

# 5 Comments on data elements

This chapter brings together summary information on utility and importance of the NMDS data elements, information from the compliance evaluation and the survey of revenue and expenditure and other comments obtained during the NMDS evaluation.

This section provides summary statistics for each individual data element obtained from the utility survey, as well as comments and recommendations for change from both the utility and compliance evaluations. The order of data elements in this section is according to how the data elements are presented in Table 4.2. A summary of utility and importance responses for each data element is presented in Table 5.1. Please note percentages may not always add to totals due to rounding. See Table 5.1 for more detail on percentages for each data element.

## Existing data elements and data element concepts

### System level expenditure elements

#### Capital expenditure—gross (accrual accounting)

Sixty-nine per cent of respondents who assessed the importance of this data element rated it as either important (19%) or highly important (50%) and 63% rated it as either useful (25%) or highly useful (38%). Nineteen per cent thought the data element was not important and 19% thought it not useful.

There were a large number of comments on this data element indicating that it is poorly defined and inaccurately and inconsistently reported. Comments also indicated that is not well used or useful when it is reported. A few respondents thought it would be useful if it was better reported, one respondent thought it unnecessary if depreciation was used. If the quality of capital expenditure data was improved, then it could be used for comparisons among states and territories, whereas it can only provide indicative data at present.

One respondent suggested that capital expenditure should be reported at state, regional and establishment level, so that the data could be used to describe capital expenditure *on* hospitals rather than *by* hospitals.

#### Capital expenditure—net (accrual accounting)

Seventy-five per cent of respondents who assessed the importance of this data element rated it as either important (25%) or highly important (50%) and 69% rated it as either useful (31%) or highly useful (38%). Nineteen per cent thought the data element was not important and 19% thought it not useful.

The comments on net capital expenditure were very similar to the comments on gross capital expenditure. Respondents mentioned the lack of accuracy and consistency in the reporting and consequent lack of usefulness of reported data. Several respondents indicated that they had never used this data.

## **Indirect health care expenditure**

Sixty-nine per cent of respondents who assessed the importance of this data element rated it as either important (56%) or highly important (13%), and 56% rated it as either useful (50%) or highly useful (6%). Twenty-five per cent thought the data element was not important and 31% thought it not useful.

Comments on this data element indicated that it is poorly defined and inconsistently collected among jurisdictions. One of the consequences of this is that any data collected is not comparable across jurisdictions. Questions were raised regarding the usefulness of data collected (without extensive improvements) and some respondents commented that they had never used this data. Some states or territories may have difficulties isolating expenditures relating to central health administrations only, if the 'health department' also has responsibility for other portfolios.

As noted for gross capital expenditure, if the NMDS were to be restructured to cover public hospital services, this data element could be refined and reported at the regional and state level to capture expenditure on public hospital services. However, the extent to which this data element actually relates to public hospitals would also need to be clarified, as some categories are apparently unrelated to the provision of public hospital services.

## **Establishment identification data elements**

### **Establishment identifier**

Seventy-five per cent of respondents who assessed the importance of this data element rated it as either important (19%) or highly important (56%), and 81% rated it as either useful (25%) or highly useful (56%). Twenty-five per cent thought the data element was not important and 13% thought it not useful.

Comments stated that this data element is necessary to identify health facilities on a state and national basis and ensuring continuity of organisation identification over time. One respondent noted that the *Establishment sector* number is redundant while the NMDS is restricted to public hospitals. Comments on *Region code*, which is also part of this data element, are outlined below.

If the NMDS were to be restructured like the Mental Health Establishments NMDS, the establishment identifier could be designed to indicate the relationship between reporting entities. For example, the first two characters of the establishment number could refer to networks or multi-component entities and the last three characters could refer to the individual campuses or other units.

### **Establishment number (supporting data element)**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (25%) or highly important (63%), and 94% rated it as either useful (31%) or highly useful (63%). Thirteen per cent thought the data element was not important and zero thought it not useful.

Comments on this supporting data element referred to its value in ensuring that the AIHW and the jurisdiction are looking at the data for the same establishment, and its usefulness in identifying establishments during name changes or sector changes.

### **Establishment sector (supporting data element)**

Eighty per cent of respondents who assessed the importance of this data element rated it as either important (13%) or highly important (67%), and 87% rated it as either useful (20%) or highly useful (67%). Twenty per cent thought the data element was not important and 7% thought it not useful.

One respondent commented that this data element is redundant because the NMDS is restricted to public hospitals, while another indicated that it is a significant component of *Establishment identifier*. If the NMDS is restructured, this element could be retained to allow private hospitals such as those funded by public authorities (for which some data are available) to be differentiated from public hospitals. This data element is also useful for cross-checking establishment 'sector' in other data sets, particularly the Admitted Patient Care NMDS.

### **Region code (supporting data element)**

Forty-four per cent of respondents who assessed the importance of this data element rated it as highly important, and 63% rated it as either useful (25%) or highly useful (38%). Fifty per cent thought the data element was not important and 31% thought it not useful. This element had the lowest important/useful percentages and the highest not important/not useful percentages in the survey.

Comments on this data element were wide-ranging. Several respondents thought it could be removed altogether as it only supplies state-allocated codes which cannot be compared nationally, although others thought it useful as a part of *Establishment identifier*. One respondent suggested that the *Region code* may help health authorities identify the regional office or authority responsible for the establishment, although the SLA or LGA of the hospital or campus, as collected for *Geographical location of establishment*, might also achieve this.

### **State/territory identifier (supporting data element)**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (13%) or highly important (75%), and 94% rated it as either useful (25%) or highly useful (69%). Thirteen per cent thought the data element was not important and zero thought it not useful.

