National Mental Health Benchmarking Project Manual

PART 3

- Technical specifications for the national KPIs

This section of the manual outlines the technical specifications to be used by participating organisations in preparing their key performance indicators.

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INTRODUCTION AND CONTEXT

1. Purpose

This section of the manual has been prepared to guide organisations on how to prepare the national key performance indicators (KPIs) from their locally available data. The focus is on the 13 national KPIs described in the document *'Key Performance Indicators for Australian Public Mental Health Services'* (hereinafter referred to as the 'KPI Report') because these are the main indicators that will be used in the benchmarking forums.

The manual describes the technical definitions and approach to be used in constructing each indicator. The aim is to ensure consistency in the way participating organisations prepare their data, by describing the 'do's and don'ts', inclusions and exclusions and so forth. While these were presented in summary form in the KPI Report for each of the indicators, this manual:

- provides the additional detail needed to translate the broad measurement concepts into specific 'rules' that can be applied by individuals at the local service delivery level; and
- amends several of the indicator specifications described in the KPI Report. These amendments are necessary because either the original specifications were incomplete, or because they were defined in a way that was suitable for state-level analysis but could not be implemented by individual service organisations.

2. Manual to be used in conjunction with data reporting workbook

This manual is to be used in conjunction with a data reporting template prepared to assist organisations in submitting indicator data. The template comprises a series of spreadsheets, compiled in a single Excel file (or 'workbook'), that is organised around each of the KPIs. The workbook identifies the source data to be provided by each organisation and calculates each of the indicators. Completing the workbook is the basic data collection task for each participating organisation before it moves on to the next stage of the project.

More detail on the data reporting workbook is provided later in this manual.

3. Roles of participating organisations in preparing KPIs

The national benchmarking project is a collaborative exercise with each party playing a role. Details on the relative roles of the various participants are provided in Part 1 of this manual

Preparation of indicators using locally available data is an early task that needs to be performed by each of the participating organisations. It is anticipated that organisations will be challenged in conducting this work as it will require coming to grips with concepts that may be unfamiliar, as well as compiling and manipulating data from multiple sources within the organisation.

The work of organisations will be supported by the national coordinating group (AMHOCN), Under contractual arrangements with the Australian Government, AMHOCN will compile the information submitted by all organisations and present indicators in a way that allows comparison and exploration. Responsibility for the first step of the process lies with each organisation to gather and submit the data before the first benchmarking forum commences.

While this section of the manual describes the general principles and technical specifications to use in preparing the KPIs, it does not (and cannot) tell you how to translate these into specific terms that are applicable within your organisation. For example, the manual specifies the rule that 'separations (discharges) from hospitals that have occurred by transfer should be excluded from particular indicators'. As each organisation uses different codes to categorise inter- or intra-hospital transfers, this general rule needs to be interpreted by each organisation in way that references the local coding systems.

The manual assumes that readers are familiar with the content of the national KPI Report and the purposes of the project.

4. Role of benchmarking project officers

It is anticipated that the principal users of this manual will be the benchmarking project officers appointed by each organisation who will come from a variety of service delivery and related backgrounds (e.g., nursing, psychology, social work, medical records). The writers of this manual have not assumed that this audience will necessarily have an in-depth knowledge of health information concepts or data analysis expertise. In preparing the data reporting workbook, we have attempted to reduce the burden of calculating the indicators from the source data to allow project staff to focus their time on gathering the source information and moving on to the next stages of the work.

Nevertheless, producing indicators is always a data intensive exercise. While some of the information items required will be readily available locally, others are likely to need extraction of data from local systems and special analyses. To achieve this, benchmarking project staff will need to become acquainted with the information available locally and make contact with the various expertise within the organisation (e.g., finance, medical records, IT staff) required to complete the information in the worksheets.

5. Supplementary survey to complement the KPI data

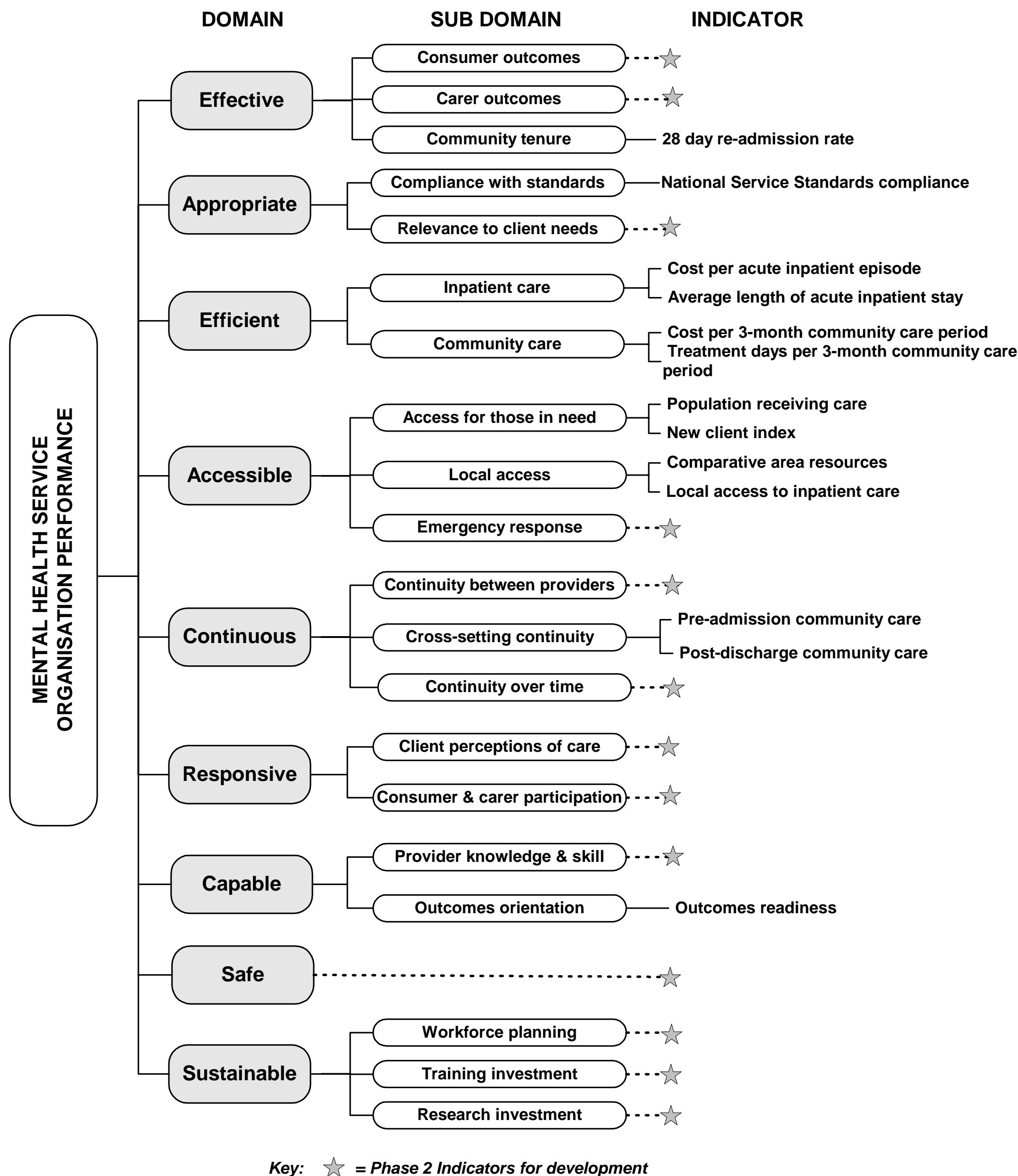
As noted earlier, this part of the manual only addresses the information required for the 13 national KPIs. To complement the KPI information, a supplementary survey will be conducted to gather contextual information about each organisation that will be useful in interpreting differences between organisations in performance. This survey will cover such areas as structure of programs, intake procedures and criteria, local availability of NGO support services, shared care arrangements with GPs and other items that will assist organisations in exploring similarities and differences in how services are provided.

The supplementary survey will be developed in collaboration with participating organisations. It is anticipated that the information collected will differ for each of the four forums.

OVERVIEW OF THE KPIs

6. The 13 ‘phase one’ national KPIs

The 13 national KPIs cover six of the nine domains of the National Health Performance Framework, summarised in the figure below.



Eight of the 13 are located primarily in two domains (accessibility and efficiency), although most of the indicators have relevance to more than one performance domain (Table 1).

Table 1: Phase 1 key performance indicators - primary and secondary coverage of the National Health Performance domains

Key Performance Indicator	Effective	Appropriate	Efficient	Responsive	Accessible	Sustainable	Capable	Safe	Continuous
28-day readmission rate	✓								○
National Service Standards compliance		✓					○		
Average length of acute inpatient stay		○	✓						
Cost per acute inpatient episode			✓						
Treatment days per three month community care period		○	✓						
Cost per three month community care period			✓						
Population receiving care					✓				
Local access to inpatient care					✓				
New client index					✓				
Comparative area resources					✓	○			
Pre-admission community care					○				✓
Post-discharge community care					○			○	✓
Outcomes readiness	○						✓		

✓ = Primary domain
○ = Secondary domain

7. Local data sources for the KPIs

Gathering information required to build the indicators will need to draw on multiple local sources. These are summarised in Table 2.

Table 2: Phase 1 key performance indicators - primary and secondary coverage of the National Health Performance domains

Indicator	Data source(s)
28-day readmission rate	Local hospital information system.
National Service Standards Compliance	Organisation returns to the National Survey of Mental Health Services 2005.
Cost per acute inpatient episode	Local financial systems and/or organisation returns to the National Survey of Mental Health Services.
	Local hospital information system.
Average length of acute inpatient stay	Local hospital information system.
Cost per Three Month Community Care Period	Local community mental health information system.
	Local financial systems and/or organisation returns to the National Survey of Mental Health Services.
Treatment days per three month community care period	Local community mental health information system.

Indicator	Data source(s)
Population under care	Local community mental health information system.
	Local hospital information system.
	ABS Population data by Area
Local access to inpatient care	Local hospital information system.
New client index	Local community mental health information system.
	Local hospital information system.
Comparative area resources	Local financial systems and/or organisation returns to the National Survey of Mental Health Services.
	ABS Population data by Area
Pre-admission community assessment	Local community mental health information system.
	Local hospital information system.
Post-discharge community care	Local community mental health information system.
	Local hospital information system.
Outcomes readiness	Local version of the National Outcome Casemix Collection (NOCC) dataset.
	Local community mental health information system.
	Local hospital information system.

8. KPI reference numbering system

For convenience in this manual, we have assigned reference numbers to each of the KPIs, as shown in Table 3.

Table 3: Key performance indicators reference numbers

Key Performance Indicator	KPI Reference Number
28-day readmission rate	KPI #1
National Service Standards compliance	KPI #2
Average length of acute inpatient stay	KPI #3
Cost per acute inpatient episode	KPI #4
Treatment days per three month community care period	KPI #5
Cost per three month community care period	KPI #6
Population receiving care	KPI #7
Local access to inpatient care	KPI #8
New client index	KPI #9
Comparative area resources	KPI #10
Pre-admission community care	KPI #11
Post-discharge community care	KPI #12
Outcomes readiness	KPI #13

KEY CONCEPTS TO ORIENT TO THE TASK

9. KPIs are based on 2004-05 as the reference year

Preparation of KPIs for the current project will not require prospective data collection but, instead, be based on retrospective analysis of recent historical data. The year to be reviewed is 2004-05, the most recent year for which full performance and financial data are available.

10. Organisations as the level of reporting KPIs

Part 2 of this manual outlines the concept of the 'mental health performance measurement matrix' and describes how indicators can be pitched at many levels. For example, indicators may be targeted at a low level (e.g., performance of the individual practitioner or team) or aggregated to higher levels such as program (e.g., Child & Adolescent program vs Adult program), the organisation, region/area (e.g., South East Queensland vs North Queensland), state or the national system level. The level at which indicators are prepared depends on the answer to the question 'whose performance are we measuring?'

The level at which performance is measured determines the type and specificity of performance indicators, and the way they are prepared. For the current project, all indicators are prepared at the level of the organisation, rather than individual service components within the organisation. This means that, for example, where an organisation manages multiple acute inpatient units, their performance will be 'bundled' into a single performance score; similarly, where the organisation manages several community mental health services that are organised into discrete teams or subprograms, these are aggregated to form a single entry in the comparative KPI charts that will be distributed to benchmarking participants.

This level of reporting reflects the principle aim of the national benchmarking project – to bring together similar organisations, grouped by programs, to allow performance to be compared.

An implication of this focus is that is that the original KPI Report specifications for a number of indicators need to be amended to ensure that they are meaningful and feasible at the organisation level. Take for example the 28-day readmission rate indicator – KPI #1. The original specification requires re-admissions to any psychiatric unit to be counted. This makes sense when the analysis is conducted at state level, but is not achievable by individual service organisations because they do not have access information about activities outside their management control.

11. In-scope and out-of-scope services

The national benchmarking forums are structured around the four major mental health program delivery areas – general adult services, child & adolescent services, older persons services and forensic services. The expectation (and one of the conditions of participation) is that all services within each organisation that fall within the definitions of the relevant program will be considered 'in-scope' and included within the KPIs prepared by the organisation. This is to reduce the possibility that particular services will be arbitrarily removed from analysis, reducing the reliability of KPIs in understanding overall organisational performance.

The option is provided, however, for organisations to classify some relevant services as ‘out-of-scope’. In general, this is only anticipated to be appropriate if the service provides a highly specialised (or ‘tertiary’) mental health function , or where the services are so demonstrably different in purpose from those of other participating organisations that it could not be regarded as being a ‘peer service’.

Details about ‘out-of-scope’ services are collected on the data reporting workbook to allow an assessment of the extent to which their exclusion might distort an organisation’s performance indicators.

12. Construction of indicators is a balance between precision and practicality

Preparing performance indicators for mental health services is inevitably complex. This stems largely from the inherent complexity of the mental health sector itself. Each year, the mental health system provides services across the traditional inpatient/community and acute/non-acute boundaries to thousands of consumers, undertakes millions of processes and produces a complex array of outcomes. The sector is also at the interface between the acute care, residential care, disability and housing sectors and requires ways of relating its work to activities in those other sectors.

Performance measurement in the mental health sector needs to reflect the complexity of the system being measured. But it also needs to be approached in a way that is achievable and practical. We have to avoid defining performance indicators so precisely, taking account of every nuance in mental health service delivery, that they are not possible for individual organisations to compile on a regular basis without a superhuman effort.

In preparing the specifications presented in this manual, compromises have been made to achieve the balance between validity, precision and achievability. Most of the indicators could be specified to further levels but we have chosen not to take this option unless the impact was clearly significant.

It is expected that that there will be many debates about definitions, exceptions and nuances as the benchmarking project proceeds. While these will be important, it will be equally important to return to the principle of ‘keep it simple, manageable and able to evolve with experience’ (see Part 2 of this Manual) to guide the work.

Consistent with this principle, it is worth considering all specifications for performance indicators to be work in progress. This also applies to the current document. We expect that a number of amendments will be made to the specifications in response to advice from organisations about the how specifications can be improved.

THE DATA REPORTING WORKBOOK

An Excel workbook has been developed as the primary tool to assist each organisation in preparing their indicators. The workbook identifies the source data that needs to be entered for each indicator and performs the various calculations to generate specific indicators. Each organisation is expected to complete this workbook and submit it to AMHOCN by **17 July 2006**.

13. Overview of the workbook

This workbook comprises 18 separate worksheets summarised below.

	Worksheet name	**Information required in the worksheet**
1.	General Information	identifying details about the organisation completing the workbook.
2.	Org Service Profile	Details of the inpatient units, ambulatory care services and community residential units considered in-scope and out-of-scope for the KPIs
3.	Expenditure	Summary sheet for reporting expenditure on all in-scope units.
4.	KPI#1_28 day readm	Data for constructing KPI#1
5.	KPI#2_National Stds	Data for constructing KPI#2
6.	KPI#3_Acute LOS	Data for constructing KPI#3
7.	KPI#4_Cost per Acute Inp Epis	Data for constructing KPI#4
8.	KPI#5_Community Treatment Days	Data for constructing KPI#5
9.	KPI#6_Community Epi Cost	Data for constructing KPI#6
10.	KPI#7_Population Treated	Data for constructing KPI#7
11.	KPI#8_Local Inpatient Access	Data for constructing KPI#8
12.	KPI#9_New Client Index	Data for constructing KPI#9
13.	KPI#10_Area Resources	Data for constructing KPI#10
14.	KPI#11_Pre Admiss Com Care	Data for constructing KPI#11
15.	KPI#12_Post Disch Com Care	Data for constructing KPI#12
16.	KPI#13_Outcomes Readiness	Data for constructing KPI#13
17.	KPI Notes	Sheet for recording any notes on specific KPIs
18.	KPI Summary	Summary sheet of all 13 KPIs

Each sheet is set up with 'fixed' cells, shaded either blue or green, that contain the formulae or titles, and 'data entry' cells (unshaded or white), where you need to enter your organisation's data. Fixed, shaded cells are locked to protect the information within them from being changed. An example is shown below.

ACUTE inpatient units		Recurrent expenditure $000s				
Hospital Name	Unit/Ward Name	Salaries & Wages	Non salary recurrent	Total Expenditure	Direct Expenditure component	Direct as % total
Hospital A	Ward 1	2,000	1,000	3,000	2,000	66.7%
Hospital A	Ward 2	1,000	500	1,500	900	60.0%
Hospital A	Ward 3	400	150	550	400	72.7%
Hospital B	Ward 4	1,000	500	1,500	1,000	66.7%
n.a	n.a			-		n.a
n.a	n.a			-		n.a
total acute inpatient expenditure		4,400	2,150	6,550	4,300	65.6%

Green cells have titles of the columns or rows

White cells are for data entry

Blue cells have formulae or links to other sheets

Information collection is organised so that any particular item of information that has relevance to more than one sheet only has to be entered once. For example, expenditure data is neded for several indicators but is collected only on the sheet 'Expenditure'. For those KPIs that need this information, the relevant worksheets contain formulae that copy the information required from 'Expenditure' to the appropriate cells. This 'enter data only once' principle is applied extensively throughout the workbook.

14. Workbook information requirements

The workbook requires quantitative data of two types:

- Specific data items that are required to construct the KPIs; and
- Other supplementary data that will be useful in interpreting the KPIs and exploring comparability between the organisations participating in each of the forums.

As an example of the latter category, KPI#3 (Average length of acute inpatient stay) is calculated as the mean (average) length of stay of all separations from the organisation's acute inpatient units within the 2004-05 period. This indicator is known to be skewed by 'outlier's – that is, exceptionally long staying cases. To gauge how this might differentially affect organisations, the data collected for KPI#3 also asks for information on the number of separations with length of stay greater than the outlier threshold – set as 35 days for adult services, 60 days for child & adolescent and older persons services and 180 days for forensic units.

Details on the additional quantitative data collected in relation to each of the indicators is given later in this manual.

15. Definitions of key terms

The data collected in the workbook relies on definitions that are specific to each of the indicators, and a number of more general terms that are used throughout the Australian health industry and defined in the National Health Data Dictionary. Definitions of all key terms are provided in the relevant sections throughout this document.

16. Completing the data reporting workbook

(a) Only fill in the white (unshaded) cells.

(b) Begin by completing the first two data entry worksheets –'Respondent Information' and 'Org Service Profile'. Relevant parts of these two sheets are automatically copied to other sheets.

(c) The order in which you complete the other sheets is up to you, and will depend upon how quickly you can track down the information required. Some information items are more complex and will require special analyses of your organisation's local data, while others will be relatively straightforward. We anticipate that, for most organisations, you will need to work on several sheets concurrently, adding the data iteratively as it becomes available over a period of several weeks.

(d) For this reason, and also because it is likely that the data reporting template will be updated periodically, benchmarking project staff responsible for completing the data requirements should take precautions to save the workbook regularly, and always print an updated hard copy when data are amended.

