

Key Performance Indicators for Australian Public Mental Health Services (3rd edition): New Client index

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).

New client index

New client index is included in the 3rd edition of the MHS KPIs for both the Service and Jurisdictional level indicator sets. *New client index* indicator maps only to the 'Accessible' domain of the 'Tier 3 Health System Performance' of the National Mental Health Performance Framework (see Annexes A and B). The indicator specification is at Annex C.

New client index has been previously considered for retirement by the NMHPSC—a decision that was not supported by MHISSC due to the indicator being utilised by a number of jurisdictions. However, discussion at the NMHPSC Working Group suggested that of jurisdictions present, only one was utilising *New client index* in its state level reporting. The Working Group noted that removal of *New client index* would leave a gap in the accessibility area of the KPI suite. Current issues identified with the indicator include the following:

- It is difficult to report and not widely utilised.
- Outcomes are difficult for services to control.
- Not all jurisdictions are able to uniquely identify patients.
- The purpose and optimal direction of the indicator is unclear.
- It is unclear if the indicator reflects change at the national level.
- It is not sensitive to change over time and there is no significant variation between jurisdictions (i.e. either models of care or service unit capacity would need to change for the indicator to reflect significant change).
- It is unable to differentiate between clients that 'touch' a service only (i.e. referral or assessment only) versus those that go on to receive more extensive treatment from the service.
- Wording of the rationale could be improved to better describe the purpose of the indicator, which may then assist with constructing tighter specifications for the indicator.

Methodological considerations

As with *Comparative area resources*, the NMHPSC Secretariat conducted an environmental scan for relevant international performance indicators prior to the June 2018 workshop. The following indicators were identified:

- Client index ([New Zealand](#)): This indicator classifies every service user seen by an organisation at their first recorded contact with an in-scope service, and data is submitted under the following categories: New service users, Service users not seen in the last 365 days (returning), Service users seen in the last 365 days (continuing).
- Number of referrals (including re-referred) received by General Adult Mental Health Team ([Ireland](#)): This metric is designed to measure the number of referrals received (i) over 16 years and less than 18 years old (ii) over 18th birthday referred to each General Adult Mental Health Team during the reporting period.
- Number of referrals (including re-referred) accepted by General Adult Mental Health Team ([Ireland](#)): This metric is designed to measure the number of referrals accepted based on the criteria operated by General Adult Mental Health Team in the reported period by (i) over 16 years and less than 18 years old (ii) over 18th birthday referred to each General Adult Mental Health Team during the reporting period.

The approach used by New Zealand and Ireland is to use multiple indicators to measure different aspects relating to client referrals. For example, Ireland's indicator set includes indicators relating to the number and percentage of referrals that are offered appointments and seen within set time periods to evaluate service waiting times and rates of non-attendance to appointments.

Potential approaches identified and discussed at the June 2018 workshop and at previous NMHPSC meetings are summarised below:

Indicator that 'tracks' a client

Similar to the New Zealand and Ireland indicators, a measure that could differentiate between clients that are 'touched' by the service and those who go on to receive care would be informative. For example, Queensland reported that up to 60% of people who present to a service do not go on to receive a service episode. Queensland also reported having a number of local measures which track the proportion of referrals that go on to have face-to-face contact, as well as triaging and assessment within a two week period.

Indicator based on a population measure

Using a measure that reports new clients per capita would resolve issues with jurisdictions having similar performance on the current measure despite having vastly different total numbers of clients accessing care. However, there are issues with the counting of clients, with different threshold levels between jurisdictions for registering new clients and the number of unregistered clients that are not being counted. However, it was considered that a population-based measure would still be unable to address issues with determining 'good' service unit performance.

Indicator based on the length of treatment

Information on the length of treatment, such as short treatment, would assist with interpreting data where clients appear to be 'touching' a service.

Setting target ranges for new and existing clients

The lack of appropriate targets and case mix information for the indicator is problematic, as a higher number on *New client index* does not necessarily indicate a better outcome. Target ranges for new and existing clients would help with determining if performance is 'good'. However, developing and getting agreement on target ranges is a time-consuming, difficult process.