Comments on this data element indicated that it is an essential item for collection.

### **Establishment type**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (13%) or highly important (75%), and 94% rated it as either useful (25%) or highly useful (69%). Thirteen per cent thought the data element was not important and zero thought it not useful.

Comments on this data element indicated that the definition needs improvement. Difficulties include:

- The range of values is now outdated and values do not reflect peer groups.
- An increasing number of establishments fulfil several of these 'types'.
- How to allocate private providers of public hospital services and privately run public hospitals.

## Geographical location of establishment

Seventy-five per cent of respondents who assessed the importance of this data element rated it as either important (13%) or highly important (63%), and 63% rated it as either useful (19%) or highly useful (44%). Nineteen per cent thought the data element was not important and 31% thought it not useful.

Comments on this data element were generally positive. However, there can be difficulties for states or territories when the *Geographical location of establishment* (state identifier plus SLA) is applied to remoteness area (for example Table 3.1 of *Australian hospital statistics 2003–04*). Allocating hospitals to remoteness area may not reflect hospital services supplied across multiple campuses or outreach services from regional hospitals. *Geographical location of establishment* reflects establishment locations rather than accessibility of services.

One respondent suggested adding travel times or distances to public hospital to this NMDS. The AIHW feels that this issue is best dealt with using the Admitted Patient Care NMDS, as patient-level data could be extracted/approximated from the National hospital morbidity database's information on area of usual residence and hospital SLA.

## Recurrent expenditure data elements

Recurrent expenditure items were considered to be useful for comparative purposes, policy development and monitoring of major expense categories. Some respondents indicated that it may be useful to align recurrent expenditure categories with National Hospital Costs Data Collection categories.

One respondent noted that the expenditure categories mix cash and accrual concepts together. If establishments are to report their operating expenses and revenues, then they need to be reported as 'expenses' and 'revenues', with consistent terminology throughout the definitions. If this recommendation is adopted, then all expenditure categories would be renamed, for example *Administrative expenditure* would become *Administration expenses* and *Interest payments* would become *Interest expenses*. Definitions for all categories would also need to be reworded to ensure that they refer to expenses rather than payments, for example *Visiting medical officer expenses* rather than *Payments to Visiting Medical Officers*.

On the output side, respondents noted that non-admitted patient cost proportions (IFRACs) are the only expenditure output measure currently collected (and they are not officially in this NMDS). It was suggested that recurrent expenditure components would be more useful if jurisdictions could separate outputs into categories. Categories could include admitted patients (acute, psychiatric, rehabilitation and other), non-admitted patients and emergency department. This would allow costs relating to certain sectors to be more accurately assessed.

## Administrative expenses

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (56%) or highly important (31%), and 94% rated it as either useful (69%) or highly useful (25%). Thirteen per cent thought the data element was not important and zero thought it not useful.

See comments for *all recurrent expenditure components* above. Workers compensation premiums are included in *Administrative expenses* but they may be more useful in a different category, to allow analysis of staffing costs.

## **Interest payments**

Sixty-nine per cent of respondents who assessed the importance of this data element rated it as either important (44%) or highly important (25%), and 69% rated it as either useful (50%) or highly useful (19%). Nineteen per cent thought the data element was not important and 25% thought it not useful.

Comments on this data element noted that it is small in relative terms (<\$18,000 for Australia in 2003–04) and reflects administrative arrangements for access to money rather than performance. One respondent suggested a review might be worthwhile, but others indicated that it be retained because it is important in the PHEC. Keeping interest payments out of other categories such as administrative expenses also keeps accuracy in recurrent expenditure categories.

## **Depreciation**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (44%) or highly important (44%), and 94% rated it as either useful (69%) or highly useful (25%). Thirteen per cent thought the data element was not important and 6% thought it not useful.

Comments on this data element indicated that its identification facilitates inter-jurisdictional analysis of recurrent expenditure totals. One respondent mentioned that in theory depreciation reduces the lumpiness of capital expenditure and reduces incomparability between capital and recurrent expenditure caused by different capital expenditure limits. Erratic reporting and use of different depreciation schedules can reduce its usefulness in practice.

## **Patient transport**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (56%) or highly important (31%), and 81% rated it as either useful (56%) or highly useful (25%). Thirteen per cent thought the data element was not important and 6% thought it not useful.

The comments on this item indicated that a lack of consistency and limited availability of data decrease its usefulness. It is an element which could provide more useful information if it was more consistently defined and reported. One respondent suggested amending the definition to 'the expense incurred by the establishment in transporting patients'.

## **Repairs and maintenance**

Seventy-five per cent of respondents who assessed the importance of this data element rated it as either important (50%) or highly important (25%), and 81% rated it as either useful (63%) or highly useful (19%). Thirteen per cent thought the data element was not important and none thought it was not useful.

The few comments on this data element indicated its usefulness for comparative purposes. One respondent suggested rewording the definition to 'The expense incurred by the establishment in maintaining and repairing buildings and equipment. Expenses of a capital nature are not to be included here'.

## **Superannuation employer contributions (including funding basis)**

Eighty-one per cent of respondents who assessed the importance of this data element rated it as either important (50%) or highly important (31%), and 88% rated it as either useful (63%)

or highly useful (25%). Thirteen per cent thought the data element was not important and zero thought it not useful.

Superannuation is included in non-salary recurrent expenditure. One respondent suggested a rearrangement of these data elements so that staffing costs could be captured. For example data elements to capture salaries and wages, superannuation, workers compensation (premiums and payments) and leave liabilities could be grouped and totalled to allow analysis of staffing costs. The costs of salary sacrifice schemes could also be captured in this group.

