.

In all cases, the likely incentive under the Rudd hospital reform plan will be to ‘admit’ the patient each day that they attend the hospital on the assumption that the payment rate will be higher than if the same patient is classified as an outpatient.

**Same day activity - renal dialysis and chemotherapy**

The two most common reasons for admission to public hospitals are same day renal dialysis and same day chemotherapy and these two procedures alone account for 20.4% of all public hospital admissions (both same day and overnight) in Australia. In both cases, the patient requires a sequence of treatments and, if the patient is admitted, each day of treatment is counted as a separate admission.

There are differences between hospitals and between states and territories in how these procedures are classified. Some patients undergoing these procedures are classified as outpatients. However, other patients undergoing exactly the same procedure are formally admitted as same day patients. In this situation, a typical renal dialysis patient would be formally admitted and discharged about three times a week or 150 times a year.

The differences between states and territories in their rate of hospital admission for these two procedures are shown in Table 1. The two territories are excluded due to their small population size. These figures do not reflect the amount of renal dialysis and chemotherapy that each state actually provides. Rather, they reflect differences between the states in their same day admission practices. Both rates vary but the noticeable difference is for chemotherapy. In contrast to the 69,201 same day chemotherapy admissions in Victoria in 2007/08, there were only 67 chemotherapy admissions in the whole of South Australia during the same period. Reflecting the incentives in the Victorian ABF model (which pays for each admission by DRG), Victoria (with 24.8% of the Australian population) accounts for over half (56.8%) of all public hospital admissions for chemotherapy.

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Per capita rates for selected same day admissions 2007/08</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NSW</td>
</tr>
<tr>
<td>Renal dialysis</td>
<td>36.0</td>
</tr>
<tr>
<td>Chemotherapy</td>
<td>0.4</td>
</tr>
</tbody>
</table>

Source: Based on AIHW (2009) *Australian Hospital Statistics*. Health services series no. 3 (Table 12.13) and Australian Bureau of Statistics Publication 3239.0.55.001 - *Population, Australian States and Territories, Dec 2007*

Assuming that the national ABF model is similar to the model that already exists in Victoria, it can be anticipated that admissions for same day chemotherapy (and for other same day procedures) will increase in other states to the levels now seen in Victoria.

One of the real benefits of a more coherent national system will be an improved capacity to consistently define, classify and count each hospital activity. Consistent data will allow for more meaningful comparisons and better informed decisions about the mix of health services that will be required into the future. This is an essential first step that will allow the health system to, over time, move beyond simply measuring activity to routinely measuring the health outcomes of that activity. Achieving this national consistency will require a coordinated approach and a significant investment in information systems and training. In the process, data on measures such as admission rates can be expected to fluctuate and change and this will need to be taken into account in future reports on the performance of the Australian health system.

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3 AIHW (2009) *Australian Hospital Statistics*. Health services series no. 3
A footnote on international comparisons

As noted above, Australia is one of only a handful of countries that formally ‘admits’ same day patients as ‘inpatients’. This is often not understood when international comparisons are made. In many international comparisons, the Australian hospital admission rate (including same day admissions) is compared with the admission rate of countries that do not admit same day patients. This can lead to the (false) conclusion that Australia has one of the highest admission rates in the world. This is not correct.

When ‘same day admissions’ are excluded, Australia’s hospital admission rate of 162 hospital admissions per 1,000 population per year is similar to the OECD average of 158 admissions per 1,000 population.4

4 OECD Health at a glance 2009: OECD indicators