STEP THROUGH OF THE WORKBOOK AND INDICATORS

This section of the manual 'walks through' each of the spreadsheets in the workbook and describes the data requirements and specifications for all indicators.

Definitions are provided for each indicator (identifying any variations from the national specification, where relevant) and all source data items needed to build the indicator.

For some indicators, or for some organisations, it is possible that the specifications will not provide all the details required, or address particular circumstances that are difficult to resolve. Recognising this, a web-based 'question and answer' forum will be established to support the work of benchmarking project staff.

The web forum is expected to be available by early June. Details of log in arrangements will be provided separately to organisations.

Respondent information

Overview of the worksheet

This worksheet simply requires entry of identifying and contact details for the organisation. The content of the sheet is shown below.

Organisation Name		
State/Territory		
Benchmarking Forum		
Contact name		
Position Title		
	Area Code	Phone
Telephone number		
	Area Code	
Fax number		
Email address		

Key issues for this worksheet

Nil.

Guide to the individual data items

Organisation Name	Enter the name of your organisation.
State/Territory	Enter the jurisdiction in which your organisation is located.
Benchmarking Forum	Enter the forum in which your benchmarking organisation is participating i.e. General Adult Mental Health Services **OR** Child & Adolescent Mental Health Services **OR** Older Persons' Mental Health Services **OR** Forensic Mental Health Services Definitions of these terms is provided on page 13. Note that if your organisation is participating in more than one forum, a separate workbook must be completed for each.
Contact Name, Position Title, Telephone Number, Fax Number, Email address	Enter the name of the benchmarking project officer for your organisation, along with position and contact details.

Additional notes

Nil

Organisation service profile

Overview of the worksheet

This worksheet requires information about the services within your organisation that will be included in the KPI data (referred to as 'in-scope services'). It also requires information about your organisation's services that fall within the relevant broad benchmarking forum category but are considered to be 'out-of-scope' and excluded from the construction of the indicators. The worksheet looks like this (simulated data included):

INPATIENT SERVICES IN-SCOPE

ACUTE inpatient units

Hospital Name	Unit/Ward Name	Number of beds	N high depend-ency beds included
Hospital A	Ward 1	20	5
Hospital A	Ward 2	10	-
Hospital A	Ward 3	5	-
Hospital B	Ward 4	10	-
total acute inpatient beds		45	5

NON ACUTE inpatient units

Hospital Name	Unit/Ward Name	Number of beds
Hospital A	Ward 7	20
Hospital A	Ward 8	10
Hospital B	Ward 9	5
Hospital B	Ward 10	10
total non acute inpatient beds		45

INPATIENT SERVICES OUT-OF-SCOPE

ACUTE inpatient units

Hospital Name	Unit/Ward Name	Number of beds	N high depend-ency beds included
Hospital A	Statewide post natal unit	10	0
total acute inpatient beds		10	0

NON ACUTE inpatient units

Hospital Name	Unit/Ward Name	Number of beds
total non acute inpatient beds		0

AMBULATORY CARE SERVICES IN-SCOPE

Service/Team Name	Number of Direct Care FTE
Service unit 1	20
Service unit 2	10
Service unit 3	5
Service unit 4	6
Service unit 5	12
Service unit 6	5
Service unit 7	6
Service unit 8	12
total FTE	76

AMBULATORY CARE SERVICES OUT-OF-SCOPE

Service/Team Name	Number of Direct Care FTE
Promotion & Prevention Team	4
total FTE	4

COMMUNITY RESIDENTIAL SERVICES IN-SCOPE

Service Name	Number of beds
Residential unit 1	20
Residential unit 2	10
Residential unit 3	5
total resi beds	35

COMMUNITY RESIDENTIAL SERVICES OUT-OF-SCOPE

Service Name	Number of beds
total resi beds	0

Note that the information requested on this sheet relates to broad, quantitative data. The supplementary survey (see section 5) of participating organisations will collect more detailed, qualitative information to identify how organisations compare in terms of service configurations.

Key issues for this worksheet

Resolving in-scope and out-of-scope services

Deciding what services are **in-scope** and what are **out-of-scope** is necessary to ensure that the benchmarking forums focus on 'like with like' services, or services that can be considered to

form a 'peer group'. There is little value, for example, in comparing a specialist neuropsychiatric acute assessment unit with an acute inpatient unit that is dedicated to treating eating disorders. Both units will have a different casemix and performance expectations measured by such indicators as length of stay and average costs.

Identifying in-scope and out-of-scope services should be approached in two steps.

- *Step 1: Identify the services within your organisation that meet the broad service definitions for the relevant benchmarking forum.*

  The benchmarking forums are organised around the four main program categories of public sector mental health services. As a first step, your organisation should identify what services are **potentially** in-scope for the specific forum in which the organisation is participating, by referring to the definitions for each of the forum categories.

  The definitions below are taken from the service classification approach used in the National Survey of Mental Health Services, a national collection that has been in place since 1994 that provides the information used in the National Mental Health Report.

General Adult Mental Health Services	These services principally target the general adult population (aged 18-65 years) but may provide services to children, adolescents or the aged. General mental health services therefore are those services that cannot be described as specialist child and adolescent, older persons' or forensic services (defined below). General adult mental health services include hospital units in which the principal function is the provision of some form of specialised service to the general adult population (e.g. post-natal depression, anxiety disorders).
Child & Adolescent Mental Health Services	These services principally target children and young people up to the age of 18 years. Classification of services in this category requires a recognition by the regional or central funding authority of the special focus of the services on children or adolescents.
Older Persons' Mental Health Services	These services principally target people in the age group 65 years and over. Classification of services in this category requires a recognition by the regional or central funding authority of the special focus of the services on aged persons.
Forensic Mental Health Services	These services principally assess, treat and care for mentally disordered individuals whose condition has led them to commit criminal offences or makes it likely that they will offend in the future if not adequately treated or contained. Forensic psychiatry services include prison-based specialist mental health services.

- *Step 2: Identify any out-of-scope services.*

  Once the services that meet the definition for the relevant forum are identified, a decision is required as to whether any will be considered out-of-scope for the construction of the performance indicators. In general, this question is only expected to apply to organisations participating in the general adult mental health services forum. For these organisations, a service that meets the specific forum criteria should be considered out-of-scope only if it provides a **highly specialised (or 'tertiary') mental health function.** For example, an organisation participating in the general adult services forum may manage a post natal

acute inpatient unit that, unlike other inpatient services that have a specific local area catchment, has a statewide function. This unit should be excluded from the indicators because its functions are so different from those of other organisations participating in the adult services forum that it could not be regarded as being a 'peer service'.

All services deemed out-of-scope need to be identified on this worksheet to allow for later comparison.

Definition of service types

Services within your organisation relevant to the specific benchmarking forum should be listed in three categories – inpatient (acute and non acute), ambulatory care, and community residential services. The definitions and notes below are based on those used in the National Survey of Mental Health Services.

Acute inpatient services	Acute inpatient services provide specialist psychiatric care for people who present with acute episodes of mental illness. These episodes are characterised by recent onset of severe clinical symptoms of mental illness, that have potential for prolonged dysfunction or risk to self and/or others. The key characteristic of acute services is that the treatment effort is focused upon symptom reduction with a reasonable expectation of substantial improvement. In general, acute psychiatric services provide relatively short-term treatment. Acute services may be focused on assisting people who have had no prior contact or previous psychiatric history, or individuals with a continuing psychiatric disorder for whom there has been an acute exacerbation of symptoms
Non acute inpatient services	Refers to all other inpatient programs that provide admitted patient care. Includes programs providing *rehabilitation services* that have a primary focus on intervention to reduce functional impairments that limit the independence of patients. Rehabilitation services are focused on disability and the promotion of personal recovery. They are characterised by an expectation of substantial improvement over the short to mid-term. Patients treated by rehabilitation services usually have a relatively stable pattern of clinical symptoms. Also includes programs providing *extended care services* that primarily provide care over an indefinite period for patients who have a stable but severe level of functional impairment and an inability to function independently, thus requiring extensive care and support. Patients of extended care services present a stable pattern of clinical symptoms, which may include high levels of severe unremitting symptoms of mental disorder. Treatment is focused on preventing deterioration and reducing impairment; improvement is expected to occur slowly.
Ambulatory services	Refers to all mental health services dedicated to the assessment, treatment, rehabilitation or care of non-admitted patients. Includes but is not confined to the following: Crisis assessment and treatment services; Mobile assessment and treatment services; Outpatient clinic services, whether provided from a hospital or community mental health centre; Child and adolescent outpatient treatment teams; Social and living skills programs including day programs; Day hospitals, and living skills centres; Psychogeriatric assessment teams and day programs; consultation liaison services.
Community residential services	Community-based residential services refers to staffed residential units established in community settings that provide specialised treatment, rehabilitation or care for people affected by a mental illness or psychiatric disability. This category includes, for example, Community Care Units and special psychiatric units for the elderly including 'psychogeriatric hostels' or 'psychogeriatric nursing homes', or as they are known in NSW, 'CADE' units. These units may or may not be staffed on a 24-hour basis. However, to be included in this category the

residential service should employ on-site staff for at least some part of the day.

Guide to the individual data items

Number of beds

The number of available beds is required for all acute inpatient, non acute inpatient and residential services to give some indication of the size of the units and their relative contribution to the overall services provided by the organisation.

Available beds are defined as follows, based on the National Survey of Mental Health Services:

> *"Available beds are those immediately available for use by admitted patients or residents if required. They are immediately available for use if located in a suitable place of care with nursing or other auxiliary staff available within a reasonable period. Beds in wards or residential units that were temporarily closed due to factors such as renovations or strikes but which would normally be open and therefore available for admission of patients should be included in the count."*

In some cases, the number of available beds will be less than the number of approved beds, with the former controlled by utilisation factors and resourcing levels, while the latter refers to the maximum capacity allowed for the hospital/residential unit, given sufficient resources and community demand.

Note that when reporting bed numbers:

- The data should show the number of available beds at 30 June 2005.
- Available beds should be restricted to beds that are intended for overnight stays only. That is, beds that are only available for same day stays should not be included in the count.

Number of high dependency beds

For acute inpatient units only, enter the number of high dependency beds (where such exist) that are included in the count of acute beds.

As a national standard definition of high dependency beds has not been developed for mental health services, organisations should use their local classification approach. The various definitions used will be reviewed in the benchmarking forums.

Number of Direct Care FTE (Full Time Equivalent) staff

Information on clinical staffing levels within your organisation's ambulatory services/teams is required to enable later comparisons and assist in interpreting the KPIs. For the purpose of the benchmarking project, 'direct care' staffing is defined *as those staff employed or engaged by your organisation to provide services directly to the organisation's mental health consumers.* The category includes the following professional and occupational groups:

- Psychiatrists and Consultant Psychiatrists
- Other Medical Officers including Psychiatry registrars
- Nursing staff, including all categories of registered nurses and enrolled nurses
- Social Workers
- Psychologists
- Occupational therapists
- Other personal care staff (for example, personal care assistants, family aides, ward assistants) engaged primarily in the provision of personal care to patients or residents.

Reporting of Direct Care FTE data for each ambulatory service requires only the combined total of full time equivalent staff for the above categories – i.e. details on each category are not required.

'Full time equivalent' is different from the number of people employed within the service because it takes into account whether the person is employed full time or part time. Total FTE refers to:

> *the number of paid hours divided by the number of hours that would normally have been worked by a full-time staff member when employed under the relevant award or agreement. Number of paid hours includes on-job hours worked plus hours of paid leave (e.g. sick, recreation, long service or workers compensation).*

Generally, FTE data on each person employed is held within each organisation's payroll or personnel department. All public sector mental health service organisations have been required to report FTE data to the National Survey of Mental Health Services since 1994.

There are a number of additional 'rules' to follow when reporting FTE for your organisation's ambulatory services:

- Data reported should be the average FTE for the 2004-05 financial year. This is to take account of the fluctuations in staffing levels that typically occur over a 12 month period.
- Reported FTE should include all workers employed in the provision of mental health services regardless of **whether they are directly employed as staff or engaged on a contract basis**. This is necessary particularly because of the variation between states and territories in arrangements for engaging medical personnel. While individuals paid on sessional or fee-for-service basis are technically not 'staff', nor 'employed', their omission from FTE counts would under-represent the level of clinical professional available for service delivery.
- Where staff provide services to more than one service setting (for example, medical staff who provide services within inpatient settings and attend a community mental health service or hospital outpatient clinic), full-time equivalent staff numbers should be apportioned between the relevant settings on the basis of estimated average hours worked in each setting.

Additional notes

What to do if services were only operating for part of 2004-05

All services should be listed even if they only operated for part of the year.

Ambulatory care services

These should include all service units that provide assessment, treatment and/or care to non-admitted patients, regardless of where the service is located e.g., outpatient clinics based in hospitals, outpatient or community outreach services located in residential services should be reported under ambulatory care services.

Expenditure

Overview of the worksheet

Expenditure data are essential for three of the KPIs (KPI#2, KPI#4, KPI#6). Information about spending and comparative unit costs is also expected to attract more general interest within the benchmarking forums.

This worksheet is designed to capture the required data in one place, and establish a consistent methodology for reporting expenditure. The worksheet looks like this (simulated data included):

INPATIENT SERVICES IN-SCOPE

ACUTE inpatient units

		Recurrent expenditure $000s				
Hospital Name	Unit/Ward Name	Salaries & Wages	Non salary recurrent	Total Expenditure	Direct Expenditure component	Direct as % total
Hospital A	Ward 1	2,000	1,000	3,000	2,000	66.7%
Hospital A	Ward 2	1,000	500	1,500	900	60.0%
Hospital A	Ward 3	400	150	550	400	72.7%
Hospital B	Ward 4	1,000	500	1,500	1,000	66.7%
n.a	n.a			-		n.a
n.a	n.a			-		n.a
total acute inpatient expenditure		**4,400**	**2,150**	**6,550**	**4,300**	**65.6%**

NON ACUTE inpatient units

		Recurrent expenditure $000s				
Hospital Name	Unit/Ward Name	Salaries & Wages	Non salary recurrent	Total Expenditure	Direct Expenditure component	Direct as % total
Hospital A	Ward 7	2,000	400	2,400	1,900	79.2%
Hospital A	Ward 8	1,200	250	1,450	1,200	82.8%
Hospital B	Ward 9	400	200	600	400	66.7%
Hospital B	Ward 10	900	350	1,250	900	72.0%
n.a	n.a			-		n.a
n.a	n.a			-		n.a
total non acute inpatient expenditure		**4,500**	**1,200**	**5,700**	**4,400**	**77.2%**

AMBULATORY CARE SERVICES IN-SCOPE

	Recurrent expenditure $000s				
Service/Team Name	Salaries & Wages	Non salary recurrent	Total Expenditure	Direct Expenditure component	Direct as % total
Service unit 1	800	200	1,000	800	80.0%
Service unit 2	500	125	625	400	64.0%
Service unit 3	300	75	375	200	53.3%
Service unit 4	600	150	750	600	80.0%
Service unit 5	800	200	1,000	900	90.0%
Service unit 6	150	50	200	20	10.0%
Service unit 7	90	38	128	18	14.1%
Service unit 8	70	18	88	70	80.0%
n.a			-		n.a
n.a			-		n.a
total ambulatory care expenditure	**3,310**	**855**	**4,165**	**3,008**	**72.2%**

COMMUNITY RESIDENTIAL SERVICES IN-SCOPE

	Recurrent expenditure $000s				
Service Name	Salaries & Wages	Non salary operating	Total Expenditure	Direct Expenditure component	Direct as % total
Residential unit 1	600	300	900	800	88.9%
Residential unit 2	800	200	1,000	900	90.0%
Residential unit 3	1,000	400	1,400	1,200	85.7%
n.a			-		n.a
n.a			-		n.a
n.a			-		n.a
total residential services expenditure	**2,400**	**900**	**3,300**	**2,900**	**87.9%**

TOTAL EXPENDITURE 2004-05

	Recurrent expenditure $000s				
	Salaries & Wages	Non salary operating	Total Expenditure	Direct Expenditure component	Direct as % total
Total expenditure	**14,610**	**5,105**	**19,715**	**14,608**	**74.1%**

Approach to expenditure reporting

The aim of this sheet is simple - to identify the full costs incurred during the 2004-05 year in the running of each of the services identified as 'in scope' on the previous Organisation Service Profile sheet.

Beyond this, there are significant complexities. This is because there are many different ways of classifying and reporting health costs that depend, in part, on the purposes of the costing exercise. The more detailed the purpose (e.g., clinical costing, where costs are allocated to each individual episode versus 'average service costing', where costs are assigned at a high, aggregate level), the more precise the methodology must be. There is a sizeable literature on health costing and many published volumes on accounting standards to be followed within the health industry.

It is beyond the scope of this manual to provide detailed advice to organisations on the costing standards developed within the Australian healthcare sector. Instead, it is expected that, within each organisation, local expertise will be available that is in touch with Australian health accounting standards and familiar with the reporting requirements for mental health expenditure that have been in place since the National Survey of Mental Health Services was introduced in 1994.

The approach taken for this project is to simplify the complexity and establish a financial reporting framework that will address the main issues raised when the benchmarking forums begin working together. The notes provided in this section are expected to deal with the main questions that will be raised by participating organisations. In addition to these, it is possible that many micro issues will be raised, some that are specific to the organisation, and some that concern the finer points of health costing theory and practice. To allow for these, a process will be established for specific issues to be submitted and logged, with responses made public to inform all organisations.

The notes outlined in this section aim to:

- identify what costs should be included and what should be excluded when preparing financial data for this project; and
- differentiate the main cost categories that should be reported – particularly distinguishing the costs associated with direct service delivery (clinical staff salaries etc) from corporate overhead costs. The emphasis on this distinction is based on the cost categories expected to be the main focus of concern within benchmarking participants, and draw on previous experience of agency involvement in mental health service costing projects.

General guidelines for reporting financial data

Five guidelines should be followed by organisations when preparing financial data for the benchmarking project.

Guideline 1: Expenditure reported should include direct service delivery costs and a share of all relevant indirect costs

This is necessary to obtain a true picture of the total costs of operating each particular service unit. Expenditure reported for each service unit is to be broadly separated into two categories – direct and indirect.

- ***Direct costs*** are those that are incurred directly in the operation of the particular service unit. They include the salaries paid to staff (clinical and other) employed within the service unit and any non salary costs directly incurred by the service unit. The key characteristic of direct costs is that they have a clear and direct relationship to the patient care provided by that service unit. Generally, direct costs represent the use of resources that are specifically dedicated to the mental health service unit and are under the direct management control of the service. For most organisations, it is expected that the local accounting system will have established each of the service units as 'patient care cost centres' (or 'direct cost centres'). In these cases, direct costs will be equivalent to the total expenditure recorded for the relevant patient care cost centre.

- ***Indirect costs*** are those costs that have an incidental rather than a direct relationship to the delivery of patient care, but are nevertheless essential for the operation of the service unit and need to be counted when estimating total costs. Indirect costs, sometimes referred to as overhead costs, typically involve services provided to the patient care unit by other external units within the organisation. They include the cost of administration and other support services such as public relations, information systems, personnel, finance and accounting functions, cleaning services, telecommunications, fuel and power and so forth. Indirect services are generally provided from a central pool of resources managed at the organisation level for all programs/business units of the organisation.

Based on two detailed studies in the mental health field, indirect costs are considerable. Both studies – one conducted in Australia and the other in New Zealand – found indirect costs to account for 37% of total service delivery expenditure.[1, 2]

Each organisation should therefore identify all indirect costs relevant to each service unit and apportion an appropriate share to the expenditure reported for that unit. A range of allocation statistics are in wide use throughout the Australian health industry to guide the apportionment of indirect costs. For example, the number of FTE staff within each unit is typically used to distribute the costs of the organisation's personnel, finance and other administrative departments across all patient care centres managed by the organisation. Similarly, cleaning and power costs are typically distributed in proportion to floor space. The choice of allocation statistics will be left to each organisation to decide. For these organisations that have not established costing systems, advice will be available through the benchmarking coordinating group (AMHOCN).

