

# Appendix 2 Collection participation and estimation methods

The analysis in this report uses information collected in three of the four regular collections in the SAAP National Data Collection. An overview of these three collections follows. The level of agency participation in the collections is discussed and estimation methods used to allow for missing data in the Unmet Demand Collection are outlined.

## A2.1 The Client Collection

The Client Collection is the main component of the National Data Collection. It contains information about all clients receiving support of more than 1 hour's duration under SAAP. Data are recorded by service providers during or immediately following contact with clients and are then forwarded to the NDCA after clients' support periods have ended or, for ongoing clients, at the end of the reporting period (30 June). Data collected include basic socio-demographic information, information about the services required by and provided to each client, and information about each client's situation before and after receiving SAAP services. A full-scale trial of the Client Collection, involving all agencies across Australia, began in March 1996 and the collection proper began on 1 July 1996. The collection has continued, with some refinements to the data items being introduced in July each year.

To ensure that the data collected accurately reflect the work done under the auspices of the program, it is important that there is a high level of participation among SAAP-funded agencies. Overall, the participation rate for the Client Collection has been very satisfactory. In 1999–2000, 93% of SAAP agencies providing support and/or accommodation to SAAP clients participated in the collection (Table A2.1). This is down slightly from the 95% participation rate obtained for 1998–99.

In assessing the quality of data in any collection, it is important to consider not only overall participation rates but also the degree to which the data-collection forms returned are complete. All data collections and surveys invariably have some missing data, but this does not necessarily undermine the validity or reliability of information obtained. However, high levels of non-response to particular questions mean that some caution should be exercised when interpreting the data because the results may not fully reflect the entire population of interest.

In this context it should be noted that the protocols established for the National Data Collection require that SAAP clients provide information in a climate of informed consent (SAAP 1996). If clients' consent is not obtained, only a limited number of questions can be completed on the data-collection forms and an 'alpha code' is not recorded. Alpha codes are used to create a linkage key, which allows data collected on separate occasions from the same client to be combined without identifying the client. Thus they allow enumeration of actual *clients* in addition to occasions of support.

Nationally, consent and valid alpha codes with consent (termed 'valid consent') were obtained from clients in 79% and 77% of support periods respectively (Table A2.1). These rates were the highest since the inception of the National Data Collection in July 1996. In all States and Territories valid consent was obtained in the majority of cases, ranging from 70%

in Tasmania to 81% in Victoria. The 1999–2000 valid consent rates were higher for every State and Territory and primary target group compared with 1998–99.

It should also be noted that some participating SAAP agencies are classified as ‘high-volume’ agencies. These agencies, characterised by having a high client turnover, complete high-volume data-collection forms that collect only a subset of Client Collection data items. Information from these forms therefore appears only in tables using data from this subset of items; other tables are restricted to information from general agencies. There were 30,852 high-volume forms returned (21% of the total) during the reporting period (Table A2.1). Appendix 3 contains copies of the general client form and the high-volume client form.

The Australian Institute of Health and Welfare has developed a scheme—primarily for use when deriving annual estimates—that adjusts for differences between support periods with consent and those without. The scheme also adjusts estimates to allow for agency non-participation, for clients who give valid consent for some support periods but not for others (referred to as ‘mixed consent’), and for clients who do not give consent in any of their periods of support. A description of the scheme is given in the 1999–2000 national annual report (AIHW 2000b:57–8). In this current report, data items requiring consent are not used, and only Tables 2.1 and A1.1 present annual data. Consequently, only those tables have been adjusted, and then only for agency non-participation. No other adjustments have been made to estimates from the Client Collection.

**Table A2.1: SAAP Client Collection: agency participation rates and forms returned with informed consent and valid consent, by State/Territory and primary target group for 1999–2000 and by reporting period, Australia**

	Agencies		Forms returned		
	Total	Participation rate	Total	Consent	Valid consent
<b>State/Territory (1999–2000)</b>	<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>	<b>%</b>
NSW	384	91.9	47,007	75.5	74.0
Vic	311	93.6	39,948	83.0	81.0
Qld	182	92.3	24,121	78.2	73.8
WA	104	93.3	12,178	80.1	77.3
SA	77	93.5	10,158	81.0	79.3
Tas	41	97.6	5,634	71.3	69.5
ACT	30	100.0	3,188	80.9	79.7
NT	30	96.7	4,559	85.1	74.5
<b>Total</b>	<b>1,159</b>	<b>93.2</b>	<b>146,793</b>	<b>79.0</b>	<b>76.5</b>
<b>Primary target group (1999–2000)</b>					
Young people	452	92.9	34,516	75.7	74.1
Single men only	101	97.0	33,386	82.9	81.8
Single women only	45	93.3	3,550	75.8	73.6
Families	101	94.1	7,265	75.1	72.4
Women escaping domestic violence	267	94.0	32,146	77.4	71.6
Cross-target/multiple/general	193	90.2	35,930	81.0	79.3
<b>Total</b>	<b>1,159</b>	<b>93.2</b>	<b>146,793</b>	<b>79.0</b>	<b>76.5</b>
<b>Reporting period</b>					
1996–97	1,119	95.4	148,873	67.9	63.7
1997–98	1,159	94.6	156,589	75.4	72.0
1998–99	1,163	95.0	155,005	75.0	71.5
1999–2000	1,159	93.2	146,793	79.0	76.5