Another respondent suggested specifying that this category includes all superannuation expenses, not just the amounts that have been paid, for example 'Contributions payable either by the establishment or on its behalf to a superannuation fund providing...'

### **Domestic services**

Eighty-one per cent of respondents who assessed the importance of this data element rated it as either important (50%) or highly important (31%), and 81% rated it as either useful (63%) or highly useful (19%). Thirteen per cent thought the data element was not important and 6% thought it not useful.

Outsourcing of domestic services may reduce the accuracy of reporting in this category. One respondent noted that staff may perform a variety of domestic, personal care and administration duties, making accurate reporting difficult.

See comments for *all recurrent expenditure components* above.

### **Payments to visiting medical officers**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (50%) or highly important (38%), and 94% rated it as either useful (63%) or highly useful (31%). Thirteen per cent thought the data element was not important and zero thought it not useful.

The only specific comment was that the definition includes reference to payments for 'honorary' work, which does not seem to make sense. It perhaps was intended to be 'hourly' or there was confusion with visiting medical officers paid an 'honorarium'.

### **Drug supplies**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (38%) or highly important (50%), and 94% rated it as either useful (56%) or highly useful (38%). Thirteen per cent thought the data element was not important and zero thought it not useful.

One respondent commented that the outsourcing of pharmacy services and inclusion of the expenditure for those contracts lessens the utility of this item. Disaggregation of pharmacy expenditure might increase the usefulness of this data element, for example by the WHO's ATC classification system.

### **Food supplies**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (56%) or highly important (31%), and 94% rated it as either useful (69%) or highly useful (25%). Thirteen per cent thought the data element was not important and zero thought it not useful.

One comment mentioned that the inclusion of outsourced food services in this category may mean that this expenditure category includes variable labour components.

### **Medical and surgical supplies**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (38%) or highly important (50%), and 94% rated it as either useful (56%) or highly useful (38%). Thirteen per cent thought the data element was not important and zero thought it not useful.

Several respondents indicated the need to disaggregate this category to make it more useful. One respondent suggested an additional data element to cover in-house and outsourced pathology and radiology services.

### **Other recurrent expenditure**

Eighty-one per cent of respondents who assessed the importance of this data element rated it as either important (38%) or highly important (44%), and 88% rated it as either useful (50%) or highly useful (38%). Thirteen per cent thought the data element was not important and 6% thought it not useful.

Respondents indicated that this data element allows some jurisdictions to allocate a high percentage of expenditure to this category, reducing the usefulness of inter-jurisdictional analysis of all the recurrent expenditure categories. Although it is necessary to have this 'other' category, the onus is on each jurisdiction to divide expenditures accurately between all recurrent expenditure categories. One respondent suggested renaming this category 'Other non-staff expenses'.

### **Salaries and wages—total**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (31%) or highly important (56%), and 94% rated it as either useful (56%) or highly useful (38%). Thirteen per cent thought the data element was not important and zero thought it not useful.

Comments on this data element indicated that each of the *Salaries and wages* categories are important and useful in building a picture of total salaries and wages. Good definitions allow accuracy and consistency in each category so that states and territories can use the data within their jurisdiction. Reliable data collections also allow the data to be comparable among states and territories and between years.

Several respondents commented that all staffing categories are overdue for a review. Staffing categories could be reviewed against the ABS ASCO codes. Another respondent noted that outsourcing of staffing arrangements may reduce the usefulness of some of staffing categories. One respondent suggested that the category be retitled *Staff expenses* (including salaries, wages and leave accruals) to be consistent with accrual accounting practices.

### **Salaries and wages—registered nurses**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (31%) or highly important (56%), and 94% rated it as either useful (56%) or highly useful (38%). Thirteen per cent thought the data element was not important and zero thought it not useful.

Some jurisdictions do not report salaries and wages for individual nurse categories, only total nurses. This limits the usefulness of the individual components. In particular, it would

be preferable to be able to differentiate between registered versus enrolled nurses given the difference in educational requirements for the two.

### **Salaries and wages—enrolled nurses**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (31%) or highly important (56%), and 94% rated it as either useful (56%) or highly useful (38%). Thirteen per cent thought the data element was not important and zero thought it not useful.

See comments on *Salary and wage – total* and *Salary and wages – registered nurses*.

### **Salaries and wages—student nurses**

Sixty-nine per cent of respondents who assessed the importance of this data element rated it as either important (44%) or highly important (25%), and 69% rated it as either useful (56%) or highly useful (13%). Twenty-five per cent thought the data element was not important and 19% thought it not useful.

This category has been reported as zero by most jurisdictions for most years. Even when it is reported, staff numbers and salary amounts are very small. Some respondents questioned the value of this element. It is important to review this category to see if it is relevant.

### **Salaries and wages—trainee/pupil nurses**

Sixty-three per cent of respondents who assessed the importance of this data element rated it as either important (38%) or highly important (25%), and 63% rated it as either useful (50%) or highly useful (13%). A comparatively high number of respondents, 31%, thought the data element was not important and 25% thought it not useful.

Several states and territories questioned whether trainee or pupil nurses still exist. No trainee or pupil nurses have been reported to NPHEd since 1997-98. This category needs to be reviewed.

### **Salaries and wages—salaried medical officer**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (31%) or highly important (56%), and 94% rated it as either useful (56%) or highly useful (38%). Thirteen per cent thought the data element was not important and zero thought it not useful.

There were no comments on this individual data element.