Direct and indirect costs are combined within each of the two main categories for reporting expenditure (salary & wages, non salary recurrent). However, organisations are required to separately indicate the direct cost component of total expenditure t provide a basis benchmarking participants to compare their costs structures.

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[1] Buckingham W, Burgess P, Solomon S, Pirkis J and Eagar K (1998) *Developing a casemix classification for mental health services: Volume 1 Main report.* Canberra: Department of health and Family Services.

[2] Gaines P, Bower A, Buckingham W, Eagar K, Burgess P. & Green J. (2003) *New Zealand Mental Health Classification and Outcomes Study: Final Report.* Auckland: Health Research Council of New Zealand

Guideline 2: Costs should be split between service units when these are shared

Clinical staff within mental health services often work across more than one service unit. For example, a consultant psychiatrist based within an inpatient unit may spend a regular part of the week working in one of the local community clinics. Where this is the case, the costs of the consultant psychiatrist should be apportioned between the inpatient and community service to allow greater accuracy in calculating average costs. If this is not done, and the consultant psychiatrist costs are reported only under inpatient services, the average costs of the inpatient unit will be falsely elevated and the community costs understated.

It is recognised that this may not be an easy task for some organisations because routine systems for monitoring staff activity and apportioning costs are not in place. There will also not be capacity within the project for organisations to align their accounting systems with requirements, or to conduct special studies of staff activities. In these cases, it will be sufficient to identify the more significant areas where clinical staff work across multiple service units, and make best estimates of the relative splits. An intelligent guess will be more useful than ignoring the problem.

Guideline 3: Report gross recurrent expenditure only

This guideline has two elements. First, gross recurrent expenditure should be provided and not be offset against revenues. The general principle is simple – the aim is to compute the true costs of each service unit in the 2004-05 year. Second, the costs reported should include only salaries and wages and non-salary recurrent expenditure (these are defined below) and exclude expenditure on capital items. It is recognised that there are variable dollar thresholds for defining capital expenditure and it is not possible to impose a national definition, although there is reasonable convergence across jurisdictions. Each organisation should use the capital threshold that has been set within its own jurisdiction when deciding which expenditure items to exclude.

Guideline 4: Accrual accounting is preferred but exclude depreciation from non salary recurrent expenditure

Accrual accounting records the costs of resources when they are actually used regardless of when they are paid for. In contrast, cash accounting attributes the costs of resources to the period in which they are actually paid. Accrual accounting gives the more accurate record of the costs of providing a service over any given period and is the preferred approach for the current project.

However, there is no consistent standard applied across public sector mental health organisations in Australia. While most use accrual accounting, many still use cash-based methods or a mix of cash and accrual approaches. Given this, the current project is not in a position to impose accrual reporting as its standard and will accept financial data prepared according to local organisation accounting approaches.

The only absolute requirement is that, for those organisations reporting on an accrual basis, depreciation must be **excluded** from all expenditure. This is because depreciation is the main source of variation between accrual and cash based methods. Removing depreciation therefore reduces a potential major source of non comparability between organisation's financial records.

Guideline 5: Report expenditure in units of one thousand

All expenditure should be reported in thousands of dollars. This requires either rounding to the nearest thousand or use of a decimal point to indicate thousands. Examples of this reporting are:

3,500 = three million five hundred thousand dollars (do not enter $3,500,000)
3,500.8 = three million five hundred thousand and eight hundred dollars (do not enter $3,500,800)
1 = one thousand dollars (do not write $1,000)

Guide to the individual data items

Recurrent expenditure – Salaries and Wages

A single total salaries and wages amount is required for each in-scope service unit. There is no requirement to break this down into individual labour categories.[3]

Salaries and wages are defined as "*Salary and wage payments for all employees of the inpatient or community service unit. This is to include all paid leave (recreation, sick and long-service) and salary and wage payments relating to workers compensation leave for the staffing categories listed below.*"[4]

Where clinical staff provide services to more than one service unit, their salaries should be apportioned between all hospitals or service units to which services are provided on the basis of hours worked in each hospital or service unit. Salary payments for clinical staff employed through an agency should be included here.

Total salary and wages reported should be sum of payments for the following labour categories employed:

- Salaried medical officers including:
  - Consultant psychiatrists and psychiatrists
  - Psychiatry registrars and trainees
  - Other medical officers
- Registered nurses
- Enrolled nurses
- Diagnostic and health professionals including:
  - Occupational therapists
  - Social workers
  - Psychologists
  - Other diagnostic and health professionals
- Administrative and clerical staff
- Domestic and other staff
- Carer consultants
- Consumer consultants
- Other personal care staff

[3] This does not preclude the possibility that organisations participating in the benchmarking project may determine that data at this level of detail is required to help unravel differences in their cost structures.

[4] This definition is adapted from the National Health Data Dictionary – Mental Health Establishments. Amendments have been made to increase clarity for the current project but are consistent with the national definition.

Recurrent expenditure – Non salary recurrent

As with salary and wages, a single total amount is required for each in-scope service unit, with no requirement to break this into individual expense categories. Non salary recurrent expenditure includes the following categories:

- Payments to visiting medical officers
- Superannuation employer contributions
- Drug supplies
- Medical and surgical supplies
- Food supplies
- Domestic services
- Repairs and maintenance
- Patient transport
- Administrative expenses
- Interest payments
- Other recurrent expenditure

Definitions for each category are provided in Appendix A.

Direct expenditure component

The information provided for this item should indicate the direct costs component that has been included in the total expenditure for each service unit, using the definition of direct costs as defined under Guideline 1 above. The amounts reported will be an aggregate of salary & wages and non salary recurrent expenditure.

Additional notes

- All public sector mental health service organisations have submitted gross recurrent expenditure data for 2004-05 via the National Survey of Mental Health Services. It is anticipated that this information will be made available to local benchmarking project officers to assist in preparing data for this worksheet.

KPI #1 – 28 day readmission rate

Overview of the worksheet

Data for this worksheet comprise information copied from previous sheets (in-scope hospital and ward names, bed numbers) plus four new items – total overnight separations for the 2004-05 year (in-scope and out-of-scope), total same day separations and total in-scope overnight separations readmitted with 28 days. The worksheet is shown below (simulated data included).

Data 2004-05

ACUTE inpatient units in-scope

Hospital Name	Unit/Ward Name	Number of beds	Total in-scope overnight separations 1/7/2004 to 30/6/2005	Total out-of-scope scope overnight separations 1/7/2004 to 30/6/2005	Total same day separations 1/7/2004 to 30/6/2005
Hospital A	Ward 1	20	400	30	20
Hospital A	Ward 2	10	300	60	40
Hospital A	Ward 3	5	196	25	30
Hospital B	Ward 4	10	150	23	10
n.a	n.a	n.a			
n.a	n.a	n.a			
totals		**45**	**1046**	**138**	**100**

SUPPLEMENTARY DATA REQUIRED ON OUT-OF SCOPE OVERNIGHT SEPARATIONS

Out-of-scope overnight separations by Type/Mode	Number of separations	Percent of total overnight separations
Discharge/transfer to an(other) acute hospital	42	3.5%
Discharge/transfer to an(other) psychiatric hospital	4	0.3%
Statistical discharge – type change	62	5.2%
Left against medical advice/discharge at own risk	27	2.3%
Death	3	0.3%
total	**138**	**11.7%**

KPI #1 2004-05

Total in-scope overnight separations in the period 1/7/2004 to 30/6/2005	1,046
Total in-scope overnight separations readmitted to this organisation's acute psychiatric inpatient unit within 28 days of discharge	190
28-day readmission rate	**18%** ← KPI#1

Indicator rationale

High levels of unplanned readmissions within a short time frame are widely regarded as reflecting deficiencies in inpatient treatment and/or follow-up care and point to inadequacies in the functioning of the overall system.

- Psychiatric inpatient services aim to provide treatment that enables individuals to return to the community as soon as possible. Unplanned admissions to a psychiatric facility following a recent discharge may indicate that inpatient treatment was either incomplete or

ineffective, or that follow-up care was inadequate to maintain the person out of hospital. In this sense, they potentially point to deficiencies in the functioning of the overall care system.

- Avoidable rapid readmissions place pressure on finite beds.
- International literature identifies the concept of one month as an appropriate defined time period for the measurement of unplanned readmissions following separation from an acute inpatient mental health service.
- International data are readily available - this indicator (or an equivalent) is in use in the UK, USA, and Canada.

Indicator definition

As defined in the KPI Report

Percentage of separations from the mental health service organisation's acute psychiatric inpatient units that result in unplanned readmission to the same or to another public sector acute psychiatric inpatient unit within 28 days of discharge.

Numerator:	All separations from the mental health service organisation's acute psychiatric inpatient unit(s) occurring within the reference period, that are followed by an unplanned readmission to the same or another acute psychiatric inpatient unit within 28 days.
Denominator:	All separations from the mental health service organisation's acute psychiatric inpatient unit(s) occurring within the reference period.

As specified for the current national benchmarking project

Percentage of overnight separations from the mental health service organisation's acute psychiatric inpatient units that result in a readmission to the organisation's acute psychiatric inpatient services within 28 days of discharge.

Numerator:	Number of in-scope overnight separations from the mental health service organisation's acute psychiatric inpatient unit(s) occurring between 1 July 2004 and 30 June 2005 that were followed by a readmission to the organisation's acute psychiatric inpatient units within 28 days.
Denominator:	Number of in-scope overnight separations from the mental health service organisation's acute psychiatric inpatient units occurring between 1 July 2004 and 30 June 2005.

Why the variation is necessary

The indicator specification for the current project differs from the national definition in two ways:

Readmission to any acute unit vs this organisation's acute units:
Ideally, estimates of readmissions should take the consumer's perspective and count any readmission, regardless of the organisation that manages the hospital. Re-defining the indicator for the current project to re-admissions only within acute units managed by the organisation has been done for two reasons:

- It recognises that, for this project, construction of the indicators is the responsibility of each organisation. Within most areas of Australia, a particular organisation does not have access to information about admissions to other hospitals.
- Most jurisdictions do not have statewide unique identifiers in place that allow tracking of the services used by an individual consumer across organisations, each of which may use separate patient identifier systems.

Ignore planned vs unplanned admission:
Current data collection systems in Australian mental health services do not include any reliable and consistent method to distinguish a planned from an unplanned admission to hospital. Technically, intent to readmit should be collected at discharge, but this is not the case in any state or territory. For this reason, the 'default' approach has been adopted – that is, to count all readmissions (excluding same day admissions – see below), regardless of what may have been the clinical intent at discharge.

The KPI Report acknowledged that both of these variations would be necessary during the initial implementation of the KPIs.

Key issues for this indicator

This indicator is simple in concept – to track all separations (discharges) from the organisation's acute inpatient units and count the number that led to readmission within 28 days. The complexity is in determining:

- what separations should be counted, given that there are many different circumstances in which a person may be discharged from an acute psychiatric unit and only some of these are meaningful for the 28-day readmission concept; and
- what admissions should be counted as a readmission.

Guidelines on each of these are given below.

What separations should be counted as 'in-scope'?
Broadly, the general rule is that you should include all separations from all the in-scope acute psychiatric units within your organisation that occurred between 1 July 2004 and 30 June 2005, **except where**:

- The separation occurred on the same day as the admission – the reasons for this are described below; **OR**
- The separation type (referred to as 'mode of separation' in the National Health Data Dictionary) meets specified criteria outlined below.

Same day separations

Same day separations, defined as those separations where the admission and discharge date are the same, account for about three quarters of all psychiatric separations in Australia's hospitals. While most of these occur within private psychiatric hospitals, the practice is also common in public sector hospitals, accounting for about 20% of psychiatric separations. However, there is considerable variation between jurisdictions, and between hospitals within jurisdictions.

Same day separations in the general health field refer to patients admitted to hospital for a medical, surgical or diagnostic procedure who are discharged on the day of admission. In the mental health field, which has few comparable procedures, same day separations primarily

involve participation by consumers in group-based day hospital programs.[5] Based on data reported by the Australian Institute of Health and Welfare, 65% of same day psychiatric separations from public sector hospitals can be considered to equivalent to ambulatory care.[6]

Inclusion of same day separations in this indicator therefore presents a significant confounding factor and a source of non-comparability between hospitals. For example, given that multiple same separations usually occur for a consumer within a 28 day period, each instance would be counted as a readmission, artificially elevating the organisation's score on the indicator.

The implication of excluding same day separations from the KPIs is that only inpatient stays in which the person spent at least one night in hospital are counted as in-scope. For simplicity, these are referred to 'overnight separations' throughout this document and the KPI worksheets.

Mode of separation

The National Health Data Dictionary defines this item as the *"Status at separation of person (discharge/transfer/death) and place to which the person is released (where applicable)".* In essence, it is a combination of the reasons for the discharge (e.g., left against advice) and the person's destination immediately following discharge (e.g., transferred to another hospital).

Separation mode provides the basis for identifying those overnight separations that should be excluded from the KPI analysis. For example, if we want to review 28 day readmission rates, it does not make sense to include separations where the person has been transferred to another acute psychiatric unit because the inpatient care has not been completed but has been transferred to another service.

Nine codes are used within the national system for coding separation mode:

(1) Discharge/ transfer to an(other) acute hospital

(2) Discharge/transfer to a nursing home

(3) Discharge/ transfer to an(other) psychiatric hospital

(4) Discharge/transfer to other health care accommodation

(5) Statistical discharge – type change

(6) Left against medical advice/discharge at own risk

(7) Statistical discharge from leave

(8) Died

(9) Other (includes discharge to usual residence, own accommodation or welfare institution (includes prisons, hostels and group homes providing primarily welfare services).

These represent a high level summary of local codes used within hospital information systems. All Australian public sector hospitals collect some form of 'separation mode' item, which is coded for every separation. Local codes vary in detail and comprehensiveness but generally, there is considerable overlap and all map to the National Health Data Dictionary definitions.

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[5] Department of Health and Ageing (2005) *National Mental Health Report 2005: Summary of Ten Years of Reform in Australia's Mental Health Services under the National Mental Health Strategy 1993-2003*. Commonwealth of Australia, Canberra.

[6] Australian Institute of Health and Welfare (2005) *Mental health services in Australia 2002–03*. Canberra: AIHW (Mental Health Series no. 6).

Within the various separation modes, a subset of separations can be identified where the person's inpatient treatment episode was incomplete or truncated, either due to transfer to another hospital or some other reason. These should be excluded from the separations counted for assessing readmission rates because their inclusion would not provide a fair test of the organisation's performance.

For the purposes of the benchmarking project, the list below defines the separations that should be included and excluded according to the mode of separation. Each organisation will need to review its own coding process and map the codes used to each of the scenarios envisaged within the National Health Data Dictionary codeset.

	Separation Mode	**Include/ Exclude**	**Interpretation within psychiatric units**
1.	Discharge/transfer to an(other) acute hospital	Exclude	All discharges to another acute hospital.
2.	Discharge/transfer to a nursing home	Include	Includes discharges to psychogeriatric nursing homes.
3.	Discharge/transfer to an(other) psychiatric hospital	Exclude	All discharges by transfer to a stand alone psychiatric hospital.
4.	Discharge/transfer to other health care accommodation (includes mothercraft hospitals and hostels recognised by the Commonwealth Department of Health and Ageing, unless this is the usual place of residence)	Include	Includes discharges to a community-based residential service.
5.	Statistical discharge – type change	Exclude	Statistical discharges break a single hospital stay into multiple parts. Includes within hospital transfers or changes of care type, program classification (e.g., from acute unit to non acute unit).
6.	Left against medical advice/discharge at own risk	Exclude	Includes discharge following abscondment.
7.	Statistical discharge from leave	Include	Discharges from leave **included** – refers to formal discharge following a period of leave. But separation to leave should be **excluded.**
8.	Died	Exclude	
9.	Other (includes discharge to usual residence, own accommodation or welfare institution (includes prisons, hostels and group homes providing primarily welfare services)	Include	Refers to all other separation modes

It is expected that the relative significance of the various separations that are excluded from the analysis will differ between the four program groups (adult, child & adolescent, older persons, forensic). To enable each forum to review the number of overnight separations excluded from the analysis, the worksheet for this indicator requires each organisation to report this information as supplementary data.

What admissions should be counted as re-admissions?

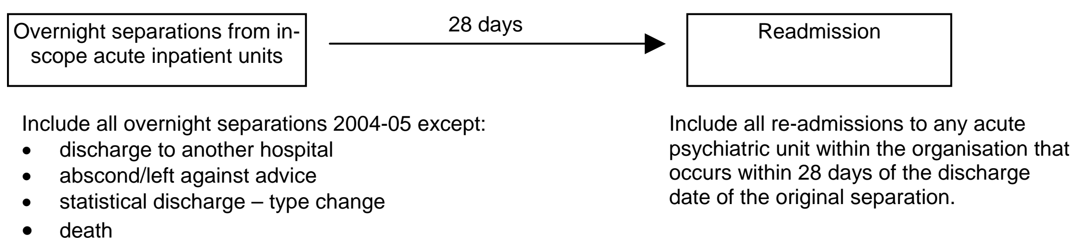
Applying the above rules identifies the subgroup of separations to be considered in-scope for counting readmission rates. The next step is to resolve the criteria for determining what constitutes a readmission for this cohort of separations.

The approach to be used for the benchmarking project is more straightforward in this area. **A readmission for any of the separations identified as 'in-scope' is an admission to any another acute psychiatric unit within the organisation that occurs within 28 days of the discharge date of the original separation**.

There are other ways to define the readmission criterion (e.g., only where the person returns to the same acute unit, or returns to an acute admission unit of the same program type). The broad approach of 'readmission to any other acute unit within the organisation' is to be used in the current project because it is simpler to implement and is considered more meaningful from the perspective of the consumer. It also takes account of the reality that acute beds are often pooled in times when demand exceeds supply.

The main implication of this approach is that a readmission to a tertiary specialist unit within the organisation will be counted (e.g., discharge from a general adult acute unit followed by later admission to an eating disorders unit). These are expected to be very few and not distort the overall indicator.

Summary of criteria



Guide to the individual data items

Total in-scope overnight separations 1/7/2004 to 30/6/2005 (KPI denominator)

Enter the number of in-scope separations as defined by the rules outlined in the section above.

Total out-of-scope scope overnight separations 1/7/2004 to 30/6/2005

Enter the number of overnight separations that are defined as out-of-scope by the rules defined in the section above. This item will provide supplementary information about the number of separations that are excluded from the analysis for each acute unit, and is used to create alternative indicators for KPI #3 and KPI #4.

Number of out-of-scope scope overnight separations by separation type/mode

Enter the total number of out-of-scope overnight separations for each of the out-of-scope separation types, i.e.

- Discharge/transfer to an(other) acute hospital
- Discharge/transfer to an(other) psychiatric hospital
- Statistical discharge – type change
- Left against medical advice/discharge at own risk
- Death

This supplementary information is collected for two purposes:

- It allows benchmarking participants to review and compare the number of separations that are being excluded from the analysis of 28-day readmission rates; and
- The number of out-of scope overnight separations is carried forward to two related KPIs (KPI#3 and KPI #4), to allow calculation of indicators based on all overnight separations.

Total same day separations 1/7/2004 to 30/6/2005 excluded from analysis

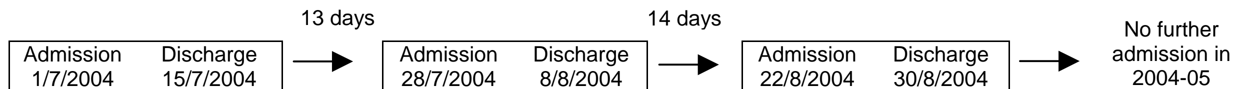
Enter the number of same day separations that are defined as out-of-scope by the rules defined in the section above. This item will provide additional supplementary information on the number of separations that are excluded.

