

**Key Performance Indicators for  
Australian Public Mental Health  
Services (3<sup>rd</sup> edition): Comparative area  
resources**

Summary paper

**September 2018**

# Background

In 2017, the National Mental Health Performance Sub-Committee (NMHPSC) established a time-limited working group to discuss and review the technical specifications of the Key Performance Indicators for Australian Public Mental Health Services (MHS KPIs). The working group reviewed the utility of the specifications for addressing contemporary mental health-related issues, and considered whether new indicators were required and whether any of the existing indicators no longer warranted ongoing national monitoring and reporting.

At the February 2018 NMHPSC meeting, the full Committee discussed the recommendations from the working group, with specific focus on three indicators; *Comparative area resources*, *New client index*, and *Rate of pre-admission community care*. The NMHPSC did not support the working group's business case for retiring the *Comparative area resources* indicator, but were unable to reach a consensus on how to resolve issues with this indicator or the other two measures.

The NMHPSC agreed to hold an out-of-session workshop in June 2018 to provide sufficient time for members to discuss the way forward with these indicators. Due to time constraints, the workshop only examined the *Comparative area resources* and *New client index* indicators. Workshop attendees included members of the NMHPSC, and jurisdictional and carer representatives from Mental Health Information Strategy Standing Committee (MHISSC).

## Comparative area resources

*Comparative area resources* is one of two indicators in the MHS KPI set (3<sup>rd</sup> Edn) that has not been specified for national reporting. This indicator maps to the 'Accessible' and 'Sustainable' domains of the Tier 3 (Health System Performance) of the National Mental Health Performance Framework (see Annexes A and B). The existing indicator specification is at Annex C.

During the 2017 review of MHS KPIs, members identified the following issues with this indicator:

- inability to apportion expenditure for services delivered state-wide to lower geographical areas
- service boundaries not matching target groups or the location of patients
- geographic regions within and between jurisdictions differ in both size and number.

## Methodological considerations

In preparation for the June 2018 workshop, the NMHPSC Secretariat conducted a brief environmental scan to identify any performance indicators used internationally that may be relevant to a review of the *Comparative area resources* indicator and identified the following indicators:

- **Age-adjusted public spending per person ([Canada](#))**: Provincial/territorial government health expenditure per capita.
- **DHB (District Health Board) NGO funding per head of population ([New Zealand](#))**: Total NGO DHB expenditure per population.
- **DHB total funding per head of population ([New Zealand](#))**: Total DHB expenditure per population.

The three identified indicators use an expenditure per capita approach, which was an approach suggested by members at the May 2018 NMHPSC meeting. The Canadian indicator is based on expenditure at the provincial/territorial government level and is standardised for age and sex, while the New Zealand indicators are based on District health boards, which provide health and disability services to populations within defined geographical areas.

Other potential approaches discussed at the June 2018 workshop and at previous meetings are summarised below:

### **Indicator based on patient location, disaggregated by age group**

Defining an indicator's geography areas based on the person's place of residence would resolve issues with using service catchment areas and may allow for examining 'whole of system' access to resources. A person-centric focus would also be better equipped at handling changes to the services environment. However, this approach would not account for people from remote or regional areas needing to travel to access a service. That is, an area may appear to be appropriately resourced (due to patients in the area travelling to services), when there are no services in the area itself.

### **Indicator including State and Commonwealth level funding**

State and territory funding would need to be considered in conjunction with Commonwealth funding to build a complete picture of the level of resources, whether for a service or for a geographical area, to address jurisdictions compensating for lack of Commonwealth funding for particular regions.

### **Indicator including total amount of resources**

It would be beneficial to consider the total amount of resources (both hospital and community resources) allocated to an area as well as a breakdown of the proportions of the type of resources available. It was noted that there are current problems with the underreporting of service contacts and over reporting of expenditure.

### **Other considerations**

At the June workshop, members considered narrowing the scope of the indicator to account for the variability of state-wide services between jurisdictions. However, members agreed that maintaining a broad scope would be useful in the future, with the expectation that data supply and quality would improve over time.

Members have noted that some of the difficulties with *Comparative area resources* stem from it originating as a 'contextual indicator' to help interpret performance in other areas, rather than being developed as a performance indicator in its own right. However, members also noted that as an equity performance indicator, there is merit in having the data published in the public interest.