### **Salaries and wages—other personal care staff**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (50%) or highly important (38%), and 81% rated it as either useful (56%) or highly useful (25%). Thirteen per cent thought the data element was not important and 13% not useful.

Respondents indicated that there are constant difficulties distinguishing between *Other personal care staff* and *Domestic and other staff*. Several respondents suggested that staffing categories be reviewed to see which categories are necessary and useful. See also comments on *Salary and wages – total staff*.

### **Salaries and wages—diagnostic and health professionals**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (38%) or highly important (50%), and 94% rated it as either useful (63%) or highly useful (31%). Thirteen per cent thought the data element was not important and zero thought it not useful.

There may be scope for some profession based health categories to be reported separately, for example by registration status. Outsourcing of pathology and pharmacy services in particular may reduce the accuracy of salary and wage measures.

### **Salaries and wages—administrative and clerical staff**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (44%) or highly important (44%), and 88% rated it as either useful (56%) or highly useful (31%). Thirteen per cent thought the data element was not important and 6% thought it not useful.

See comments on *Salary and wages – total staff*.

### **Salaries and wages—domestic and other staff**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (44%) or highly important (44%), and 88% rated it as either useful (56%) or highly useful (31%). Thirteen per cent thought the data element was not important and 6% not useful.

Respondents indicated that there are constant difficulties distinguishing between *Domestic and other staff* and *Other personal care staff*. Several respondents suggested that staffing categories be reviewed to specify which categories are necessary and useful.

## **Revenue data elements**

State government sources of revenue are currently excluded from revenue counting. One respondent suggested that revenue from all sources disaggregated by funding source may be more useful than the current three categories. Revenue sources could include Department of Veterans' Affairs (DVA) payments, inter-hospital payments, contracted patients from private sector, research grants, and state block /Diagnosis Related Group (DRG) funding.

The Mental Health Establishments NMDS contains eight data elements which may be a useful starting point in developing more appropriate revenue categories. The categories are DVA funded expenditure, National Mental Health Strategy funded expenditure, other Australian Government funded expenditure, other patient revenue funded expenditure, other revenue funded expenditure, other state or territory funded expenditure, recoveries funded expenditure, and state or territory health authority funded expenditure.

### **Patient revenue**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (38%) or highly important (50%), and 81% rated it as either useful (44%) or highly useful (38%). Thirteen per cent thought the data element was not important and 6% thought it not useful.

One comment on this element was that capture and recording are not consistent across states and territories. Another respondent suggested that the title be changed to *Patient fee revenues*

and that the definition be reworded to simplify it and to specify that it relates only to revenues from the provision of health services to patients.

## **Other revenues**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (44%) or highly important (44%), and 81% rated it as either useful (50%) or highly useful (31%). Thirteen per cent thought the data element was not important and 6% not useful.

Respondents commented that the split between *Other revenue* and *Recoveries* is unclear. One respondent commented that the definition could do with some tightening, and suggested *All revenues of the establishment that are not included under patient fee revenues or recoveries revenues (but not including revenues from state and territory governments). This would include: earnings on investments; gifts from charitable institutions; bequests; and revenues deriving from the provision of accommodation to non-patients.*

## **Recoveries**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (50%) or highly important (38%), and 81% rated it as either useful (56%) or highly useful (25%). Thirteen per cent thought the data element was not important and 6% thought it not useful.

Comments indicated that the distinctions between *Recoveries* and *Other revenue* and *Patient revenue* is unclear. Another respondent felt that the current definition poses substantial problems as it allows revenues from the provision of goods and services to related establishments to be recorded as recoveries (for example cost recovery for laundry services). It is important to avoid double counting by separately defining and recording recoveries from other (hospital) establishments.

## **Other data elements**

### **Full-time equivalent staff (FTE)**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (38%) or highly important (50%), and 88% rated it as either useful (50%) or highly useful (38%). Thirteen per cent thought the data element was not important and 6% thought it not useful.

Comments on this data element focused on issues of scope: the inclusion or exclusion of staff in business units, outsourced contracts and staff working in non-hospital services (e.g. aged care services). Inconsistencies in reporting could reduce the usefulness of the FTE data. One respondent suggested that the disaggregation of FTE into admitted versus non-admitted patients could be useful.

*Salaries and wages* and *Full-time equivalent staff (FTE)* numbers are collected for the same categories. Comments on the *Salaries and wages* categories translate to the *FTE* categories and any amendments to *Salaries and wages* would also require amendments to *Full-time equivalent staff*.

One respondent suggested that Indigenous status identifier could be included for staffing data. The AIHW's medical labour force surveys include Indigenous status in their staffing categories.

One respondent requested more information on staff vacancies (unfilled medical and nursing positions) be included in this NMDS. The AIHW believes this information is more appropriately covered by the ABS job vacancies survey and the ANZ Bank Employment Advertisement Series.

### **Specialised service indicators**

Seventy-five per cent of respondents who assessed the importance of this data element rated it as either important (19%) or highly important (56%), and 81% rated it as either useful (31%) or highly useful (50%). Nineteen per cent thought the data element was not important and 19% not useful.

There were a large number of comments on this data element, all agreeing that it needed work. Generally, respondents thought that the categories were out of date, too broad and ill-defined. Specific problems included:

1. Small categories such as pancreas transplantation units are included while some major craft groups such as orthopaedics are not represented. Other units not represented include operating theatres, eating disorders and specialised procedure rooms (for example angioplasty and endoscopy).
2. Some categories use labels which are not defined – e.g. level III, Acute and Maintenance.
3. Some categories use superseded terminology that may be misinterpreted. For example, Geriatric Assessment Unit is now called Aged Care Assessment Team.
4. There are frequent mismatches between specialised service units counted and hospital functions. For example one hospital might indicate that it has a specialised obstetric unit but have few obstetric patients, whereas another hospital might have large numbers of obstetric patients but no specialised obstetric unit.