Total in-scope overnight separations readmitted to this organisation's acute psychiatric inpatient unit within 28 days of discharge (KPI numerator)

Enter the number of in-scope separations that are readmitted to an acute psychiatric unit with the organisation within 28 days of discharge. For counting purposes, 28 days is defined as (Discharge Date) – (Readmission Date) ≤ 28

Additional notes

- An individual consumer may be counted more than once in the 28-day readmission indicator. For example, in the scenario below, the same consumer experienced three discharges in the 2004-05 year, two of which were followed by readmission within 28 days.



KPI #2 – National Service Standards compliance

Overview of the worksheet

Data for this worksheet comprise information copied from previous sheets plus one new item – National Standards for Mental Health Services accreditation status at 30 June 2005 for each in-scope service. This worksheet performs multiple calculations to generate the indicators required. The worksheet is shown below (simulated data included):

Data - 2004-05

INPATIENT SERVICES IN-SCOPE

ACUTE inpatient units in-scope

					Expenditure at Level			
Hospital Name	**Unit/Ward Name**	**Expenditure 2004-05**	**Standards Code**	**Standards Category**	**Lev 1 Total**	**Lev 2 Total**	**Lev 3 Total**	**Lev 4 Total**
Hospital A	Ward 1	3,000	7	4	-	-	-	3,000
Hospital A	Ward 2	1,500	1	1	1,500	-	-	-
Hospital A	Ward 3	550	1	1	550	-	-	-
Hospital B	Ward 4	1,500	4	3	-	-	1,500	-
n.a	n.a	n.a		n.a	-	-	-	-
n.a	n.a	n.a		n.a	-	-	-	-
total acute inpatient expenditure		**6,550**			**2,050**	**-**	**1,500**	**3,000**

NON ACUTE inpatient units in-scope

					Expenditure at Level			
Hospital Name	**Unit/Ward Name**	**Expenditure 2004-05**	**Standards Code**	**Standards Category**	**Lev 1 Total**	**Lev 2 Total**	**Lev 3 Total**	**Lev 4 Total**
Hospital A	Ward 7	2,400	1	1	2,400	-	-	-
Hospital A	Ward 8	1,450	2	2	-	1,450	-	-
Hospital B	Ward 9	600	5	4	-	-	-	600
Hospital B	Ward 10	1,250	7	4	-	-	-	1,250
n.a	n.a	n.a		n.a	-	-	-	-
n.a	n.a	n.a		n.a	-	-	-	-
total non acute inpatient expenditure		**5,700**			**2,400**	**1,450**	**-**	**1,850**

AMBULATORY CARE SERVICES IN-SCOPE

				Expenditure at Level			
Service Name	**Expenditure 2004-05**	**Standards Code**	**Standards Category**	**Lev 1 Total**	**Lev 2 Total**	**Lev 3 Total**	**Lev 4 Total**
Service unit 1	1,000	1	1	1,000	-	-	-
Service unit 2	625	2	2	-	625	-	-
Service unit 3	375	5	4	-	-	-	375
Service unit 4	750	7	4	-	-	-	750
Service unit 5	1,000	3	3	-	-	1,000	-
Service unit 6	200	6	4	-	-	-	200
Service unit 7	128	7	4	-	-	-	128
Service unit 8	88	2	2	-	88	-	-
n.a	n.a		n.a	-	-	-	-
n.a	n.a		n.a	-	-	-	-
total ambulatory expenditure	**4,165**			**1,000**	**713**	**1,000**	**1,453**

COMMUNITY RESIDENTIAL SERVICES IN-SCOPE

				Expenditure at Level			
Service Name	**Expenditure 2004-05**	**Standards Code**	**Standards Category**	**Lev 1 Total**	**Lev 2 Total**	**Lev 3 Total**	**Lev 4 Total**
Residential unit 1	900	8	EXCL	-	-	-	-
Residential unit 2	1,000	2	2	-	1,000	-	-
Residential unit 3	1,400	5	4	-	-	-	1,400
n.a	n.a		n.a	-	-	-	-
n.a	n.a		n.a	-	-	-	-
n.a	n.a		n.a	-	-	-	-
total residential expenditure	**3,300**			**-**	**1,000**	**-**	**1,400**

KPI #2 2004-05

	Tot $$	**% of total**
Total expenditure of services at Level 1	5,450	29%
Total expenditure of services at Level 2	3,163	17%
Total expenditure of services at Level 3	2,500	13%
Total expenditure of services at Level 4	7,703	41%
Total expenditure of services	18,815	100%
Total excluded expenditure	900	5%

KPI#2

Indicator rationale

National standards are one way in which concerns regarding the quality of mental health service delivery may be addressed.

- Implementation of the National Standards for Mental Health Services has been agreed by all jurisdictions and was only partially implemented by the end of the Second National Mental Health Plan.
- Service quality has been a driving force for the National Strategy.

Indicator definition

As defined in the KPI Report

Percentage of the mental health service organisation's services (weighted by expenditure) that have been reviewed against the National Standards for Mental Health Services. The indicator grades services into three categories:

- Level 1 - Services have been reviewed by an external accreditation agency and judged to have met all national standards.·
- Level 2 - Services have been:
  - reviewed by an external accreditation agency and judged to have met some but not all National Standards; or
  - are in the process of being reviewed by an external accreditation agency but the outcomes are not known; or
  - are booked for review by an external accreditation agency. ·
- Level 3 - Mental heath services that do not meet criteria detailed under Level 1 or 2.

Numerator:	Total expenditure by mental health service organisations on mental heath services that meet the definition of Level X where X is the level at which the indicator is being measured (either Level 1, Level 2, or Level 3 as detailed above).
Denominator:	Total mental health service organisation expenditure on mental health services.

As interpreted for the current national benchmarking project

Percentage of the mental health service organisation's services (weighted by expenditure) that have been reviewed against the National Standards for Mental Health Services. The indicator grades services into four categories:

- Level 1 - Services have been reviewed by an external accreditation agency and judged to have met all national standards.·
- Level 2 - Services have been reviewed by an external accreditation agency and judged to have met some but not all National Standards.
- Level 3 – Services:
  - are in the process of being reviewed by an external accreditation agency but the outcomes are not known; or
  - are booked for review by an external accreditation agency. ·
- Level 4 - Mental heath services that do not meet criteria detailed under Levels 1 to 3.

Numerator: Total expenditure by mental health service organisations on mental heath services that meet the definition of Level X where X is the level at which the indicator is being measured (either Level 1, Level 2, Level 3 or Level 4 as detailed above).

Denominator: Total mental health service organisation expenditure on mental health services.

Why the variation is necessary

The key amendment to this indicator is expanding the grading from three to four levels, creating a new Level 2 for the category "Services have been reviewed by an external accreditation agency and judged to have met some but not all National Standards". This amendment has been made to be consistent with the National Mental Health Report 2005 which published the first attempt to apply this indicator. The need to distinguish the new Level 2 is justified on the basis that this level represents completion of the external standards assessment process.

Key issues for this indicator

Rating system for scoring progress in implementing the National Standards for Mental Health Services

This rating system is taken directly from the National Survey of Mental Health Services. Introduced in 2003, the system was designed to gather information at the individual service level on progress in implementation of the National Service Standards. Reporting of progress at the individual service level recognises that parts rather than whole organisations may be implementing the Standards. Similarly, services may be at varying stages of the Standards implementation cycle. It is therefore not practical to capture the required information about the organisation in a single item.

The progress of each service in implementing the National Standards should be reported using the standard set of codes shown below.

Code	Category description	LEVEL
1	By 30 June 2005, the service had been reviewed by an external accreditation agency and was judged to have met the National Standards.	1
2	By 30 June 2005, the service had been reviewed by an external accreditation agency and was judged to have met some but not all National Standards.	2
3	At 30 June 2005, the service was in the process of being reviewed by an external accreditation agency but the outcomes were not known.	3
4	At 30 June 2005, the service was booked for review by an external accreditation agency and was engaged in self-assessment preparation prior to the formal external review.	3
5	At 30 June 2005, the service was engaged in self-assessment in relation to the National Standards but did not have a contractual arrangement with an external accreditation agency for review.	4
6	At 30 June 2005, the service had not commenced the preparations for review by an external accreditation agency but this was intended to be undertaken in the future.	4
7	At 30 June 2005, it had not been resolved whether the service would undertake review by an external accreditation agency under the National Standards.	4
8	The National Standards are not applicable to this service (see note below).	-

Note that Code 8 should only be used for those Aged care residential services (e.g., psychogeriatric nursing homes) in receipt of funding under the Aged Care Act and subject to Australian Government residential aged care reporting and service standards requirements.

Guide to the individual data items

Standards Code

For each in-scope service unit, enter the code that best describes the state of progress in implementing the National Service Standards at 30 June 2005.

Additional notes

- This worksheet draws on cost data reported in the 'Expenditure' worksheet to prefer the calculations required to generate the indicators.
- Expenditure associated with services coded 8 is excluded from the denominator when the indicators are calculated.
- Information required for this worksheet is reported by organisations at the service unit level to the National Survey of Mental Health Services and should available to benchmarking project officers.

KPI #3 – Average length of acute inpatient stay

Overview of the worksheet

Data for this worksheet comprise information copied from previous sheets (in-scope hospital and ward names, bed numbers and in-scope separations) plus three new items – total patient days accounted for by in-scope overnight separations, total patient days accounted for by out-of-scope overnight separations plus the number of in-scope overnight separations with a length of stay greater than 35 days. The worksheet is shown below (simulated data included):

Data - 2004-05

ACUTE inpatient units in-scope

Hospital Name	Unit/Ward Name	Number of beds	Total in-scope overnight separations 1/7/2004 - 30/6/2005	Total patient days accounted for by in-scope overnight seps	N in-scope Overnight separations > X days
Hospital A	Ward 1	20	400	8,250	20
Hospital A	Ward 2	10	300	3,250	36
Hospital A	Ward 3	5	196	1,700	15
Hospital B	Ward 4	10	150	3,330	18
n.a	n.a	n.a	n.a		
n.a	n.a	n.a	n.a		
totals		**45**	**1,046**	**16,530**	**89**

Outlier specifications for each forum (X =)

Adult - 35 days.
Child/Adol - 60 days
Older Pers - 60 days
Forensic - 180 days

SUPPLEMENTARY DATA REQUIRED ON OUT-OF SCOPE OVERNIGHT SEPARATIONS

Out-of-scope overnight separations by Type/Mode	Number of separations	Total patient days accounted for by out-of-scope overnight seps	Percent of total overnight patient days	Av LOS out-of-scope overnight separations
Discharge/transfer to an(other) acute hospital	42	160	0.9%	3.8
Discharge/transfer to an(other) psychiatric hospital	4	24	0.1%	6.0
Statistical discharge – type change	62	85	0.5%	1.4
Left against medical advice/discharge at own risk	27	57	0.3%	2.1
Death	3	58	0.3%	19.3
	n.a		n.a	n.a
total	**138**	**384**	**2.3%**	**2.8**

KPI #3 2004-05

Hospital Name	Unit/Ward Name	Av LOS in-scope overnight separations	% In-scope overnight Seps > X days
Hospital A	Ward 1	20.6	5.0%
Hospital A	Ward 2	10.8	12.0%
Hospital A	Ward 3	8.7	7.7%
Hospital B	Ward 4	22.2	12.0%
n.a	n.a	n.a	n.a
n.a	n.a	n.a	n.a
totals		**15.8**	**8.5%**

KPI #3 In-scope seps

Average LOS, all overnight separations
14.3

Alternative KPI #3 All overnight seps

Indicator rationale

Length of stay is the main driver of variation in inpatient episode cost and reflects differences between mental health service organisations in practice, casemix or both. Inclusion of this

indicator promotes a fuller understanding of an organisation's episode costs as well as providing a basis for utilisation review. For example, it allows services provided to particular patient groups to be assessed against any clinical protocols developed for those groups.

Indicator definition

As defined in the KPI Report

Average length of stay of completed separations from acute psychiatric inpatient units managed by the mental health service organisation.

Numerator:	Total number of patient days in the mental health service organisation's acute psychiatric inpatient unit(s) accounted for by completed overnight formal separations during the reference period.
Denominator:	Total number of completed overnight separations from the mental health service organisation's acute psychiatric inpatient unit(s) occurring within the reference period.

As interpreted for the current national benchmarking project

Average length of stay of overnight separations from acute psychiatric inpatient units managed by the mental health service organisation.

Numerator:	Total number of patient days in the mental health service organisation's acute psychiatric inpatient unit(s) accounted for by in-scope overnight separations occurring between 1 July 2004 and 30 June 2005.
Denominator:	Number of in-scope overnight separations from the mental health service organisation's acute psychiatric inpatient unit(s) occurring between 1 July 2004 and 30 June 2005.

Why the variation is necessary

The indicator specification for the current project has been varied to align the separations counted as in-scope with those used for KPI #1 and other related inpatient service indicators (KPI #4). This ensures that the subset of separations used to determine readmission rates (KPI #1), average length of stay (KPI #3) and average cost per acute inpatient episode (KPI #4) are the same.

Key issues for this indicator

What separations should be counted as 'in-scope'?

Construction of this indicator is based on the same group of 'in-scope' separations used for the analysis of 28-day readmission rates (KPI #1). Thus, it excludes same day separations, and all overnight separations that occur through discharge/transfer to an(other) acute hospital; discharge/transfer to an(other) psychiatric hospital; statistical discharge – type change; left against medical advice/discharge at own risk and death.

The reason for aligning the separations used for KPI #1 and KPI #3 is because variation on each indicator is often argued to be linked – for example, higher readmission rates may be a function of shorter lengths of stay, and vice versa. To allow the extent to which this is the case to be examined within the benchmarking forums, it is essential that both indicators are constructed from the same set of observations.

There are times, however, when an organisation will need to review length of stay within its acute inpatient units based on all overnight separations – that is, to not exclude separations that

occur through transfer, left against advice and so forth. To allow for this, collection of data for KPI #3 includes supplementary information about out-of-scope overnight separations to enable an alternative average length of stay indicator to be calculated that is based on all overnight separations.

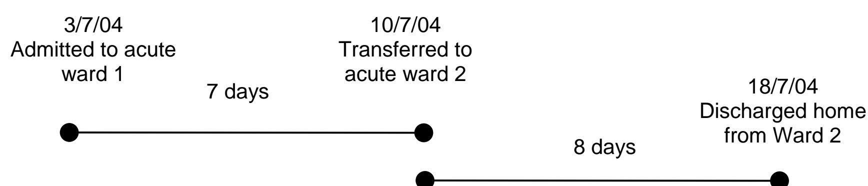
Guide to the individual data items

Total patient days accounted for by in-scope overnight separations

This requires the sum of the lengths of stay of all in-scope overnight separations. The national standard for calculating length of stay for an individual overnight inpatient episode is as follows:

Length of stay = (Discharge date) – (Admission date) – (Number of leave days)

In calculating length of stay for each episode, attention will need to be given to those episodes where the person may have been transferred between two or more acute psychiatric wards, as in the scenario below.



This pair of records represents two 'ward episodes' within a single hospital stay. Depending on how records are maintained within each organisation, there is the risk that the date of transfer from ward 1 to ward 2 will be used to calculate length of stay, generating a misleading representation of the real length of stay. For scenarios of this kind, it is essential to use the original admission date (i.e. 3 July 2004) when calculating length of stay. Benchmarking project officers will need to review their local information recording arrangements and discuss with medical records information system staff the best approach to ensuring that the original date of admission is always used for length of stay calculations.

Number of in-scope overnight separations greater than X days

Enter the number of in-scope overnight separations with a length of stay greater than X days, where X is defined as:

- For adult inpatient services – 35 days
- For child & adolescent services – 60 days
- For older persons services – 60 days
- For forensic services – 180 days

This is a supplementary item to assist in interpreting variations between organisations on the length of stay KPI. It aims to identify the extent to which the average is skewed by long staying 'outlier' cases.

Total patient days accounted for by out-of-scope overnight separations

This requires the sum of the lengths of stay of all out-of-scope overnight separations – that is, discharges from acute inpatient units where the separation type was:

- Discharge/transfer to an(other) acute hospital
- Discharge/transfer to an(other) psychiatric hospital
- Statistical discharge – type change
- Left against medical advice/discharge at own risk
- Death

The national standard for calculating length of stay for an individual overnight inpatient episode, described above, should be followed.

This supplementary information is collected to allow an alternative KPI #3 to be calculated based on all overnight separations.

Additional notes

- Nil

KPI #4 – Cost per acute inpatient episode

Overview of the worksheet

Data for this worksheet includes information copied from previous sheets plus one new item – total accrued mental health care days. The worksheet is shown below (simulated data included):

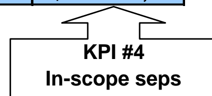
Data - 2004-05

ACUTE inpatient units in-scope

Hospital Name	Unit/Ward Name	Number of beds	Total in-scope overnight separations 1/7/2004 to 30/6/2005	Total patient days accounted for by in-scope overnight seps	Expenditure 1/7/2004 to 30/6/2005 $000s	Av LOS in-scope overnight separations 1/7/2004 to 30/6/2005	Number of accrued mental health care days 1/7/2004 to 30/6/2005
Hospital A	Ward 1	20	400	8,250	3,000	20.6	7,120
Hospital A	Ward 2	10	300	3,250	1,500	10.8	3,560
Hospital A	Ward 3	5	196	1,700	550	8.7	1,780
Hospital B	Ward 4	10	150	3,330	1,500	22.2	3,560
n.a	n.a	n.a	n.a	n.a	n.a	n.a	
n.a	n.a	n.a	n.a	n.a	n.a	n.a	
totals		**45**	**1,046**	**16,530**	**6,550**	**15.8**	**16,020**

KPI #4 2004-05

Hospital Name	Unit/Ward Name	Av cost per patient day	Total recurrent expenditure accounted for by in-scope overnight separations $000s	Av cost per in-scope overnight episode
Hospital A	Ward 1	$ 421	$ 3,476	$ 8,690
Hospital A	Ward 2	$ 421	$ 1,369	$ 4,565
Hospital A	Ward 3	$ 309	$ 525	$ 2,680
Hospital B	Ward 4	$ 421	$ 1,403	$ 9,354
n.a	n.a	n.a	n.a	n.a
n.a	n.a	n.a	n.a	n.a
totals		**$ 409**	**$ 6,759**	**$ 6,461**



Indicator rationale

Efficient functioning of public mental health acute inpatient units is critical to ensuring that finite funds are used effectively to deliver maximum community benefit

- Unit costs are a core feature of management-level indicators in all industries and are necessary to understand how well an organisation uses its resources in producing services. They are fundamental to value for money judgements.
- Acute mental health inpatient units account for 70 percent of the total costs of specialised mental health inpatient care and 36 percent of overall delivery costs.

- This indicator is based on the concept of the episode as the patient care product that should be the focus for indicator development, and is designed to give more direct estimates of technical efficiency.

Indicator definition

As defined in the KPI Report

Average cost of completed separations from acute psychiatric inpatient units managed by the mental health service organisation.

Numerator:	Total recurrent expenditure on completed episodes occurring within the mental health service organisation's acute psychiatric inpatient unit(s) during the reference period.
Denominator:	Total number of completed inpatient episodes occurring within the mental health service organisation's acute psychiatric inpatient unit(s) during the reference period..

As interpreted for the current national benchmarking project

Average cost of overnight separations from acute psychiatric inpatient units managed by the mental health service organisation.

Numerator:	Total recurrent expenditure accounted for by in-scope overnight separations between 1 July 2004 and 30 June 2005 within the mental health service organisation's acute psychiatric inpatient unit(s).
Denominator:	Number of in-scope overnight separations from the mental health service organisation's acute psychiatric inpatient unit(s) occurring between 1 July 2004 and 30 June 2005.

