

MENTAL HEALTH NATIONAL OUTCOMES AND CASEMIX COLLECTION

NOCC Strategic Directions 2014-2024

National Mental Health Information Development Expert Advisory Panel



Report Prepared for the Mental Health Information
Strategy Standing Committee

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NOCC Strategic Directions

2014-2024

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A report prepared by the
National Mental Health Information Development Expert Advisory Panel
2013

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- > Adult Mental Health Information Development Expert Advisory Panel
- > Older Persons Mental Health Information Development Expert Advisory Panel
- > Forensic Mental Health Information Development Expert Advisory Panel
- > State and Territory Mental Health Branches

Foreword

This report marks a milestone in the measurement of the outcomes of mental health care in Australia. It provides an overview of the progress mental health services have made in implementing outcome measures into routine practice, and a clear vision for the ongoing development of the National Outcomes and Casemix Collection (NOCC).

In 1992 the National Mental Health Policy stated “positive consumer outcomes are the first priority in mental health policy and service delivery” and committed to the development of measures to assess the impact of mental health services on consumer outcomes. As a result, the NOCC was developed and collection within clinical public mental health services commenced in 2002. In 2011 the Mental Health Information Strategy Standing Committee commissioned a review of the NOCC to both undertake a stocktake of progress, and produce a set of recommendations to guide future development.

It has been my privilege to chair the Expert Panel that has undertaken this task, although not without some initial trepidation. Australia was the first country to commit to a national system to routinely measure the outcomes of mental health care. This has required considerable investment and decisions that have impacted upon all involved with public mental health services - staff, consumers, carers and family. Changes of such magnitude inevitably draw both plaudits and criticism. However, extensive national consultation, involving over 1500 participants given explicit ‘permission’ to criticise or reject NOCC, revealed a very strong commitment to the continuation of routine outcome measurement within the public mental health sector.

Such commitment was accompanied by realistic expression of the need for change to the NOCC - to both address shortfalls in implementation and meet the future needs of consumers of a mental health system that is already very different to that of 2002. Analysis of the NOCC data supplemented these consultations, with notable consistency in findings.

The culture within public mental health services has changed from ‘can or should we measure outcomes?’ to ‘how should we best measure outcomes?’ with a focus on identifying the outcomes most important to measure and how these outcomes can be improved through the use of measures.

Indeed, the voice from the community managed mental health organisations was also clear throughout the consultations, with strong support for the development and use of measures in their services. As we move forward, it is important to recognise the diversity of providers of mental health care and to advocate for an integrated approach to measurement that puts the consumer at the centre of care.

Whilst we can be proud that internationally Australia has been recognised as leader in the implementation of outcome measures, it is important that we continue to strive to improve in what we collect and how we use that information.

A continued investment in routine outcome measure collection will ensure that mental health services continue to understand, improve and be accountable for the effectiveness of the care that they provide. The set of recommendations within this report aim to ensure that services measure and improve the outcomes that matter to consumers and their families; reduce the burden of collection on consumers, carers and clinicians; and increase the focus on how best to use the measures in practice.

This report is the result of considerable work from a wide range of people, including clinicians, consumers and carers. I wish to acknowledge their contribution, enthusiasm and willingness to be a part of the extensive national consultations. Their input provided a strong foundation upon which to base the recommendations for the future. I also wish to acknowledge the National Mental Health Information Development Expert Advisory Panel (NMHIDEAP) and the child and adolescent, adult, older persons and forensic subpanels, and the Australian Mental Health Outcomes and Classification Network (AMHOCN), for their commitment and hard work in the development of the recommendations.

It is with sadness that I note the passing of Professor Tom Trauer during the final stages of this report's preparation. His contributions as a member of the NMHIDEAP, academic and international expert in routine outcome measurement will be sorely missed.



Dr Rod McKay

Chair, National Mental Health Information Development Expert Advisory Panel

October 2013

Executive Summary

This report summarises progress with implementation of Australia’s National Outcomes and Casemix Collection (NOCC) since 2002, and sets out strategic directions for that collection for the decade to 2024. It focuses on changes to the NOCC measures and the rules (“protocols”) for their administration. It also considers some broader issues of health and information system capacity which affect the implementation of outcome measurement.

The National Outcomes and Casemix Collection (NOCC)

Since the National Mental Health Policy 1992, Australian governments have committed to national monitoring of the effectiveness of public mental health services. Development of the NOCC has been a central strategy in Australia’s National Mental Health Information Development Priorities [2]. The NOCC is the national specification of a set of standardised measures of consumer symptoms and functioning and a protocol for their collection at key points of care within public specialised clinical mental health services. Along with other strategies, the NOCC’s aims were to support development of:

- > Routine use of outcome measures in all publicly funded or managed mental health services, where such measures contribute to both improved practice and service management.
- > An informed mental health sector, in which benchmarking is the norm, with each service having access to regular reports on its performance relative to similar services that can be used in a quality improvement cycle.
- > A culture of research and evaluation within mental health services and academic institutions that supports reflection on practice and debate about ongoing development.
- > The informed use of casemix to understand the role of variation between agencies in costs and outcomes.

States and territories began implementing the NOCC in 2001, using different local project titles. They have undertaken widespread changes to business practices, training of the entire clinical workforce, and modifications to information systems. The Australian Government has provided funding of approximately \$60 million to support State and Territory investments. Having no international precedent, the initiative has placed Australia as a world leader in the use of standardised outcome measures to monitor the progress of mental health consumers.

Aims of the review

In 2011, the Mental Health Information Strategy Standing Committee (MHISSC) determined that it was timely to review key issues associated with the NOCC and, in particular, to take stock of the progress to date and future strategies to promote routine outcome measurement and use of the data in public mental health services. The primary areas of focus of the NOCC review were the NOCC measures (i.e. the individual tools selected for use) and NOCC protocols (i.e. the rules governing the use of measures, including how, when and where they are used). Implementation and capacity issues to support the introduction and ongoing collection and use of routine outcome measures were also considered. The focus of the stock take and review is on

public specialised mental health services. Information developments in the private and community managed organisation sectors were out of scope for this project, however an understanding of potential developments in these areas and their impact on the NOCC were considered.

This report reviews progress to date and makes recommendations for future directions. It considers five issues:

1. Progress: To what extent have the original objectives for NOCC been achieved?
2. Factors influencing progress: What factors in the measures, protocols or broader implementation and capacity have influenced the extent to which NOCC has achieved its objectives?
3. Future objectives: Are the original objectives of NOCC still current? How should they be amended over the next 10 years?
4. Changes needed to support future objectives: What modifications or additions should be made to the NOCC measures and the NOCC protocol to achieve these objectives?
5. Implementing change: How should we implement changes to NOCC measures and protocols in ways that maximise benefits and minimise the risks arising from changing a long established national data collection? What broader changes to the capacity to record, analyse, report and use mental health service information should also be noted and addressed through other planning processes?

Methods

This review was conducted by the National Mental Health Information Development Expert Advisory Panel (NMHIDEAP), an expert advisory group reporting to the Mental Health Information Strategy Standing Committee (MHISSC). Both NMHIDEAP and MHISSC include consumer and carer representation. Work on the review commenced in 2012.

The literature review, data extraction and analysis have been undertaken by the Australian Mental Health Outcomes and Classification Network (AMHOCN). There has been extensive consultation involving over 1500 individuals.

- > Forums and face to face consultations were held with consumers, carers, health service clinicians and managers, and services managed by non-government organisations (NGOs) in all states and territories. From May to September 2012, 866 participants attended consultations including 47 forums, 22 consultation meetings, 25 site visits and 5 videoconference consultations.
- > Additional consultations were held with peak bodies including: National Mental Health Commission (NMHC), Australian Council on Healthcare Standards (ACHS), headspace, the Private Mental Health Alliance (PMHA), the College of Mental Health Nursing, the Royal Australian and New Zealand College of Psychiatrists (RANZCP) and the Australian Association of Social Workers (AASW).
- > Consultation with state and territory Chief Psychiatrists occurred through presentations to the Safety and Quality Partnership Standing Committee (SQPSC).
- > Consultations and presentations were conducted at The Mental Health Services (TheMHS) Conference, Cairns, 2012.
- > Two on-line surveys were conducted with responses received from 511 clinicians and 134 consumers/carers.

Findings and recommendations

OVERVIEW OF KEY CHANGES TO NOCC AND FUTURE VISION

Purpose

To support the collection and use of information about consumers of public mental health services to support:

- > Clinical care, dialogue and assessment of progress for individual consumers, parents/carers and clinicians.
- > Service managers and leaders to implement reflective care, effective management and the identification and exploration of variations in clinical practice or outcomes.
- > Policy makers, planners and funders to effectively plan and monitor performance, improve understanding of variations in processes and outcomes between services and support the further development of casemix in mental health.
- > Researchers and academics in clinical and service research.
- > The community by facilitating knowledge of, and accountability by mental health services.

Key Changes

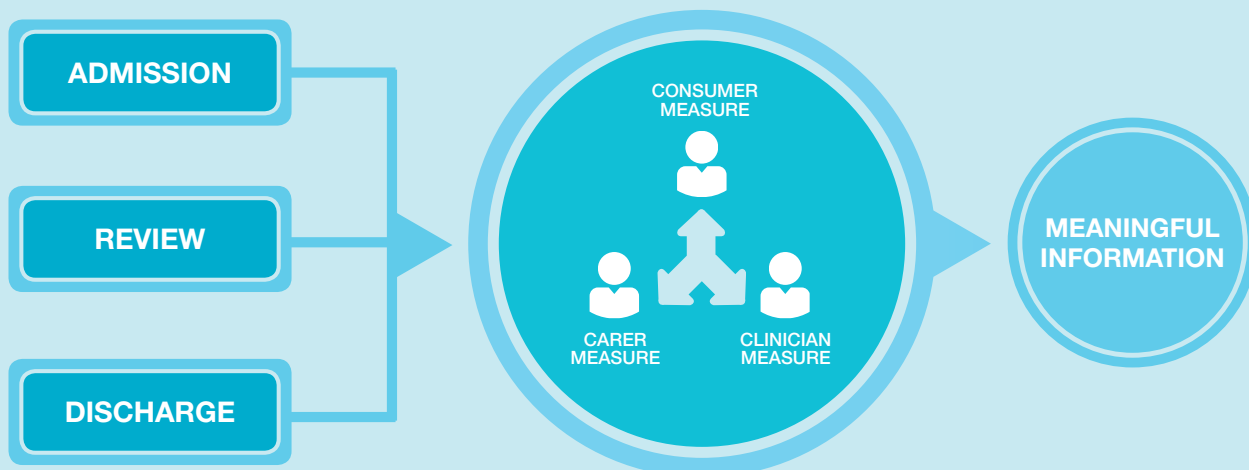
Outcome measurement will improve through:

- > Increasing active participation by consumers and carers.
- > Increasing focus on clinical use, supporting the consumer in recovery.
- > Simplifying collection rules.
- > A research and development program to develop or identify:
 - measures for infants and pre-schoolers;
 - a self-report for primary school aged children;
 - one consistent consumer-rated measure for adults and older persons nationally, which includes social inclusion and aspects of recovery;
 - a carer rated measure for the adult and older persons age groups; and
 - a single clinician-rated measure for adult and older persons.

Outcome Measurement in 2024

Outcome measurement in clinical public mental health services in 2024 should provide a set of tools to allow a shared understanding of the characteristics of people at and between different stages of their contact with services. These tools should:

- > Be meaningful to consumers, carers, clinicians and the community.
- > Provide a consistent approach to measurement regardless of where the consumer receives their care.
- > Be embedded in a national minimum dataset.
- > Provide timely and meaningful information in formats that can be understood.



PROGRESS

To what extent have the original objectives for NOCC been achieved?

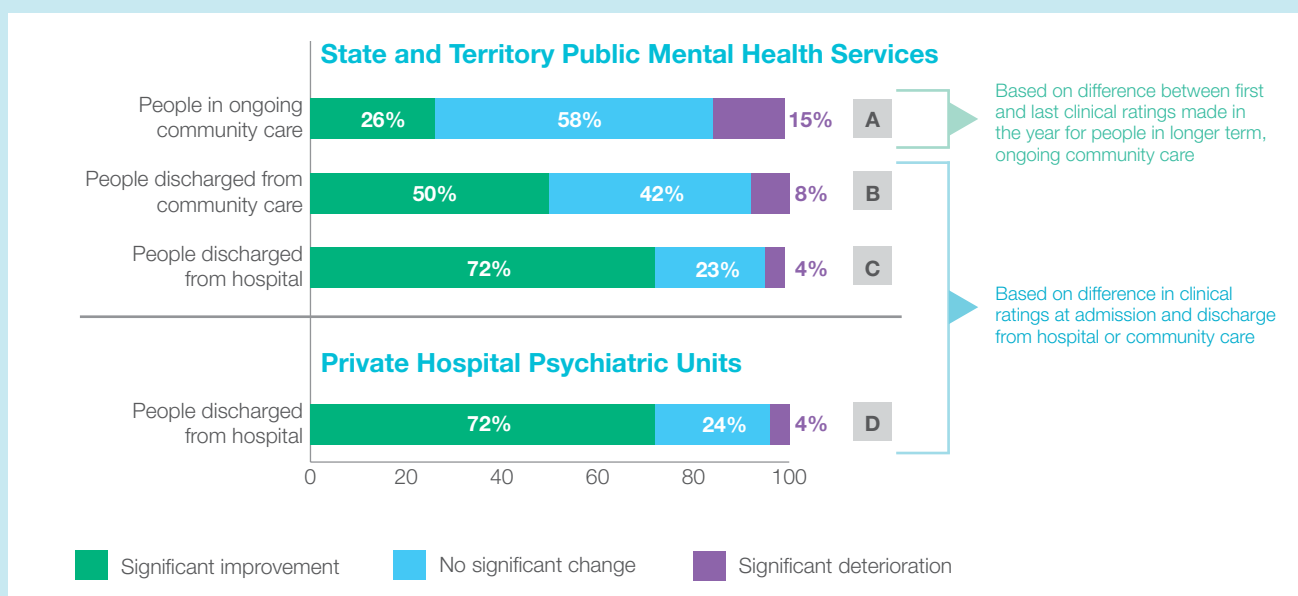
There has been very significant progress in achieving the NOCC objectives. In 2002, there was no national information available regarding the symptoms, functioning or outcomes of consumers receiving mental health care in Australia. Today, Australia has been recognised as a leader in the implementation of outcome measures [3, 4]. In the 2010-11 financial year, over 475,000 collections of measures were reported nationally, with 99% of public specialised mental health organisations collecting and submitting such measures for national reporting. In parallel with these developments in the public sector, all Australian private psychiatric hospitals participate in routine outcome collection. Key national reports that cover mental health reform in Australia now include summary indicators of the degree of clinical change being achieved at a national or state level, following the format developed for annual reporting to the Council of Australian Governments (Figure 1).

The consultations found that the vast majority of public mental health service staff, consumers and carers supported the ongoing collection of routine outcome measures in order to contribute to improved practice, to ensure the continued funding of services and to guarantee accountability. Amongst those consulted, it appears that the culture within mental health services has changed from ‘can or should we measure outcomes?’ to ‘how should we best measure outcomes?’, with a focus on identifying the outcomes most important to measure and how these outcomes can be improved through the use of measures.

However, there are many issues on which there has been less progress:

- > collection and use of consumer-rated outcome measures has lagged behind the uptake of clinician-rated measures;
- > methods for analysing and reporting on clinical change and the effectiveness of services still require research and development;
- > NOCC does not cover all publicly funded specialist mental health services. NOCC measures and protocols have limited use in services contracted by state and territory or Australian governments through non-government organisations. Clinical, support or residential services provided through Medicare or other programs (e.g. headspace, Early Psychosis Prevention and Intervention Centre (EPPIC), Partners in Recovery, Personal Helpers and Mentors (PHaMs)) collect some outcomes data but this does not form part of national reporting. No work has yet been conducted to examine the appropriateness, feasibility or

Figure 1 - Clinical outcomes of people receiving various types of mental health care, 2010-11



Source: Standing Council on Health (2013), COAG National Action Plan for Mental Health 2006-2011: Final progress report covering implementation to 2010-11

cost of implementing routine outcome measurement in these sectors;

- > casemix aspects of the NOCC have been less developed and used than those focusing on clinical outcomes; and
- > there is variability in the use of measures for benchmarking and service evaluation, and to date only limited use of NOCC measures to support research.

FACTORS INFLUENCING PROGRESS

What factors in the measures, protocols or broader implementation and capacity have influenced the extent to which NOCC has achieved its objectives?

Consultations found that implementation and system capacity issues had a greater impact on the use of NOCC measures than the specific measures and protocols themselves. Capacity issues highlighted included information systems, feedback and reporting, training, leadership and service culture. Each of these could have strong facilitating or hindering effects on collection and use.

The measures themselves were thought to have a number of positive attributes that have facilitated their use in practice. For example, they are considered simple and relatively brief to complete, cover core domains, have sound psychometric properties, are complementary in nature and can support communication between clinicians, consumers and families/carers.

Regarding specific measures:

- > The consultations provided strong support for the continuation of the Health of the Nation Outcomes Scales (**HoNOS**) family of measures. The most frequent examples of utilisation of the outcome data to support the goals of NOCC were with the HoNOS family. The NOCC national data also indicated that the highest collection rates were for the HoNOS family of measures.
- > The lack of a nationally consistent, **consumer-rated outcome measure** for adults and older persons was seen as a significant gap in implementation. No current measure was considered ideal, however the Kessler-10 Plus (K10+) has the highest uptake of the adult self-report measures, allows normative population comparisons, is used by a range of other providers of health care, including in primary care settings, and its brevity gives the opportunity for other areas to be included in a self-report measure into the future.
- > The **Strengths and Difficulties Questionnaire** (SDQ) was strongly supported for continued use by child and adolescent services and evidenced the highest collection rates for consumer measures.

There were felt to be some significant gaps in measures. The current measurement suite does not measure important aspects of consumer outcomes including social participation, education, employment, housing, quality of life and satisfaction with services. No measures cover infants and pre-schoolers aged 0-3 years, nor is there a self-report tool for primary school aged children. Forensic services need measures that capture relevant risk, security and legal issues. There was clear agreement during the consultation process that a carer's perspective was important to include within the NOCC for adults and older persons; however, there was no consensus on the type of information to collect, for example the carer's health and wellbeing (also covering burden), carer's experience of care and/or the carer's perspective of the consumer's health and wellbeing.

The current NOCC protocols were seen as broadly supporting the use of the measures and national reporting. There was strong support for continuation of a minimum three-month review cycle, consistent with national standards regarding the regular review of consumers.

Participants in the consultations did, however raise a number of issues in relation to the collection protocol and requested that changes be made to deal with the protocol for various changes of service setting and the routine collection of the consumer self-report in adult and older person inpatient services. Other issues requiring clarification included the need to remove the ambiguity regarding whether brief ambulatory episodes and consultation liaison services are in scope, flexibility in the timing and frequency of the collection to reduce burden upon staff and consumers and responsiveness to new service developments such as sub-acute care.