### **Next steps**

Members noted that some jurisdictions have relevant local measures examining expenditure which may be possible to repurpose for this indicator. Interested jurisdictional members agreed to form a working group to explore methodological approaches with collecting data at the organisational level and other levels as a 'proof of concept'. The results of the 'proof of concept' tests would form the basis for developing the methodology for the national specification.

## Annex A: National Mental Health Performance Framework

<b>Health Status and Outcomes ('TIER 1')</b>				<i>How healthy are Australians? Is it the same for everyone? Where is the most opportunity for improvement?</i>	
<b>Health Conditions</b>	<b>Human Function</b>	<b>Life Expectancy and Well-being</b>	<b>Deaths</b>		
Prevalence of disease, disorder, injury or trauma or other health-related states	Alterations to body, structure or function (impairment), activities (activity limitation) and participation (restrictions in participation)	Broad measures of physical, mental, and social wellbeing of individuals and other derived indicators such as Disability Adjusted Life Expectancy (DALE)	Age or condition specific mortality rates		
<b>Determinants of Health ('TIER 2')</b>				<i>Are the factors determining health changing for the better? Is it the same for everyone? Where and for whom are they changing for the worse?</i>	
<b>Environmental Factors</b>	<b>Socio-economic Factors</b>	<b>Community Capacity</b>	<b>Health Behaviours</b>	<b>Person-related Factors</b>	
Physical, chemical and biological factors such as air, water, food and soil quality resulting from chemical pollution and waste disposal	Socio-economic factors such as education, employment per capita expenditure on health, and average weekly earnings	Characteristics of communities and families such as population density, age distribution, health literacy, housing, community support services and transport	Attitudes, beliefs knowledge and behaviours (e.g. patterns of eating, physical activity, excess alcohol consumption and smoking)	Genetic related susceptibility to disease and other factors such as blood pressure, cholesterol levels and body weight	
<b>Health System Performance ('TIER 3')</b>				<i>How well is the health system performing in delivering quality health actions to improve the health of all Australians? Is it the same for everyone?</i>	
<b>Effective</b>		<b>Appropriate</b>		<b>Efficient</b>	
Care, intervention or action achieves desired outcome		The care, intervention or action provided is relevant to the consumer's and/or carer's needs and based on established standards		Achieving desired results with most cost effective use of resources	
<b>Responsive</b>		<b>Accessible</b>		<b>Safe</b>	
Service provides respect for persons and is consumer and carer orientated: respect for dignity, confidential, participate in choices, prompt, quality of amenities, access to social support networks, and choice of provider		Ability of people to obtain health care at the right place and right time irrespective of income, geography and cultural background		Potential risks of an intervention or the environment are identified and avoided or minimised	
<b>Continuous</b>		<b>Capable</b>		<b>Sustainable</b>	
Ability to provide uninterrupted, coordinated care or service across programs, practitioners, organisations and levels over time.		An individual or service's capacity to provide a health service based on skills and knowledge		System or organisation's capacity to provide infrastructure such as workforce, facilities and equipment, and be innovative and respond to emerging needs (research, monitoring)	

# Annex B: National Mental Health Performance Framework domains, indicators and benchmarking usage

Mental Health Services Key Performance Indicators	Effective	Appropriate	Efficient	Responsive	Accessible	Sustainable	Capable	Safe	Continuous	Level at which indicators can be used for benchmarking			
										State and Territory	Regional Group of Services	MHSOs	Service Units
MHS PI 1: Change in consumers' clinical outcomes	▲									✓	✓	✓	✓
MHS PI 2: 28 day readmission rate	▲								■	✓	✓	✓	✓
MHS PI 3: National Service Standards compliance		▲					■			✓	✓	✓	○
MHS PI 4: Average length of acute inpatient stay		■	▲							✓	✓	✓	✓
MHS PI 5: Average cost per acute admitted patient day			▲							✓	✓	✓	✓
MHS PI 6: Average treatment days per three month community care period		■	▲							✓	✓	✓	✓
MHS PI 7: Average cost per community treatment day			▲							✓	✓	✓	✓
MHS PI 8: Proportion of population receiving care					▲					✓	✓	✓	✗
MHS PI 9: New client index					▲					✓	✓	✓	○
MHS PI 10: Comparative area resources					▲	■				✓	✓	✓	✗
MHS PI 11: Rate of pre-admission community care					■				▲	✓	✓	✓	✓
MHS PI 12: Rate of post-discharge community care					■			■	▲	✓	✓	✓	✓
MHS PI 13: Consumer outcomes participation				▲			■			✓	✓	✓	✓
MHS PI 14: Outcomes readiness	■						▲			✓	✓	✓	✓
MHS PI 15: Rate of seclusion		■						▲		✓	✓	✓	✓