Why the variation is necessary

The indicator specification for the current project has been varied to align the separations counted as in-scope with those used for KPI #1 and other related inpatient service indicators (KPI #3). This ensures that the subset of separations used to determine readmission rates (KPI #1), average length of stay (KPI #3) and average cost per acute inpatient episode (KPI #4) are the same.

Key issues for this indicator

What separations should be counted as 'in-scope'?

Construction of this indicator is based on the same group of 'in-scope' separations used for the analysis of 28-day readmission rates (KPI #1) and average length of acute inpatient stay (KPI #3). Thus, it excludes same day separations, and all overnight separations that occur through discharge/transfer to an(other) acute hospital; discharge/transfer to an(other) psychiatric hospital; statistical discharge – type change; left against medical advice/discharge at own risk and death.

The reason for aligning the separations used for KPI #1, KPI #2 and KPI #3 is to allow organisations participation in the benchmarking forums to explore the relationship between readmissions rates, length of stay and episode cost. To do this, it is essential that all three indicators are constructed from the same set of observations.

There are times, however, when an organisation will need to review average episode within its acute inpatient units based on all overnight separations – that is, to not exclude separations that occur through transfer, left against advice and so forth. To allow for this, collection of

supplementary data on KPI #3 about out-of-scope overnight separations is used on this worksheet to calculate an alternative acute episode costs indicator that is based on all overnight separations.

Accrued mental health care days

'Accrued mental health care days' is a simple measure of the 'output' of an inpatient unit, measured in terms of the number of patient days (previously called 'occupied bed days') provided in the year. This information is used to derive average per day costs of each in-scope inpatient unit. Average cost per day is calculated by taking the total 'outputs' (accrued days) of each inpatient unit and dividing these into the total cost of the unit (as reported on the Expenditure worksheet). This is then used to calculate average cost per episode.

'Accrued mental health care days' refers to the number of patient days provided by the specific inpatient unit within the nominated reference period – in this case, 1 July 2004 to 30 June 2005. Same day admissions are counted as one accrued mental health care day. The complete, technical definition, developed by the Australian Institute of Health and Welfare, is reproduced at Appendix B.

'Accrued mental health care days' differs from the statistic 'Total patient days accounted for by overnight separations' that is reported for KPI#3 in the following ways:

- 'Accrued mental health care days' only counts days spent in hospital between 1 July 2004 and 30 June 2005. Thus, if a consumer was admitted on 20 June 2004 and discharged on 7 July 2005, the number of accrued days would be (7 July) minus (1 July) = 6 days (assuming no leave days occurred). The 10 days spent in hospital between 20-30 June 2004 would not be included because they fell outside the reference period.
- By contrast, 'Total patient days accounted for by in-scope overnight separations' counts the total days pent in hospital (less leave days), regardless of when the person was first admitted. So in the scenario above, the total patient days (i.e. length of stay) would be (7 July) minus (20 June) = 17 days.

Accrued patient days are compiled by all public sector mental health services for annual reporting to the National Survey of Mental Health Services. 2004-05 data should therefore be readily accessible to benchmarking project officers from local sources.

Calculating average cost per acute inpatient episode

The key question for this indicator concerns the degree of precision that will be used in allocating costs to patients.

Technically, the true average cost is calculated from the costs of individual cases. Therefore, for this indicator, the average cost per acute inpatient episode requires information about the costs of each of individual episode.

In an ideal world, the cost of individual episodes would be calculated directly, by collecting information about the actual services used by each patient, on each day of care, and summing these to arrive at a total episode cost. Within this approach, the costs for any particular day are distributed across all patients within a ward based on their actual use of services measured by, for example, relative amount of nursing time, drugs, theatre time, medical time and so forth.

This approach is suited to one-off studies but is not practical for day-to-day use because it requires intensive, ongoing data collection.

Costing technology in the health care field has developed considerably over the past two decades to allow estimates of individual inpatient episode costs to be collected regularly, without an intensive data collection burden. These approaches – known as 'cost modelling' and 'clinical costing' – involve distributing cost pools to individual patients based on pre-determined allocation statistics. For example, ward staffing costs may be apportioned to patients on the basis of length of stay or a measure of nursing dependency which rates patients according to their level of need. Similarly, drug costs might be distributed on the basis of diagnosis.

While these approaches are more achievable, they require uniform costing information systems to be established that are updated and validated regularly. Most inpatient psychiatric units in Australia do not have such systems in place.

An alternative approach is therefore required for the current project to derive average costs per acute inpatient episode. The approach to be used is based on a key finding of the MH-CASC project, a detailed mental health costing study undertaken in Australia in 1996.[7] MH-CASC collected data on costs based on actual services used on a daily basis, covering approximately 18,000 consumers and 25% of specialised mental health services in Australia. Costs for inpatient episodes were built from 'bottom up', using staff daily diary entries of time spent with individual consumers, and other data on services utilisation.

The results of MH-CASC indicated that, while there is variation in per day costs between individual inpatients that are related to severity levels, the main driver of overall acute inpatient episode costs was length of stay. Length of stay was found to predict 91% of the variation between individuals in overall episode costs in acute inpatient units. A similar result was found in a comparable study conducted in New Zealand in 2002.[8]

The implication is that, in the absence of detailed data on individual patient costs, length of stay provides a robust allocation statistic to derive costs for acute inpatient episodes.

Converting length of stay to an episode cost requires one further item of information – the average cost per patient day. As noted above, this information is calculated by collecting total accrued mental health care days and diving this into total acute inpatient costs. Formulae have been built into this worksheet for these calculations to be performed automatically.

Guide to the individual data items

Number of accrued mental health care days 1 July 2004 to 30 June 2005

Enter the number of accrued mental health care days (as defined above) for each in-scope acute inpatient unit.

[7] Buckingham W, Burgess P, Solomon S, Pirkis J and Eagar K (1998) *ibid.*

[8] Gaines P, Bower A, Buckingham W, Eagar K, Burgess P. & Green J. (2003) *ibid.*

Additional notes

- Average per day costs calculated in this worksheet are for the 2004-05 year. By contrast, a component of the in-scope and out-of-scope separations will include days spent in hospital in the period preceding 1 July 2005. The calculations made for this worksheet assume that 2004-05 average per day costs can be generalised to the period immediately preceding 1 July 2005.

KPI #5 – Treatment days per three month community care period

Overview of the worksheet

Data for this worksheet requires four new data items, for each quarter of the 2004-05 year – total service contacts recorded, number of consumers who received one treatment day only, number of consumers who received more than one treatment day, total treatment days provided in the period. The worksheet is shown below (simulated data included):

Data - 2004-05	Totals for all in-scope ambulatory care service units				
	Q1 1/7/2004 - 30/9/2004	Q2 1/10/2004 - 31/12/2004	Q3 1/1/2005 - 31/3/2005	Q4 1/4/2005 - 30/6/2005	Full Year Total
Total service contacts recorded	2,500	3,300	4,400	1,987	12,187
N Consumers who received one treatment day only	150	130	140	160	580
N Consumers who received > 1 treatment day	430	510	450	370	1,760
Total 3 month periods of care	580	640	590	530	2,340
% 'assessment only' episodes	26%	20%	24%	30%	25%
Total treatment days provided in the period	5,200	6,200	5,500	5,980	22,880

KPI #5 2004-05

KPI #5 2004-05	Q1	Q2	Q3	Q4	Full Year
Average treatment days per 3 month period - all consumers seen	9.0	9.7	9.3	11.3	9.8
Average treatment days per 3 month period - excluding 'assessment only' episodes	11.7	11.9	11.9	15.7	**12.7**

KPI#5

Indicator rationale

- The number of treatment days is the community counterpart of length of stay and provides an indication of the relative volume of care provided to people seen in ambulatory care.
- Frequency of servicing is the main driver of variation in community care costs and may reflect differences between health service organisation practices. Inclusion of this indicator promotes a fuller understanding of an organisation's community care costs as well as providing a basis for utilisation review. For example, it allows the frequency of servicing of particular patient groups in the community to be assessed against any clinical protocols developed for those groups.
- When combined with average costs per three month community care period, it allows average treatment day costs to be derived should this be required.
- May also demonstrate degrees of accessibility to public sector community mental health services.

Indicator definition

As defined in the KPI Report

Average number of treatment days per three month period of ambulatory care provided by the mental health service organisation's community mental health services.

Numerator:	Total number of community treatment days provided by the mental health service organisation's community mental health services within the reference period.
Denominator:	The total number of ambulatory care statistical episodes (three month periods) treated by the mental health service organisation's community services within the reference period.

As interpreted for the current national benchmarking project

No changes made.

Key issues for this indicator

In-scope ambulatory care services

In-scope services for this indicator are listed those under Ambulatory Care services on the organisation's service profile. These should include all service units that provide assessment and treatment to non-admitted patients e.g., outpatient clinics based in hospitals, outpatient or community outreach services located in residential services.

The concept of 'community treatment days'

The concept of 'number of community treatment days' is used in the national KPIs as a broad indicator of the volume of services delivered to consumers receiving community care.

A 'community treatment day' refers to any day on which one or more community service contacts (direct or indirect) are recorded for an identified client. The concept is the ambulatory care equivalent of the 'patient care day' used in admitted patient (inpatient) units, but is not in common use throughout mental health services. Like the patient care day idea, a consumer may receive multiple services (or contacts) on any particular community treatment day. Only one day treatment day is counted, regardless of the number of contacts that occurred on the day.

Treatment days originated as a concept in the Australian MH-CASC project, described earlier under KPI#4. MH-CASC found that the number of treatment days was a significantly better predictor of total ambulatory episode costs than the more familiar statistic – number of contacts – which is typically used by mental health services when they report on the amount of services received by individual consumers. Based on costing data derived from daily diaries, maintained by clinical staff treating approximately 13,000 consumers in the community, the study found that the number of community treatment days received by consumers over a three month period predicted 86% of their variation in costs.

Community treatment days provides a means to 'iron out' differences that arise from inconsistencies in the way community contacts are recorded by mental health services across Australia. This is important for the current project, given that it involves services using many different local information systems and practices.

At the technical level, the number of community treatment days for a particular consumer is defined as the number of **dates** on which a service contact was recorded.

The concept of 'statistical episodes' (3-month period of care)

There are many perspectives on what constitutes an episode of community care in mental health services. The approach taken in the national KPIs is to bypass this debate by using the concept of a standard period of care to define a 'statistical episode'. This is not to undermine the importance of the debate or the validity of the various perspectives. Instead, it is based on a recognition that a simple statistic is needed that can be applied uniformly to develop indicators that compare services on the number of consumers treated in the community, the volumes of services provide to those consumers and their associated costs. There is no expectation that the 'statistical episode' used for the KPI construction can be equated with a clinically defined episode.

For the purposes of the national KPIs, a statistically derived community episode is defined as each three month period of ambulatory care of an identified individual patient, where the patient was under 'active care', defined as one or more treatment days in the period. As described below under 'Guide to the individual data items', statistical periods will consist of the following fixed three month periods; July to September, October to December, January to March and April to June.

Unique counting of consumers across the organisation's ambulatory care service units

For this indicator (and all associated indicators of community service performance), each consumer is counted uniquely at the mental health service organisation level, regardless of the number of teams or community programs involved in his/her care.

Treatment of an individual by multiple teams is common in mental health care; for example, where a consumer is simultaneously under the care of a community mental health team and a separate day program. Typically, the consumer is registered by both teams and each team separately records contacts. While it makes sense from the perspective of each team to count the consumer as undergoing a 'service episode', it is not sensible to count this as two 'statistical episodes' from the point of view of the organisation because this would result in double counting and create distortions when comparing indicators between organisations.

The approach taken is for 'statistical episodes' to be defined and counted at the person level, with each consumer having only one statistical episode at any one time within each organisation. The implication is that data on ambulatory care provision by the various service units within the organisation needs to be pooled for the purposes of preparing this indicator.

'Assessment only' statistical episodes

This indicator makes a distinction between 'active' community care episodes and 'assessment only' episodes, defined as those where only one treatment day is provided within any three month period. The calculation of average treatment days per three month period is based only on the former and excludes 'assessment only' episodes.

This approach is designed to address an important source of variation between organisations that has potential to confound comparisons of indicators. Many people present to public sector community mental health services who are assessed and referred elsewhere or not deemed to require further contact. Best estimates suggest that such cases may account for up to 20% of people seen in community mental health services, with variation between teams depending on their function.

Separating these cases aims to establish a 'like with like' comparison between agencies by confining the analysis of treatment days to those consumers who have been assessed and accepted for ongoing treatment and care. To do otherwise would confound the treatment days indicator by confusing individuals who receive 'partial services' from those who received full treatment services.

It is acknowledged that the approach taken is a coarse attempt to address a complex issue. Exclusion of consumers who receive only one day of community contact within any three month period will remove some who are in fact receiving ongoing care, and who require three monthly appointments to help maintain their situation. However, this disadvantage is outweighed by the overall benefits of the approach.

Data collected on the worksheet for this indicator will allow the frequency of 'assessment only' cases to be identified, compared across organisations and included in benchmarking forum discussions about differences in agency practices.

Service contact definition

Service contacts for mental health care are defined in the National Health Data Dictionary as follows:

> *The provision of a clinically significant service by a specialised mental health service provider(s) for a patient/client, other than those admitted to a psychiatric hospital or a designated psychiatric unit in an acute care hospital, and those resident in a 24 hour staffed residential specialised mental health service, where the nature of the contact would normally warrant a dated entry in the clinical record of the patient/client in question.*

An important clarification recently added to the definition is that service contacts may be indirect:

> *Service contacts can either be with a patient/client, or with a third party such as a carer or family member, or with another professional or mental health worker or other service provider. Service contacts include consultations occurring between a health service provider and any other third party in relation to a patient/client, where the nature of the contact would normally warrant a dated entry in the clinical record of the patient/client in question.*

An extract of the revised definition is provided at Appendix C.

As the benchmarking project is based historical 2004-05 data rather than designed as a prospective study, it will be affected by any variations between organisations in their definitions and thresholds used to record service contacts during 2004-05. These can not be changed. However, where there is scope in the analysis of local data to make adjustments to increase consistency with the above definition, these should be taken.

Guide to the individual data items

Four new data items are required for this worksheet for each of the 3 month periods of 2004-05 (i.e. 1 July to 30 September, 1 October to 31 December, 1 January to 31 March and 1 April to 30 June)

Total service contacts recorded

Enter the total number of service contacts recorded by the ambulatory care services within your organisation for the three month period. This is a supplementary data item.

Number of consumers who received one treatment day only

Enter the total number of consumers who received a service contact (or multiple contacts) on only one date in the three month period.

Number of consumers who received more than one treatment day

Enter the total number of consumers who received a service contact (or multiple contacts) on more than one date in the three month period.

Total treatment days provided in the period

Enter the total number of treatment days provided by your organisation's ambulatory services within the three month period.

Additional notes

- Preparing the data for this indicator will require special analysis of local data, and is one of the more demanding indicators in this respect. How this is done will depend on the skills available within each organisation, and the data analysis tools used. As a simplified guide, the task can be considered as having three steps.

  Step 1: Extract an analysis file of all contacts provided by the organisation's ambulatory services in 2004-05. Data items included in this file should include the consumers unique ID and record for each date on which a contact was recorded. The basic tabular structure of the file for the July-September quarter might look like this:

Consumer ID	Date	Number of Contacts
1211	4-7-2004	2
1211	10-7-2004	1
1433	6-7-2004	1
1675	3-7-2004	1
1675	28-8-2005	1
1798	3-8-2004	1
1798	10-8-2004	2
1798	17-8-2004	1

  Step 2: From this, build a new table by aggregating the file to count, for each consumer, the number of dates and number of contacts.

Consumer ID	Number of dates	Number of Contacts
1211	2	3
1433	1	1
1675	2	2
1798	3	4

Step 3: From this, build a third table that counts the number of consumers who received contacts on one day, two days, three days etc.

Number of dates (A)	Number of consumers (B)	Number of Treatment days (*)
1	1	1
2	2	4
3	1	3

(* Number of treatment days is calculated on this table by multiplying columns A and B)

An analysis approach along these lines will produce all the required data items needed for this worksheet.

- Note that it is not possible from the data collected in this worksheet to estimate the number of consumers seen over the full year 2004-05 period, because consumers seen in more than one quarter will be counted for each quarter. This information is collected in the worksheet for KPI#7.

KPI #6 – Cost per three month community care period

Overview of the worksheet

Information on this worksheet is totally derived from other worksheets and requires no additional information. The worksheet performs multiple calculations to generate the indicators required. The worksheet is shown below (simulated data included):

Data - 2004-05

In-scope ambulatory services expenditure $000s	4,165
Total contacts recorded 2004-05	29,100
Total treatment days 2004-05	22,880
Total 3 month periods of care 2004-05	2,340
Total 3 month periods of care with 1 treatment day only ('Assessment Only')	580
Total 3 month periods of care > treatment day	1,760
Average treatment days per 3 month period - all episodes	9.8
Average treatment days per 3 month period - excluding 'Assessment Only' episodes	12.7

KPI #6 2004-05

Average cost per contact	$	143
Average cost per treatment day	$	182
Average cost per 3 months of community care - **including** 'Assessment Only' episodes	$	1,780
Average cost per 3 months of community care - **excluding** Assessment Only' episodes	**$**	**2,306** ← **KPI #6**

Indicator rationale

- Unit costs are a core feature of management-level indicators in all industries and are necessary to understand how well an organisation uses its resources in producing services. They can be fundamental to value for money judgements.
- Previous estimates of unit costs in community care have been compromised by inadequate product definition. Most commonly, estimates have been based on average cost per occasion of service, and provide little indication of the overall costs of care.
- This indicator is based on the concept of a statistically derived episode as the patient care product that should be the focus for indicator development for community mental health services

Indicator definition

As defined in the KPI Report

Average cost per three month period of ambulatory care provided by the mental health service organisation's community mental health services.

Numerator: Total mental health service organisation recurrent expenditure on community mental health ambulatory care services within the reference period.

Denominator: Total number of ambulatory care statistical episodes (three month periods) treated by the mental health service organisation within the reference period.

Note: A statistically derived community episode is defined as each three month period of ambulatory care of an individual identified patient where the patient was under 'active care', defined as one or more treatment days in the period.

As interpreted for the current national benchmarking project

No changes made.

Key issues for this indicator

In-scope ambulatory care services

As per KPI#5 - In-scope services for this indicator are those listed those under Ambulatory Care services on the organisation's service profile. These should include all service units that provide assessment and treatment to non-admitted patients e.g., outpatient clinics based in hospitals, outpatient or community outreach services located in residential services.

The concepts of 'community treatment days, 'statistical episodes' and 'assessment only episodes'

See KPI#5.

Calculating average cost per three month period of care

Methodologies for estimating the costs of episodes of care in the community are substantially less well developed than for inpatient episodes. The approach to be used for the current project uses the lessons that emerged from the Australian and New Zealand casemix studies, that together, represent the largest costing studies of community mental health care published internationally.[9,10]

Both studies costed community episodes of care from a detailed, 'bottom up' perspective. Complex algorithms were developed to distribute different cost pools, including clinical salaries, administrative overheads, and non salary operating costs to individual consumers in proportion to actual service use. Both studies required extensive data analysis teams, using expertise that is not normally available within the typical mental health service organisation.

As indicated under KPI#5, the studies found that the number of treatment days a person was seen in the community was a very good predictor of overall episode costs, accounting for up to 86% of the cost variation between consumers in the Australian study. It was superior to using number of contacts (because of the variability in how these are recorded) and has advantages over using total contact time because this is only suitable for distributing clinician salaries and

[9] Buckingham W, Burgess P, Solomon S, Pirkis J and Eagar K (1998) *ibid*

[10] Gaines P, Bower A, Buckingham W, Eagar K, Burgess P. & Green J. (2003) *ibid.*

not for overheads and indirect expenditure which account for more than a third of total service expenditure.

The number of treatment days is therefore a suitable proxy for estimating community costs when more sophisticated options are unavailable, and is used as the underlying allocation statistic for making the estimates required for this indicator.