FUTURE OBJECTIVES

Are the original objectives of NOCC still current? How should they be amended over the next 10 years?

Consultations indicated that the original objectives of NOCC are still relevant, but must be increasingly translated to practice to support the active participation of consumers, carers and families in care.

NOCC measures and protocols must remain relevant in a changing health environment. In particular, NOCC should support understanding and accountability to ensure that:

- > the consumer experience remains at the centre of care, and services measure and improve the outcomes that matter to consumers and their families;
- > information and reporting developments remain relevant in an increasingly diverse health system, where a greater proportion of clinical and support services are funded and provided directly by the Australian Government and through NGOs; and
- > Australia's large investment in NOCC helps to inform developing classification and funding models for mental health.

Specific objectives for the development of national outcome measurement for 2014-2024 are to:

1. Support clinical care, dialogue and assessment of progress for individual consumers, parents/carers and clinicians.
2. Support service managers and leaders to implement reflective care, effective management and the identification and exploration of variations in clinical practice or outcomes.
3. Support policy makers, planners and funders effectively plan and monitor performance, improve understanding of variations in processes and outcomes between services and support the further development of casemix in mental health.
4. Support researchers and academics in clinical and service research.
5. Support the community by facilitating knowledge of, and accountability by mental health services.

SPECIFIC CHANGES TO SUPPORT FUTURE OBJECTIVES

What modifications or additions should be made to the NOCC measures and the NOCC protocol to achieve these objectives?

Modifications to NOCC must continue to ensure that services measure the consumer's level of distress, the severity of their mental illness and their ability to function in day to day life, because these are the core areas where clinical mental health services are expected to provide effective care. Any changes must support the active participation of consumers, carers and families in care.

Recommendations for national outcome measurement 2014-2024

FOUNDATIONS

1. NOCC should continue as standardised routine outcome measurement for the purposes of supporting clinical care in partnership with consumers and carers, service management, benchmarking, service evaluation, research and casemix development.
2. Work should be commissioned to progress towards inclusion of the NOCC as a national minimum data set (NMDS).
3. Episodes of care should remain the counting unit for measuring outcomes and the foundation upon which the NOCC protocol is based.
4. Work should be commissioned to identify the priority domains to be measured for individual consumers receiving mental health services. This will guide the future development of standardised routine outcome measures.
5. Reporting should shift from a focus largely on compliance to also include reporting of outcomes of care and use of the measures, by consumers, carers, clinicians, services and jurisdictions.

MEASURES

6. Work should be commissioned to develop one consistent national consumer-rated measure for adults and older persons. This measure should include the areas of social inclusion, aspects of recovery, social and role functioning and symptoms. The symptom component of this measure should be based on the Kessler 10 (K10).
7. Work should be commissioned to develop a single clinician-rated measure that covers the domains of symptoms and functioning for adults and older persons. This should use the Health of the Nation Outcome Scales (HoNOS) / Health of the Nation Outcome Scales 65+ (HoNOS 65+) as the foundation and include a measure of functioning that replaces the LSP-16.
8. Work should be commissioned to supplement the HoNOSCA glossaries to optimise clarity for particular items (5, 7, 13, 14 and 15).
9. Work should be commissioned to review the use of Children's Global Assessment Scale (CGAS), Factors Influencing Health Status (FIHS), Focus of Care (FOC), Resource Utilisation Groups - Activities of Daily Living (RUG-ADL) following specification of Activity Based Funding data requirements.
10. Work should be commissioned to develop a carer-rated measure of the carer's perspective of consumer health and wellbeing for adults and older persons.
11. Work should be commissioned to identify and recommend appropriate measures and a protocol for use of outcome measures with infants and pre-schoolers.
12. Work should be commissioned to develop or identify a self report measure for primary school aged children.
13. Work should be commissioned to develop a process for identifying non-mandatory preferred additional measures for use outside the scope of NOCC.

PROTOCOLS

14. The consumer-rated measure for adults and older persons should be offered at all collection occasions. The protocol should be changed specifically to include the offering of the measure in inpatient settings.
15. Brief ambulatory episodes should be explicitly included in scope for the collection, with clarification that episodes extending over 14 days or less do not require discharge outcome measures to be collected.
16. Inpatient consultation liaison should be explicitly included in scope for the collection when there is a face-to-face assessment, with clarification that episodes extending over 14 days or less do not require discharge outcome measures to be collected.
17. The protocol should be amended in relation to consumers receiving treatment in the community, who are admitted to hospital, to remove the requirement that the ambulatory clinician collect discharge outcome measures in respect of the community episode.
18. Ambulatory episodes that follow bed based care should be coded 'assessment post discharge' rather than 'ambulatory admission'.
19. Work should be commissioned to develop guidelines for clinicians to support selection of appropriate NOCC measures for use with youth and there should also be flexibility in information systems to support this. There should also be communication that the age protocol used for an individual should not change within an episode of care.
20. The protocol should be amended so that discharge ratings for the HoNOS, HoNOS65+ and the Health of the Nation Outcome Scales Children and Adolescents (HoNOSCA) in an inpatient setting are not required for inpatient episodes that are 3 days or less in duration.

SUPPORTING USE IN PRACTICE

21. Work should be commissioned to develop guidelines to support the use, analysis, and reporting of outcome measures data to support good practice by jurisdictions, services, consumers, carers and clinicians. This will also include guidelines specifically for use with Culturally and Linguistically Diverse and Aboriginal and Torres Strait Islander populations. This work should be backed by activities to support the use of these guidelines in practice.
22. Work should be commissioned to explore new ways to collect and report information that takes advantage of technology that will better support clinicians, consumers and carers in the efficient collection and use of outcome measures in practice.
23. Work should be commissioned to develop decision support tools related to outcome measures. Initially this should focus on the further refinement of clinical prompts, and explore technology options that may support their use in practice.
24. Work should be commissioned to integrate all mental health data sets with the aim of improving national reporting.
25. There is a need for continuation of an independent body to provide key national infrastructure and leadership for routine outcome measurement.

IMPLEMENTING CHANGE

How should we implement changes to NOCC measures and protocols in ways that maximise benefits and minimise the risks arising from changing a long established national data collection? What broader changes to the capacity to record, analyse, report and use mental health service information should also be noted and addressed through other planning processes?

Changes to the NOCC can only be effective with continued investment in mental health research and development, training, information systems, feedback and reporting systems, leadership and culture change.

Changes to the NOCC must also balance ambition with logistical and practical considerations. Collection burden is relevant to staff, consumers and carers who are likely to receive requests for feedback from multiple sources. Measures and protocols must demonstrate their use for clinical care and management; data for other purposes such as service management, casemix or research can only be meaningful if built on a foundation of clinical utility.

Communication about any changes will be essential. Consumers and carers must be engaged as active participants in the evolution of NOCC. Information and support should be provided to clinicians, service leaders and jurisdictional management in implementing these changes.

Developments in broader health information systems may either facilitate or hinder changes to both the NOCC and other mental health related information collection. Such work should facilitate linkage of NOCC with specific mental health intervention codes and other national mental health data sets. This would appear most suitably progressed through the establishment of the NOCC as part of a national minimum data set.

The implications of a national electronic health record were beyond the scope of this review, but require careful consideration.

The needs of individuals with mental illness, their family and carers will be met by an increasing range of service providers over the next decade, operating in the community managed non-government sector or the clinical services funded by the Australian Government. All of these services currently fall outside the scope of NOCC, and have no parallel arrangement for the collection and reporting of information on consumer outcomes. The continued implementation of Australia's world leading approach to outcome measurement over the coming decade will need to address the structural barriers created by the Commonwealth-State funding divide. A truly integrated approach to measurement is needed that recognises that consumers move between service systems, regardless of funding source and that all services should seek to understand, improve and be accountable for the effectiveness of the care that they provide.

CHAPTER 1: OVERVIEW OF THE NATIONAL OUTCOMES AND CASEMIX COLLECTION

Australia has undertaken a strategic national approach to ensuring the delivery of safe, effective and quality mental health services under the banner of the National Mental Health Strategy. Major investments in information development and data collection have been vital in driving these service reforms, and Australia has been recognised as a world leader in the collection and use of mental health information.

1.1 Policy origins of outcome measurement in Australia

Australia first began collecting outcomes data in 2001, but the origins of development began 10 years earlier. Establishing a system for the routine monitoring of consumer outcomes has been an objective of Australia's National Mental Health Strategy since it was first agreed by Health Ministers in 1992. The National Mental Health Policy included as one of its original objectives:

“To institute regular review of client outcomes of services provided to persons with serious mental health problems and mental disorders as a central component of mental health service delivery.”

The goal was to develop standard measures of a consumer's clinical status and functioning and apply these at entry and exit from care to enable change to be measured. For consumers who require longer term care, the measures were envisaged to be applied at regular review points. The original intent was for outcome measurement to be introduced in a way that provided both clinician and consumer perspectives on the extent to which services are effective in achieving improvements.

The concept was simple but ambitious in the context of the poor status of information in mental health services in the early 1990s. Most services did not routinely collect basic clinical and service delivery data, nor have systems capable of timely analysis and reporting of such data to inform clinical care. Instruments for measuring consumer outcomes on a routine basis were not available at the commencement of the Strategy, nor were a set of candidate measures evident. More significantly, there were few precedents to follow, as no other country had established routine consumer outcome measures comprehensively across their publicly funded mental health services.

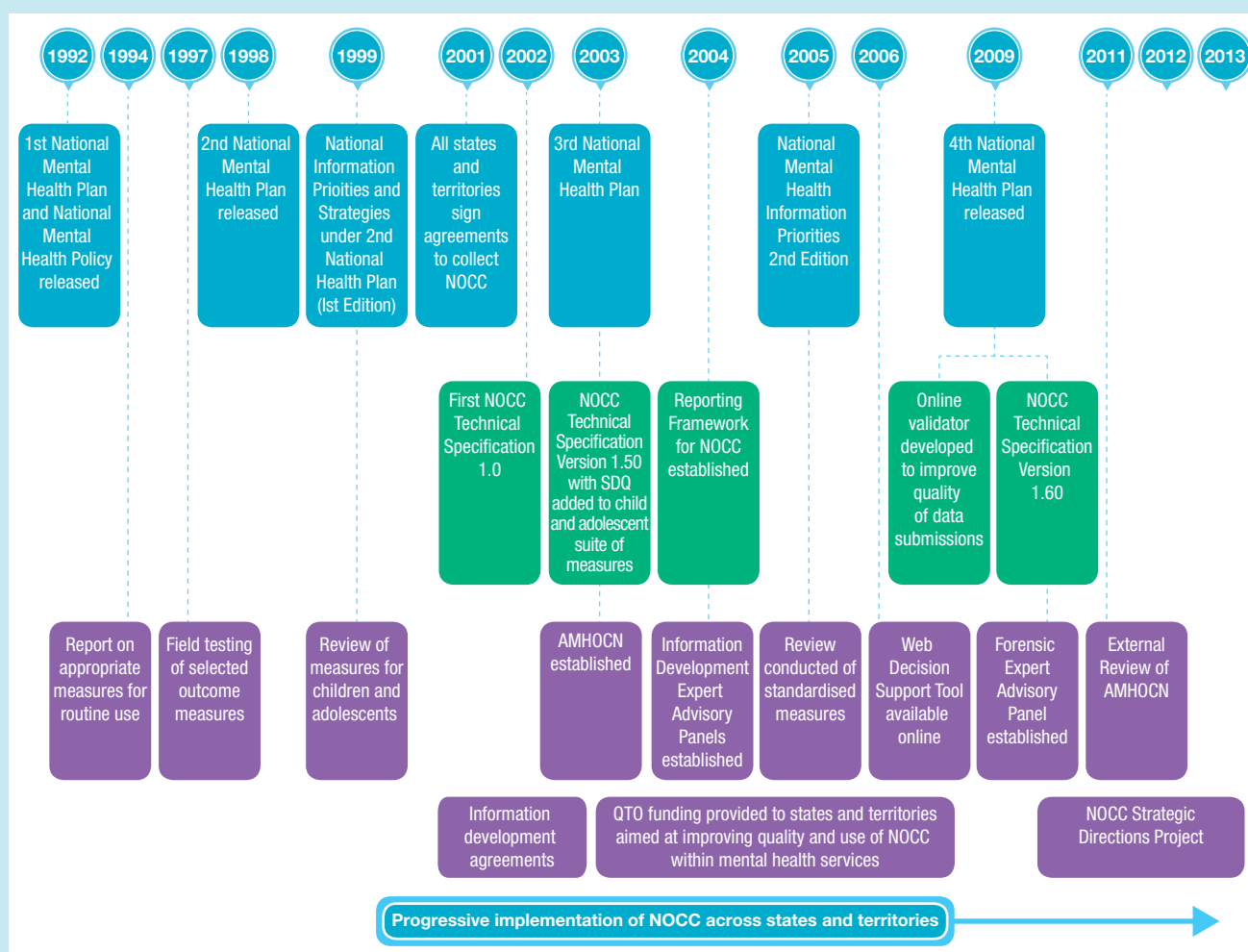
In response, a research and development program was initiated early in the Strategy to identify outcome measures that were feasible for use in routine clinical practice with adult consumers [5]. Described later in this chapter, this resulted in the selection of a small set of standard measures that were put to trial [6]. Similar work was undertaken in relation to outcome measures for use in child and adolescent mental health services [7].

1.2 Introduction of NOCC

Implementation of the National Outcomes and Casemix Collection (NOCC) commenced during the period of the Second National Mental Health Plan 1998-2003, and was specifically outlined in a document titled National Mental Health Information Priorities and Strategies, released in June 1999 and endorsed by all governments. Substantial Australian Government funding was offered to jurisdictions to support the implementation process, with bilateral funding agreements negotiated with each jurisdiction over the following two years.

By October 2001, all states and territories had agreed to collect routine outcome measures and to submit data to a national pool annually through a process funded by the Commonwealth. The introduction of this was staggered, but by 2003-04, all states and territories were submitting data, with the collection growing every year since.

Figure 2 - Milestones in the establishment, implementation and continued development of NOCC



The NOCC covers clinical specialised mental health services managed by, or in receipt of funds from state or territory health authorities, and more specifically, the activities of mental health service organisations. It does not cover community managed organisations or private providers. Data are collected regarding the symptoms and functioning of consumers at key points within an episode of mental health care, within a specific episode service setting. The specific clinical measures and other data elements to be collected at any given collection occasion, are determined by the episode service setting (psychiatric inpatient, community residential and ambulatory), the collection age group (children and adolescents, adults, and older persons) and whether the collection occasion is defined as an admission, a review or a discharge.

The policy mandate for the continuation of further development of NOCC was renewed under the Third National Mental Health Plan (2003-08), released in July 2003 and its complementary document, the National Mental Health Information Priorities and Strategies 2nd Edition, released later in 2005. As with the 2nd plan, specific funding agreements were negotiated between the Commonwealth and individual states and territories to provide further financial assistance to finalise the implementation process.

Figure 2 shows the key milestones in the development and implementation of NOCC, and in particular, highlights national documents that have directed the work of routine outcome measurement in public specialised mental health services in Australia.

It also outlines other key initiatives, such as the establishment of the Australian Mental Health Outcomes and Classification Network (AMHOCN), providing national leadership in the development and use of outcome measures in practice, and the establishment of the national Mental Health Information Development Expert Advisory Panels (MHIDEAPs) to drive the collection and use of NOCC across states and territories.

1.2.1. Objectives of the National Outcomes and Casemix Collection

At the time of its original implementation, the objectives for NOCC were embedded within the overall objectives of the broader statement of national priorities for mental health information development in Appendix A [8]. Within these, the primary objective of the NOCC was identified as:

- > The establishment of the routine use of outcome measures in all publicly-funded or managed mental health services, where such measures contribute both to improved practice and service management.

NOCC was also expected to contribute to the other goals of the national mental health information priorities, being the development of:

- > An informed mental health sector, in which benchmarking is the norm, and with each service having access to regular reports on its performance, relative to similar services used in a quality improvement cycle.
- > A culture of research and evaluation within mental health services and academic institutions, supporting reflection on practice and debate about ongoing development.
- > The informed use of casemix to understand the role of variation between agencies in costs and outcomes.

1.2.2. Roles and responsibilities for NOCC

The implementation of routine outcome measures in Australia has relied upon collaboration between a number of parties, as well as the input of a broad range of experts and participation by consumers and carers.

1.2.2.1. States and territories

As noted earlier, by October 2001 all states and territories had signed information development funding agreements with the Commonwealth, committing to the collection and reporting of the nationally agreed outcome and casemix measures as specified in the National Mental Health Priorities document.

Staff in all public specialised mental health services are required to collect outcome measures according to the NOCC protocol, and in 2011, information was collected on just over 475,000 service occasions.

States and territories have implemented information systems to manage the collection and reporting of measures, however there still exists quite large variability in the capacity and functionality of these systems.

Whilst AMHOCN provides training in the collection and use of measures, some states and territories have also invested significantly in this area.

1.2.2.2. Australian Government

The Australian Government provided financial assistance to states and territories to assist them in implementation of routine outcome measurement with the public mental health services under their administration. This included \$38 million in funding to assist states and territories to develop information systems and to provide training through the bilaterally negotiated Information Development Agreements (2001-2003), and a further \$22 million through the Quality Through Outcomes Agreements (2003-2009).

The Australian Government also established and funds the Australian Mental Health Outcomes and Classification Network (AMHOCN), and supports national expert panels (child and adolescent, adult, older persons and forensic) to provide advice on the implementation and use of measures in mental health services.

1.2.2.3. Australian Mental Health Outcomes and Classification Network (AMHOCN)

AMHOCN was established in 2003 by the Australian Government Department of Health and Ageing to provide national leadership in the collection and use of outcome and casemix measures as part of routine clinical practice.

Operating as a consortium, data management is provided by Strategic Data Pty Ltd, analysis and reporting is provided by the University of Queensland, and training and service development is provided by the New South Wales Institute of Psychiatry.

1.2.3. Outcome measures mandated for inclusion in NOCC

1.2.3.1. Specification of measures

There was extensive development and exploratory work conducted at a national level to select appropriate outcome and casemix measures for routine use. This involved critically reviewing the psychometric properties of the measures, trialling measures in the field, and more recently, investigating and developing possible additional measures to supplement the collection.

Research and development projects were conducted to assess the most appropriate measures [5, 7] and the measures were also field tested [6].

Mental Health Classification and Service Costs (MH-CASC) was a national casemix development project conducted in 1998, with the aim of creating a casemix classification for specialised mental health services [9]. This subsequently became one of the largest investments in any single project funded over the first five years of the National Mental Health Strategy, with significant implications for future data collections. The project collected data on approximately 18,000 patients and provided experience in the collection of outcomes data, primarily the HoNOS, HoNOSCA and LSP-16, for around one quarter of the mental health clinical workforce. The project demonstrated the value of outcome measures for casemix purposes, and first defined the concept of 'period of care' as the basis for outcomes collection.