▲ = Primary domain  
 ■ = Secondary domain

✓ = Valuable at this level  
 ○ = Limited value at this level  
 ✗ = Not useful at this level

## Annex C: Comparative area resources specification

### Comparative area resources, 2018– (Service level)

#### Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Indicator type:</i>	Indicator
<i>Short name:</i>	Comparative area resources, 2018–
<i>METeOR identifier:</i>	693359
<i>Registration status:</i>	Health, Candidate 09/08/2018
<i>Description:</i>	<p>Per capita recurrent expenditure by the organisation on mental health services for the target population within the organisation's defined catchment area.</p> <p><b>NOTE:</b> There is no jurisdictional level data source available for this indicator; therefore, there is no Jurisdictional level version of this indicator specification.</p>
<i>Rationale:</i>	<ul style="list-style-type: none"><li>• Equity of access to mental health services is, in part, a function of differential level of resources allocated to area populations.</li><li>• 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.</li><li>• 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.</li></ul>
<i>Indicator set:</i>	Key Performance Indicators for Australian Public Mental Health Services (Service level version) (2018–) <i>No registration status</i>

#### Collection and usage attributes

<i>Computation description:</i>	<p>Coverage/Scope:</p> <p>All public mental health service organisations.</p> <p>Public sector mental health services that provide a cross regional or state-wide specialist function are excluded.</p> <p>Methodology:</p> <ul style="list-style-type: none"><li>• Estimates of expenditure for defined populations are based on expenditure reported by the mental health service organisation with specific catchment responsibility for the population, adjusted to remove any cross-regional and state-wide services included in the organisation's expenditure.</li></ul>
---------------------------------	---

- Defined populations should match with catchment areas of the mental health service organisations.
- Recurrent costs include costs directly attributable to the unit(s) plus a proportional share of indirect costs. Cost data for this indicator is based on gross recurrent expenditure as compiled by Health Departments according to the specifications of the Mental Health Establishments National Minimum Data Set (NMDS). As such, it is subject to the concepts, definitions and costing methodology developed for the NMDS.

<i>Computation:</i>	Numerator ÷ Denominator Calculated separately for setting and target population.
<i>Numerator:</i>	Recurrent expenditure on mental health services partitioned by mental health service setting.
<i>Denominator:</i>	Number of consumers who reside in the defined mental health service organisation's catchment area, partitioned by mental health service setting.
<i>Disaggregation:</i>	Service variables: target population, service setting. Consumer attributes: nil.

### **Representational attributes**

<i>Representation class:</i>	Count
<i>Data type:</i>	Monetary amount
<i>Unit of measure:</i>	Currency
<i>Format:</i>	N[NNN]

### **Indicator conceptual framework**

<i>Framework and dimensions:</i>	<a href="#">Accessible</a> <a href="#">Sustainable</a>
----------------------------------	---

### **Accountability attributes**

<i>Benchmark:</i>	Levels at which the indicator can be useful for benchmarking: <ul style="list-style-type: none"> <li>• mental health service organisation</li> <li>• regional group of services</li> <li>• state/territory.</li> </ul>
<i>Further data development / collection required:</i>	This indicator cannot be constructed using the Mental Health Establishments NMDS because information about catchment areas is not available for all public mental health service organisations.

There is no proxy solution available. To construct this indicator at a national level requires separate indicator data to be provided individually by states and territories.

Catchment area data for all public mental health service organisations needs to be available to report this indicator from national sources.

*Other issues caveats:*

This indicator assumes that the expenditure reported by the local mental health service organisation is directed to its catchment population and does not take account of cross border flows. The alternative approach of basing estimates on actual service utilisation by populations is desirable and needs to be explored in the future. Such an approach will require reliable utilisation data and development of cost modelling methodologies.

### **Source and reference attributes**

*Submitting organisation:*

Australian Institute of Health and Welfare on behalf of the National Mental Health Performance Subcommittee (NMHPSC)

*Reference documents:*

National Mental Health Performance Subcommittee (NMHPSC) 2013. Key Performance Indicators for Australian Public Mental Health Services, 3rd edn. Canberra: NMHPSC.

### **Relational attributes**

*Related metadata references:*

Supersedes [KPIs for Australian Public Mental Health Services: PI 10 – Comparative area resources, 2015–](#) Health, Standard 19/11/2015