Guide to the individual data items

No new data are required for this worksheet.

Additional notes

- Nil.

KPI #7 – Population receiving care

Overview of the worksheet

Data for this worksheet requires three new data items - number of people in receiving one or more community contacts by in-scope ambulatory services; number of people receiving one or more days of inpatient care within in-scope inpatient units; and number of people in receiving one or more days of residential care within in-scope residential units. For each item, the data are disaggregated by the consumer's residential address (living within organisation's catchment vs external to catchment) and age band. In addition, data are required on your organisation's catchment area population size – for each of ambulatory, inpatient and residential services.

The worksheet is shown below (simulated data included):

Data - 2004-05

	Resident in your organisation's defined catchment area		Resident outside of organisation's defined catchment area	Total consumers seen by your organisation
	Consumers in specified age band	Other consumers outside of specified age band		
Number of people receiving one or more community contacts by in-scope ambulatory services	1,650	300	210	2,160
Number of people receiving one or more days of inpatient care within in-scope inpatient units	680	95	30	805
Number of people receiving one or more days of residential care within in-scope residential units	45	2	1	48
Ambulatory services age-specific Area catchment population at December 2004	198,000			
Acute inpatient services age-specific Area catchment population at December 2004	300,000			
Residential services age-specific Area catchment population at December 2004	198,000			

Age bands specific to the benchmarking forums:
Adult - Ages 18-64 years
Child & Adolescent - Ages 0-17 years
Older Persons - 65+ years
Forensic - 18+ years

KPI #7 2004-05

% target population receiving ambulatory services 2004-05	0.8%	KPI #7 (Ambulatory)
% target population receiving inpatient services 2004-05	0.2%	KPI #7 (Inpatient)
% target population receiving residential services 2004-05	0.02%	KPI #7 (Residential)

Indicator rationale

- Access to public sector mental health services is an issue of significant public concern.
- The issue of unmet need has become prominent since the National Survey of Mental Health and Well Being indicated that a majority of adults and younger persons affected by a mental disorder do not receive treatment.
- The implication for performance indicators is that a measure is required to monitor population treatment rates and assess these against what is known about the distribution of mental disorders in the community.

- Access issues figure prominently in concerns expressed by consumers and carers about the mental health care they receive. More recently, these concerns are being echoed in the wider community.
- Most jurisdictions have organised their mental health services to serve defined catchment populations, allowing comparisons of relative population coverage to be made between organisations.

Indicator definition

As defined in the KPI Report

The percentage of persons resident in the mental health service organisation's defined catchment area who received care from a public sector mental health service.

Numerator: Total number of persons resident in the defined area who are recorded as receiving one or more services from a public sector mental health service in the reference period.

Denominator: Total number of persons resident in the defined area within the reference period.

As interpreted for the current national benchmarking project

The percentage of persons resident in the mental health service organisation's defined catchment area who received care from the organisation's mental health (inpatient/ambulatory/residential) services.

Numerator: Total number of persons resident in the defined catchment area who were recorded as receiving a service from your organisation's in-scope (inpatient/ambulatory/residential) mental health services between 1 July 2004 and 30 June 2005.

Denominator: Total number of persons in the target population who were resident in the defined catchment area for your organisation's in-scope (inpatient/ambulatory/residential) mental health services at December 2004.

Why the variation is necessary

The indicator specification for the current project differs from the national definition in two ways:

Separate indicators for inpatient, ambulatory and residential services:

Based on advice from several participating organisations, catchment areas for inpatient, ambulatory and residential services may differ – for example, the acute inpatient unit may be responsible for accepting admissions from a wider geographic area than that covered by the local ambulatory services and extend into areas covered by another organisation's ambulatory services. Where this is the case, it is not possible to construct a single 'population under care' index because there is not a common population 'denominator'. The splitting of KPI #7 into three separate indicators for ambulatory, inpatient and residential services aims to interpret the 'population under care' concept in a meaningful way for those organisations with non-overlapping catchment boundaries, while preserving its original intent.

Focus only on consumers seen by the organisation:

The indicator specification has been amended for the current project to focus only consumer's seen by the organisation. This recognises that construction of the indicators is the responsibility of each organisation. Within most areas of Australia, an individual organisation does not have access to information about people within their catchment area who are treated by other organisations.

Key issues for this indicator

This indicator asks the question: *"What percentage of the target population within your organisation's catchment area is seen by those mental health services in your organisation that are funded specifically to provide care to that target population?"*

For each of the three service streams (inpatient, ambulatory, residential), construction of the indicator requires three steps:

- Count the number of people seen by any in-scope service during the period 1 July 2004 to 30 June 2005.
- Sort this group into those who were resident within the organisation's catchment area and those who lived outside the area.
- For the group of consumers seen who lived within the catchment area, sort into two sub categories - those whose age was within the forum-specific age band and others.

Guidelines on each of these steps are given below.

'Seen by any in-scope service'

For the purposes of these indicators:

- A person is defined as being seen by an ambulatory service if he/she received one or more community contacts by in-scope ambulatory care services.
- A person is defined as being seen by an inpatient service if he/she spent one or more days as an admitted patient within an in-scope acute or non-acute inpatient unit.
- A person is defined as being seen by a residential service if he/she spent one or more days as a resident within an in-scope community residential service.

Within each of the three service streams, the indicator requires a unique count of each consumer seen, regardless of the number of times they have accessed the service stream. For example, a person who was admitted on three separate occasions to an acute inpatient unit within the 2004-05 year should only be counted as one consumer when calculating the number of people seen by inpatient services.

Unique person counts are only required within each service stream, not across service streams. For example, a person who was admitted to an acute inpatient unit who also received contacts in the community by in-scope ambulatory services would be counted as one individual for each of the inpatient and ambulatory services 'population under care' indicators.

Distinguishing consumers resident in the organisation's catchment area

The consumer's address (or more specifically, their postcode) recorded on local clinical information systems should be used to determine their 'within catchment' residential status. Because each consumer is only counted once when constructing each of the three versions of the 'population under care' indicator, they can only be assigned to one address for each indicator. This creates two problems that require a consistent solution:

- For inpatient and residential services, a different address may have been recorded at each admission for those consumers who had multiple admissions within the year.

- For people seen by ambulatory services, multiple addresses may have been recorded due to changes in the person's accommodation.

The approach to be taken by organisation's participating in the national benchmarking project is to assign each consumer to the most recent address recorded for that consumer by the organisation. Thus:

- When calculating the indicator for inpatient services for individuals who had more than one admission to an in-scope inpatient unit – use the address recorded on the most recent admission.
- When calculating the indicator for residential services for individuals who had more than one admission to an in-scope residential unit – use the address recorded on the most recent admission.
- When calculating the indicator for ambulatory services for people with multiple recorded addresses - use the most recent address recorded.

While this may create some minor distortions in the results, it is an approach that is used frequently in epidemiological research.

Age bands relevant to each forum

The consumer's date of birth should be used to determine whether the individual's age is within the target population relevant to each specific forum. Two issues will be faced by organisations in applying this general rule:

- *Resolving how to assign a consumer to an age band who moves between age bands within the 2004-05 year*

  Take, for example, a consumer born on 8 November 1987 who was seen by your organisation's in-scope ambulatory care services in July 2004. At the time of contact, the consumer was 17, and would be categorised within the 'Child & Adolescent' age band (0-17 years). Let's assume this consumer was seen again in January 2005 – he/she has now turned 18 and would be grouped within the 'adult' age band (18-64 years). Given each consumer can only be assigned to one age band, how should this consumer be classified?

  The approach to be taken for the national benchmarking project is to classify consumers seen into age bands on the basis of their age at 30 June 2005. Thus, for the scenario above, the consumer would be grouped within the adult age band.

- *The consumer may have conflicting dates of birth recorded within local clinical information systems*

  This scenario may result, for example, when conflicting dates of birth are recorded at admission to two separate inpatient episodes.

  The approach to be taken by organisation's participating in the national benchmarking project is to assign each consumer to the most recent date of birth recorded for that consumer.

Guide to the individual data items

Number of people receiving one or more community contacts by in-scope ambulatory services

Enter the number of people who received one or more community contacts by in-scope ambulatory care services within the period 1 July 2004 to 30 June 2005. Each person should be counted only once, regardless of the number of contacts received.

Separate counts are required for:

- Persons seen by ambulatory services who were resident within the organisation's ambulatory services catchment area and whose age was within the relevant forum-specific age band.
- Persons seen by ambulatory services who were resident within the organisation's ambulatory services catchment area and whose age was outside the relevant forum-specific age band.
- Persons seen by ambulatory services who resided in a location external to the organisation's ambulatory services catchment area.

Number of people receiving one or more days of inpatient care within in-scope inpatient units

Enter the number of people who received one or more days of inpatient care within in-scope inpatient units within the period 1 July 2004 to 30 June 2005. Each person should be counted only once, regardless of the number of days of care received.

A person should be defined as receiving one or more days of inpatient care if they were recorded as being admitted to, or separated from, any of the acute or non-acute inpatient units classified as in-scope by your organisation over the period 1 July 2004 to 30 June 2005. This count should include persons who received same day admissions.

Persons who were resident within an inpatient unit continuously over the period should be counted once.

Separate counts are required for:

- Persons receiving one or more days of inpatient care who were resident within the organisation's acute inpatient services catchment area and whose age was within the relevant forum-specific age band.
- Persons receiving one or more days of inpatient care who were resident within the organisation's acute inpatient services catchment area and whose age was outside the relevant forum-specific age band.
- Persons receiving one or more days of inpatient care who resided in a location external to the organisation's acute inpatient services catchment area.

Number of people receiving one or more days of residential care within in-scope residential units

Enter the number of people who received one or more days of residential care within in-scope residential units within the period 1 July 2004 to 30 June 2005. Each person should be counted only once, regardless of the number of days of care received.

A person should be defined as receiving one or more days of residential care if they were recorded as being admitted to, or separated from, any of the residential units classified as in-scope by your organisation over the period 1 July 2004 to 30 June 2005. Persons who were resident within a residential unit continuously over the period should be counted once.

Separate counts are required for:

- Persons receiving one or more days of residential care who were resident within the organisation's residential services catchment area and whose age was within the relevant forum-specific age band.
- Persons receiving one or more days of residential care who were resident within the organisation's residential services catchment area and whose age was outside the relevant forum-specific age band.
- Persons receiving one or more days of residential care who resided in a location external to the organisation's residential services catchment area.

Ambulatory services age-specific Area catchment population at December 2004

Enter the relevant age-specific population (0-17 years, or 18-64 years or 65+ years) of your organisation's ambulatory services catchment at December 2004 (mid point of the 2004-05 year).

> *Note: Population data by age group, at Statistical Local Area and municipal level, should be available from the state health department.*

Acute inpatient services age-specific Area catchment population at December 2004

Enter the relevant age-specific population (0-17 years, or 18-64 years or 65+ years) of your organisation's acute inpatient services catchment at December 2004 (mid point of the 2004-05 year).

Residential services age-specific Area catchment population at December 2004

Enter the relevant age-specific population (0-17 years, or 18-64 years or 65+ years) of your organisation's residential services catchment at December 2004 (mid point of the 2004-05 year).

Additional notes

Forensic services requirements on this worksheet

As this indicator is designed for organisations that have a defined geographical catchment population, it was originally considered to be difficult to apply to forensic mental health services. However, based on advice from forensic services participating in the national benchmarking project, all services have defined catchments (usually whole of state) and the indicator is considered relevant and meaningful. All data should therefore be reported.

Assigning persons of no fixed address to an area

These cases are problematic and will possibly vary in significance between benchmarking participants. As a workaround solution, these cases should be counted under the column 'Resident outside of organisation's defined catchment area'. Discussion with the benchmarking forums may need to review the relative significance of this group and explore alternative solutions.

KPI #8 – Local access to inpatient care

Overview of the worksheet

Data for this worksheet requires two new data items - number of overnight separations from your organisation's in-scope acute units by persons in the target age population; and number of overnight separations by persons in the target age population from acute inpatient units managed by other public sector organisations. As noted below, assistance from your central state mental health branch will be required in compiling the second data item.

The worksheet is shown below (simulated data included):

Data - 2004-05

	OVERNIGHT SEPARATIONS FROM ACUTE UNITS		
	Resident in your organisation's acute inpatient catchment area	Resident outside of your organisation's acute inpatient catchment area	Total
Total overnight separations from your organisation's in-scope acute units by persons in age-specific target population, 1 July 2004 to 30 June 2005	890	110	1,000
Total overnight separations by persons in age-specific target population from acute psychiatric inpatient units managed by other public sector organisations, 1 July 2004 to 30 June 2005	210		
Total overnight separations by persons in age-specific target population from within catchment area, 1 July 2004 to 30 June 2005	1,100		

Age bands specific to the benchmarking forums:
Adult - Ages 18-64 years
Child & Adolescent - Ages 0-17 years
Older Persons - 65+ years
Forensic - 18+ years

KPI #8 2004-05

Percent target population separations from your catchment managed by your organisation	**81%** ← **KPI #8**
Percent of separations for target population managed by your organisation that came from outside the catchment area	**11%**

Indicator rationale

- Local access to services has been a key principle underpinning mental health reforms over the past decade.
- Access implies geographic proximity so that services are delivered in a way that minimises dislocation of the patient from family and local supports. This measure points to the degree to which persons living within a particular community who require acute inpatient treatment are in fact treated by the local service established to meet the area's needs.

- Significant capital and recurrent resources have been invested to build networks of services that are responsible for serving the needs of their local communities.
- Most jurisdictions have organised their mental health services to serve defined catchment populations, allowing comparisons to be made between organisations in terms the extent to which their populations receive local inpatient care.

Indicator definition

As defined in the KPI Report

The percentage of separations from acute psychiatric inpatient units for persons resident in the mental health service organisation's defined catchment area where the person was treated within the local inpatient unit.

Numerator:	Total number of acute psychiatric inpatient separations in the reference period for residents of the defined area where the person was treated within the local public sector psychiatric inpatient unit.
Denominator:	Total number of acute psychiatric inpatient separations in the reference period for residents of the defined area who received the acute inpatient service from any public sector mental health service organisation.

As interpreted for the current national benchmarking project

The percentage of separations from acute psychiatric inpatient units for persons in the target age group who were residents of your organisation's catchment area where the person was treated within your organisation's acute inpatient unit.

Numerator:	Number of overnight acute psychiatric inpatient separations that were managed by your organisation between 1 July 2004 and 30 June 2005 for people within the target age group who lived in your organisation's acute inpatient catchment area.
Denominator:	Number of overnight acute psychiatric inpatient separations that were managed by any public sector mental health service organisation between 1 July 2004 and 30 June 2005 for people within the target age group who lived in your organisation's acute inpatient catchment area.

Why the variation is necessary

The indicator specification has been amended for the current project to focus only on the target age groups specific to each of the benchmarking forums.

Key issues for this indicator

Separations in scope for this indicator

Separations used for this KPI should include all separations of people within the target age group that occurred from the in-scope acute psychiatric units within your organisation between 1 July 2004 and 30 June 2005, **except** where the separation occurred on the same day as the admission. As noted in the discussion under KPI #1, same day separations introduce confounding effects to some performance indicators and need to be excluded to improve 'like with like' comparisons between organisations.

Age bands relevant to each forum

The consumer's age at admission should be used to determine whether the separation falls within the target population relevant to each specific forum.

Identifying the number of acute separations from other organisations of people within the target population

This indicator requires a count of the number of separations from other mental health service organisations for people within the target age group who lived within your organisation's catchment area in the 2004-05 year. Collection of this information will require assistance from the central mental health branch within your state or territory, as such data are not accessible to local organisations. This is the only data item in the benchmarking dataset that requires access to information that is beyond the scope of participating organisations.

Guide to the individual data items

Total overnight separations from your organisation's in-scope acute units by persons in age-specific target population, 1 July 2004 to 30 June 2005

Enter the number of overnight separations from your organisation's in-scope services that occurred within the period 1 July 2004 to 30 June 2005 for people in the target age group.

Decisions about whether the person is within the relevant age-band should be based on age at admission and derived from date of birth.

Because this indicator is based on a count of separations (as opposed to persons), an individual consumer may be counted more than once if they had more than one separation in the 2004-05 year.

Separate counts are required for:

- Separations for people who were resident within your organisation's acute inpatient catchment area; and
- Separations for people who were lived outside of your organisation's acute inpatient catchment area.

The consumer's address (postcode) recorded at admission should be used to determine their 'within catchment' status.

Total overnight separations by persons in age-specific target population from acute psychiatric inpatient units managed by other public sector organisations, 1 July 2004 to 30 June 2005

Enter the number of overnight separations from public sector acute psychiatric units managed by other organisations for people resident in your organisation's acute inpatient catchment whose age was within the target population.

As above, age should be defined as age at admission and derived from date of birth. Similarly, the consumer's address (postcode) recorded at admission should be used to determine 'within catchment' status.

As noted above, this item will require assistance from the central mental health unit within your state or territory.

Additional notes

Forensic services requirements on this worksheet

As this indicator is designed for organisations that have a defined geographical catchment population, it was originally considered to be difficult to apply to forensic mental health services. However, based on advice from forensic services participating in the national benchmarking project, all services have defined catchments (usually whole of state) and the indicator is considered relevant and meaningful. All data should therefore be reported.

Assigning persons of no fixed address to an area

As per KPI #7, these cases are problematic and will likely vary in significance between benchmarking participants. As a workaround solution, separations for people with no fixed address should be counted under the column ‘Resident outside of organisation's defined catchment area’.

KPI #9 – New client index

Overview of the worksheet

The worksheet uses data requires two data items - Number of people seen by any in-scope services, 1 July 2004 to 30 June 2005; and number of people seen by all in-scope services, 1 July 2004 to 30 June 2005 who had not been seen by any of the organisation's mental health services in the year (365 days) preceding the date of first contact in 2004-05.

The worksheet is shown below (simulated data included):

Data - 2004-05

Number of people seen by any in-scope services, 1 July 2004 to 30 June 2005	2,035
Number of people seen by all in-scope services, 1 July 2004 to 30 June 2005 who had not been seen by any of the organisation's mental health services in the year (365 days) preceding the date of first contact in 2004-05	950

KPI #9 2004-05

New client index	**53%**	← **KPI #9**

Indicator rationale

- Access to services by persons requiring care is a key issue. There is significant concern that the public sector mental health service system is inadequately responding to new people requiring care.
- Existing population treatment rates are relatively low (1% to 1.5%).
- There is concern that public sector mental health services invest a disproportionate level of resources in dealing with existing clients and too little in responding to the needs of new clients as they present.

Indicator definition

As defined in the KPI Report

New clients as a percentage of total clients under the care of the mental health service organisation's mental health services.

Numerator:	Number of new clients who received services from the mental health service organisation's specialised mental health services within the reference period.
Denominator:	Total number of clients who received services from the mental health service organisation's specialised mental health services within the reference period.

As interpreted for the current national benchmarking project

Total clients seen in 2004-05 who had not received a service from the organisation in the year (356 days) preceding the data of the first service received in 2004-05, as a percentage of total clients receiving services in 2004-05.

Numerator:	Total number of persons who were recorded as receiving one or more services from your organisation's in-scope mental health services between 1 July 2004 and 30 June 2005 who did not receive any mental health service from your organisation in the year (365 days) preceding their first service received in 2004-05.
Denominator:	Total number of persons who were recorded as receiving one or more services from your organisation's in-scope mental health services between 1 July 2004 and 30 June 2005.

Why the variation is necessary

The KPI Report acknowledged that the *'…methodology for identifying new clients requires further development in supplementary technical specifications'*. Regardless of the definition, 'new client' identification is expected to be one of the more challenging indicators for organisations to quantify. The definition to be used in the national benchmarking project represents an initial approach that, based on feedback from participating organisations, is expected to be achievable within the resources available to participating organisations.