The suite of outcome measures has not changed from those originally mandated, with the exception of the addition in December 2003 of the Strengths and Difficulties Questionnaire (SDQ) as both a self-report measure for adolescents, and as a parent/carer of children and adolescents.

NOCC MEASURES

Child and adolescent	<ul style="list-style-type: none"> • Health of the Nation Outcome Scale for Children and Adolescents (HoNOSCA) • Strengths and Difficulties Questionnaire (SDQ) from 2003 • Children's Global Assessment Scale (CGAS) • Factors Influencing Health Status (FIHS)
Adult	<ul style="list-style-type: none"> • Health of the Nation Outcome Scales (HoNOS) • Life Skills Profile 16 (LSP-16) • Focus of Care (FOC)
Older persons	<ul style="list-style-type: none"> • Health of the Nation Outcome Scales for Elderly Persons (HoNOS65+) • Life Skills Profile 16 (LSP-16) • Resource Utilisation Groups – Activities of Daily Living (RUG-ADL) • Focus of Care (FOC)
Consumer-rated Measures for Adult and Older persons	<ul style="list-style-type: none"> • Mental Health Inventory (MHI-38) • Behaviour and Symptom Identification Scale 32 (BASIS-32) • Kessler 10 Plus (K10+)

Originally, it was proposed that the Mental Health Inventory (MHI-38) be used nationally, however this requirement was changed to allow the states and territories to introduce an alternative measure [10]. Initially Queensland and Western Australia collected the originally proposed MHI-38 while New South Wales, South Australia and the Northern Territory selected the Kessler 10 Plus (K10+), and Victoria, Tasmania and the Australian Capital Territory selected the Behaviour and Symptom Identification Scale 32 (BASIS-32). In 2004-05 Western Australia decided to move to collecting the K10+ instead of the MHI-38.

The NOCC measures are subject to a set of collection guidelines documented in Mental Health National Outcomes and Casemix Collection: Technical specification of State and Territory reporting

requirements for the outcomes and casemix components of 'Agreed Data' . Verion 1.50

1.2.3.2. Psychometric properties of the measures

The early developmental work of Andrews et al. [5], Stedman et al. [6] and Bickman et al. [7] was critical in guiding the selection of the measures used today in Australia. Andrews et al. [5] identified six instruments of acceptable reliability, validity and sensitivity to change that were likely to be of practical use and acceptable for routine application in adult mental health services, as follows:

- > The Health of the Nation Outcome Scales (HoNOS)
- > The Role Functioning Scale (RFS)
- > The Life Skills Profile (LSP)
- > The Behaviour and Symptom Identification Scale (BASIS)
- > The Mental Health Inventory (MHI)
- > The Medical Outcomes Study Short Form 36 (SF36)

The instruments were then field tested by Stedman et al. [6] in a range of private and public sector clinical practice settings.

The review by Bickman et al. [7] focused on outcome measures in the area of child and adolescent mental health.

In 2005, Pirkis et al. [12] conducted a critical review of the standard measures, focusing on their psychometric properties. The findings suggested that the measures have mostly adequate or good validity, reliability, sensitivity to change, feasibility and utility, although it was noted that some showed better overall psychometric performance than others, and for some instruments, particular properties were not well covered in the literature. Since the review of Pirkis et al., several other empirical studies have found the HoNOS and HONOS65+ [17,22-26], HoNOSCA and the SDQ [13-21] to have acceptable psychometric properties. Pirkis et al. concluded that the suite of measures could be regarded as appropriate for the purposes of monitoring outcomes for consumers [12].

There continues however to be debate among some clinicians and experts over the psychometric properties of various measures, and in the literature regarding the reliability and validity of the outcome measures currently used in Australia [27]. In the consultations, it was evident that the culture within mental health care has clearly changed from 'can/should we measure outcomes?' to 'how should we best measure outcomes?' with a focus on identifying the outcomes most important to measure.

1.2.4. NOCC protocol

Implementing a set of routine outcome measures within clinical practice required the development of guidelines to assist services with implementation, and ensure national consistency in the way outcomes data was collected.

Technical specifications were developed collaboratively by the jurisdictions. These outlined agreed 'ground rules' for what measures would be collected on which occasions, and those measures should be reported nationally.

The first version of the Mental Health NOCC Technical Specifications was released in 2008 [11], and this was later revised to include the Strengths and Difficulties Questionnaire (SDQ) for children and adolescents. In 2009, Version 1.60 was released [28], retaining the fundamentals of the previous versions, but aligning aspects of the NOCC collection with the National Minimum Data Sets for Mental Health Care, and addressing the inconsistencies and errors of the previous versions.

The Technical Specifications outline key concepts that underpin the collection protocol, including episode of mental health care and mental health service setting, collection occasion, age group and mental health provider entity.

The collection protocol outlines the data to be collected, and when it is to be collected for each target population and service setting. The collection is based around the episode of care, with collections at admission, review and discharge.

Table 1 summarises the measures to be collected for each episode of mental health care. This is the minimum requirement, but states and territories are free to increase the frequency and scope of collection should they chose to do so.

Table 1 - NOCC requirements from 2009 [28]

EPISODE SERVICE SETTING	Inpatient			Community residential			Ambulatory		
	A	R	D	A	R	D	A	R	D
CHILDREN AND ADOLESCENTS									
HoNOSCA	•	•	•	•	•	•	•	•	•
CGAS	•	•	×	•	•	×	•	•	×
FIHS	×	•	•	×	•	•	×	•	•
SDQ (Parent/Consumer self-report)	•	•	•	•	•	•	•	•	•
Principal and Additional Diagnoses	×	•	•	×	•	•	×	•	•
Mental Health Legal Status	×	•	•	×	•	•	×	•	•
ADULTS									
HoNOS	•	•	•	•	•	•	•	•	•
LSP-16	×	×	×	•	•	•	×	•	•
Consumer self-report (MHI-38, BASIS-32, K10+)	×	×	×	•	•	•	•	•	•
Principal and Additional Diagnoses	×	•	•	×	•	•	×	•	•
Focus of Care	×	×	×	×	×	×	×	•	•
Mental Health Legal Status	×	•	•	×	•	•	×	•	•
OLDER PERSONS									
HoNOS 65+	•	•	•	•	•	•	•	•	•
LSP-16	×	×	×	•	•	•	×	•	•
RUG-ADL	•	•	×	•	•	×	×	×	×
Consumer self-report (MHI-38, BASIS-32, K10+)	×	×	×	•	•	•	•	•	•
Principal and Additional Diagnoses	×	•	•	×	•	•	×	•	•
Focus of Care	×	×	×	×	×	×	×	•	•
Mental Health Legal Status	×	•	•	×	•	•	×	•	•

ABBREVIATIONS AND SYMBOLS

- A Admission to mental health care
 - R Review of mental health care
 - D Discharge from mental health care
 - Reporting of data is mandatory
 - ×
- ×

1.2.5. Data and reporting

States and territories have undertaken to annually provide the outcomes data that they collect to the Australian Government Department of Health and Ageing. From 2003, these data were collated nationally and held in a national data bureau, with Strategic Data Pty Ltd contracted to perform this role.

Data must be extracted in conformance with the NOCC Technical Specifications [28] and are to be validated using a specially developed online validation tool. Data may be submitted quarterly, but a complete and final extract covering the full financial year is required to be submitted by 31 December following the end of that financial year.

Data are then available through a number of mechanisms, including password-protected access to submitted records. Reports are generated for use by states and territories, services and clinicians, as well as for national reporting purposes. A web decision support tool has also been developed that allows for queries to be run on the data, with a breakdown of data for each NOCC measure available by state and territory, sex, age group, diagnosis, legal status and financial year.

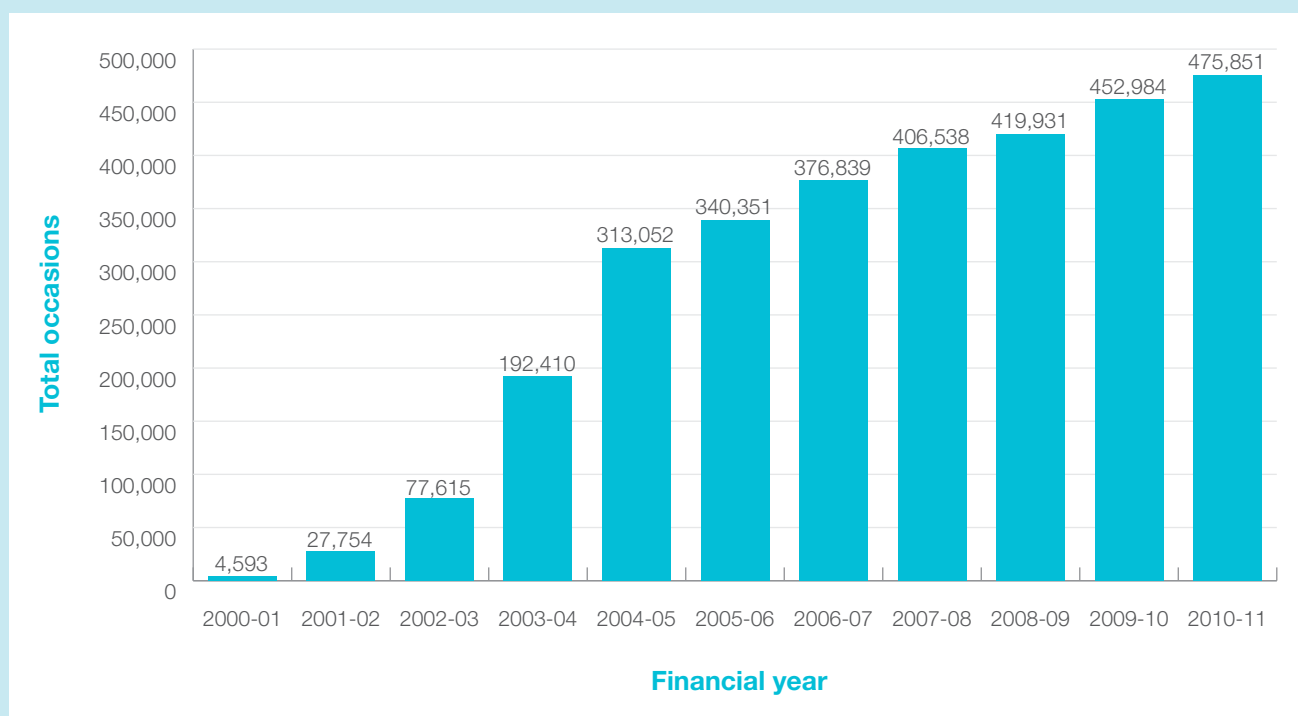
States and territories have submitted their annual data from as far back as 2000-01, where available. All states and territories have submitted some level of data from 2003-04.

The annual collection of outcomes data has grown each year since states and territories first began to introduce outcome measurement from 2000-01, with the biggest change seen in 2003-04, by which time all states and territories began routine collection. By June 2008, routine measurement of consumer outcomes was in place in an estimated 98% of public mental health services, and states and territories were contributing approximately 420,000 de-identified records annually to the collection. There have continued to be annual increases in the national collection rates albeit much smaller ones, with outcome measures reported for 475,851 occasions of service in public mental health services in 2010-11 (Figure 3).

De-identified consumer level outcomes data were provided from 2000-01 by Victoria, from 2001-02 by New South Wales and Tasmania, from 2002-03 by Western Australia, Queensland, the Northern Territory and the Australian Capital Territory, and from 2003-04 by South Australia.

'Collection occasions' may be at admission, review or discharge.

Figure 3 - Collection occasions, 2000-01 to 2010-11



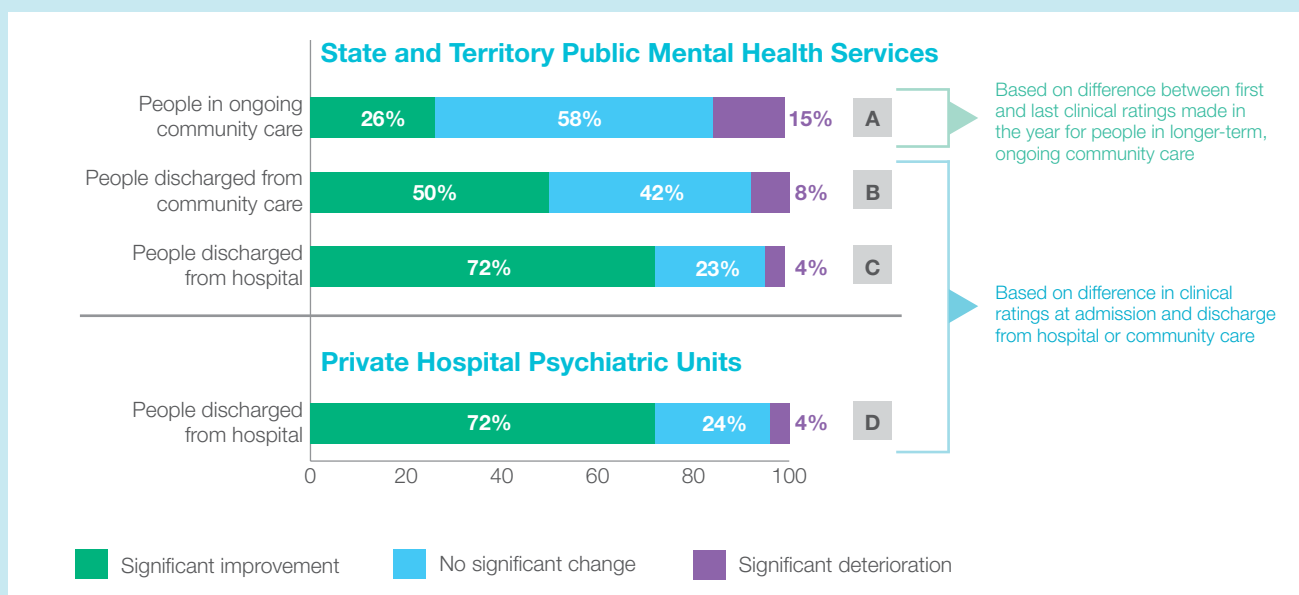
Public reporting

Public reporting of the outcomes of care commenced in 2008, and forms part of the National Mental Health Report, Council of Australian Government (COAG) annual progress report and the Report on Government Services. The proportion of health systems collecting and reporting outcome measures are reported in the National Mental Health Report, and the estimated coverage (the proportion of episodes for which 'complete' outcome measures are collected) is reported in the Report on Government Services (RoGS). The clinical outcomes of people receiving care is reported in RoGS, the National Mental Health Report and the COAG progress report, the COAG progress report commenced reporting these clinical outcomes by jurisdiction in 2011.

Clinical outcomes of care

The figure below outlines the proportion of people receiving various types of mental health care who have significantly improved, had no significant change or who have significantly deteriorated. Indicators for change for all groups are based on changes in ratings of the HoNOS family of measures completed by clinicians at various points over the course of a consumer's treatment and care. The classification of 'significant improvement', 'significant deterioration' or 'no significant change', is based on Effect Size. Effect Size is a statistic used to assess the magnitude of a treatment effect. It is based on the ratio of the difference between pre- and post- scores to the standard deviation of the pre- score. Individual episodes were classified as either: 'significant improvement' if the Effect Size index was greater than or equal to positive 0.5; 'significant deterioration' if the Effect Size index was less than or equal to negative 0.5; or 'no change' if the index was between -0.5 and 0.5 [29].

Figure 4 - Clinical outcomes of people receiving various types of mental health care, 2010-11



Source: Standing Council on Health (2013), COAG National Action Plan for Mental Health 2006-2011: Final progress report covering implementation to 2010-11.

Below are the major findings from the NOCC data regarding clinical outcomes of care:

- > For people admitted to state and territory managed psychiatric inpatient units (Group C in Figure 4), approximately three quarters (72%) have a significant reduction in the symptoms that precipitated their hospitalisation. Notwithstanding the changes in symptoms for this group, most remain symptomatic at discharge, pointing to the need for continuing care in the community. For a small percentage (4%), their clinical condition is worse at discharge than at admission. About one in four (23%) are discharged with no significant change in their clinical condition.
- > Similar results are achieved for people admitted to private psychiatric hospital units (Group D in Figure 4),

with 72% experiencing a significant clinical improvement, 4% deteriorating and 24% having no significant change during their hospitalisation.

- > The picture for people treated in the community by state and territory mental health services is more complex because it covers a wide range of people with varying conditions. Some people receive relatively short term care in the community, entering and exiting care within the year (Group B in Figure 4). For this group, 50% experience significant clinical improvement, 8% deteriorate and 42% experience no significant clinical change.
- > A second group of consumers of state and territory community services are in longer term, ongoing care (Group A in Figure 4). This group, representing a significant proportion of people treated by state and territory community mental health services, are affected by illnesses that are persistent or episodic in nature. More than half of this group (58%) experience no significant change in their clinical condition, compared with approximately one quarter (26%) who improve and 15% who undergo clinical deterioration. An important caveat to understand for this group is that, for many, 'no clinical change' can be a good result because it indicates that the person has maintained their current level and not undergone a worsening of symptoms.

The above excerpt is taken from the Council of Australian Governments National Action Plan for Mental Health 2006 – 2011. Final Progress Report covering implementation to 2010-11, pgs 27-28 [29].

1.3 Other outcome measurement activities

1.3.1. Private hospital collection

Since 2002, almost all private hospitals with psychiatric beds in Australia have been routinely collecting and reporting a nationally agreed suite of clinical measures and related data.

The collection is specified in the National Model for the Collection and Analysis of a Minimum Data Set with Outcome Measures. A clinician-rated measure and a consumer-rated measure are collected at admission and discharge from hospital, and every three months for those with extended periods of care [30]. The measures collected include the Health of the Nation Outcome Scales (HoNOS), Health of the Nation Outcome Scales for Elderly Persons (HoNOS65+) and the Mental Health Questionnaire, 14-item version (MHQ-14).

A centralised data management system was established in 2001 to support private hospitals with the collection and analysis of data, and standard reports are prepared to enable hospitals to monitor, evaluate and improve quality of care [31]. The data management system is funded by participating hospitals, private health insurance funds and the Australian Government, with work overseen by the Private Mental Health Alliance. For the 2010-11 financial year, 82% of hospitalisations had a HoNOS measure at admission and discharge.

1.3.2. Outcome measurement in the community managed mental health sector

There has been increasing interest in routine outcome measurement in the community managed mental health sector. A number of developments have taken place to support such routine outcome measurement. These include work by the Australian Institute of Health and Welfare (AIHW), in partnership with Community Mental Health Australia (CMHA), in 2011 to complete the first phase of an NGO Establishments National Minimum Data Set (NMDS) Project, resulting in The Mental Health Non-Government Organisation Data Development Project: Phase 1 Final Report (2011). This work was seen as essential before more nationally consistent routine outcome measurement within the sector could take place. At its meeting in March 2012, the Mental Health Information Strategy Subcommittee (now known as the Mental Health Information Strategy Standing Committee (MHISSC)) agreed to a project plan that would investigate the current use and potential standardisation of outcome measurement tools being used in the mental health Community Managed Organisation (CMO) sector.