The AIHW noted that these data are frequently requested, with enquirers also requesting beds available in these and other (not included) units. Another respondent indicated that the hospice unit count contributes to the picture of palliative care provision in Australia. Alternative sources of information were suggested, including DRG data (for admitted patients), Service Related Groups or the list of clinics in the Outpatient Care NMDS.

### **Outpatient Care NMDS**

There is some overlap between this NMDS and the Outpatient Care NMDS. The Outpatient Care NMDS includes Peer Group A and B hospitals only (Principal referral and specialist women's and children's hospitals and Large hospitals). However, the data elements in both data sets should be monitored as the Outpatient Care NMDS develops. The data elements are:

- . number of group sessions
- . number of occasions of service
- . organisation identifier (Australian)
- . outpatient clinic type
- . non-admitted patient service event
- . service contact – group session status, individual/group session indicator code.

## **Occasions of service**

Eighty-one per cent of respondents who assessed the importance of this data element rated it as either important (19%) or highly important (63%), and 81% rated it as either useful (31%) or highly useful (50%). Thirteen per cent thought the data element was not important and 6% thought it not useful.

One respondent suggested that this data would be more useful if it was counted for occasions per person. Other respondents noted that there is overlap between this data element and the *Occasions of service* data element in the new Outpatient Care NMDS. However the Outpatient Care NMDS does not cover all public hospitals in Australia.

## **Type of non-admitted patient care**

Eighty-one per cent of respondents who assessed the importance of this data element rated it as either important (25%) or highly important (56%), and 75% rated it as either useful (31%) or highly useful (44%). Thirteen per cent thought the data element was not important and 13% thought it not useful.

Several respondents requested work to disaggregate non-admitted patient care. While this disaggregation will partially be covered by the new Outpatient Care NMDS, there is also room to improve the categories in the *Type of non-admitted patient care*.

The AIHW noted that it would be better if the definition of emergency services matched the definition of emergency department services in the Non-admitted Patient Emergency Department Care NMDS, and if counts for mental health were aligned with the Community Mental Health Care NMDS.

One respondent suggested that Indigenous status identifier be included for *Type of non-admitted patient care* (although, over time, Indigenous status for occasions of service needs to be addressed by the Outpatient Care NMDS).

## **Type of non-admitted patient care (public psychiatric, alcohol and drug)**

Seventy-five per cent of respondents who assessed the importance of this data element rated it as either important (25%) or highly important (50%), and 75% rated it as either useful (31%) or highly useful (44%). Nineteen per cent thought the data element was not important and 6% thought it not useful.

A few respondents commented that the scope of this data element is narrow. The AIHW noted that there is more detailed information collected on non-admitted patient care in public psychiatric hospitals in the Community Mental Health Care NMDS. Also the non-admitted patient care in public alcohol and drug hospitals (of which there are only two in Australia) may be better covered by the Alcohol and Other Drug Treatment Services NMDS.

## **Individual/group session**

Seventy-five per cent of respondents who assessed the importance of this data element rated it as either important (31%) or highly important (44%), and 69% rated it as either useful (31%) or highly useful (38%). Thirteen per cent thought the data element was not important and 13% thought it not useful.

Some respondents indicated that this is a 'highly important and useful' data element as it distinguishes between groups when counting occasions of service. Other respondents indicated that they did not use this data element.

## **Group sessions**

Seventy-five per cent of respondents who assessed the importance of this data element rated it as either important (38%) or highly important (38%), and 63% rated it as either useful (31%) or highly useful (31%). Thirteen per cent thought the data element was not important and 19% thought it not useful.

Comments on this data element were generally supportive, a number suggesting that it might be useful to also count the number of participants in the session. Number of group sessions does not give information about what occurs (resource wise) at the group sessions. The Outpatient Care NMDS has counts of patients attending group sessions in its *Occasions of service* data element.

## **Number of available beds for admitted patients**

Eighty-one per cent of respondents who assessed the importance of this data element rated it as either important (25%) or highly important (56%), and 81% rated it as either useful (31%) or highly useful (50%). Nineteen per cent thought the data element was not important and 13% thought it not useful.

This data element elicited more comments than any other data element. Most comments related to the broad definition and varied interpretation of the definition, for example 'the definition is too open to interpretation which leads to haphazard reporting'. Difficulties defining beds were consistently mentioned, as were issues counting day surgery beds, trolleys, chairs and beds in specialty clinics, such as coronary care beds.

Some respondents suggested improvements to the definition of an 'available bed' are needed, while others indicated that this data element may no longer be relevant to the analysis of service capacity and provision. The AIHW noted that these data are often requested.

## **Teaching status**

Sixty-nine per cent of respondents who assessed the importance of this data element rated it as either important (38%) or highly important (31%), and 81% rated it as either useful (56%) or highly useful (25%). Thirty-one per cent thought the data element was not important and 19% thought it not useful.

Several respondents suggested that this data element be reviewed. Many hospitals (of all sizes) are now providing clinical experience for students and so data are fairly ambiguous. Respondents also questioned if these data have any meaning.

## **Supporting data elements and data element concepts**

### **Hospital**

Eighty-eight per cent of respondents who assessed the importance of this data element concept rated it as either important (31%) or highly important (56%), and 88% rated it as either useful (44%) or highly useful (44%). Thirteen per cent thought the data element was not important and zero thought it not useful.