Key issues for this indicator

Defining 'new client'

Complex issues need to be resolved when deciding how to define this concept. These include:

- *Level of the mental health system at which 'newness' is defined*: Clients new to a particular organisation may be existing clients of other organisations. Counts of new clients at the state/territory level would certainly yield lower estimates than those derived from organisation-level counts.
- *Time period for defining 'newness':* New client status may be defined as no previous use of public sector mental health services over the person's life, or no use within a defined period.
- *Diagnosis criteria for defining 'newness':* A client may present with a new condition, although they have received previous treatment for a different condition.

At the technical level, assessing 'newness' would require tracking each individual consumer's history of service utilisation back in time for an extended period (e.g., five years). This is not believed to be achievable within the current project.

The approach taken represents a compromise between the ideal and the practical. It is based on distinguishing clients who are in regular, ongoing contact with services over long periods (in this case, 1 year) from those who are not. Operationally, the definition of new client being trialled in the project is:

> *A new client is defined as one who was seen by any in-scope service between 1 July 2004 and 30 June 2005 who had not received any type of mental health service provided by the organisation in the 365 days preceding the first date of contact in 2004-05.*

The approach requires five steps in the analysis:

- **STEP 1:** Identify all persons seen by any in-scope service during the period 1 July 2004 to 30 June 2005.). This should include all people who:
  - received one or more community contacts by ambulatory care services; OR
  - spent one or more days as an admitted patient within an acute or non-acute inpatient unit. A person should be counted as receiving one or more days of inpatient care if they were recorded as being admitted to, or separated from, a psychiatric inpatient unit between 1 July 2004 and 30 June 2005. This includes same day admissions; OR
  - spent one or more days as a resident within a community residential service. A person should be counted as receiving one or more days of residential care if they were recorded as being admitted to, or separated from, a community residential service unit between 1 July 2004 and 30 June 2005.

  This step requires unique identification of individuals seen by the organisation between 1 July 2004 and 30 June 2005, regardless of the number of services that they have accessed – this is the key information item from which the indicator is constructed and is used as the denominator for calculating the indicator.

- **STEP 2:** For all persons within this group, identify the first date that a service was provided between 1 July 2004 to 30 June 2005. This is defined as the earliest date of:
  - The first contact recorded by <u>any</u> of the ambulatory care services managed by the organisation; OR
  - The first date of admission to <u>any</u> psychiatric inpatient unit managed by the organisation, regardless of type of admission (i.e. includes same day, transfers etc); OR
  - The first date of admission to <u>any</u> residential service unit managed by the organisation.

- **STEP 3:** For all persons within this group, identify the last (i.e. most recent) date that a service was provided a service (if any) between 1 July 2003 to 30 June 2004. This is defined as the most recent date of:
  - Contacts recorded by <u>any</u> of the ambulatory care services managed by the organisation between 1 July 2003 to 30 June 2004; OR
  - The date of discharge from <u>any</u> psychiatric inpatient unit managed by the organisation, regardless of type of discharge (i.e. includes same day, transfers etc); OR
  - The date of discharge from <u>any</u> residential service unit managed by the organisation.

- **STEP 4:** Calculate the number of days intervening between the dates identified at Step 2 and Step 3 as:

  {Date first seen in 2004-05 – *as per Step 2*} – {Date last seen in 2003-04 – *as per Step 3*}

  For individuals not seen in 2003-04, set the number of days to >365 for calculation purposes.

- **STEP 5:** Count the number of people for whom the number of days intervening between the dates identified at Step 2 and Step 3 is more than 365. This number is used as the numerator to construct the indicator.

Guide to the individual data items

Number of people seen by all in-scope services, 1 July 2004 to 30 June 2005

The data for this item is as per calculated at Step 1 above.

Number of people seen by all in-scope services, 1 July 2004 to 30 June 2005 who had not been seen by any of the organisation's mental health services in the year (365 days) preceding the date of first contact in 2004-05.

The data for this item is as per calculated at Step 5 above.

Additional notes

Tracking services to consumers across inpatient and ambulatory services

Accurate counting for this indicator requires patient unique identifiers to be shared between ambulatory and residential services within the organisation. Where this is not the case, organisations will need to explore alternative approaches (e.g., name matching).

KPI #10 – Comparative area resources

Overview of the worksheet

This worksheet uses expenditure and population data entered on other worksheets and collects three additional items – the 2004-05 funding allocation provided for the organisation's in-scope ambulatory care services, the 2004-05 funding allocation provided for the organisation's in-scope inpatient services; and the 2004-05 funding allocation provided for the organisation's in-scope residential services. The worksheet is shown below (simulated data included):

Data - 2004-05

State/Territory Government + other funding

Item	Value
Total 2004-05 **funding allocation** provided by state/territory government and other sources for provision of ambulatory mental health services to the age-specific target population within the organisation's catchment area ($000s)	3,950
Total 2004-05 **funding allocation** provided by state/territory government and other sources for provision of inpatient mental health services to the age-specific target population within the organisation's catchment area ($000s)	10,600
Total 2004-05 **funding allocation** provided by state/territory government and other sources for provision of residential mental health services to the age-specific target population within the organisation's catchment area ($000s)	2,800

Expenditure

Item	Value
Total organisation 2004-05 mental health **expenditure** on in-scope ambulatory care services ($000s)	4,165
Total organisation 2004-05 mental health **expenditure** on in-scope inpatient services ($000s)	12,250
Total organisation 2004-05 mental health **expenditure** on in-scope residential care services ($000s)	3,300

Catchment area population data

Item	Value
Ambulatory services age-specific Area catchment population at December 2004	198,000
Acute inpatient services age-specific Area catchment population at December 2004	300,000
Residential services age-specific Area catchment population at December 2004	198,000

Age bands specific to the benchmarking forums:
- Adult - Ages 18-64 years
- Child & Adolescent - Ages 0-17 years
- Older Persons - 65+ years
- Forensic - 18+ years

KPI #10 2004-05

Based on funding

Item	Value
Ambulatory services per capita **funding** for target population	$ 19.95
Inpatient services per capita **funding** for target population	$ 35.33
Residential services per capita **funding** for target population	$ 14.14

Based on expenditure

Item	Value	
Ambulatory services per capita **expenditure** for target population	$ 21.04	KPI #10 (Ambulatory)
Inpatient services per capita **expenditure** for target population	$ 40.83	KPI #10 (Inpatient)
Residential services per capita **expenditure** for target population	$ 16.67	KPI #10 Residential)

Indicator rationale

- Equity of access to mental health services is, in part, a function of differential level of resources allocated to area populations.
- Review of comparative resource levels is essential for interpreting overall performance data, for example, an organisation may achieve relatively lower treatment rates because it has relatively less resources available rather than because it uses those resources inefficiently.

- When used with measures of population under care this indicator may illustrate relative resourcing in terms local mental health service delivery and therefore accessibility by proxy.

Indicator definition

As defined in the KPI Report

Per capita recurrent expenditure on public sector specialised mental health services within the mental health service organisation's defined catchment area.

Numerator:	Recurrent expenditure for the defined area.
Denominator:	The population of the defined area.

As interpreted for the current national benchmarking project

Per capita recurrent expenditure by the organisation on (ambulatory/inpatient/residential) mental health services for the target population within the organisation's defined catchment area.

Numerator:	Total expenditure in 2004-05 by your organisation on in-scope (ambulatory/inpatient/residential) mental health services.
Denominator:	Total number of persons in the target population who were resident in the defined catchment area for your organisation's in-scope (ambulatory/inpatient/residential) mental health services at December 2004.

Why the variation is necessary

Two modifications have been made to the national definition for the current project:

Separate per capita estimates for ambulatory, inpatient and residential services:

As noted in KPI #7, several participating organisations have advised that catchment areas for inpatient, ambulatory and residential services may differ – for example, the acute inpatient unit may be responsible for accepting admissions from a wider geographic area than that covered by the local ambulatory services and extend into areas covered by another organisation's ambulatory services. Where this is the case, it is not possible to construct a single per capita expenditure indicator because there is not a common population 'denominator'. The splitting of KPI #10 into three separate indicators for ambulatory, inpatient and residential services aims to interpret the 'comparative area resources' concept in a way that is meaningful for those organisations with non-overlapping catchment boundaries, while preserving its original intent.

Focus only on expenditure by the organisation:

The indicator specification has been amended to focus only on expenditure by the mental health service organisation. Expenditure by other organisations on provision of services within the area is ignored.

Key issues for this indicator

Funding vs expenditure

The definition for this indicator is based on what the mental health service organisation spends on its-scope services for the age-specific target population. An alternative approach is to use the amount of dedicated funding (state/territory and other government sources) provided to the organisation for mental health service provision to the catchment area target population. To enable comparison between the two approaches, this worksheet collects supplementary

information about the amount of dedicated funding provided by government sources to the organisation in 2004-05.

Adjusting for cross border flows

Ideally, both expenditure and funding-based indicators would be adjusted to take account of the costs associated with cross-border flows – that is, consumers seen by your organisation who live in other catchment areas, and consumers who live within your organisation's catchment areas who are treated by other organisations. Neither of these adjustments are made in the indicator calculation due to the complexity involved. The assumption is made that in-flows will are offset by out-flows – this will need to be taken into consideration in each of the benchmarking forums.

Guide to the individual data items

Total 2004-05 funding allocation provided by state/territory government and other sources for provision of ambulatory mental health services to the age-specific target population within the organisation's catchment area ($000s)

Enter the state/territory government and other 2004-05 funding allocations provided to your organisation for the provision of ambulatory care mental health services to the age-specific target population within the organisation's catchment area.

Total 2004-05 funding allocation provided by state/territory government and other sources for provision of inpatient mental health services to the age-specific target population within the organisation's catchment area ($000s)

Enter the state/territory government and other 2004-05 funding allocations provided to your organisation for the provision of inpatient mental health services to the age-specific target population within the organisation's catchment area.

Total 2004-05 funding allocation provided by state/territory government and other sources for provision of residential mental health services to the age-specific target population within the organisation's catchment area ($000s)

Enter the state/territory government and other 2004-05 funding allocations provided to your organisation for the provision of residential mental health services to the age-specific target population within the organisation's catchment area.

Note: For most services, the sole source of funding will be the relevant state or territory government.

Additional notes

Forensic services requirements on this worksheet

As this indicator is designed for organisations that have a defined geographical catchment population, it was originally considered to be difficult to apply to forensic mental health services. However, based on advice from forensic services participating in the national benchmarking project, all services have defined catchments (usually whole of state) and the indicator is considered relevant and meaningful. All data should therefore be reported..

KPI #11 – Pre-admission community care

Overview of the worksheet

The worksheet requires two new data items – the number of in-scope overnight admissions between 1/7/2004 - 30/6/2005; and the number of in-scope overnight admissions in the period 1/7/2004 to 30/6/2005 for which the patient was recorded as receiving a community contact in the 7 days prior to the admission date. The worksheet is shown below (simulated data included):

Data - 2004-05

ACUTE inpatient units in-scope

Hospital Name	Unit/Ward Name	Number of beds	Total in-scope overnight admissions from within ambulatory services catchment area 1/7/2004 - 30/6/2005	Total in-scope overnight admissions in the period 1/7/2004 to 30/6/2005 that were recorded as receiving a community contact in the 7 days prior to the admission date
Hospital A	Ward 1	20	420	205
Hospital A	Ward 2	10	280	155
Hospital A	Ward 3	5	212	110
Hospital B	Ward 4	10	165	89
n.a	n.a	n.a		
n.a	n.a	n.a		
totals		**45**	**1,077**	**559**

KPI #11 2004-05

Hospital Name	Unit/Ward Name	% in-scope overnight admissions receiving a community contact in the 7 days prior to the admission date
Hospital A	Ward 1	**49%**
Hospital A	Ward 2	**55%**
Hospital A	Ward 3	**52%**
Hospital B	Ward 4	**54%**
n.a	n.a	**n.a**
n.a	n.a	**n.a**
totals		**52%**

KPI #11

Indicator rationale

- Access to community based mental health services may alleviate the need for, or assist with improving the management of, admissions to inpatient care.
- The majority of clients admitted to public sector mental health acute inpatient units are known to public sector community mental health services and it is reasonable to expect community teams should be involved in pre-admission care.

- To monitor the continuity/accessibility of care via the extent to which public sector community mental health services are involved with patients prior to hospitalisation:
  - To support and alleviate distress during a period of great turmoil.
  - To relieve carer burden.
  - To avert hospital admission where possible.
  - To ensure that admission is the most appropriate patient option.
  - To commence treatment of the patient as soon possible where admission may not be averted.

Indicator definition

As defined in the KPI Report

Percentage of admissions to the mental health service organisation's acute inpatient unit(s) for which a community ambulatory service contact was recorded in the seven days immediately preceding that admission.

Numerator: Number of admissions to the mental health service organisation's acute inpatient unit(s) for which a public sector community mental health ambulatory contact was recorded in the seven days immediately preceding that admission.

Denominator: Total number of admissions to the mental health service organisation's acute inpatient unit(s).

As interpreted for the current national benchmarking project

Percentage of admissions to the mental health service organisation's in-scope acute inpatient unit(s) from within the organisation's ambulatory services catchment area for which a community ambulatory service contact was recorded in the seven days immediately preceding that admission by ambulatory care services managed by the organisation.

Numerator: Number of in-scope admissions to the mental health service organisation's acute inpatient unit(s) occurring between 1 July 2004 and 30 June 2005 for which a community mental health ambulatory contact was recorded in the seven days immediately preceding the admission by ambulatory care services managed by the organisation.

Denominator: Total number of in-scope admissions from within the organisation's ambulatory services catchment area to the mental health service organisation's acute inpatient unit(s) occurring between 1 July 2004 and 30 June 2005.

Why the variation is necessary

The specification has been amended to:

- restrict in-scope admissions to only those that arise from within the catchment area of the organisation's ambulatory care mental health services; and
- focus only on the pre-admission activity of ambulatory care services managed by the organisation.

Key issues for this indicator

What admissions should be counted as 'in-scope'?

Unlike related indicators in the national KPI set, this indicator is based on a count of admissions rather than separations. However, the logic for identifying in-scope admissions is the same as that applied to separations.

Broadly, the general rule is that you should include all admissions to all the in-scope acute psychiatric units within your organisation that occurred between 1 July 2004 and 30 June 2005, **except where**:

- The admission occurred on the same day as a discharge; **OR**
- The admission type (referred to as 'mode of admission' in the National Health Data Dictionary) was either:
  - Transfer from another hospital – these admissions need to be excluded from the count because the indicator is not applicable; or
  - Statistical admissions – these refer to an administrative event that marks a change of care type within a single hospital stay. They do not reflect the original entry to the hospital; **OR**

These two admission type categories represent a high level summary of local codes used within hospital information systems. All Australian public sector hospitals collect some form of 'admission mode' item, which is coded for every admission. Local codes vary in detail and comprehensiveness. Each organisation will need to review its own coding process and identify those codes used for transfers and statistical admissions so that these can be excluded.

In addition, admission counts should exclude those for individuals who were not resident within the organisation's ambulatory service catchment area. This is based on advice from several participating organisations that catchment areas for inpatient and ambulatory services may differ – for example, the acute inpatient unit may be responsible for accepting admissions from a wider geographic area than that covered by the local ambulatory services and extend into areas covered by another organisation's ambulatory services. Where this is the case, it cannot be expected that pre-admission community care will be provided by the organisation participating in the benchmarking project.

What contacts qualify for the 7 day pre-admission count?

For initial implementation of this indicator, all contacts made by any of the ambulatory services within the organisation qualify as a contact for this indicator. The indicator therefore does not consider variations in intensity or frequency of contacts prior to admission, nor distinguish between indirect and face-to-face community contacts.

Guide to the individual data items

Total in-scope overnight admissions 1/7/2004 - 30/6/2005

Enter the number of in-scope admissions as defined by the rules outlined in the section above.

Note that the address (postcode) recorded at admission should be used to determine the individual's 'within catchment' status.

Total in-scope overnight admissions in the period 1/7/2004 to 30/6/2005 that were recorded as receiving a community contact in the 7 days prior to the admission date

Enter the number of admissions that were preceded by one or more community contacts provided by any of the organisation's ambulatory care services in the 7 days **prior to the discharge date** – that is, exclude contacts recorded on the day of admission.

Additional notes

Tracking services to consumers across inpatient and ambulatory services

Accurate counting for this indicator requires patient unique identifiers to be shared between ambulatory and residential services within the organisation. Where this is not the case, organisations will need to explore alternative approaches (e.g., name matching).

Assigning persons of no fixed address to an area

These cases are problematic and will possibly vary in significance between benchmarking participants. As a workaround solution, these cases should be counted as 'out of catchment'.

KPI #12 – Post-discharge community care

Overview of the worksheet

This worksheet uses data collected in other worksheets and adds one additional item – the number of overnight separations in the period 1/7/2004 to 30/6/2005 for which the patient was recorded as receiving a community contact in the 7 days following the discharge date. The worksheet is shown below (simulated data included):

Data - 2004-05

ACUTE inpatient units in-scope

Hospital Name	Unit/Ward Name	Number of beds	Total in-scope overnight separations 1/7/2004 - 30/6/2005 counted for KPI #1	Total in-scope overnight separations 1/7/2004 - 30/6/2005 for people resident within ambulatory services catchment area	Total overnight separations in the period 1/7/2004 to 30/6/2005 that were recorded as receiving a community contact in the 7 days following the discharge date
Hospital A	Ward 1	20	400	350	260
Hospital A	Ward 2	10	300	210	165
Hospital A	Ward 3	5	196	166	115
Hospital B	Ward 4	10	150	98	54
n.a	n.a	n.a	n.a		
n.a	n.a	n.a	n.a		
totals		**45**	**1,046**	**824**	**594**

KPI #12 2004-05

Hospital Name	Unit/Ward Name	% overnight separations receiving a community contact in the 7 days following the discharge date
Hospital A	Ward 1	**74%**
Hospital A	Ward 2	**79%**
Hospital A	Ward 3	**69%**
Hospital B	Ward 4	**55%**
n.a	n.a	**n.a**
n.a	n.a	**n.a**
totals		**72%**

KPI #12

Indicator rationale

- A responsive community support system for persons who have experienced an acute psychiatric episode requiring hospitalization is essential to maintain clinical and functional stability and to minimise the need for hospital readmission.
- Patients leaving hospital after a psychiatric admission with a formal discharge plan, involving linkages with community services and supports, are less likely to need early readmission.
- Research indicates that patients have increased vulnerability immediately following discharge, including higher risk for suicide.

Indicator definition

As defined in the KPI Report

Number of separations from the mental health service organisation's acute inpatient unit(s) for which a public sector community mental health contact was recorded in the seven days immediately following that separation.

Numerator:	Number of separations from the mental health service organisation's acute inpatient unit(s) for which a public sector community mental health contact was recorded in the seven days immediately following that separation.
Denominator:	Total number of separations from the mental health service organisation's acute inpatient unit(s).

As interpreted for the current national benchmarking project

Percentage of 'within ambulatory catchment area' separations from the mental health service organisation's in-scope acute inpatient unit(s) for which a community mental health contact was recorded in the seven days immediately following that separation by ambulatory care services managed by the organisation.

Numerator:	Number of in-scope overnight separations from the mental health service organisation's acute psychiatric inpatient unit(s) occurring between 1 July 2004 and 30 June 2005 for which a community mental health contact was recorded in the seven days immediately following that separation by ambulatory care services managed by the organisation.
Denominator:	Number of in-scope overnight separations from the mental health service organisation's acute psychiatric inpatient units occurring between 1 July 2004 and 30 June 2005.

Why the variation is necessary

The specification has been amended to:

- restrict in-scope separations to only those for individuals discharged to the catchment area of the organisation's ambulatory care mental health services; and
- focus only on the post discharge activity of ambulatory care services managed by the organisation.

Key issues for this indicator

What separations should be counted as 'in-scope'?