The Report on the National Community Managed Outcome Measurement Project Survey and Consultation (2013) will be reported to MHISSC in October 2013, with recommendations regarding further development of routine outcome measurement in the CMO sector to be identified following this meeting. However, preliminary work indicates that there is no current standard outcome measure or suite of measures being used by all mental health CMOs nationally. CMOs also often use more than one outcome measurement tool. A number of instruments are likely to be used to adequately reflect the range of consumer outcomes.

1.3.3. Identification or development of other measures

There has been national agreement to proceed with the development of a number of new measures, with work commencing from 2011 on measures of consumer experiences of care, carer experiences of care and various aspects of consumer social inclusion. It should be noted that these measures have been developed to support the broader implementation of the agreed national information priorities for mental health, rather than as part of the NOCC.

The development of a self-report measure focusing on social inclusion and aspects of recovery for adults is being led by AMHOCN. The 'Living in the Community Questionnaire' is a self-report measure for consumers covering community and social participation, study and employment, housing, general practitioner services and the extent to which consumers have a voice within the community.

The Department of Health in Victoria has led the development of a measure for the adult and older person consumer experience of care, as a literature review confirmed that no existing tool fully met the requirements and a new tool needed to be developed. Field testing is anticipated in 2013.

AMHOCN is leading the development of a measure for adult and older person carer experiences of care, and following a literature review, one measure was identified that may be appropriate, subject to some modifications. Work is underway on the modification of the measure with a proof of concept trial also planned.

Work is being undertaken by the Child and Adolescent Mental Health Information Development Expert Advisory Panel (CAMHIDEAP), to identify a suitable measure for the 0-3 year age group. Additionally, work has been undertaken by the CAMHIDEAP, in collaboration with AMHOCN, to explore aspects of the SDQ as a recovery measure. The Forensic Mental Health Information Development Expert Advisory Panel (FMHIDEAP) has undertaken project work to identify measures that may be more suitable for consumers in forensic mental health services. Both projects have included a review of the literature and a report on the forensic work was provided to the FMHIDEAP in 2011 [32].

CHAPTER 2: THE REVIEW OF THE NOCC 2014 - 2024

Since the introduction of the National Outcomes and Casemix Collection (NOCC) in 2001, significant changes have occurred in the way mental health related services are provided. Of particular relevance to the future of the NOCC, and more specifically the collection and use of outcome measures, is the greater recognition of the role of consumers, and their carers, in their own care, an increasing diversity of providers of mental health care and new developments in activity based funding for public mental health services. The increase in the diversity of providers has seen a greater proportion of clinical and support services funded and provided directly by the Australian Government and through community managed organisations.

When the NOCC was first established, it was agreed that the measures would need to be reviewed and that the collection would require further development over time. Some ten years later, the Mental Health Information Strategy Standing Committee (MHISSC) determined that it was timely to review key issues associated with the NOCC and, in particular, to take stock of the progress to date and future strategies to promote routine outcome measurement and use of the data in public mental health services.

2.1 Scope of the NOCC Strategic Directions review

The primary areas of focus of the NOCC review were the NOCC measures (i.e. the individual tools selected for use) and NOCC protocols (i.e. the rules governing the use of measures, including how, when and where they are used). Implementation and capacity issues to support the introduction and ongoing collection and use of routine outcome measures were also considered. This work assisted in identifying the strategic direction for the NOCC over the coming 10-year period from 2014-2024.

The focus of the stock take and review is on public specialised mental health services. Information developments in the private and community managed organisation sector were out of scope for this project, however an understanding of potential developments in these areas and their impact on the NOCC were considered.

Over a ten-month period, information was gathered from states and territories, those working in mental health services, experts, consumers and carers, and was then considered by the National Mental Health Information Development Expert Advisory Panel. Data from the collection was examined and a literature review was conducted to inform this work.

These inputs are summarised in the report and form the basis of the recommendations for future work regarding the NOCC.

The review process has provided guidance in the development of the goals and benefits for the National Outcome and Casemix Collection for 2014 – 2024. It is important to note that whilst routine outcome measurement will remain focused upon public specialised mental health services, the measures do offer the potential for use by other mental health service providers.

2.2 Benefits of routine outcome measurement

The collection and use of information from the National Outcomes and Casemix Collection should benefit multiple stakeholders, including consumers and carers, clinicians, managers, policy makers, funding bodies and the broader community. These benefits are summarised in the table below.

Table 2 - Benefits of routine outcome measurement in mental health services

STAKEHOLDER	BENEFITS
Consumers	<ul style="list-style-type: none"> • Provides the opportunity to have input into the process of care through active engagement by sharing their perspective • Gives consumers a voice and input into the system to describe issues important to them • Provides information back to the consumer regarding their completion of the measure and change over time • Provides an opportunity for dialogue between clinicians, consumers, carers and families, enabling different perspectives to be represented and discussed
Carers/Parents	<ul style="list-style-type: none"> • Provides the opportunity to have input into the process of care through sharing their perspective and being actively engaged in the process of care • Gives carers and families a voice and input into the system to describe issues important to them • Provides information back to carers and families regarding measures and progress • Provides an opportunity for dialogue between clinicians, consumers, carers and families, enabling different perspectives to be represented and discussed
Clinicians	<ul style="list-style-type: none"> • Provides tools to support care planning, goal setting and monitoring change over time • Provides tools that support reflective practice and the evaluation of care
Service Managers	<ul style="list-style-type: none"> • Provides tools that support service development through the use of information to inform decision-making • Provides information that describes clinician workload • Provides information that can describe variation in groups of consumers presenting to mental health services • Provides information that describes the outcomes of care
Policy Makers	<ul style="list-style-type: none"> • Provides information that describes the needs of consumers and carers • Provides information that informs policy development
Funders	<ul style="list-style-type: none"> • Provides information that informs decisions regarding value for money
Communities	<ul style="list-style-type: none"> • Provides information to support transparency and accountability, highlighting how mental health services operate and where opportunities for quality improvement can occur
Researchers and Evaluators	<ul style="list-style-type: none"> • Provides information to support both research into, and evaluation of services, with the aim of supporting clinical practice and quality improvement activities

2.3 Principles guiding future development work

A set of principles was considered essential to guide all future developments of the NOCC and were considered when developing the recommendations outlined in this report. These principles identify the importance of all stakeholders in the delivery of mental health care and ensure that national outcomes collection is viewed as part of a broader agenda within mental health.

Table 3 - Principles to guide the development of routine outcome measurement

PRINCIPLE	DESCRIPTION
Adaptability	<ul style="list-style-type: none"> Measures and protocols should respect the diverse personal and cultural needs of consumers of mental health services, and where possible, be tailored to those needs Measures and protocols should acknowledge the diversity of individual needs and services, and where appropriate, allow the use of additional specific measures suitable to an individual person, carer, family, mental health condition or service
Comparability	<ul style="list-style-type: none"> Measures and protocols should allow the broadest possible comparability between individuals, perspectives (i.e. consumers, carers, clinicians), services and settings
Continuity	<ul style="list-style-type: none"> Measures and protocols should build on Australia's significant investment in mental health information collection, and encourage the greatest possible continuity between current and future developments
Coverage	<ul style="list-style-type: none"> Measures and protocols should be suitable for the full range of consumers seen by Australian mental health services Measures and protocols should include all age groups Any identified instruments should, as much as developmentally appropriate, measure similar domains across age groups Measures and protocols should be complementary, with minimal overlap between the domains measured Measures and protocols should include all mental health service settings including inpatient, community, residential, consultation-liaison, emergency departments, day programs and forensic services Measures and protocols should be able to be implemented in a consistent way across all publicly funded mental health services Development of the NOCC measures and protocols should occur with an understanding of the broad context of mental health care delivery in Australia, including the CMO and private sector, and where possible, be consistent with or enable comparison with other measurement and protocols in other parts of the sector
Efficiency	<ul style="list-style-type: none"> Measures and protocols should be as brief as possible Measures and protocols should require little or no training Measures, as a result of copyright, should not attract administration costs Measures and protocols should be easy to score and produce reports that are meaningful to consumers, carers and families
Partnerships	<ul style="list-style-type: none"> The process of collecting and using measures should be designed to support the relationship between consumers, carers, families and services, and minimise adverse effects on clinical interactions and relationships

(Table 3 continues on next page)

Psychometric Properties	<ul style="list-style-type: none"> • There should be appropriate evidence of the validity and reliability of any measures identified for use, and measures should be sensitive to change • Measures and associated protocols should provide a long-term view of an individual and the changes that occur • Measures and associated protocols should provide a developmentally informed view of long-term change
Usefulness	<ul style="list-style-type: none"> • Measures and protocols must have use in the provision of individual clinical care, and measure aspects of the consumer's condition that are important to the consumer • Administration of measures and the associated protocol should support the engagement and assessment process • Measures and protocols must have use at the management/service setting level and at a policy and planning level, to assist with identifying gaps in service provision, as well as enabling monitoring of quality improvement • Measures and protocols should have use for researchers and academics to support clinical and service research • Measures and protocols should have the ability to report at the individual level as well as aggregated for collective reporting • Measures and protocols should enable accessible and timely feedback for consumers, clinicians, families and carers

CHAPTER 3: METHODOLOGY

The NOCC Strategic Directions project aimed to gather a broad variety of input to ensure that any recommendations for the future of the NOCC were practical, and met the varied needs of users.

The primary areas of focus of the NOCC review were the NOCC measures (i.e. the individual tools selected for use) and NOCC protocols (i.e. the rules governing the use of measures, including how, when and where they are used). Implementation and capacity issues to support the introduction and ongoing collection and use of routine outcome measures were also considered. This work assisted in identifying the strategic direction for the NOCC over the coming 10-year period from 2014-2024.

The focus of the stock take and review is on public specialised mental health services. Information developments in the private and community managed organisation sector were out of scope for this project, however an understanding of potential developments in these areas and their impact on the NOCC were considered.

Consultations with the mental health sector were guided by 6 key questions:

PROGRESS TO DATE

1. To what extent have the original objectives of the NOCC been achieved?
2. What factors in (i) the measures (ii) the protocols or (iii) broader implementation and capacity have influenced the extent to which the NOCC has achieved its objectives?

STRATEGIC DIRECTIONS

3. Are the original objectives of the NOCC still current? How should they be amended over the next 10 years?
4. What modifications or additions should be made to (i) NOCC measures and (ii) NOCC protocols to achieve these objectives?

RISKS AND IMPLEMENTATION ISSUES

5. How should we implement changes to the NOCC measures and protocols in ways that maximise benefits and minimise the risks arising from changing a long-established national data collection?
6. What broader changes to mental health service capacity to record, analyse, report and use information should also be noted and addressed through other planning processes?

A broad consultation process was undertaken, with written feedback sourced from states and territories, face-to-face consultations held nationally, and online surveys made available for staff of public specialised mental health services, consumers and carers. A full summary of the national consultation is at Appendix C, and a full summary of the online surveys is at Appendix D.

A review of the published literature on outcome measurement development and collection in Australia has been undertaken to supplement the findings of the national consultations.

In addition, a review of the published literature on the introduction and collection of outcome measures outside of Australia has been conducted, and a summary is included at Appendix E.

Summary data from the NOCC have been included to track the development of the collection and factors that may hinder or promote collection, and a summary of this information is included at Appendix F.

Input from the Mental Health Information Development Expert Advisory Panels, and the specially formed Technical Advisory Group, was key to ensuring that more technical issues such as the psychometric properties of the measures were considered, and that issues relating to the broader objectives of the collection were addressed.

The 6 questions listed above form the basis for this report. More detailed information regarding the methodology is included at Appendix B.

CHAPTER 4: FINDINGS

Written feedback from states and territories, face-to-face consultations, online surveys, national data and material collected in the literature review have highlighted issues relating to measures and protocols, implementation, current use and continued collection of routine outcome measures in Australia.

4.1 To what extent have the original objectives of the NOCC been achieved?

The original objectives of the NOCC were not specifically stated in any documents published at the time of implementation but instead, were embedded in broader statements about the strategic priorities for mental health information development. The objectives therefore need to be derived from the various nationally endorsed documents related to Australia's Mental Health Information Development Strategy [33].

The primary objective of the NOCC was:

- > The establishment of routine use of outcome measures in all publicly funded or managed mental health services, where such measures contribute both to improved practice and service management.

The NOCC was also expected to contribute to the other goals of the information strategy, including the development of:

- > An informed mental health sector, in which benchmarking is the norm, with each service having access to regular reports on its performance relative to similar services that can be used in a quality improvement cycle,
- > A culture of research and evaluation within mental health services and academic institutions that supports reflection on practice and debate about ongoing development,
- > The informed use of casemix to understand the role of variation between agencies in costs and outcomes.

4.1.1. Objective One: Routine use of outcome measures

Objective 1: The routine use of outcome measures in all publicly funded or managed mental health services, where such measures contribute both to improved practice and service management

4.1.1.1. Estimated NOCC participation and coverage

A key question regarding the implementation of routine outcome measurement in specialised mental health services relates to the extent to which the measures are recorded as prescribed by the NOCC protocol.

The protocol mandates that clinician rated measures should be collected on admission, review (every 91 days) and discharge for all consumers in all three mental health services settings (i.e., psychiatric inpatient, community residential and ambulatory mental health services). The protocol also mandates that a consumer rated measure and, for child and adolescent services, the carer/parent rated measure should be offered where appropriate.

The expected scope of the collection is all public sector specialised mental health services. These services report consumer and treatment related information, on an annual basis, to three National Mental Health Minimum Datasets (NMDS): the Admitted Patients Mental Health Care (APMHC), the

Community Mental Health Care (CMHC) and the Residential Mental Health Care (RMHC) NMDS.

For the purposes of this report, information was available from the APMHC – which captures activity occurring in psychiatric inpatient services – and the CMHC - which captures activity occurring in ambulatory mental health services. Information from the RMHC - which captures activity in community residential services – was not available at the time for inclusion in these analyses.

It follows that comparing the numbers of consumers and episodes reported to NOCC with the overall “population” of consumers and episodes reported to each of the NMDS will provide an indication of the extent to which the protocol has been successfully implemented.

The general method for estimating NOCC uptake was to compare the number of consumers and episodes of mental health care with clinical ratings to the overall number of consumers and episodes reported to the APMHC and the CMHC.

These analyses only looked at the clinician-rated HoNOS family of measures (i.e. the HoNOS, the HoNOS65+ and the HoNOSCA) as these are common to all settings and to all collection occasion age groups. Two general indicators were developed:

1. The proportion of consumers and episodes with a HoNOS family measure “completed”. A “completed” measure is defined as a specified minimum number of items (10 of the 12 HoNOS and HoNOS65+ and 11 of the first 13 scales on the HoNOSCA) that have valid clinical ratings. This indicator gives an estimate of the level of “participation” with routine outcome measurement across specialised mental health services; and
2. The proportion of episodes of mental health care with a “matched pair” of HoNOS family measures “completed” at both the start and the end of the episode. This indicator gives an estimate of the “coverage” of routine outcome measurement across specialised mental health services.

Overall findings for the participation and coverage indicators are presented separately for the APMHC and the CMHC, for each of the four financial year reporting periods (i.e. 2007-08 through 2010-11). In these sections, summary findings are reported for all age groups combined. Appendix F reports findings from the CMHC for each of the three age groups (i.e. 0-17 years, 18-64 years and 65+ years).

Estimated NOCC Participation and Coverage in Inpatient Settings

Since “unit record” information from the APMHC was not available for these analyses, only the overall number of separations were able to be compared with those reported to NOCC.

From the APMHC, all completed inpatient episodes that started and finished within each reporting period were examined. The NOCC protocol does not require collection of discharge ratings on the HoNOS measures when the episode lasted 3 days or less. Therefore, the APMHC episodes were divided into two groups: those separations where the length of stay was 3 days or less and those where the length of stay was more than 3 days. The numbers of separations were compared to the number of inpatient episodes of mental health care reported to the NOCC, again dividing NOCC episodes into those 3 days or less or more than 3 days.

The following table shows the number of separations (inpatient episodes) reported to the APMHC and the relative proportions of these with HoNOS family ratings. For the participation indicator, the number of NOCC episodes that had a completed HoNOS/CA/65+ at admission were counted; for the coverage indicator, the number of NOCC episodes that had a matched pair of HoNOS/CA/65+ ratings (i.e. an admission HoNOS/CA/65+ and a discharge HoNOS/CA/65+) were counted.

Table 4 - NOCC participation and coverage indicators for inpatient settings

LENGTH OF STAY	REPORTING PERIOD	NOCC PARTICIPATION: NOCC Admission Rating	NOCC COVERAGE: Matched Admission & Discharge Ratings
< = 3 days	2007-2008	46.5%	n/a
	2008-2009	39.8%	n/a
	2009-2010	46.6%	n/a
	2010-2011	45.8%	n/a
> 3 days	2007-2008	38.2%	34.0%
	2008-2009	37.7%	34.0%
	2009-2010	41.2%	36.8%
	2010-2011	41.4%	37.5%

In terms of participation, about 45% of all inpatient episodes lasting 3 days or less had a HoNOS family rating at admission; approximately 40% of all inpatient episodes lasting more than 3 days had a HoNOS family rating at admission.

In terms of coverage, about 36% of all inpatient episodes lasting more than 3 days had a HoNOS family rating at admission and discharge.

These estimates are reasonably consistent over time, other than the 2008-09 estimates, which are somewhat lower than other years. Coverage as measured by match pairs has improved from 34% in 2007-08 to 37.5% in 2010-11.

Estimated NOCC participation and coverage in ambulatory settings

Estimating participation and coverage rates for community-based mental health services is less straightforward than was the case for inpatient services. Specifically, the APMHC and the NOCC have a common definition of an episode of inpatient care (i.e. an episode is the treatment period from admission to discharge from care). The CMHC does not define “episodes” – instead, the CMHC collects consumer and treatment information for discrete “service contacts”.

However, the unit record CMHC NMDS was available for these analyses and this allowed for analyses of the patterns of service contacts for individual consumers within each of the reporting periods. As an approximation of an episode of community mental health care, a “CMHC Treatment Period” for each consumer was defined as the number of days between the first and the last service contact within the year.

A CMHC Treatment Period is similar to “length of stay” in inpatient settings although there are important differences. In inpatient settings, length of stay is typically adjusted to exclude “leave days” (for example, a consumer goes on leave from hospital over the weekend – the days “on leave” do not count in the calculation of length of stay). In the CMHC, it is not possible to identify periods where the consumer is not actively receiving care (for example a consumer’s mental health status may fluctuate over time from being relatively stable and requiring planned routine review to periods where the consumer’s status deteriorates and requires more intensive treatment).

The patterns of CMHC Treatment Periods vary significantly among consumers. For example, one consumer may have two service contacts in the reporting period and these occur on consecutive days. The CMHC Treatment Period is 2 days. Another consumer may also have only two service contacts

in the reporting period but these occur at the start (1 July 20nn) and the end (30 June 20nn), giving a CMHC Treatment Period of 365 days, or 366 days in a leap year.