Further disaggregation of the indicator

While the indicator does not provide useful information at the jurisdictional level, it may be helpful at the individual service level. For example, New South Wales reported that investigating variation between services that were similar led to changes in the service model. There is also evidence that there is variation across services within jurisdictions. A benchmarking group found variations from 40% to 20% for new clients for adults. The indicator may benefit from further disaggregation, such as by target population, organisational structure or lower level geography.

A new indicator relating to on wait times

The observed national average of about 40% new clients each year does not support the premise of the KPIs rationale's that new clients are unable to access services. As the indicator in its current form is not a good measure of access to care, an alternative measure using service waiting times might be a better measure of access. Waiting times is already a conventional measure of access in the health system and would more readily reflect investment in the mental health sector. This would address issues with the lack of change over time for the existing *New client index* Indicator. All jurisdictional representatives have indicated that data relating to referral wait times is collected within their mental health information systems.

Next steps

Members agreed that it would be worth considering any measures already being used in the health sector that could be repurposed as a national specification. All jurisdictional representatives indicated that data relating to referral waiting times is collected within their mental health information systems and some jurisdictions had local measures for waiting times. Members agreed to progress work for a replacement *New client index* through the same working group that would be examining methodological approaches for the *Comparative area resources* indicator.

Annex A: National Mental Health Performance Framework

Health Status and Outcomes ('TIER 1')				<i>How healthy are Australians? Is it the same for everyone? Where is the most opportunity for improvement?</i>	
Health Conditions	Human Function	Life Expectancy and Well-being	Deaths		
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		
Determinants of Health ('TIER 2')				<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>	
Environmental Factors	Socio-economic Factors	Community Capacity	Health Behaviours	Person-related Factors	
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	
Health System Performance ('TIER 3')				<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>	
Effective		Appropriate		Efficient	
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	
Responsive		Accessible		Safe	
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	
Continuous		Capable		Sustainable	
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: New client index specification

Mental health new client index, 2018

Identifying and definitional attributes

<i>Metadata item type:</i>	Indicator
<i>Indicator type:</i>	Indicator
<i>Short name:</i>	Mental health new client index, jurisdictional level, 2018
<i>METeOR identifier:</i>	692991
<i>Registration status:</i>	Health, Candidate 09/08/2018
<i>Description:</i>	<p>The percentage of new clients under the care of state/territory specialised mental health services.</p> <p>NOTE: This specification has been adapted from the indicator <i>Mental health new client index, 2018– (Service level)</i> using terminology consistent with the National Health Data Dictionary. There are no technical differences in the calculation methodologies between the Service level version and the Jurisdictional level version of this indicator.</p>
<i>Rationale:</i>	<p>Access to services by persons requiring care is a key issue and there is concern that the public mental health service system is inadequately responding to new people requiring care. 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.</p> <p>Existing population treatment rates are relatively low.</p>
<i>Indicator set:</i>	Key Performance Indicators for Australian Public Mental Health Services (Jurisdictional level version) (2018) <i>No registration status</i>

Collection and usage attributes

<i>Computation description:</i>	<p>Coverage/Scope:</p> <p>State/territory public specialised mental health services.</p> <p>Mental health clients for which a unique person identifier was not recorded, that is non-uniquely identifiable clients, are to be excluded.</p> <p>Methodology:</p> <p>Reference period for 2018 performance reporting: 2016–17</p> <ul style="list-style-type: none">Tracking the client's service use back from the date of first contact in the reference period should be
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calculated as the 5 years preceding the date of first contact rather than on a calendar or financial year basis.

- Client counts should be unique at the state/territory level.

Requires a count of individuals receiving services provided by state/territory mental health services within the reference period. The preferred standard for reporting this data is for person counts to be based on unique enumeration of individuals receiving care within the year. That is, consumers who received services in the reference period in more than one service setting, or by more than one specialised mental health service organisation, should only be counted once. However, in developing specifications for this indicator, it has been recognised that states and territories vary significantly in the extent to which persons can be counted uniquely at the jurisdiction level, the details of which are explored in the data quality statement for this indicator.

No additional service utilisation thresholds have been set for this indicator. This approach has been taken to allow:

- 'assessment only' cases to be included (i.e. individuals receiving only one service contact) because these are regarded as a significant and valid service provided by specialist mental health services; and
- all service contacts to be included in defining whether a person receives a service, including those delivered 'on behalf' of the consumer i.e. where the consumer does not directly participate. This approach has been taken to ensure that the role of state and territory mental health services in providing back up as tertiary specialist services to other health providers is recognised.