*Notes*

1. 'Agencies' refers to the number of agencies that were 'in scope', that is agencies that should have been participating in the reference period.
2. Based on forms returned from agencies in scope for the Client Collection.
3. 'Valid consent' here refers to all forms with a valid alpha code that were completed with consent, where the alpha code is a predetermined combination of letters from a client's name together with a letter designating the client's gender. It is joined to the client's reported year of birth and encrypted to create a unique client indicator. This is used to combine data from more than one support period without requiring the actual name of the client to be recorded.
4. Of the 146,793 forms returned in 1999–2000, 30,852 were high-volume forms.

Sources: AIHW 1997; AIHW 1999; AIHW 2000a; AIHW 2000b

## **A2.2 The Unmet Demand Collection**

### **A2.2.1 The Collection**

The 2 week Unmet Demand Collection is conducted annually to gather information on homeless people or people at risk of homelessness who are not accepted as clients of a SAAP agency. It measures the level of unmet demand for SAAP services by collecting information about the number of requests for support or accommodation that are not met, for whatever reason. In 1999–2000 the collection was held between 11 and 24 November. All SAAP-funded agencies that provide support or accommodation to clients were asked to record each unsuccessful request for assistance during the specified fortnight—a form was completed for each person aged 18 years or more and for children aged less than 18 years who were not accompanied by their parent or guardian. In November 1999, 7,394 forms were returned (Table A2.2).

The participation rate for the Unmet Demand Collection was lower than that for the Client Collection. Nationally, 71% of agencies returned forms following the 2 week collection period—lower than the 79% recorded in the previous year (Table A2.2). The participation rate ranged from a high of 84% in the Australian Capital Territory to a low of 61% in Western Australia. It also varied across target groups: agencies targeting families had the highest participation rate (85%) and agencies targeting single men recorded the lowest (66%) (Table A2.2).

It is not known whether agencies that did not participate in the Unmet Demand Collection received requests they could not meet. Consequently, it is possible that findings from this collection may understate the true extent of unmet demand.

**Table A2.2: SAAP Unmet Demand Collection: agency participation rates and forms returned, by State/Territory and primary target group for 11–24 November 1999 and by reporting period, Australia**

	Agencies	Participation rate	Forms returned
State/Territory (11–24 November 1999)	Number	(%)	Number
NSW	383	69.5	2,053
Vic	314	74.8	1,996
Qld	182	69.8	1,607
WA	108	61.1	603
SA	75	66.7	616
Tas	41	75.6	183
ACT	31	83.9	200
NT	30	80.0	136
<b>Total</b>	<b>1,164</b>	<b>70.9</b>	<b>7,394</b>
<b>Primary target group (11–24 November 1999)</b>			
Young people	450	68.2	2,545
Single men only	100	66.0	482
Single women only	45	66.7	301
Families	99	84.8	1,330
Women escaping domestic violence	263	74.9	1,056
Cross-target/multiple/general	207	68.1	1,680
<b>Total</b>	<b>1,164</b>	<b>70.9</b>	<b>7,394</b>
<b>Reporting period</b>			
14–27 November 1996	1,106	69.0	8,036
13–26 November 1997	1,152	76.3	7,239
12–25 November 1998	1,168	78.6	7,001
11–24 November 1999	1,164	70.9	7,394

*Notes*

1. Based on forms returned from agencies in scope for the Unmet Demand Collection.
2. 'Agencies' refers to the number of agencies that were 'in scope', that is agencies that should have been participating in the reference period.
3. In November 1999, 469 forms were returned for people who refused assistance.