Differences in the amount of services consumers received for varying lengths of CMHC Treatment Periods were explored. Preliminary analysis suggested two groups of patients: those who had CMHC Treatment Periods of 1-14 days and those with a CMHC Treatment Period of more than 14 days. Figures 5 and 6 below illustrate the proportion of consumers with different treatment periods and the service activity that is associated with these two groups. Approximately 41% of consumers have less than 14 days of care in ambulatory services but these consumers only account for 6% of all service activity, as defined by the number of contact dates on which service contacts were recorded. In contrast, the 59% of consumers who have more than 14 days of care in ambulatory services account for 94% of the service activity.

Figure 5 - Proportion of consumers with CMHC Treatment Periods of 1-14 days vs. CMHC Treatment Periods > 14 days, 2010-11 financial year

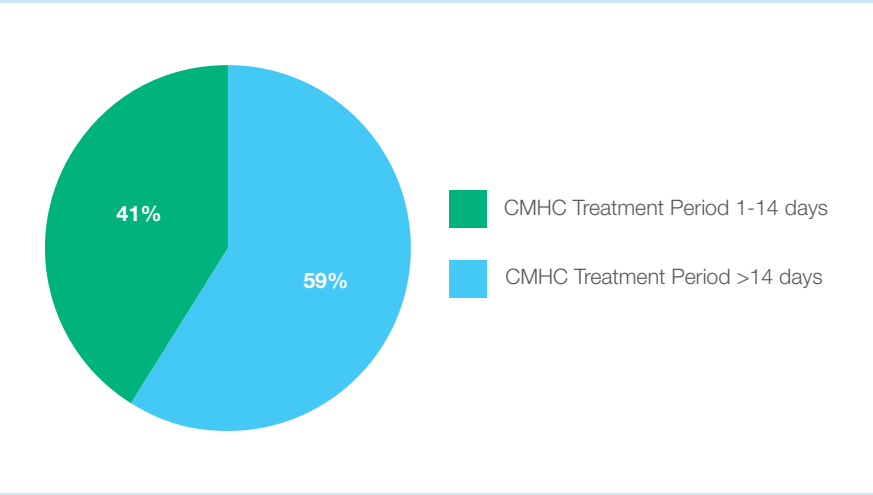
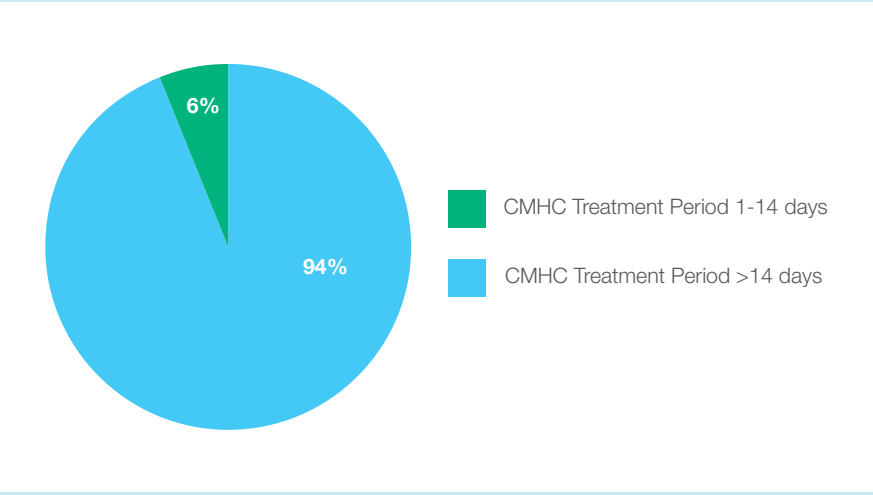


Figure 6 - Total Service Activity accounted for by consumers with CMHC Treatment Periods of 1-14 days vs. CMHC Treatment Periods > 14 days¹, 2010-11 financial year



¹Total Service Activity refers to the number of service contact days, defined as the number of dates on which service contacts were recorded for an individual consumer.

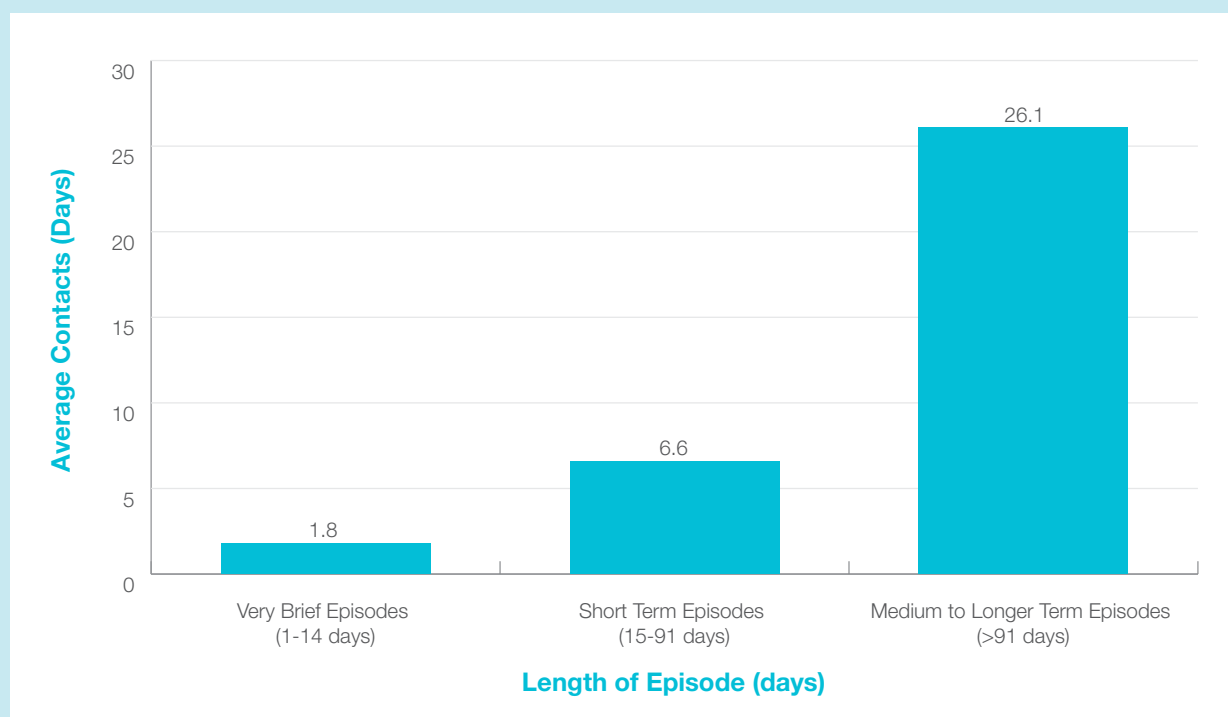
Relating CMHC Treatment Periods to ambulatory episodes of care is further complicated by the different kinds of episodes that are reported with the NOCC data. For example, as noted earlier in Figure 4, when reporting “Clinical outcomes of people receiving various types of mental health care”, a distinction is made between “completed” and “ongoing” episodes of community care. It is difficult to identify these kinds of episodes on the basis of CMHC Treatment Periods since the CMHC NMDS cannot reliably link patient and treatment information across reporting periods.

To approximate these episode concepts, a distinction was made between three categories of CMHC Treatment Periods as follows:

1. “Very Brief Episodes” - consumers with a CMHC Treatment Period between 1 and 14 days inclusive;
2. “Short Term Episodes” - consumers with a CMHC Treatment Period between 15 and 91 days inclusive; and
3. “Medium to Longer Term Episodes” - consumers with a CMHC Treatment Period greater than 91 days.

The following figure illustrates the average number of service contact days for each of these three groups. On average, consumers with Very Brief Episodes received community mental health care on 1.8 days; those with Short Term Episodes received community mental health care on 6.6 days; and those with Medium to Longer Term Episodes received community mental health care on 26.1 days.

Figure 7 - Average contacts days for CMHC episode types, 2010-11 financial year



The following table shows the number of consumers reported to the CMHC in each of these three groups and the relative proportions of these with HoNOS family ratings. For the participation indicator, the number of consumers who had at least one completed HoNOS/CA/65+ in the reporting period were counted. This is different from the method used with the APMHC because some CMHC Treatment Periods begin with either a review or a discharge and end with either an admission or a review. As such, for the purposes of estimating participation, it is more realistic to count the number of clinical ratings regardless of the specific collection occasion type. Similarly, for the coverage indicator, the number of consumers who had a matched pair of HoNOS/CA/65+ ratings were counted. The matched pair could either be an admission-discharge pair (“completed episode”) or any other pairing of admission, review and discharge collection occasions (“not completed episodes”).

Table 5 - NOCC participation and coverage indicators for ambulatory settings²

CMHC TREATMENT PERIOD	REPORTING PERIOD	NOCC PARTICIPATION: Any NOCC Rating	NOCC COVERAGE: Matched Start & End Ratings
Very Brief Episodes 1-14 days	2007-2008	9.6%	2.4%
	2008-2009	10.7%	2.6%
	2009-2010	10.7%	2.7%
	2010-2011	10.3%	2.8%
Short Term Episodes 15-91 days	2007-2008	32.5%	12.3%
	2008-2009	31.3%	11.3%
	2009-2010	35.0%	13.0%
	2010-2011	34.3%	12.9%
Medium to Longer Term Episodes >91 days	2007-2008	45%	34.0%
	2008-2009	45.6%	33.6%
	2009-2010	53.4%	42.4%
	2010-2011	54.9%	44.7%

²For the purposes of some national reports, states and territories separately estimate the total number of unique patient counts within their jurisdiction. The NOCC “business rules” uniquely identify patients at a lower level, namely the mental health service organisation. For the purposes of estimating participation and coverage within ambulatory settings, NOCC patient counts have been scaled proportionately to the jurisdictional estimated unique patient count. In addition, further adjustments to estimated unique patient counts have been undertaken to ensure consistency with the formal technical specification of episode types. Specifically, “completed episode” patient counts have been discounted to remove the estimated proportion of patients who are discharged from ambulatory care to inpatient care; “ongoing episode” patient counts have also been discounted to remove the estimated proportion of patients whose episode was “left censored” (i.e., the episode commenced in an earlier reporting period)

Both participation and coverage estimates demonstrate that consumers in longer periods of care are more likely to have clinical ratings.

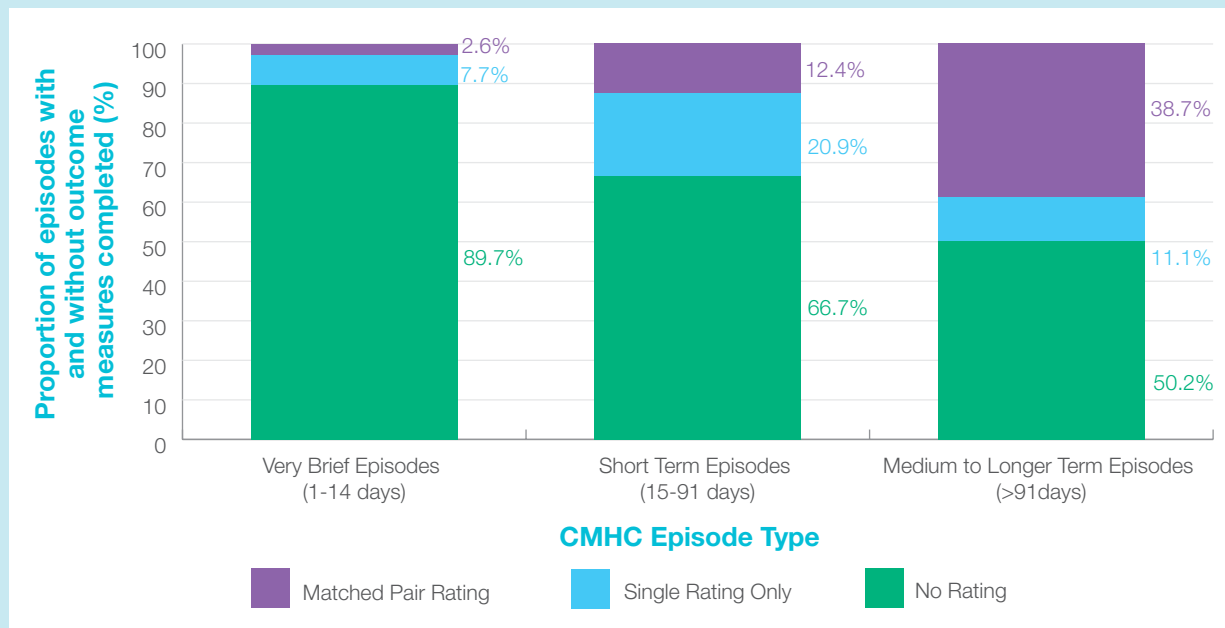
In terms of participation, about 10% of consumers with CMHC Treatment Periods lasting between 1 and 14 days have a completed clinical rating; the rates are approximately 33% and 50% for consumers with CMHC Treatment Periods lasting between 15 and 91 days, and more than 91 days respectively.

In terms of coverage, less than 3% of consumers with CMHC Treatment Periods lasting between 1 and 14 days have a matched pair of clinical ratings; the rates are approximately 12% and 39% for consumers with CMHC Treatment Periods lasting between 15 and 91 days, and more than 91 days respectively.

These estimates are reasonably consistent over time for consumers who have CMHC Treatment Periods less than 91 days. In contrast, for the consumers who have CMHC Treatment Periods greater than 91 days, both participation and coverage rates increased by approximately 10% in the 4 year period from 2007-08.

The following figure, based on the average across the four reporting periods, summarises participation and coverage findings for ambulatory episodes. It clearly demonstrates that longer episodes of care result in greater participation rates of clinical ratings as well as greater coverage rates of matched pairs.

Figure 8 - 4-year national ambulatory NOCC participation & NOCC coverage rates by CMHC episode types³ (2007-08, 2008-09, 2009-10 and 2010-11).



³In this section of the report, the concept of NOCC Participation Rates is equivalent to the sum of the percentage of Single Rating Only & Matched Pair Ratings; the concept of NOCC Coverage Rates is equivalent to the percentage of Matched Pair Ratings Only.

4.1.1.2. Clinical use

Outcome measures are primarily embedded within clinical practice in clinical reviews and to support collaborative care planning with consumers and carers. It has been suggested that they are particularly useful to identify patterns of clinical significance to focus clinical attention, identify agreement or disagreement between the consumer and clinician, and aid in the identification, monitoring and understanding of change [34].

During the consultation process, participants reported that where the outcome measures were being used, they were being used fairly routinely to assist with a wide variety of activities. These included informing care plans, supporting team reviews and decision making (particularly in relation to discharge planning) and informing referrals to other services.

“NOCC data is used at weekly team meetings; it can be useful to assist with decisions regarding flow through the team, and individually to assess how a consumer is progressing.” Clinician Forum

Examples of use to support services engagement with consumers, carers and parents around planning processes, and reflecting on progress over time were mainly found in child and adolescent services.

Responses to the online survey indicated that nurses were the most likely to use the measures to support their clinical practice (77%), compared with psychiatrists who were least likely, with 55% indicating they used the measures sometimes or consistently in practice.

There are also examples of the use of outcome measures to support clinical practice in the literature. The use of outcome measures to support decision-making in ward rounds was outlined by McKay

Good Practice Clinical Use

In the YouthReach South team the young person and clinician complete the outcome measures together and discuss the results. The management plan is informed by both the clinician rated and consumer rated measures and is always signed by the young person. The measures are used to support clinical review and track the young person’s change over time. The focus for this service is consumer participation and the use of routine outcome measures is one way to support this goal.

YouthReach South, South Metropolitan Health Service, WA

and McDonald [35], who undertook a study at Braeside Aged Care Psychiatry, a 16 bed inpatient unit with a multi disciplinary community team. In 2004-05, the aged care psychiatric team began to use outcome data to assist with their work. A 'key item' score on the HoNOS 65+, best relating to the consumer's purpose for clinical care was monitored throughout the episode of care. This is not only discussed during ward round but also forms part of the transfer of clinical information as required and informs the consumer's care plan. The authors proposed that this approach improves the monitoring of the consumer's progress and assists care planning and team communication [35].

Coombs et al. [36] described the use of measures by an adult community mental health team in Bundaberg, with clinical review discussion focused on the clinically significant HoNOS ratings, which became a target for care planning. Taking approximately ten minutes per consumer, staff felt that that the clinical review process became more productive and rigorous than prior to its introduction.

Coombs et al. [36] also described a number of other services using outcome measures in a variety of clinical and service settings. The Sydney West Area Health Service utilises the clinician-rated measures (HoNOS and LSP-16) and the consumer-rated measure (K10+) in a collaborative approach to care planning and goal setting in discussions with the consumer. This enables the clinician to gain an awareness of the consumer's perspective, and provides the opportunity for the consumer to be actively involved in the care planning process.

Prabhu and Brown [37] described the use of outcome measures in an outreach-based rehabilitation program within the La Trobe Regional Hospital Mental Health Services. The measures, utilised in team meetings with the psychiatrist and clinical psychologist, support care planning and decision making [37]. It was noted that whilst the HoNOS was not able to capture clinically significant change in all areas of the program, it provided a framework to plan intervention when used in combination with other clinical practices [37].

4.1.1.3. Service management

The use of outcome measures for service management was reported throughout the consultations to be more limited than their use in clinical practice, with participants reporting that many services had only recently introduced reports with outcomes data at quality and management meetings. In these cases, the use of the data in meetings appeared to be in the early stages of development, with the information being used predominantly to assist with caseload management and to explore consumer profiles for particular services.

“We use it more in clinical practice than service management; it has depended on resources and an understanding of how to use the information in service management. Its use in this area is patchy”
Clinician, Older Persons Forum

Participants reported that management was often more focused on collection rates, than exploring ways to use the information. This is in contrast to the findings of the online survey, in which just over two thirds (69%) of managers reported using outcome measures to support management and monitoring.

Outcome measures have the potential to assist clinical leaders and service managers to guide decision

Good Practice Service Management

As a result of clinical benchmarking in NSW, the non-acute inpatient services found that there was an under-reporting of issues with problem drinking or drug-taking. In exploring this issue it was found these services had limited experience or confidence in diagnosing and managing substance misuse. Services conducted training with staff, and as a result, the identification of substance misuse via the HoNOS increased. The change scores on the HoNOS item 3 also suggested that the training in the management of substance misuse had been effective, with the percentage of consumers with clinically significant scores for this item on discharge being between 15% and 30% fewer than those on admission between 2008 and 2012.

InforMH, Mental Health and Drug Alcohol Office, North Ryde, NSW

making at a service level, as well as providing a means to benchmark against like services and to support evaluation of their services [38]. There are a number of ways that outcome measures have been utilised in this way in Australia, in particular by supporting decision making regarding entry into programs, and assisting decision making for transfer or discharge.