The initial sample of separations to use for this indicator is the same as for KPI#1 – that is, it should exclude same day separations, and all overnight separations that occur through discharge/transfer to an(other) acute hospital; discharge/transfer to an(other) psychiatric hospital; statistical discharge – type change; left against medical advice/discharge at own risk and death.

From this sample, the subset to be used as 'in-scope' for this indicator are those separations where the individual resided in the catchment area defined for the organisation's ambulatory services. This is based on advice from several participating organisations that catchment areas for inpatient and ambulatory services may differ – for example, the acute inpatient unit may be responsible for accepting admissions from a wider geographic area than that covered by the local ambulatory services and extend into areas covered by another organisation's ambulatory

services. Where this is the case, it cannot be expected that post-discharge community care will be provided by the organisation participating in the benchmarking project.

What contacts qualify for the 7 day post discharge count?

For initial implementation of this indicator, all contacts made by any of the ambulatory services within the organisation qualify as a contact for this indicator. The indicator therefore does not consider variations in intensity or frequency of contacts following the discharge, nor distinguish between indirect and face-to-face community contacts.

Guide to the individual data items

Total in-scope overnight separations 1/7/2004 - 30/6/2005 for people resident within ambulatory services catchment area

Enter the number of in-scope separations as defined by the rules outlined in the section above.

Note that the address (postcode) recorded at discharge should be used to determine the individual's 'within catchment' status.

Total in-scope overnight separations in the period 1/7/2004 to 30/6/2005 that were recorded as receiving a community contact in the 7 days following the discharge date

Enter the number of in-scope separations that were followed by one or more community contacts provided by any of the organisation's ambulatory care services in the 7 days **after the discharge date** – that is, exclude contacts recorded on the day of discharge.

Additional notes

Tracking services to consumers across inpatient and ambulatory services

Accurate counting for this indicator requires patient unique identifiers to be shared between ambulatory and residential services within the organisation. Where this is not the case, organisations will need to explore alternative approaches (e.g., name matching).

Assigning persons of no fixed address to an area

These cases are problematic and will possibly vary in significance between benchmarking participants. As a workaround solution, these cases should be counted as 'out of catchment'.

KPI #13 – Outcomes readiness

This indicator requires two new data items, derived from your organisations local National Outcomes and Casemix Collection data – the number of NOCC Inpatient Setting Collection Occasions recorded between 1 July 2004 to 30 June 2005; and the number of NOCC Ambulatory Care Setting Collection Occasions recorded between 1 July 2004 to 30 June 2005.

Data - 2004-05

ACUTE inpatient units in-scope

Number of overnight separations from in-scope acute inpatient units, 1 July 2004 to 30 June 2005	1,046
Estimate of number of NOCC Collection Occasions that should be recorded for in-scope acute inpatient separations	1,883
Number of NOCC Inpatient Setting Collection Occasions with a valid HoNOS/HoNOS65+/HoNOSCA recorded between 1 July 2004 to 30 June 2005	655

Ambulatory care services in-scope

Number of 3 month periods of community care (excluding 'Assessment Only' episodes)	1,760
Estimate of number of NOCC Collection Occasions that should be recorded for ambulatory care episodes	2,200
Number of NOCC Ambulatory Care Setting Collection Occasions with a valid HoNOS/HoNOS65+/HoNOSCA recorded between 1 July 2004 to 30 June 2005	1,210

KPI #13 2004-05

Estimated percent inpatient episodes for which outcome measures were recorded	**35%**
Estimated percent ambulatory care periods for which outcome measures were recorded	**55%**
Estimated percent inpatient and ambulatory care episodes for which outcome measures were recorded	**46%**

KPI #13

Indicator rationale

- All States and Territories have committed to implementing routine outcome measurement in public sector mental health services.
- Indicators derived from outcome assessments should form an integral component of the next stage of key performance indicator development.
- This indicator was designed as an interim measure to monitor the uptake of the National Outcomes Casemix Collection (NOCC).

Indicator definition

As defined in the KPI Report

Percentage of mental health episodes with outcome assessments completed.

Numerator: Number of episodes of care reported with completed outcome assessments.

Denominator: Total number of episodes of mental health care defined as the sum of total separations in the reference period from the mental health service organisation's acute inpatient unit(s) where length of stay is greater than three days, plus, total number of ambulatory episodes in the reference period where an episode is counted for each person seen with two or more contacts within each of the three month calendar periods.

As interpreted for the current national benchmarking project

NOCC Collection Occasions with a valid HoNOS/HoNOS65+/HoNOSCA recorded as a percentage of the number of Collection Occasions expected if the national outcomes reporting protocol was fully implemented.

Numerator: Number of NOCC Collection Occasions with a valid HoNOS/HoNOS65+/HoNOSCA recorded by the organisation's in-scope inpatient and ambulatory care services between 1 July 2004 and 30 June 2005.

Denominator: Estimated number of NOCC Collection Occasions that would have been recorded by the organisation's in-scope inpatient and ambulatory care services if the national outcomes reporting protocol was fully implemented.

Why the variation is necessary

Estimating the compliance by organisations with the NOCC protocol for collection of outcome measures is complex. Ideally, it needs to take account of the both the extent to which outcome assessments are applied at the appropriate points of the care cycle, as well as the quality and completeness of all required measures. However, accurate estimates are not possible on a direct counting basis from existing information systems or via data analysis procedures established in most mental health service organisations.

Therefore, the approach taken for the national benchmarking project is to use a method to approximate each organisation's 'take up' of outcome measurement. This is achieved by comparing the number of NOCC collection occasions actually recorded that include a valid HoNOS/HoNOS65+/HoNOSCA, with the number that could be expected on the basis of the volume of acute inpatient separations and 3-month periods of ambulatory care provided by the organisation.

Key issues for this indicator

Estimating the number of Inpatient Collection Occasions that could be expected if the national protocol was fully implemented by the organisation

The approach used is based on the number of in-scope overnight separations from the organisation's acute inpatient units reported at KPI #1.

The method assumes that, for each separation, two Collection Occasions should be reported, each with a valid HoNOS/HoNOS65+/HoNOSCA (one at admission, one at discharge) for all episodes with a length of stay of three days or more. Assuming that episodes with a length of stay less than 3 days account for 10% of inpatient episodes, the formula used in the worksheet to estimate NOCC Collection Occasions is:

{Number of in-scope overnight separations} x 2 x 0.9

Estimating the number of Ambulatory Collection Occasions that could be expected if the national protocol was fully implemented by the organisation

The approach used is based on the number of 3-month periods of ambulatory care that had more than one 'treatment day', calculated from the data reported at KPI #5.

The method assumes that, for each 3-month period of care, two Collection Occasions, each with a valid HoNOS/HoNOS65+/HoNOSCA, should be reported (one at the beginning, one at the end). Thus, the number of NOCC Ambulatory Collection Occasions could be estimated as:

{3-month periods of ambulatory care that had more than one 'treatment day'} x 2

Adjustment to this formula is needed to take account of consumers who received ambulatory care for the full 2004-05 period (i.e. 4 x 3-month periods of ambulatory care, 8 potential Collection Occasions). In such cases, the NOCC collection protocol allows Collection Occasion measures completed at the end of any 3-month period to substitute as the measures for the beginning of the next 3-month period. Where this occurs, there would be five Collection Occasions recorded for the consumer rather than eight.

This adjustment is built into the final formula used in the worksheet to estimate NOCC Ambulatory Collection Occasions as follows:

{3-month periods of ambulatory care that had more than one 'treatment day'} x 2 x 5/8

The result derived from this approach provides a very conservative estimate of the Ambulatory Collection Occasions that the organisation could expect to have resulted in 2004-05 if the national outcomes protocol was fully implemented.

Guide to the individual data items

Number of NOCC Inpatient Setting Collection Occasions with a valid HoNOS/HoNOS65+/HoNOSCA recorded between 1 July 2004 to 30 June 2005

Number of NOCC Ambulatory Care Setting Collection Occasions with a valid HoNOS/HoNOS65+/HoNOSCA recorded between 1 July 2004 to 30 June 2005

Both of these figures should be available from the local information system used to record outcome measures. Valid HoNOS/HoNOS65+/HoNOSCA measures are defined as follows:

- **For HoNOS and HoNOS65+** - a minimum of 10 of the 12 items to have a valid score (in the range 0-4).
- **For HoNOSCA** – a minimum of 11 of the first 13 items (items 1-13) to have a valid score (in the range 0-4).

Additional notes

- The estimation method focuses only on whether NOCC Collection Occasion records are reported with one outcome measure (HoNOS/HoNOSCA) and does not fully address issues regarding quality or completeness of the total NOCC collection.
- Residential services are excluded from the estimates to reduce the complexity, and given their low volume, are not expected to influence the indicator significantly.

KPI Notes sheet

This worksheet serves two purposes:

- To allow each organisation to add any notes or caveats that are relevant to each of the KPIs; and
- To allow each organisation to assign a confidence rating regarding the accuracy of the source data used for this indicator.

The worksheet is shown below:

KIP #	Title	Confidence Rating (0-5)	ENTER ANY RELEVANT NOTES, CAVEATS ETC
KPI #1	28-day readmission rate		
KPI #2	National Service Standards compliance (Level 1 %)		
	National Service Standards compliance (Level 2 %)		
	National Service Standards compliance (Level 3 %)		
	National Service Standards compliance (Level 4 %)		
KPI #3	Average length of acute inpatient stay		
KPI #4	Cost per acute inpatient episode		
KPI #5	Treatment days per three month community care period		
KPI #6	Cost per three month community care period		
KPI #7	Population receiving care - Ambulatory services		
	Population receiving care - Inpatient services		
	Population receiving care - Residential services		
KPI #8	Local access to inpatient care		
KPI #9	New client index		
KPI #10	Comparative area resources (Area per capita expenditure - Ambulatory services)		
	Comparative area resources (Area per capita expenditure - Inpatient services)		
	Comparative area resources (Area per capita expenditure - Residential services)		
KPI #11	Pre-admission community care		
KPI #12	Post-discharge community care		
KPI #13	Outcomes readiness		

Assigning confidence rating to KPI source data

Each indicator should be assigned a rating between 0-4, using the scale below.

Rating	Description
0	Many concerns about the accuracy of my organisation's source data used for this indicator.
1	Some concerns about the accuracy of my organisation's source data used for this indicator.
2	Don't know about the accuracy of my organisation's source data used for this indicator.
3	Reasonably confident about the accuracy of my organisation's source data used for this indicator.
5	Very confident about the accuracy of my organisation's source data used for this indicator.

KPI Summary Sheet

This final worksheet in the series draws together all 13 indicators into a summary table for quick reference.

		KPI	ALTERNATIVE KPI
KPI #1	28-day readmission rate	18%	
KPI #2	National Service Standards compliance (Level 1 %)	29%	
	National Service Standards compliance (Level 2 %)	17%	
	National Service Standards compliance (Level 3 %)	13%	
	National Service Standards compliance (Level 4 %)	41%	
KPI #3	Average length of acute inpatient stay	15.8	14.3
KPI #4	Cost per acute inpatient episode	$ 6,461	$ 5,841
KPI #5	Treatment days per three month community care period	12.7	
KPI #6	Cost per three month community care period	$ 2,306	
KPI #7	Population receiving care - Ambulatory services	0.8%	
	Population receiving care - Inpatient services	0.2%	
	Population receiving care - Residential services	0.02%	
KPI #8	Local access to inpatient care	81%	
KPI #9	New client index	53%	
KPI #10	Comparative area resources (Area per capita expenditure - Ambulatory services)	$ 21.04	
	Comparative area resources (Area per capita expenditure - Inpatient services)	$ 40.83	
	Comparative area resources (Area per capita expenditure - Residential services)	$ 16.67	
KPI #11	Pre-admission community care	52%	
KPI #12	Post-discharge community care	72%	
KPI #13	Outcomes readiness	46%	

Appendix A – Definitions for Non salary recurrent expenditure

Extracts from National Health Data Dictionary, Version 12.

Payments to visiting medical officers	All payments made by an institutional health care establishment to visiting medical officers for medical services provided to hospital (public) patients on an honorary, sessionally paid, or fee for service basis. A visiting medical officer is a medical practitioner appointed by the hospital board to provide medical services for hospital (public) patients on an honorary, sessionally paid, or fee for service basis. This category includes the same Australian Standard Classification of Occupations codes as the salaried medical officers category.
Superannuation employer contributions	Contributions paid or (for an emerging cost scheme) that should be paid (as determined by an actuary) on behalf of establishment employees either by the establishment or a central administration such as a State health authority, to a superannuation fund providing retirement and related benefits to establishment employees. The following different funding bases are identified: - paid by hospital to fully funded scheme - paid by Commonwealth Government or State government to fully funded scheme - unfunded or emerging costs schemes where employer component is not presently funded. Fully funded schemes are those in which employer and employee contributions are paid into an invested fund. Benefits are paid from the fund. Most private sector schemes are fully funded. Emerging cost schemes are those in which the cost of benefits is met at the time a benefit becomes payable; that is, there is no ongoing invested fund from which benefits are paid. The Commonwealth superannuation fund is an example of this type of scheme as employee benefits are paid out of general revenue.
Drug supplies	The cost of all drugs including the cost of containers.
Medical and surgical supplies	The cost of all consumables of a medical or surgical nature (excluding drug supplies) but not including expenditure on equipment repairs.
Food supplies	The cost of all food and beverages but not including kitchen expenses such as utensils, cleaning materials, cutlery and crockery.
Domestic services	The costs of all domestic services including electricity, other fuel and power, domestic services for staff, accommodation and kitchen expenses but not including salaries and wages, food costs or equipment replacement and repair costs.
Repairs and maintenance	The costs incurred in maintaining, repairing, replacing and providing additional equipment, maintaining and renovating building and minor additional works. Expenditure of a capital nature should not be included here. Do not include salaries and wages of repair and maintenance staff.
Patient transport	The direct cost of transporting patients excluding salaries and wages of transport staff.
Administrative expenses	All expenditure incurred by establishments (but not central administrations) of a management expenses/administrative support nature such as any rates and taxes, printing, telephone, stationery and insurance (including workers compensation).
Interest payments	Payments made by or on behalf of the establishment in respect of borrowings (e.g. interest on bank overdraft) provided the establishment is permitted to borrow. This does not include the cost of equity capital (i.e. dividends on shares) in respect of profit-making private establishments.
Other recurrent expenditure	Other payments are all other recurrent expenditure not included elsewhere in any of the recurrent expenditure categories.

Appendix B – Definition of Accrued Mental Health Care Days

Extract from National Minimum Data Set – Mental Health Establishments (AIHW)

Definition: The accrued number of mental health care days provided by admitted patient care services and residential mental health care services within the reference period (from 1 July to 30 June inclusive).

Guide for use: Mental health care days are days of admitted patient care provided to admitted patients in psychiatric hospitals, designated psychiatric units and days of residential care provided to residents in residential mental health services.

To be reported for admitted patient care services and specialised residential mental health care services, including services that are staffed for less than 24 hours, and non-government organisation services where included. The accrued number of mental health care days provides information for the reporting and analysing of staff, financial and activity data.

The days to be counted are only those days occurring within the reference period, i.e. from 1 July to the following 30 June for the relevant period, even if the patient/resident was admitted prior to the reference period or discharged after the reference period.

A day is measured from midnight to 2359 hours.

The following basic rules are used to calculate the number of accrued mental health care days:

- Admission and discharge on the same day is equal to one mental health care day.
- For a patient/resident admitted and discharged on different days all days are counted as mental health care days, except the day of discharge and any leave days.
- If the patient/resident remains in hospital or residential care facility from midnight to 2359 hours count as a mental health care day.
- The day a patient/resident goes on leave is not counted as a mental health care day, unless this was also the admission day. The day the patient/resident returns from leave is counted as a mental health care day, unless the patient/resident goes on leave again on the same day of return or is discharged
- Leave days involving an overnight absence are not counted as mental health care days.
- If a patient/resident goes on leave the day they are admitted and does not return from leave until the day they are discharged, count as one mental health care day.
- If the patient/resident remains in a hospital or residential care facility from 1 July to 30 June (the whole of the reference period) count as 365 days (or 366 days in a leap year).
- If the patient/resident remains in a hospital or residential care facility after the end of the reference period (i.e. after 30 June) do not count any days after the end of the reference period.

The following additional rules cover special circumstances and in such cases, override the basic rules.

When calculating accrued mental health care days for the reference period:

- Count the mental health care days of those patients/residents separated during the reference period. Exclude any days that may have occurred before the beginning of the reference period.
- Count the mental health care days of those patients/residents admitted during the reference period who did not separate until the following reference period. Exclude the days after the end of the reference period.
- For patients/residents admitted before the reference period and who remain in after the reference period (i.e. after 30 June), count the mental health care days within the reference period only. Exclude all days before and after the reference period.

Examples of mental health care day counting for a reference period 1 July 2004 to 30 June 2005:

- Patient/resident A was admitted to hospital on 4 June 2004 and separated on 6 July 2004. If no leave or transfer occurred counting starts on 1 July. Count would be 5 days as day of discharge is not counted.
- Patient/resident B was admitted to hospital on 1 August 2004 and separated on 8 August 2004. If no leave or transfer occurred counting starts on 1 August. Count would be 7 days as day of discharge is not counted.
- Patient/resident C was admitted to hospital on 1 June 2005 and separated on 6 July 2005. If no leave or transfer occurred counting starts on 1 June. Count would be 30 days as patient/resident was not discharged on 30 June, so every day up to and including 30 June would be counted.
- Patient/resident D was admitted to hospital on 1 August 2003 and has remained continuously in hospital to the present time. If no leave or transfer occurred counting starts on 1 July 2004 and concludes on 30 June 2005. Count would be 365 days as there is no day of discharge.

Appendix C – Definition of Service Contact

Extract from National Minimum Data Set – Community Mental Health Care, as amended 2005 (AIHW)

Definition: The provision of a clinically significant service by a specialised mental health service provider(s) for a patient/client, other than those admitted to a psychiatric hospital or a designated psychiatric unit in an acute care hospital, and those resident in a 24 hour staffed residential specialised mental health service, where the nature of the contact would normally warrant a dated entry in the clinical record of the patient/client in question..

Guide for use: Identifies service delivery at the patient/client level for specialised ambulatory mental health services (including mobile and outreach services).

A service contact must involve at least two persons, one of whom must be a specialised mental health service provider.

Consultation and liaison services are included as service contacts.

A service contact is not restricted to face-to-face communication but can include telephone, video link or other forms of direct communication.

Service contacts can either be with a patient/client, or with a third party such as a carer or family member, or with another professional or mental health worker or other service provider. Service contacts include consultations occurring between a health service provider and any other third party in relation to a patient/client, where the nature of the contact would normally warrant a dated entry in the clinical record of the patient/client in question.

There may be multiple service contacts on any one day for a patient/client, carer or family member or third party and each service contact should be recorded separately.

A service contact should be recorded for each patient/client participating in the service provision, whether by phone or other electronic means or in person, regardless of the number of patients/clients participating or the number of service providers providing the service.

Service provision is only regarded as a service contact if it is relevant to the clinical condition of the patient. This means that it does not include services of an administrative nature (e.g. telephone contact to schedule an appointment) except where the nature of the service contact would normally warrant a dated entry in the clinical record of the patient/client in question.

However, there may be instances where notes are made in the patient/client clinical record that have not been prompted by a service provision for a patient/client (e.g. noting receipt of test results that require no further action). These instances would not be regarded as service contacts.

In instances where documenting the patient/client's service contact details is separated in time from the service provision, this is not counted as a separate service contact.

Travel to or from the location at which the service contact is provided, for example to or from outreach facilities or private homes, is not to be reported as a service contact.

Comment It is recognised that service contacts do not represent the total quantity of mental health service activities. For example they do not include travel time to or from a client; administrative tasks; writing up details of assessments or outcomes measures; health promotion activities; education; teaching; or consultation/liaison in a psychiatric hospital, a designated psychiatric unit in an acute care hospital, or in a 24 hour staffed residential specialised mental health service..