Sources: SAAP Administrative Data Collection and Unmet Demand Collection; AIHW 1997; AIHW 1999; AIHW 2000a; AIHW 2000b

## A2.2.2 Estimation methods

During the collection period for the 1999 Unmet Demand Collection, SAAP agencies across Australia reported 6,925 requests for support or accommodation that were not met, excluding those in which people refused to accept assistance (Table A2.2). However, many of these requests were at inappropriate agencies; such *invalid* requests include those made for accommodation at agencies that do not provide accommodation or where the person did not fall within the agency's target group. Invalid requests may be followed by successful requests at another agency, especially if a referral has been arranged. Consequently, the number of *valid unmet requests* is a more useful measure of unmet demand. In addition, not all valid unmet requests involve accommodation. In the context of homelessness, the level of unmet requests for immediate accommodation is of particular importance. It must also be emphasised that the number of valid unmet requests does not represent the actual number of people, since a person can make requests on more than one occasion and of more than one SAAP agency. Therefore, there are two types of estimates of primary interest: numbers of valid unmet requests, and numbers of people with valid unmet requests.

There are several difficulties in estimating both the number of valid unmet requests and the number of people who make these requests but who, for various reasons, are not provided with that assistance. First, a proportion of people who make an unsuccessful request for support or accommodation may subsequently receive ongoing support or accommodation from a SAAP agency, quite possibly soon after the initial request. Use of a linkage key (the alpha code) has proved to be unworkable in the context of unmet need, so to date it has not been possible to identify when this situation occurs. Second, people may have their needs met by other means and no longer require SAAP assistance. Third, a person may make several requests for the same assistance. Again, without a linkage key related requests cannot be identified with certainty. Finally, data required to identify valid unmet requests may be missing from returned forms.

This poses several problems:

- Estimates of numbers of unmet requests obtained from the collection may overstate the actual level of unmet demand.
- Estimates of valid unmet requests may be too low as a result of missing data.
- The number of people making valid unmet requests cannot be obtained directly from the collection.
- An accurate final success rate for those seeking assistance cannot be calculated.

Although it is not currently possible to resolve the first and last of these problems, a method has been developed which derives estimates of both the total number of valid unmet requests and the number of individuals, or potential clients, whose valid requests were not met during the 2 week period. It should be noted, however, that the resulting estimate of potential clients would overstate the number of people involved if people make requests for different services on different approaches to SAAP agencies within the collection period. Additionally, because people might make several approaches to SAAP agencies throughout the year, the fortnightly figure cannot be pro-rated up to give an estimate of the number of people turned away from SAAP agencies annually. That people often approach SAAP services more than once within 12 months is illustrated by the fact that nationally 35% of SAAP clients had more than one support period in 1999-2000 (AIHW 2000b:23).

Between 11 and 24 November 1999 an estimated 4,450 potential clients were unable to be supported by SAAP agencies at the time they made their request for assistance (Table 3.1). Furthermore, it is estimated that these people made a total of 5,420 valid unmet requests for this assistance. The method used to derive these estimates is outlined in the following section.

### **Adjusting for missing information**

The foregoing discussion makes it clear that two types of estimates from the Unmet Demand Collection are particularly important:

- numbers of valid unmet requests for immediate accommodation; and
- numbers of potential clients.

These estimates are crucial because they show the volume of requests for immediate accommodation, indicate the number of people with unmet needs within the collection period, and are used in conjunction with data from other collections to examine total demand for SAAP services. Missing data in items used to derive these estimates will therefore affect the estimates' utility because they lead to estimates being too low.

The information used to derive these estimates is elicited through five questions on the Unmet Demand form (see Appendix 3 for the questionnaire):

- question 10, asking about immediacy of need for accommodation;
- question 11, asking whether or not this was the first time the person had their request turned down;
- question 12, asking whether the previous request for assistance, identified in question 11, was made at a SAAP agency;
- question 13, asking if the person refused an offer of assistance; and
- question 14, asking if the person made a valid request—that is, sought support from an appropriate agency (in terms of target group and type of assistance provided by the agency).

Missing information for any of these questions affects estimates of valid unmet requests and/or estimates of potential clients.

To maximise the utility of estimates from the Unmet Demand Collection, where information was missing for one of these questions an answer was imputed. The imputation itself was done at the form level by randomly assigning an answer for the missing question using the distribution of answers for that question. To improve accuracy, this imputation also used information from related questions. This is the first time such adjustments have been made in connection with the Unmet Demand Collection.

An estimate of the total number of valid unmet requests can then be derived by identifying forms that corresponded to valid unmet requests. This is done using both the original and the imputed answers: initially valid requests are identified using question 14, then any requests in which an offer of assistance was refused are excluded using the results of question 13. Question 10 can then be used to divide these valid unmet requests into requests for immediate accommodation and other requests.