In a mental health service with a number of adult community teams, particular HoNOS scores have been used as a flag for teams to consider transfer options between community mental health teams or discharge from the service. These flags aim to support clinical decision making by the team and promote flow through the service [39].

Outcome measures have also been identified as useful to support decision making by services regarding suitability for referral into the Community Housing Implementation Program [36]. Prowse and Hunter [40] reported the use of LSP-16 scores to determine the appropriate stream for the dialectical behaviour therapy program for people with borderline personality disorder.

4.1.2. Objective Two: Informed use of benchmarking

Objective Two: An informed mental health sector in which benchmarking is the norm, with each service having access to regular reports on its performance relative to similar services that can be used in a quality improvement cycle.

Participants in all jurisdictions reported some level of involvement in benchmarking through the National Mental Health Benchmarking Project and the Health Round Table. In New South Wales and Queensland there have been state wide initiatives to promote benchmarking, however in other jurisdictions, benchmarking at the local level seems ad hoc or only supported for a limited time.

Where local benchmarking is occurring, outcome measures do not often form part of the information used, and some services appear to be benchmarking purely for compliance with collection.

“There is some compliance reporting of outcome measures but it is not used in benchmarking for quality improvement purposes” Clinician, Country Forum

Whilst the participants in the national consultations noted that benchmarking has not yet been consistently embedded in service practices, they considered it an important activity. Participants from smaller specialist areas and rural services noted the need to be able to benchmark across jurisdictions, as they had no peers within their state or territory.

The online survey responses reaffirmed the view that the use of outcome measures to support benchmarking is still a developing area, with just over two thirds (69%) reporting that they do not use the information in this way.

The National Mental Health Benchmarking Project was undertaken between 2006 and 2008, aiming to:

- > promote information sharing between organisations to increase understanding and acceptance of benchmarking;
- > identify the benefits, barriers and issues for organisations in the mental health field engaging in benchmarking activities;
- > understand what is required to promote such practices on a wider scale; and
- > evaluate the suitability of the National Mental Health Performance Framework as a basis for benchmarking. [41]

Good Practice Benchmarking

Queensland commenced benchmarking for their extended care mental health services in 2003. There were five general domains of performance indicators chosen, with the HoNOS and the LSP-16 used as an evaluation indicator. In an evaluation of the benchmarking initiative it was reported that staff in 86% of the services identified issues that needed to be addressed and 64% of services had implemented service improvement projects in response to the information shared through benchmarking [1].

Mental Health Information Unit,
Queensland Health

National benchmarking occurred across the four main program areas of general adult, child and adolescent, older persons and forensic. Whilst outcomes data from the NOCC were used in this process, a range of other key performance indicator data were also explored by the participating mental health services [42]. It was reported that there was variability on a range of indicators explored, that this promoted discussion amongst service providers, and participants reflected on opportunities for quality improvement as a result of these comparisons [43, 44].

Child and adolescent services involved in national benchmarking for instance, explored the cost efficiency of community care by investigating the costs per treatment hour and episode for child and adolescent mental health services, and the relationship with intake severity as measured by the HoNOSCA. Of the six participating child and adolescent mental health services, those with a more severe presentation (as measured by HoNOSCA), were shown to have higher mean and median costs. There was a positive correlation between the number of clinically significant HoNOSCA items and total contact time, which explained 6% of the variance in cost [45].

NOCC data are essential to the construction of three nationally agreed key performance indicators⁴, which are compared across mental health services nationally:

- > Performance indicator 1 - Change in consumer's clinical outcomes, which is the proportion of episodes of care, or partial episodes of care, where there is significant improvement, significant deterioration or no significant change as indicated by HoNOS/HoNOSCA/HoNOS65+ data.
- > Performance indicator 13 - Consumer outcome participation, which is the proportion of ambulatory episodes with completed consumer self report measures.
- > Performance indicator 14 - Outcomes readiness, which is the proportion of episodes of care with outcome assessments completed [46].

4.1.3. Objective Three: Development of a culture of research and evaluation

Objective Three: A culture of research and evaluation within mental health services and academic institutions that supports reflection on practice and debate about on-going development.

There is some evidence that services are using outcomes data for service evaluation and research, although it is not widespread.

The consultation process found that there has been limited use of outcome measures to date in service evaluation and research, although these activities are seen as important areas to embed in services. The online survey confirmed this finding, with just over two thirds (68%) of respondents reporting that they did not use outcome measures for service evaluation or research.

Participants of the consultations gave some examples of the use of outcome measures to evaluate particular programs, such as the Housing and Accommodation Support Initiative (HASI) in New South Wales, and some services reported that they have utilised it for research purposes.

Participants also highlighted that access to the data and resources to engage in evaluation and research were limiting factors in progressing towards this objective. Formation of collaborative arrangements with local universities seemed to assist with this kind of activity.

Examples in the literature show that outcome measures collected routinely in services have been used in the evaluation of services, the evaluation of programs, and to

Good Practice Service Evaluation and Research

The team at Macquarie Hospital provide support to a range of mental health teams; this often involves the production of adhoc reports to support evaluation and service planning. In particular the CAMHS teams have used outcome information to evaluate clinical programs. The HASI program for example used routine outcome measures as a comparison pre admission and post discharge to evaluate the effectiveness of this Housing and supported accommodation program.

Macquarie Hospital, Northern Sydney Local Health District, NSW

⁴ Key Performance indicators for use in Australia's public sector mental health services are based on the National Health Performance Framework (NHPF) and linked to the strategic directions of the National Mental Health Plans.

discriminate between particular cohorts of consumers to better understand service usage and consumer needs.

The HoNOS family in particular have been used as an outcome measure in these evaluations across a number of service settings, including inpatient services [47-49], community services [50-57], residential care [58], drug and alcohol services [59, 60], and in primary care [61]. These evaluations have also been undertaken across the age groups, for example perinatal [56], adolescents [62], youth [57], adult [48, 49, 52-55, 58, 59, 61] and older persons [47, 50, 52]. One study particularly focussed on a service working with indigenous consumers [51].

Particular mental health programs have also been evaluated using the HoNOS as a key outcome measure [37, 53, 63]. For example, Prabhu and Browne [37] studied the Stepping Stones Recovery Program, an outreach based rehabilitation program. They found there was a statistically significant reduction in total HoNOS scores and on the behaviour and symptom subscales after the program, proposing that HoNOS was able to monitor change over time and was an appropriate indicator of program effectiveness.

Gilbert et al. [63], used the HoNOS to evaluate the effectiveness of a self management intervention, delivered as part of routine care in an adult community mental health service in a non-randomised controlled trial. They compared routine care with a nine-session self management intervention in addition to routine care, and found significant improvement in health and social functioning measured by the HoNOS relative to the control group.

Allen et al. [60] evaluated a community-based mental health drug and alcohol nursing intervention. The HoNOS was used amongst a range of other measures (DASS-21, ASSIST and WHOQoL) to assess the effectiveness of the intervention. Significant differences were found on the impairment and social scales of the HoNOS [60].

Nash et al. [57] used the HoNOS to evaluate the benefits of a change in service delivery when an early psychosis program was established. The aim of the study was to determine whether staff training and service restructuring of an early psychosis service resulted in improved clinical outcomes for young people. The HoNOS was used as part of the service evaluation and administered at admission, 3-monthly review and discharge, along with other outcome measures. There was a significant reduction in total HoNOS scores for the group of consumers, however there was no difference in improvements, assessed via HoNOS, when comparing the new service intervention to the prior delivery of service.

Kennair et al. [62] used HoNOSCA to compare the relative effectiveness of an adolescent group day program with typical community based outpatient treatment. Matching for age, diagnosis, gender and initial severity, it was found that those receiving the day program showed both significant improvement and in some areas more improvement than those in standard outpatient care [62].

In an evaluation of the effectiveness of a program addressing social anxiety and its impact on school attendance, HoNOSCA and CGAS were used pre and post intervention. Participants' symptomatic improvement was accompanied by improvements in educational and vocational participation [64].

Comparatively fewer studies have used the LSP-16 [50, 51, 61, 65] and the K10+ [48, 51, 66] as a measure of effectiveness for service and program evaluation. For example, the LSP-16 was used in a study by Meehan et al. [65] to investigate the clinical and social outcomes of a group of consumers discharged into supported accommodation from three long-stay facilities. They found that whilst there was an improvement in the LSP-16 over time, it was not a statistically significant change.

Whilst Nagel et al. [51] used the HoNOS as the main indicator to determine effectiveness of the intervention, the LSP-16 and the K-10+ were also used. This study examined the effects of a culturally adapted motivational care planning treatment in comparison with treatment as usual, with indigenous consumers with chronic mental illness. This study found that there were greater improvements in HoNOS in comparison to treatment as usual, and the LSP-16 and K10+ were significantly correlated to the HoNOS.

There are also examples of use of the K10+ in primary care with the Divisions of General Practice using the K10+ to assess whether people in the Access to Allied Psychological Services (ATAPS) program recorded clinical improvement outcomes [66].

The HoNOS has further been used to discriminate between groups of consumers accessing mental health services. For example Crismani et al. [67] studied the differences between consumers accessing a new walk-in service in comparison to those utilising the acute intervention service. They found that those accessing the new service were similar in symptom severity and functioning to those accessing the acute services, which gave support to both the continued need for the service, and an indication of the level of

experience required to effectively work in the service [67].

Another study examined differences between consumers who were secluded and those who were not in the same acute inpatient unit, finding that those consumers with higher scores on the behaviour, impairment and social subscales of HoNOS were more likely to be secluded [68]. Other studies have examined the differences between rural and urban consumers accessing similar services [69], consumers accessing Assertive Care Treatment (ACT) in comparison to standard case management [70] and between consumers who were referred to an inpatient unit by police and to those from other referral sources [71].

A number of studies have also used routine outcome measures to examine the relationship between consumer's current symptoms and functioning to other consumer related outcomes. For example a study by Clarke et al. [72] examined whether the baseline measures of symptoms, functioning and recovery (as measured by HoNOS, LSP-16, K10+ and Recovery Assessment Scale) were associated with goal attainment (measured by the Collaborative Goal Index). They found the K-10+ was a predictor of goal attainment, and that improvement on the behaviour subscale of the HoNOS was significantly correlated with goal attainment. Other studies have examined the relationship between better engagement with youth and treatment outcomes assessed via the HoNOS and HoNOSCA [73], the relationship between HoNOS-Secure and needs identified via the CANFOR [74] and the relationship between outcomes measured by admission and discharge HoNOS on the length of stay in an inpatient unit [75]. Other studies have looked at the relationship between the measures in the context of the youth mental health agenda [76].

4.1.4. Objective Four: Informed use of casemix

Objective Four: The informed use of casemix to understand the role of variation between agencies in costs and outcomes

Australia's investment in developing a casemix classification for mental health services was initiated in the mid 1990s, culminating in a 'first generation' classification (MH-CASC) that was foreshadowed for further development, and critical in influencing both the development of data items for inclusion in NOCC and its associated protocol [9]. The MH-CASC project recommended a casemix classification model to be introduced within mental health services that included 42 patient classes - 19 for community episodes and 23 for inpatient episodes. Adoption of the classification required routine use of a small number of clinical scales, drawn mainly from the same family of instruments used for measuring consumer outcomes and applied at periodic intervals.

The original intent was that collection and reporting of the data required for further development of the classification would occur during the Second National Mental Health Plan (1998-2003), in parallel with the introduction of outcome measures. As a result, further research and development to improve the classification was suspended over the 1998-2003 period, while states and territories implemented arrangements for the collection and national reporting of the required data.

The current review found that since the MH-CASC study in 1998, little progress has been made in terms of the use of the NOCC measures for casemix adjustment purposes. This is due in part to difficulties experienced in linking the NOCC data reliably to the activity data reported in the various National Minimum Data Sets, as well as uncertainty about the national directions for casemix generally in the broader healthcare environment. At the service delivery level, participants in the national consultations reported that the outcome measures were not being used for casemix adjustment purposes to date, although there were some exceptions. In two forums, participants reported that some community mental health services had begun to explore the use of outcome measures to manage caseloads. The online survey also found limited development in this area, with three-fifths (60%) of respondents indicating that they did not use casemix measures to help understand differences between consumers.

Recent developments under the National Health Reform agreement that have committed all governments to use Activity Based Funding, provide a clear re-endorsement of the prominence that will be given to casemix in the future. The newly established Independent Hospital Pricing Authority will take the lead in this area, and has committed to developing a specific mental health classification. Whilst the role of NOCC data in that classification is not yet clear, Australia's large investment in the NOCC helps to inform the developing classification and funding models in mental health, and at a minimum, these developments can be expected to raise the profile of casemix in the mental health sector.

4.1.5. Summary

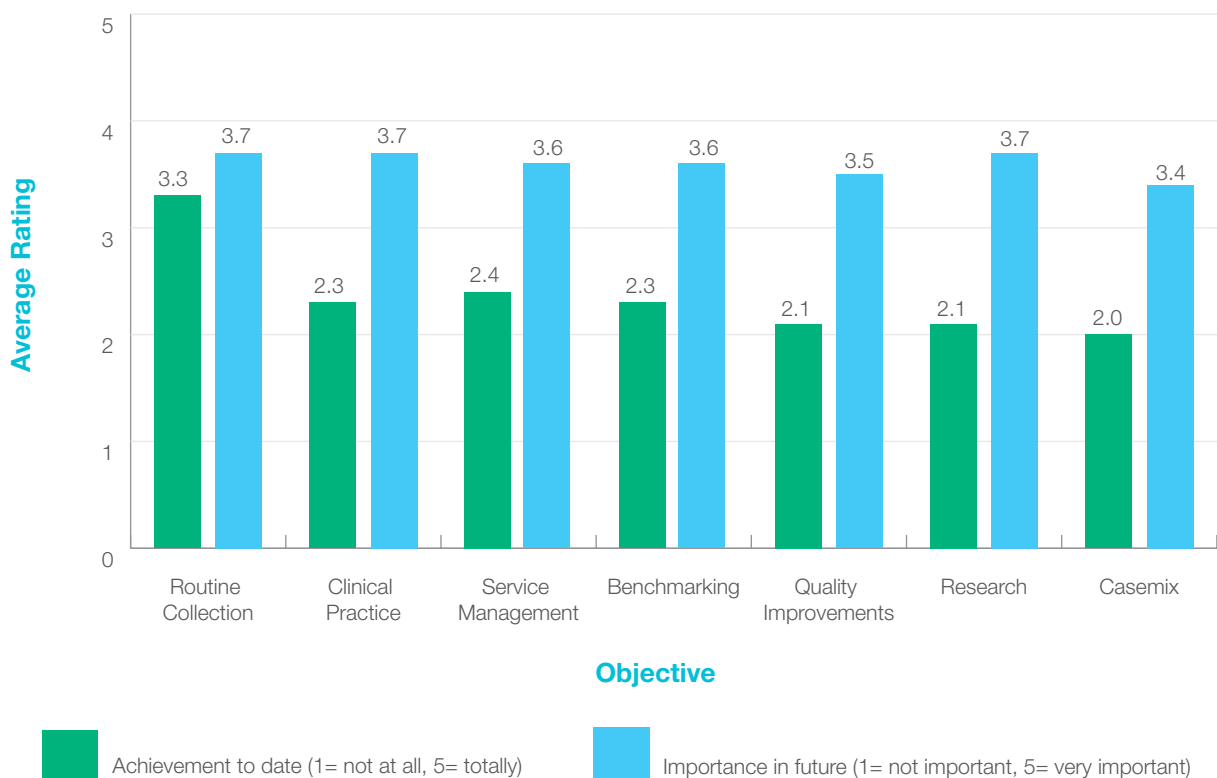
Utilisation of outcome measures is dependent upon this collection, but data collection does not necessarily ensure use. It was evident throughout the consultations that the extent to which the original objectives had been achieved varied across jurisdictions and across services within those jurisdictions. The focus to date has been very much on the collection of outcome measures rather than utility in practice. This is also evidenced in the use of compliance reports in many jurisdictions, with stipulated targets for collection and monitoring. However, it was a consistent theme across the consultations that participants noted progress towards the objectives, particularly in terms of improvements in routine collection, as well as increasing pockets of excellence in the use of the information in clinical practice and service management. There was enthusiasm for the continued development of benchmarking culture and an appreciation of the value of the measures for service evaluation and research. By contrast, minimal use of the measures for casemix development was reported and there was often limited understanding of what this meant.

The respondents to the online survey generally reported that whilst routine collection was becoming embedded in services, relatively equal but much less progress had been achieved in all other areas, as shown in Figure 9. Interestingly, respondents thought all areas or objectives were equally important into the future.

Figure 9 outlines firstly the extent to which services have achieved the original NOCC objectives, and secondly how important respondents thought each of the objectives were, going into the future. To assist respondents with understanding the underlying intent of the objectives, questions were structured around quality improvement rather than service evaluation.

There is improving use of outcome measures within clinical practice and to support service management, however there is still only limited national use of the information to support benchmarking, service evaluation and research and casemix development.

Figure 9 - Average ratings in online survey of extent to which NOCC objectives have been achieved and importance into the future



Examples of good practice are emerging in regards to service evaluation and research, together with some state wide initiatives to further the benchmarking agenda. There has been a notable lack of progress in developing casemix, although this may now be changing rapidly with the advent of Activity Based Funding. The culture within mental health care has clearly changed from ‘can/should we measure outcomes?’ to ‘how should we best measure outcomes?’ with a focus on identifying the outcomes most important to measure and how these outcomes can be improved through the use of measures.

4.2 Are the original objectives of NOCC still current? How should they be amended over the next 10 years?

There was extensive support for the continuation of routine outcome measurement collection in public mental health services in Australia. All participants in 45 of the 47 forums conducted as part of the consultation, supported the continued collection of routine measures. This reflected that consumers, carers, and public mental health staff across a variety of settings and across age groups all saw the need for NOCC. Likewise, the professional organisations that were consulted all expressed the need for the continuation of routine collection in mental health services.

“Still need to be collecting routinely. If it is used well it will help clinicians and managers in practice and will engage consumers in treatment”
Clinician – Rural Forum

“If we don’t have this information we have a problem that we don’t have the evidence regarding effective services and continued need for services”
– Psychiatrist, Royal Australian and New Zealand College of Psychiatry

Participants felt that the routine nature of the collection enabled clinicians to use this information to support and inform clinical practice. Others expressed the need to continue to ensure the ongoing funding, quality and accountability of mental health services. Some felt there were significant risks associated with discontinuing collection at this point, particularly in terms of introducing any similar initiatives in the future.

A relatively small number of participants, in 2 forums and on 2 site visits, suggested that the same type of information might be collected with fewer burdens on services through, for example, a yearly census. Some also questioned whether the investment of time and resources into the implementation of NOCC had resulted in equivalent improvement in clinical practice or service management. The majority of participants in all sessions however, supported the ongoing routine collection of outcome measures.