There were quite a variety of comments on this data element. Several respondents thought it central to the whole NMDS, whereas others thought it might be made redundant by the *Establishment type* data element work. Some respondents thought it 'acceptable' provided that there is acknowledgement that definitions of hospitals (and hospital services) vary. The issue of counting hospitals versus other facilities was again raised. The NMDS for

Community Mental Health Care and the NMDS for Mental Health Establishments provide examples of how this can be done. Theoretically, the data that they specify can be analysed disregarding the boundary between hospital and non-hospital services (as is currently done with the Community Mental Health Care data).

### **Hospital boarder**

Eighty-one per cent of respondents who assessed the importance of this data element concept rated it as either important (63%) or highly important (19%), and 88% rated it as either useful (69%) or highly useful (19%). Nineteen per cent thought the data element was not important and zero thought it not useful.

Several respondents commented that this data element concept is useful for determining what records need to be excluded from data for this NMDS.

### **Non-admitted patient**

Eighty-eight per cent of respondents who assessed the importance of this data element concept rated it as either important (25%) or highly important (63%), and 88% rated it as either useful (38%) or highly useful (50%). Thirteen per cent thought the data element was not important and 6% not useful.

The definition of admitted versus non-admitted patient impacts on other data elements including *Number of available beds*, *Occasions of service* and non-admitted patient cost proportions (IFRACs). Comments supported the need to improve the definitional boundary between admitted and non-admitted patient. Several respondents referred to the work on this data element currently being conducted by HDSC.

### **Overnight-stay patient**

Eighty-one per cent of respondents who assessed the importance of this data element concept rated it as either important (25%) or highly important (56%), and 88% rated it as either useful (31%) or highly useful (56%). Nineteen per cent thought the data element was not important and 13% thought it not useful.

One respondent commented that this data element concept is not really needed for this NMDS.

### **Patient**

Eighty-eight per cent of respondents who assessed the importance of this data element concept rated it as either important (25%) or highly important (63%), and 94% rated it as either useful (31%) or highly useful (63%). Thirteen per cent thought the data element was not important and 6% thought it not useful.

One respondent commented that this data element concept is not really needed for this NMDS.

### **Same-day patient**

Eighty-eight per cent of respondents who assessed the importance of this data element concept rated it as either important (25%) or highly important (63%), and 94% rated it as either useful (31%) or highly useful (63%). Thirteen per cent thought the data element was not important and 6% thought it not useful.

One respondent commented that this data element concept is not really needed for this NMDS.

## **Separation**

Eighty-eight per cent of respondents who assessed the importance of this data element rated it as either important (19%) or highly important (69%), and 94% rated it as either useful (31%) or highly useful (63%). Thirteen per cent thought the data element was not important and 6% thought it not useful.

Regarding this derived data element, one respondent indicated that it would be useful to be able to distinguish between physical discharge and statistical separations to determine the actual time a patient spends within an organisation for a specific condition. Other comments noted that this definition has limited applicability in this NMDS which focuses on establishments rather than separations.

## **Proposed data elements**

### **Admitted patient cost proportion (IFRAC)**

At present jurisdictions provide admitted patient cost proportions to the AIHW as part of the NPHEd. They are required for the calculation of cost per casemix adjusted separation. There is no definition of admitted patient cost proportion in the NHDD. Given the importance of cost per casemix adjusted separation as an indicator of hospital performance, the development of clear definition for this data item would be valuable.

Several respondents registered the need to formalise definitions for the admitted patient cost proportion categories – standard, acute and acute non-psychiatric – and to include them in the NMDS.

### **Operating theatre efficiency**

One respondent suggested that increased work on operating theatre utilisation and throughput would be worthwhile. This could include information such as numbers of theatres, opening hours and numbers of patients and/or procedures.

### **Safety and quality**

As outlined in Chapter 3, several respondents to the survey of utility requested an increased focus on safety and quality data collection. Suggestions included counts of sentinel events, reporting of ACHS clinical indicators, and the inclusion of NPHEd quality accreditation/certification status items in the NMDS.

Table 5.1: 'Importance and usefulness': Survey responses and percentages by data element.