Computation:

$(\text{Numerator} \div \text{Denominator}) \times 100$

Numerator:

Number of new consumers who received services from state/territory public specialised mental health services within the reference period.

Numerator data elements:

Data Element / Data Set
Data Element

Specialised mental health service – number of new consumers receiving services from specialised public mental health care services

Data Sources

[State/territory community mental health care data](#)

[State/territory admitted patient data](#)

Guide for use

A new consumer is defined as a person who has not been seen in the 5 years preceding the first contact with a state/territory public specialised mental health service in the reference period.

Denominator:

Number of individuals recorded on jurisdictional mental health information systems as receiving one or more service events from state/territory public mental health services (including admitted patient, ambulatory and residential services) within the reference period.

Denominator data elements:

Data Element / Data Set Data Element

Specialised mental health service – number of consumers receiving services from specialised public mental health care services

Data Sources

[State/territory community mental health care data](#)

[State/territory admitted patient data](#)

Guide for use

Data source type: Administrative by-product

Disaggregation:

Service variables: nil.

Consumer attributes: age, sex, Socio-Economic Indexes for Areas (SEIFA) decile, remoteness area, Indigenous status.

Disaggregated data excludes missing or not reported data.

All disaggregated data are to be calculated as at the first service event for the reporting period, that is, any in-scope admission, residential episode or service contact, even if an ongoing event is underway at the start of the reporting period. In cases where a null value is returned, the first valid result is to be used.

Disaggregation data elements:

Data Element / Data Set Data Element

Person – age

Data Sources

[State/territory community mental health care data](#)

[State/territory admitted patient data](#)

Data Element / Data Set

Data Element

Person – sex

Data Sources

[State/territory community mental health care data](#)

[State/territory admitted patient data](#)

Data Element / Data Set

Data Element

Person – area of usual residence, statistical area level 2 (SA2) code

Data Sources

[State/territory community mental health care data](#)

[State/territory admitted patient data](#)

Guide for use

Used for disaggregation by remoteness and SEIFA

Data Element / Data Set

Data Element

Person – Indigenous status

Data Sources

[State/territory community mental health care data](#)

[State/territory admitted patient data](#)

Representational attributes

Representation class: Percentage

Data type: Real

Unit of measure: Person

Format: N[NN].N

Indicator conceptual framework

Framework and dimensions: [Accessible](#)

Accountability attributes

Benchmark:

State/territory level

*Further data development /
collection required:*

This indicator cannot be accurately constructed using the mental health National Minimum Data Sets because they do not include unique patient identifiers that allow links across data sets and financial reporting years.

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

Development of state-wide unique patient identifiers within all mental health NMDs is needed to improve this capacity.

Other issues caveats:

- This indicator presents complexities at the analysis stage. For example, there are several approaches to defining 'new client' that depend on how the following issues are resolved:
 - * Level of the mental health system at which 'newness' is defined- Consumers new to a particular organisation may be existing consumers of other organisations. Counts of new consumers at the state/territory level would certainly yield lower estimates than those derived from organisation-level counts.
 - * Diagnosis criteria for defining 'newness'- A consumer may present with a new condition, although they have received previous treatment for a different condition.
- To date, the approach has been to specify an initial measure for implementation with a view to further refinement following detailed work to address the complexities associated with the definition of a new clients and the possible implementation of unique state-wide patient identifiers within all jurisdictions.
- This work does not take into account the activities of private mental health services, primary mental health care or the specialist private mental health sector.

When data for this indicator are requested, jurisdictions are required to answer whether a state-wide unique client identifier system is in place, or some comparable approach has been used in the data analysis to allow tracking of service utilisation by an individual consumer across all public specialised mental health services in the jurisdiction. Collection of this information is aimed at assessing the degree of consistency between jurisdictions in data reported, the result of which are explored in the data quality statement.

Source and reference attributes

Submitting organisation: Australian Institute of Health and Welfare on behalf of the National Mental Health Performance Subcommittee

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 09J – New client index, 2017](#) Health, Standard 14/06/2017