A number of concerns were raised regarding the breadth of objectives. The focus to date for many services has been implementation and compliance with the routine collection of outcome measures, and their use within clinical practice. Participants suggested that the suite of measures supporting clinical practice and service management may not be the same suite that is utilised for casemix development purposes.

Most participants felt that the objectives were appropriate moving forward for the next ten years, and rather than changing these, the focus should be on how to implement the suite of measures to achieve all identified objectives. Similarly, respondents to the online survey felt that all areas or objectives were equally important into the future (Figure 9).

Views were strongly supportive for minimal changes to the current measures and protocols, with the focus on how best to support services (through better reporting, analysis, information systems and clinical support), to ensure that outcome measures are utilised to their full potential within clinical practice, service management and to support research and evaluation.

There was consistent feedback from the consultations highlighting the need for a greater emphasis on objective one than on the other objectives. Participants felt that the objectives of benchmarking, service evaluation and research, and casemix development would be more easily met with appropriate support for the use of outcome measures in clinical practice and service management. In other words, if clinicians are confident in using the measures, then the quality and quantity of information available would better support these other activities.

One of the key objectives of NOCC should be to engage with consumers, carers and families, providing them with the opportunity to participate actively in care, and it is not currently stated within existing objectives. Moving forward, it is important that the collaboration and partnership with consumers, carers and parents in the collection and use of outcome information be a priority goal.

Indeed the international experts consulted during this project agreed with the need for this primary focus for outcome measurement, highlighting the importance of using information in a clinical setting as the priority with the use of any aggregated data a secondary benefit.

There was considerable support from public mental health services staff, consumers and carers to continue the collection of routine outcome measures. The collection of measures was thought necessary to support and inform practice, to ensure the continued funding of services and to guarantee accountability. Indeed there was also wide support from the growing mental health community managed organisation sector, for a common approach to the development and use of outcome measures across the whole mental health sector.

The NOCC must continue to aspire to the original objectives stipulated, but must also have a strong focus on supporting the active participation of consumers, carers and families in care and must remain relevant in a changing health environment.

Summary

In moving to the future the NOCC must remain relevant in a changing health environment. In particular, the NOCC must support understanding and accountability to ensure that:

- > the consumer experience remains at the centre of care, and services measure and improve the outcomes that matter to consumers and their families;
- > information and reporting developments support the use of the measures across a range of purposes which include clinical use with consumers and carers, but also support its use for service management, research and evaluation and casemix;
- > information and reporting developments remain relevant in an increasingly diverse health system, where a greater proportion of clinical and support services are funded and provided directly by the Australian Government and through CMOs; and
- > Australia's large investment in the NOCC helps to inform developing classification and funding models in mental health.

4.3 What factors in the measures, the protocols or broader implementation and capacity have influenced the extent to which NOCC has achieved its objectives?

Implementation and capacity issues were clearly seen as having a greater impact on whether services used the measures in practice than the measures and the protocol themselves. This issue was expressed by participants in all forums and across all site visits. Issues highlighted as influencing the implementation of routine outcome measures included information systems, feedback and reporting, training, leadership and service culture. Each of these could have strong facilitating or hindering effects on collection and use.

4.3.1. The measures

A number of common themes emerged in relation to key factors that have influenced how well the measures have been integrated into practice.

4.3.1.1. Structured approach

Outcome measures, and the suite as a whole, were viewed by participants as providing an effective structure to support clinical review. The NOCC also provided a structured or standardised way to present information, with a common format and language to assist with communication within and outside the service team.

Consumers and carers had a consistently held view that routine outcome measures provided a structured approach for discussing a consumer's progress and their state of health and wellbeing.

When utilised in practice, participants found value in discussions with a clinician. Unfortunately most consumers and carers participating in the consultations had not been offered a consumer-rated measure and associated discussion with a clinician.

“Useful as a consumer to have this structured approach and discuss outcome and progress with my key worker” Consumer, Consumer Forum

“Should be mandatory to discuss the HoNOS with consumers”, Consumer, Consumer and Carer Forum

“HoNOS helps structure initial assessment interview and gives clearer indication of what is clinically significant, which leads well into care management planning” Clinician, On-line survey

4.3.1.2. Domains

The domains captured by the current suite of measures are broad and generally thought to be relevant to the consumer groups receiving services, and provide cues to guide care planning with consumers, carers and parents.

Whilst many participants noted that key domains were captured by the current suite of outcome measures, others noted that these domains were not always relevant or the most important for particular consumer groups. Some clinicians strongly believed that the current set of measures do not provide any additional or useful information for clinical practice to that which is currently collected in a comprehensive assessment.

“HoNOS doesn’t tell me anything I don’t already know about a consumer” Clinician, Adult Forum

Gaps in the collection were noted, predominately aspects of social inclusion, recovery, carer burden and carer perspective of the consumer (for adult and older persons services) and consumer and carer experiences of care.

4.3.1.3. Psychometric properties

Participants were at times divided regarding the psychometric properties of the measures. Whilst many identified that they were valid, reliable and sensitive to change, there was a small number of participants who raised concerns regarding the ability of the measures to show changes over time. These concerns appeared to come from some who felt the literature was not strong enough yet, and some who had perhaps less knowledge or interest in the published literature.

4.3.1.4. Complementary information and duplication

Whilst many participants noted that one of the key strengths of the NOCC is the complementary information provided by the suite of outcome measures, others felt that there was some duplication. When the issue of duplication was discussed in more detail, however, participants stated that this was not so much about the measures themselves, but rather in relation to their other organisational assessment and documentation requirements.

Certainly, it was frequently noted that a suite of outcome measures covering a number of domains collected from different perspectives was a key aspect driving the use of the NOCC in practice.

4.3.1.5. Cultural aspects

It was frequently noted throughout the consultations, particularly in Queensland and the Northern Territory, that there was concern about the cultural appropriateness of the measures for Aboriginal and Torres Strait Islander (ATSI) peoples and culturally and linguistically diverse (CALD) populations. Indeed, participants often cited this as a reason that the consumer self-report in services for adults and

older persons and the SDQ are not offered to all consumers. However, with the SDQ available in over 40 languages (www.sdqinfo.com), the K10 available in 16 (<http://www.dhi.health.nsw.gov.au/default.aspx?ArticleID=1505#Kessler%2010>) and the HoNOS also translated into a number of languages, it seemed that some of the concerns may have reflected some gaps in knowledge.

A UK study reviewed the influence of culture in the development and use of mental health outcome measures and suggested criteria to improve the reliability and validity of mental health outcome measures used in multicultural contexts [77]. This is consistent with the decision by the Transcultural Mental Health Service in NSW to review and enhance the integrated outcome measure and documentation suite in that state; they have since produced a series of resources to assist clinicians to conduct more culturally appropriate assessments with CALD populations (<http://www.dhi.health.nsw.gov.au/Transcultural-Mental-Health-Centre/MulticulturalMHOAT/default.aspx>). Guidelines for use of the measures with the Aboriginal and Torres Strait Islander population have also been progressed by AMHOCN and QLD health [78], with the need for much broader dissemination to the mental health sector.

Whilst there is evidence of work progressing in the area of culturally appropriate use of the outcome measures, it appears this information has not been disseminated widely across the sector.

4.3.1.6. Impact of measure on collection rates

The type of measure implemented has influenced how well mental health services have achieved the original objectives of the NOCC. The data below demonstrates that it is more likely for the clinician-rated measure to be collected than the consumer-rated measure, it is more likely for the HoNOS/ HoNOS65+ to be collected than the LSP-16 and the collection of casemix measures varies across settings and age groups.

Three consumer-rated measures have been selected for use with adults and older persons. The K10+ is used in New South Wales, South Australia, Western Australia and Northern Territory, while the BASIS-32 is used in Victoria, Tasmania and the Australian Capital Territory, and the MHI-38 is used in Queensland.

The SDQ collects information from parents or carers of children and adolescents receiving services. There are separate versions of the SDQ for parents of children aged 4-10 years, and those aged 11-17 years, as well as a self-report version that can be used in addition to the parent rated version for those aged 11-17 years.

The consumer-rated measures are also not mandated in the way that the clinician-rated measures are expected to be, with the NOCC protocol expecting that consumer-rated measures be offered. There are also protocol exclusions if the consumer is too unwell to be offered the measures, or it would otherwise interfere with treatment. Additionally, consumer-rated measures are not required for adults and older persons receiving inpatient care, and the SDQ is not required when the rating would occur within 28 days of the initial rating.

In terms of clinician-rated measures, the HoNOS suite of measures (HoNOSCA for children and adolescents, the HoNOS for adults and the HoNOS 65+ for older persons) is specified for all three service settings and for all three broad reasons for collection. The only exception is in those instances where a consumer is discharged from an inpatient setting within 3 days of admission, when a HoNOS rating is not required as the rating periods would overlap.

Figures 10, 11 and 12 show the relative collection rates for each HoNOS measure and the comparable consumer-rated measure. The overall numbers of HoNOS suite ratings were pooled across all three settings (admitted patient care, residential care and ambulatory care) and all three collection occasions (admission, review and discharge from mental health care episode) to estimate the reporting rate. It is important to note that the collection rates reported are per to 10,000 of the general population, enabling a picture of change over time. Further analysis would be required to determine collection rates per population seen.

Although the collection rates of the consumer-rated measures have increased over the years, they remain very low for adult and older persons in comparison to the clinician-rated measures. The SDQ is most frequently collected and is collected on around half of the occasions of the HoNOSCA (Figure 10). The data also show that the consumer-rated measure is seldom used in services for older persons.

Figure 10 - HoNOS for Children and Adolescents (HoNOSCA) and SDQ collection occasion rates for consumers aged 0-17 years, 2000-01 to 2010-11



Figure 11 - HoNOS and consumer-rated measure collection occasion rates for consumers aged 18-64 years, 2000-01 to 2010-11

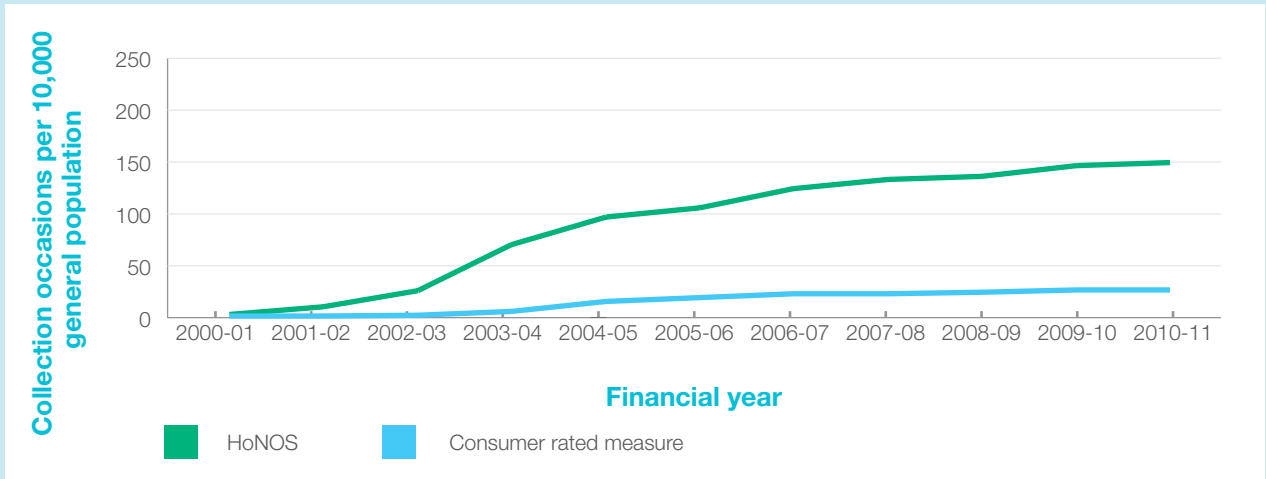
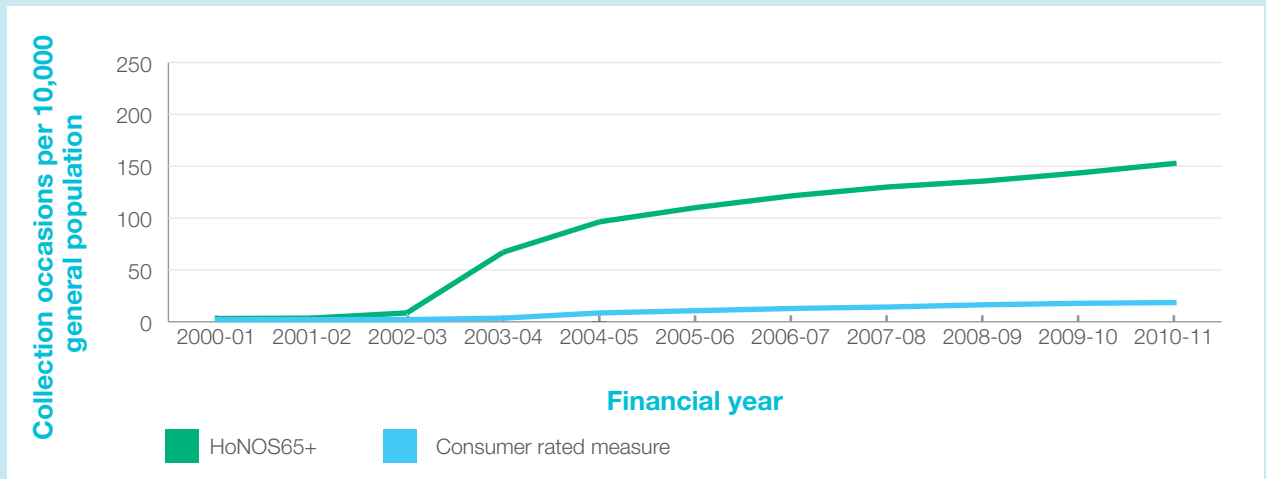


Figure 12 - HoNOS for Elderly Persons (HoNOS65+) and consumer-rated measure collection occasion rates for consumers aged 65 years and over, 2000-01 to 2010-11



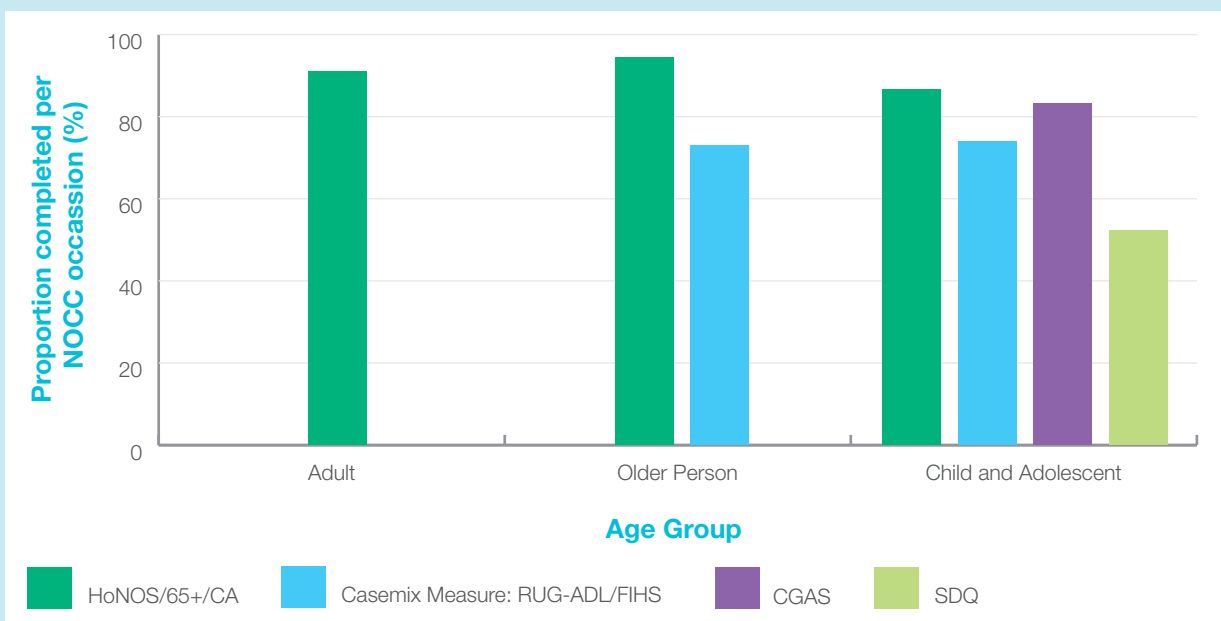
Figures 13 and 14 describe differences in collection rates, as measured by the proportion collected at each NOCC occasion, by measure, across age groups and service settings for the 2010-11 financial year.

The CGAS is specified for collection across all settings in child and adolescent services, at admission and review, whilst the FIHS is mandated for collection at review and discharge. The Focus of Care is required to be collected in Adult and Older Persons services in ambulatory settings at review and discharge. The RUG-ADL is collected at admission and review in inpatient units for older persons consumers.

Figure 13 - Proportion of NOCC occasions in an ambulatory setting with a HoNOS/CA/65+, functioning measure, casemix measure or consumer-rated measure/SDQ collected, by age group, for 2010-11 financial year.



Figure 14 - Proportion of NOCC occasions in an inpatient setting with a HoNOS/CA/65+, CGAS, RUG-ADL and SDQ collected, by age group, for 2010-11 financial year.



The HoNOS/65+ is collected at a higher rate in adult and older persons services in comparison to the LSP-16 in an ambulatory setting. In child and adolescent services, the CGAS is collected at a higher rate than the HoNOSCA in an ambulatory setting, but the collection rate for HoNOSCA is higher in an inpatient setting. Notably the collection for the SDQ (34%) is much higher than that in adult and older persons services, 19% and 13% respectively. Additionally, Figure 14 shows that over half (53%) of NOCC occasions in an inpatient setting have an SDQ collected in child and adolescent services.

The casemix measure (FOC) in ambulatory settings for adult and older persons has a higher collection rate than the HoNOS family, whilst the collection of the FIHS is collected at a lower rate than the HoNOSCA in both ambulatory and inpatient settings. Similarly the RUG-ADL is collected at a lower rate than the HoNOS65+.

4.3.2. The protocol

The protocol was generally seen as supporting the use of the measures in practice, and in particular, a national standardised way of collecting the information was viewed as an important strategy to support its use.

Many participants indicated that a 3-monthly collection was appropriate, met the needs of consumers and service providers, and was useful as it aligned with the National Standards for Mental Health Services review interval. However, there were many participants who felt there was a need for greater flexibility within the protocol in regards to the frequency of collection. The online survey respondents were equally divided in their views on the frequency of collection. Those that indicated preference for a reduced frequency cited this in relation to consumers engaged in mental health services for monitoring via clinics, for longer-term consumers or for consumers receiving services in rural and remote areas with infrequent face-to-face contact.

Although the collection of measures based on the concept of episodes of care may not reflect how all consumers move between services within clinical practice, it was equally acknowledged that the episode of care provides clear and simple boundaries upon which the collection of information can occur.

The main concern with the collection at change of service setting was the unnecessary duplication of measurement, reinforcing the view that outcome measurement is an administrative task rather than clinically relevant.