| Data element                                    | Importance    |           |                  | Importance (per cent*) |           |                  | Useful     |        |               | Useful (per cent*) |        |               |
|---|---------------|-----------|------------------|------------------------|-----------|------------------|------------|--------|---------------|--------------------|--------|---------------|
|   | Not important | Important | Highly important | Not important          | Important | Highly important | Not useful | Useful | Highly useful | Not useful         | Useful | Highly useful |
| <b>NMDS for public hospital establishments</b>  | 2             | 1         | 13               | 12%                    | 6%        | 76%              | 0          | 3      | 12            | 0%                 | 18%    | 71%           |
|   |               |           |                  |                        |           |                  |            |        |               |                    |        |               |
| <b>System level expenditure elements</b>        |               |           |                  |                        |           |                  |            |        |               |                    |        |               |
| Capital expenditure - gross                     | 3             | 3         | 8                | 19%                    | 19%       | 50%              | 3          | 4      | 6             | 19%                | 25%    | 38%           |
| Capital expenditure - net                       | 3             | 4         | 8                | 19%                    | 25%       | 50%              | 3          | 5      | 6             | 19%                | 31%    | 38%           |
| Indirect health care expenditure                | 4             | 9         | 2                | 25%                    | 56%       | 13%              | 5          | 8      | 1             | 31%                | 50%    | 6%            |
|   |               |           |                  |                        |           |                  |            |        |               |                    |        |               |
| <b>Establishment identification elements</b>    |               |           |                  |                        |           |                  |            |        |               |                    |        |               |
| Establishment identifier                        | 4             | 3         | 9                | 25%                    | 19%       | 56%              | 2          | 4      | 9             | 13%                | 25%    | 56%           |
| Establishment number                            | 2             | 4         | 10               | 13%                    | 25%       | 63%              | 0          | 5      | 10            | 0%                 | 31%    | 63%           |
| Establishment sector                            | 3             | 2         | 10               | 20%                    | 13%       | 67%              | 1          | 3      | 10            | 7%                 | 20%    | 67%           |
| Region code                                     | 8             | 0         | 7                | 50%                    | 0%        | 44%              | 5          | 4      | 6             | 31%                | 25%    | 38%           |
| State/territory identifier                      | 2             | 2         | 12               | 13%                    | 13%       | 75%              | 0          | 4      | 11            | 0%                 | 25%    | 69%           |
| Establishment type                              | 2             | 2         | 12               | 13%                    | 13%       | 75%              | 0          | 4      | 11            | 0%                 | 25%    | 69%           |
| Geographical location of establishment          | 3             | 2         | 10               | 19%                    | 13%       | 63%              | 5          | 3      | 7             | 31%                | 19%    | 44%           |
|   |               |           |                  |                        |           |                  |            |        |               |                    |        |               |
| <b>Establishment level expenditure elements</b> |               |           |                  |                        |           |                  |            |        |               |                    |        |               |
| Administrative expenses                         | 2             | 9         | 5                | 13%                    | 56%       | 31%              | 0          | 11     | 4             | 0%                 | 69%    | 25%           |
| Interest payments                               | 3             | 7         | 4                | 19%                    | 44%       | 25%              | 4          | 8      | 3             | 25%                | 50%    | 19%           |
| Depreciation                                    | 2             | 7         | 7                | 13%                    | 44%       | 44%              | 0          | 11     | 4             | 0%                 | 69%    | 25%           |
| Patient Transport                               | 2             | 9         | 5                | 13%                    | 56%       | 31%              | 1          | 9      | 4             | 6%                 | 56%    | 25%           |
|   |               |           |                  |                        |           |                  |            |        |               |                    |        |               |

(continued)

**Table 5.1 (continued): 'Importance and usefulness': Survey responses and percentages by data element.**

| Data element   | Importance    |           |                  |        | Importance (per cent*) |           |                  |        | Useful     |        |               |        | Useful (per cent*) |        |               |        |
|--|---------------|-----------|------------------|--------|------------------------|-----------|------------------|--------|------------|--------|---------------|--------|--------------------|--------|---------------|--------|
|  | Not important | Important | Highly important | Unsure | Not important          | Important | Highly important | Unsure | Not useful | Useful | Highly useful | Unsure | Not useful         | Useful | Highly useful | Unsure |
| Repairs & maintenance                                | 2             | 8         | 4                | 2      | 13%                    | 50%       | 25%              | 13%    | 0          | 10     | 3             | 3      | 0%                 | 63%    | 19%           | 19%    |
| Superannuation employer contribution                 | 2             | 8         | 5                | 1      | 13%                    | 50%       | 31%              | 6%     | 0          | 10     | 4             | 2      | 0%                 | 63%    | 25%           | 13%    |
| Domestic services                                    | 2             | 8         | 5                | 1      | 13%                    | 50%       | 31%              | 6%     | 1          | 10     | 3             | 2      | 6%                 | 63%    | 19%           | 13%    |
| Payments to VMOs                                     | 2             | 8         | 6                | 0      | 13%                    | 50%       | 38%              | 0%     | 0          | 10     | 5             | 1      | 0%                 | 63%    | 31%           | 6%     |
| Drug supplies  | 2             | 6         | 8                | 0      | 13%                    | 38%       | 50%              | 0%     | 0          | 9      | 6             | 1      | 0%                 | 56%    | 38%           | 6%     |
| Food supplies  | 2             | 9         | 5                | 0      | 13%                    | 56%       | 31%              | 0%     | 0          | 11     | 4             | 1      | 0%                 | 69%    | 25%           | 6%     |
| Medical & surgical supplies                          | 2             | 6         | 8                | 0      | 13%                    | 38%       | 50%              | 0%     | 0          | 9      | 6             | 1      | 0%                 | 56%    | 38%           | 6%     |
| Other recurrent expenditure                          | 2             | 6         | 7                | 1      | 13%                    | 38%       | 44%              | 6%     | 1          | 8      | 6             | 1      | 6%                 | 50%    | 38%           | 6%     |
| Salaries & wages                                     | 2             | 5         | 9                | 0      | 13%                    | 31%       | 56%              | 0%     | 0          | 9      | 6             | 1      | 0%                 | 56%    | 38%           | 6%     |
| Salaries & wages – salaried medical officer          | 2             | 5         | 9                | 0      | 13%                    | 31%       | 56%              | 0%     | 0          | 9      | 6             | 1      | 0%                 | 56%    | 38%           | 6%     |
| Salaries & wages – registered nurses                 | 2             | 5         | 9                | 0      | 13%                    | 31%       | 56%              | 0%     | 0          | 9      | 6             | 1      | 0%                 | 56%    | 38%           | 6%     |
| Salaries & wages – enrolled nurses                   | 2             | 5         | 9                | 0      | 13%                    | 31%       | 56%              | 0%     | 0          | 9      | 6             | 1      | 0%                 | 56%    | 38%           | 6%     |
| Salaries & wages – student nurses                    | 4             | 7         | 4                | 1      | 25%                    | 44%       | 25%              | 6%     | 3          | 9      | 2             | 2      | 19%                | 56%    | 13%           | 13%    |
| Salaries & wages – trainee/pupil nurses              | 5             | 6         | 4                | 1      | 31%                    | 38%       | 25%              | 6%     | 4          | 8      | 2             | 2      | 25%                | 50%    | 13%           | 13%    |
| Salaries & wages – other personal care staff         | 2             | 8         | 6                | 0      | 13%                    | 50%       | 38%              | 0%     | 2          | 9      | 4             | 1      | 13%                | 56%    | 25%           | 6%     |
| Salaries & wages – diagnostic & health professionals | 2             | 6         | 8                | 0      | 13%                    | 38%       | 50%              | 0%     | 0          | 10     | 5             | 1      | 0%                 | 63%    | 31%           | 6%     |
| Salaries & wages – administrative & clerical staff   | 2             | 7         | 7                | 0      | 13%                    | 44%       | 44%              | 0%     | 1          | 9      | 5             | 1      | 6%                 | 56%    | 31%           | 6%     |
| Salaries & wages – domestic & other staff            | 2             | 7         | 7                | 0      | 13%                    | 44%       | 44%              | 0%     | 1          | 9      | 5             | 1      | 6%                 | 56%    | 31%           | 6%     |