Potential clients are identified by finding those valid unmet requests that correspond to first valid unmet requests. This can partly be done by excluding repeat requests at SAAP agencies (identified via questions 11 and 12) from identified valid unmet requests (estimated as described). However, in addition to this, to estimate the number of potential clients one

further piece of information is needed: whether a first (invalid) request at an inappropriate agency later becomes an unmet (valid) request at an appropriate agency. Such information is very difficult to obtain and is not available from the current collection. In previous reports adjustments were made for this gap in information at the State and Territory level. The adjustments were based on the ratio of valid second (or further) unmet requests to the total number of first unmet requests. In the current analysis this ratio was also applied, but it was used at the form level to provide an estimate of the probability of an invalid first unmet request later becoming a valid unmet request. Using this probability, a proportion of invalid first unmet requests were imputed to become first valid unmet requests. These imputed first valid unmet requests can then be combined with observed first valid unmet requests to estimate the total number of potential clients. This 'unit-level' approach allows greater flexibility in the tables that can be produced than the 'State-level' adjustments.

In this report, imputed data are included in all tables that use information from questions 10 to 14 on the Unmet Demand Collection form, or present information on potential clients. Notes to tables indicate the use of imputed data.

## **A2.3 The Casual Client Collection**

The 2 week Casual Client Collection is conducted annually to elicit information about short-term or one-off assistance provided to homeless people and people at risk of homelessness. In 1999–2000 it was conducted from 18 May to 31 May. A total of 30,050 records were returned for the collection period (Table A2.3).

The participation rate for this collection was relatively high, with 83% of agencies across Australia returning forms following the collection period, compared with 75% in the previous year. There was some variation across States and Territories—94% of agencies in the Australian Capital Territory participated, compared with 80% of agencies in New South Wales, Western Australia and South Australia. Variation also occurred across target groups. Participation was highest among agencies targeting single men (88%) and lowest among agencies targeting single women (76%).



**Table A2.3: SAAP Casual Client Collection: participation rates and forms returned, by State/Territory and primary target group for 18–31 May 2000 and by reporting period, Australia**

	Agencies	Participation rate	Records returned
<b>State/Territory (18 May–31 May 2000)</b>	<b>Number</b>	<b>(%)</b>	<b>Number</b>
NSW	383	79.6	5,779
Vic	315	86.0	6,901
Qld	186	81.7	10,892
WA	108	79.6	3,362
SA	79	79.7	1,701
Tas	41	90.2	496
ACT	31	93.5	489
NT	30	83.3	430
<b>Total</b>	<b>1,173</b>	<b>82.5</b>	<b>30,050</b>
<b>Primary target group (18–31 May 2000)</b>			
Young people	449	81.1	4,964
Single men only	101	88.1	5,231
Single women only	45	75.6	765
Families	101	82.2	1,822
Women escaping domestic violence	268	85.4	2,641
Cross target/multiple/general	209	80.9	14,627
<b>Total</b>	<b>1,173</b>	<b>82.5</b>	<b>30,050</b>
<b>Reporting period</b>			
22 May–4 June 1996	1,127	79.2	40,762
21 May–3 June 1997	1,175	81.1	25,257
20 May–2 June 1999	1,183	74.9	27,050
18 May–31 May 2000	1,173	82.5	30,050

*Note:* 'Agencies' refers to the number of agencies that should have been participating in the reference period.

*Sources:* SAAP Administrative Data Collection and Casual Client Collection; AIHW 1997; AIHW 1999; AIHW 2000a; AIHW 2000b

## A2.4 Interpretation of tables

When interpreting the tables in this report, a number of points should be noted:

- The reference period for the table is specified in the title. This may vary from table to table, depending on the collection being used.
- The population to which the table refers is specified in the title. A number of tables use data from more than one collection, so a table may have two reference populations. This is specified in the title.

- The main unit used in the table (for example, percentages or numbers) is shown at the end of the table title. If no unit is given there, the units used are given in the body of the table. Fortnightly estimates based on the Unmet Demand Collection, and all figures from the Casual Client Collection, are rounded to the nearest 10. Annual estimates derived from the Client Collection are rounded to the nearest 100. Daily figures on demand for accommodation (presented in Table 3.2) are not rounded.
- Adjustments have been made for agency non-participation only in Tables 2.1 and A1.1 (see A2.2).
- Unless indicated otherwise, records with missing data (due to errors or omissions) are not included in the percentages or numbers in a table. Care should be taken when interpreting and using figures in a table if the numbers of errors and omissions are relatively high (as a rule of thumb, more than one-third as big as the number of records included in the table).
- Components may not add to totals due to rounding.
- In a number of tables people may have had more than one response, so percentages will not total 100. A note to the table will indicate whether this is the case.
- Where percentages sum to 100, the rows above the 'Total' row sum to 100. In the 'Total (%)' row, the figures to the left of '100.0' sum to 100.

In general, numbered notes at the bottom of the tables indicate:

- the number of records excluded from the table because of missing data. The number missing for each collection used in the table are given separately;
- whether an adjustment for non-participation has been made;
- whether any imputed data have been used (see Appendix A2.3.2); and
- any additional information needed to interpret the table.