(continued)

Table 5.1 (continued): 'Importance and usefulness': Survey responses and percentages by data element.

| Data element                                    | Importance    |           |                  | Importance (per cent*) |           |                  | Useful     |        |               | Useful (per cent*) |        |               |     |
|---|---------------|-----------|------------------|------------------------|-----------|------------------|------------|--------|---------------|--------------------|--------|---------------|-----|
|   | Not important | Important | Highly important | Not important          | Important | Highly important | Not useful | Useful | Highly useful | Not useful         | Useful | Highly useful |     |
| <b>Revenue data elements</b>                    |               |           |                  |                        |           |                  |            |        |               |                    |        |               |     |
| Patient revenue                                 | 2             | 6         | 8                | 13%                    | 38%       | 50%              | 1          | 7      | 6             | 2                  | 6%     | 44%           | 38% |
| Other revenues                                  | 2             | 7         | 7                | 13%                    | 44%       | 44%              | 1          | 8      | 5             | 2                  | 6%     | 50%           | 31% |
| Recoveries                                      | 2             | 8         | 6                | 13%                    | 50%       | 38%              | 1          | 9      | 4             | 2                  | 6%     | 56%           | 25% |
| <b>Other data elements</b>                      |               |           |                  |                        |           |                  |            |        |               |                    |        |               |     |
| Full-time equivalent staff                      | 2             | 6         | 8                | 13%                    | 38%       | 50%              | 1          | 8      | 6             | 1                  | 6%     | 50%           | 38% |
| Specialised service indicators                  | 3             | 3         | 9                | 19%                    | 19%       | 56%              | 3          | 5      | 8             | 0                  | 19%    | 31%           | 50% |
| Occurrences of service                          | 2             | 3         | 10               | 13%                    | 19%       | 63%              | 1          | 5      | 8             | 2                  | 6%     | 31%           | 50% |
| Type of non-admitted patient (NAP) care         | 2             | 4         | 9                | 13%                    | 25%       | 56%              | 2          | 5      | 7             | 2                  | 13%    | 31%           | 44% |
| Type of NAP care (public psych, alcohol & drug) | 3             | 4         | 8                | 19%                    | 25%       | 50%              | 1          | 5      | 7             | 3                  | 6%     | 31%           | 44% |
| Individual / group session                      | 2             | 5         | 7                | 13%                    | 31%       | 44%              | 2          | 5      | 6             | 3                  | 13%    | 31%           | 38% |
| Group sessions                                  | 2             | 6         | 6                | 13%                    | 38%       | 38%              | 3          | 5      | 5             | 3                  | 19%    | 31%           | 31% |
| Number of available beds for admitted patients  | 3             | 4         | 9                | 19%                    | 25%       | 56%              | 2          | 5      | 8             | 1                  | 13%    | 31%           | 50% |
| Teaching status                                 | 5             | 6         | 5                | 31%                    | 38%       | 31%              | 3          | 9      | 4             | 0                  | 19%    | 56%           | 25% |
| <b>Supporting data element concepts</b>         |               |           |                  |                        |           |                  |            |        |               |                    |        |               |     |
| Hospital  | 2             | 5         | 9                | 13%                    | 31%       | 56%              | 0          | 7      | 7             | 2                  | 0%     | 44%           | 44% |
| Hospital boarder                                | 3             | 10        | 3                | 19%                    | 63%       | 19%              | 2          | 11     | 3             | 0                  | 13%    | 69%           | 19% |
| Non-admitted patient                            | 2             | 4         | 10               | 13%                    | 25%       | 63%              | 1          | 6      | 8             | 1                  | 6%     | 38%           | 50% |
| Overnight-stay patient                          | 3             | 4         | 9                | 19%                    | 25%       | 56%              | 1          | 5      | 9             | 1                  | 6%     | 31%           | 56% |
| Patient   | 2             | 4         | 10               | 13%                    | 25%       | 63%              | 1          | 5      | 10            | 0                  | 6%     | 31%           | 63% |
| Same-day patient                                | 2             | 4         | 10               | 13%                    | 25%       | 63%              | 1          | 5      | 10            | 0                  | 6%     | 31%           | 63% |
| Separation                                      | 2             | 3         | 11               | 13%                    | 19%       | 69%              | 1          | 5      | 10            | 0                  | 6%     | 31%           | 63% |

\* Percentages may not add to 100 due to rounding.