“Why do I need to collect NOCC when the consumer is going into hospital, sometimes I don’t even see them before this happens? It should just be the inpatient unit that collect it then..” Clinician, Adult Forum

In an analysis of the national data, it was found that clarification was required regarding the rule to exclude the collection of the HoNOS suite of measures in an inpatient setting for episodes less than 3 days duration. Whilst this includes episodes of 2 days or less, it has been found that consistently across jurisdictions this has been interpreted as exclusion of episodes of 3 days or less (which technically translates to less than 4 days). An analysis of the national data found that, since national reporting commenced in 2000-01, there have only been 19 collections of a discharge HoNOS/CA/65+ with an episode length of 3 days (Table 6). From this analysis, it is clear that services and/or jurisdictional NOCC data extractions processes overwhelmingly interpret the 3-day rule as “3-days or less”, i.e. less than 4 days.

Table 6 - Number of inpatient episodes with a valid HoNOS/CA/65+ rating, by length of stay

Reporting Period	Completed Inpatient Episodes with <u>LOS = 3 days</u> and a Valid HoNOS/CA/65+ Rating at Discharge	All Completed Inpatient Episodes and a Valid HoNOS/CA/65+ Rating at Discharge
2000-2001	–	23
2001-2002	–	470
2002-2003	–	1,920
2003-2004	–	9,082
2004-2005	1	14,244
2005-2006	4	17,118
2006-2007	–	20,795
2007-2008	5	21,202
2008-2009	1	21,253
2009-2010	2	22,839
2010-2011	5	24,141
2011-2012	1	17,514
TOTAL	19	170,601

Although the protocol provides clear guidelines for the collection of the measures, the need to include a section on the use of the measures in the protocol was repeatedly raised. This was highlighted by clinical staff, consumers and carers in a number of consultation sessions. Whilst the collection of the measures is improving, the focus is still on compliance, and providing direction within the protocol on the appropriate use of the measures may shift this focus.

The NOCC protocol is also currently silent regarding when collections should commence as an individual enters ambulatory care, and whether the full set of admission and discharge collection occasions are required for all ambulatory care, regardless of the length of the community treatment period. Consultations suggest this has led to significant variation in practice in this area, with some teams collecting measures at first face to face contact, but most doing so after a period in care.

4.3.3. Broader implementation and capacity

Implementation and capacity issues were seen as having a greater impact on whether services used the measures in practice, than the measures and the protocol themselves. Information systems, feedback and reporting, training, leadership and service culture have all impacted on how well services have implemented the measures, and indeed have also impacted on collection rates at a state and territory level.

Much has been written regarding key issues to consider when introducing outcome measures into clinical practice. A number of theoretical frameworks have also been proposed, and there has been some exploration of the impact of various supports on clinician attitudes and use of the data. There have also been a wide variety of initiatives aimed at supporting the introduction and ongoing use of outcome measures.

There are, however, a number of elements that are commonly cited as necessary for the successful implementation of routine outcome measurement and their ongoing use. These include strong leadership and management; ongoing training; effective information and reporting systems for data entry; extraction of data, reporting and providing timely and meaningful feedback; selection of measures with clinical utility; stakeholder involvement and good communication across all levels of the service [79-83].

4.3.3.1. Leadership

Strong leadership and management are essential to support staff in the uptake of new initiatives. Leadership is key at the national, state and territory levels, and indeed states and territories identified consistency of leadership and service restructuring as having an impact on variation in collection rates.

National level

The implementation of the NOCC has been supported at the national level in a number of ways. In particular, the Australian Government Department of Health and Ageing established the Australian Mental Health Outcomes and Classification Network (AMHOCN) in 2003, to provide leadership in training and service development, data management, analysis and reporting [84].

The Australian Government formally established three panels (Child and Adolescent, Adult and Older persons) to provide expert and state and territory specific input on outcomes measurement in 2004, and a fourth, the Forensic panel, was established in 2009. An overarching National Mental Health Information Development Expert Advisory Panel was also established in 2009. The Panel comprises an independent chair, the chairs and deputy chairs of the four population specific advisory panels, consumer and carer representatives, invited experts and representatives from AMHOCN, the Department of Health and Ageing, the Private Mental Health Alliance and New Zealand. All panels provide advice on the implementation and specific information needs of particular target populations and the National Panel oversees this NOCC review process.

In 2011, a review was undertaken, including a high-level desktop audit of deliverables developed by AMHOCN; a review of AMHOCN data management processes; 37 consultations gathering information from 50 key stakeholders across all jurisdictions, clinical specialty groups and the AMHOCN collaborative; and analysis of materials against AMHOCN objectives. The review found that AMHOCN had made substantial contributions towards building an information foundation for measuring outcomes and developing mental health casemix concepts in Australia. There was a consensus amongst stakeholders that AMHOCN had provided effective leadership in supporting the implementation of the NOCC across all states and territories and there was an ongoing need for the services AMHOCN provides. There were however mixed views regarding the effectiveness of the expert panels, with some panels being seen as more effective and involved than others [84].

State and territory level

States and territories reported that responsibility and accountability for the collection and use of data at the state and territory level was often unclear. There were concerns that leadership at the state and territory level was too often focused on compliance, with teams and services being benchmarked only on collection rates rather than understanding issues relating to casemix. Participants felt that this focus further reinforced to staff that outcome measurement is an administrative task rather than providing information that can inform practice and service management.

Some states and territories highlighted that consistency in leadership and service restructuring had impacted significantly on collection rates. The figures below highlight variation in the collection of outcome measures at a state and territory level for New South Wales, Western Australia and the Australian Capital Territory, selected for illustrative purposes only.

Area health service amalgamations in New South Wales in 2004-05 contributed to a decrease in outcomes collection, as services were aligned under new structures. It is important to note that a similar change in infrastructure in 2010-11 did not appear to have the same impact.

New South Wales also noted that the improvements seen in collection rates in 2005-06 and 2006-07, may be due in part to the relative lack of upheaval within area health services, allowing support for outcomes collection and training systems to remain much the same over this period.

Western Australia noted a change in executive leadership in 2005, resulting in a substantial decrease in the collection rate for 2005-06.

In the Australian Capital Territory, it was noted that a change in focus by the existing executive on the collection of measures, rather than a change in leadership, contributed to the increase in collection rates for 2008-09.

Figure 15 - New South Wales NOCC occasion rates 2000-01 to 2010-11

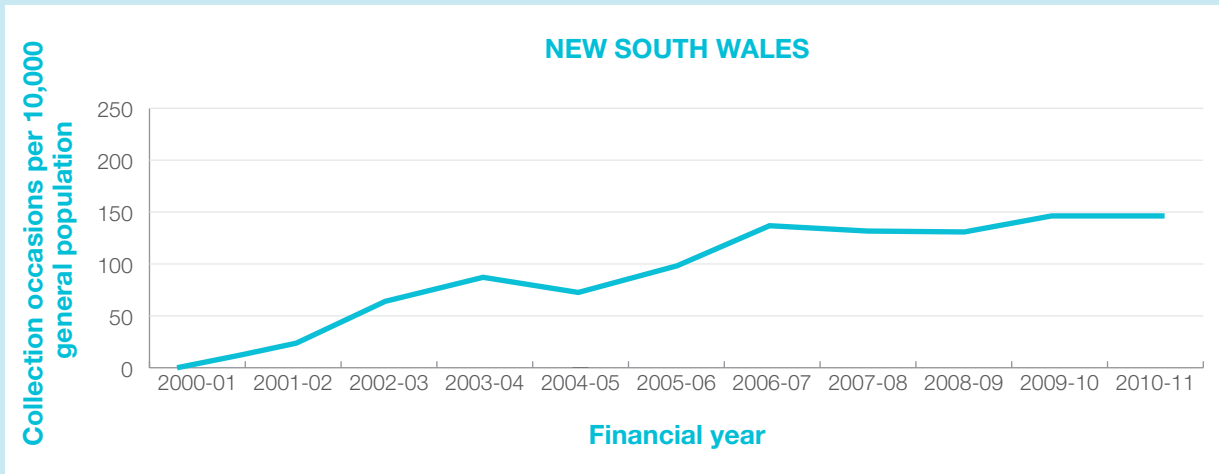


Figure 16 - Western Australia NOCC occasion rates 2000-01 to 2010-11

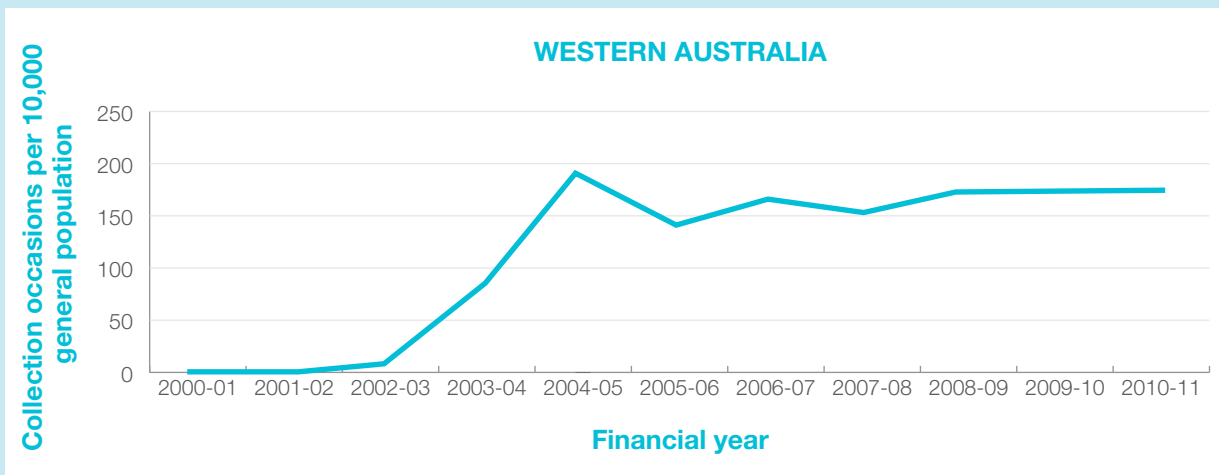
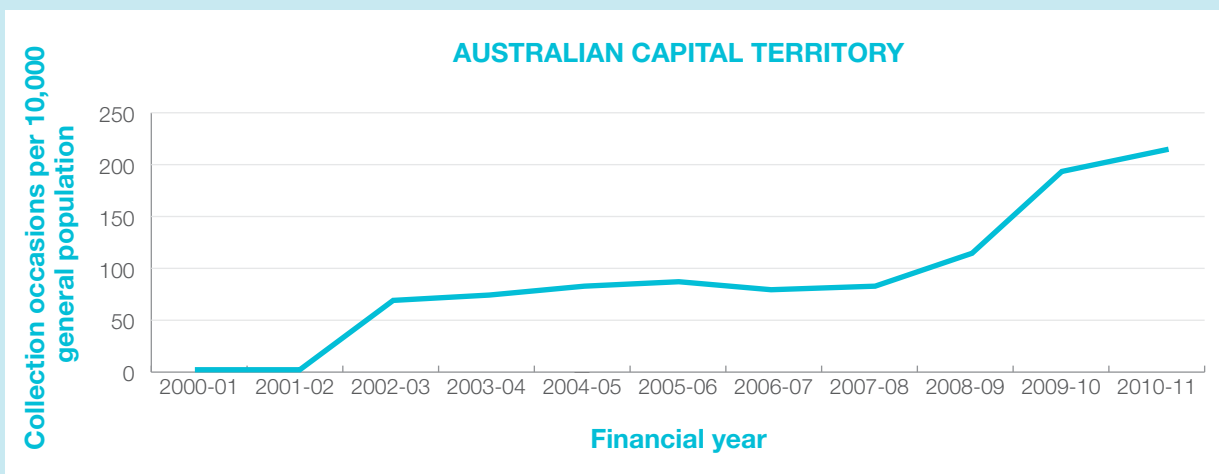


Figure 17 - Australian Capital Territory NOCC occasion rates 2000-01 to 2010-11



Service level

Participants of the national consultations repeatedly emphasised that strong leadership was required to drive the uptake and use of the measures in practice. Many participants raised concerns about a lack of clinical leadership in their services, which acted as a barrier to the individual clinician, the teams and services utilising outcome measures in clinical practice and in service management. Participants thought that there was a high degree of scepticism about outcome measures amongst the leadership group, and often managers were not looking at the aggregated level data nor were clinical leaders promoting its use in team reviews. It was evident, particularly in the site visits undertaken as part of the national consultations, that those services effectively collecting and using outcome measures had strong leadership and executive support to facilitate this.

Participants across jurisdictions and service types held a common view that strong leadership can promote an expectation within service culture that outcome measures will be collected, and the information will be utilised at all levels within the service.

“When team leadership around outcome measures falls away then so does its use in practice” Clinician, Child and Adolescent Forum

Both management and senior clinical staff are responsible for providing leadership within services. Trauer et al. [85] investigated the effect of guidance by senior clinicians on the use of routine outcome measures as a training strategy to improve their use. The type of intervention trialled utilised leadership at a clinical level amongst a range of services, with experienced clinicians attending clinical review meetings to support the team to use outcome measures to assist with decision making and care planning [85]. The study found a significant improvement in attitudes towards outcome measurement following the guidance provided by the clinical leads.

4.3.3.2. Training

National activity - Training

Ongoing training of clinical staff was seen as an important enabling factor in the continued use of routine outcome measures. By the end of March 2013, AMHOCN had delivered training to 10,411 clinicians and managers across all states and territories, and from a range of services. It was reported in the review of AMHOCN in 2011, that this training was highly regarded [84] and this sentiment was reiterated in the national consultations.

A range of resources have been developed both nationally and within jurisdictions to support training. AMHOCN has developed a range of training materials able to be modified for local use, including *Basic Measure Training*, *Rater and Clinical Utility Training* and *Using the NOCC in Team Reviews and for Case Presentation*. An additional publication developed in collaboration with Barwon Health titled, *Whose Outcome Is It Anyway?*, focuses on improving the dialogue between consumer and clinician, and more recently, *Sharing Perspectives: Collaborative Use of Outcome Measures in Clinical Practice*, was developed in partnership with Queensland Health. In the 2011 review of AMHOCN, it was reported that stakeholders unanimously assessed the quality, quantity and effectiveness of the training resources developed and provided by AMHOCN as meeting or exceeding expectations [84].

Online training is available through the AMHOCN website, and covers a review of the rating rules and special considerations when rating, a practice rating measure (The Health of the Nation Outcomes Scales) appropriate to the service setting, and the completion of a knowledge test. In the 2011 review, it was reported that the online training tool was well regarded by those states and territories using it consistently; however, it was acknowledged that some states and territories did not utilise the tool. This may be due to internal training programs being delivered by states and territories, limited awareness or promotion of its use or the belief it was unnecessary, and difficulty with access due to the availability and quality of the computer infrastructure within services [84].

AMHOCN are undertaking a collaborative project with the Royal Australian and New Zealand College of Psychiatry to develop a training module in the use of routine outcome measures for psychiatric registrars.

AMHOCN has been engaged in a number of initiatives aimed at supporting the use of outcome

measures within clinical practice and service management across the country. Notably, the exploration of clinically significant scores on the HoNOS family of measures has provided services with a framework to assist with utilising scores for care planning and decision making processes [86, 87]. Work has also been undertaken on the development of clinical prompts tied to outcomes scores. A large manual has been completed, but its utility has not been realised to date as it is better suited to use through information technology applications [88].

The training provided has evolved over time, with the initial focus on basic training in the measures to support the collection. Training is now focusing on the use of the measures for clinical practice improvement and to support recovery-orientated practices, as well as the use of aggregated data for benchmarking and service development purposes.

State and territory level - Training

States and territories reported employing a range of strategies to deliver both initial and ongoing training across mental health services. Most jurisdictions initially used a train-the-trainer model, whilst Western Australia and Queensland employed staff specifically to deliver training across the state. Queensland implemented a service readiness strategy and delivered follow-up support after the initial training, while Western Australia invested in a clinical training program utilising consultants, and ensured that the NOCC trainers were accredited. South Australia also used a train the trainer model and provided Certificate IV training for those involved in the initial implementation.

Whilst the train the trainer-model was initially considered useful, in the longer-term it presented some problems. Staff retention, and the ability and willingness of management to release staff to deliver training, were cited as ongoing issues across states and territories. In particular, the Northern Territory found the train the trainer model difficult to implement and instead used Quality Through Outcomes (QTO) funding to employ dedicated trainers when these funds were available. The Australian Capital Territory funded a dedicated position, but was unable to find and recruit within the ACT for the position, so a part-time consultant from Queensland was employed and considered a successful strategy.

In New South Wales, the NOCC was introduced as part of a larger project focusing on clinical assessment skills, and a suite of standardised clinical documentation was introduced at the same time. A team of clinicians were involved in this initial training, and although this was seen as an effective strategy, linking the NOCC training with other training (assessment skills and clinical documentation) made the task significantly more complex.

States and territories generally reported that the support from AMHOCN through forums and national training meetings, and the consistency that the training materials provided were important, and the development of vignettes and the promotion of the use of consumer-rated measures were also highlighted as useful strategies. Although online training was seen as an important development, the continuation of face-to-face training was considered essential, particularly for initial training.

The initial NOCC training provided by AMHOCN and the states and territories focused on gaining an understanding of the measures, how to rate appropriately, and in some states and territories, how to record the data in the information systems. Training has evolved since its initial introduction, with a shift in the focus to the use of the measures more broadly in practice. This shift was identified by most state and territories as successful, and important in continuing to drive the uptake and use of the NOCC.

A number of states and territories identified dedicated funding or a lack of recurrent funding as a major barrier to providing training on an ongoing basis. An uneven distribution of resources may be affecting smaller services such as child and adolescent services and services in regional areas that are competing for resources alongside larger services. Limitations on backfilling of staff to both provide and attend training were also noted.

Some states and territories had employed a number of personnel centrally, deployed to train and support clinicians and managers in the services, but most had no dedicated resources for these positions at the time of providing input to this project.

Queensland reported having a number of staff employed to train and support clinicians, with a strong mental health clinical improvement team, a dedicated consumer coordinator position and additional

support for information and systems management.

Western Australia had significant investment initially, with approximately 10 FTE positions supporting training, utilisation in clinical practice and service management, and data analysis. They no longer have dedicated resources to provide training, nor is there a central coordination position as before. The Northern Territory used funding from Quality Through Outcomes (QTO) agreements to support training, and the development of operational and management reporting tools, however investment now is minimal, with only technical support for the NOCC being provided. Victoria had a central, full-time position to coordinate the NOCC from 2004 to 2009, but has not had a dedicated position since. The Australian Capital Territory and the Northern Territory currently have no dedicated resources for training and coordination, and South Australia has no central coordination position, but currently has two dedicated positions (2 FTE) for training local mental health services.

Six states and territories initially involved consumers and carers in the development of training materials, and in projects aiming to increase the uptake and use of routine outcome measures. However, Queensland is the only state that continues to employ a consumer coordinator with a specific brief to improve uptake and utilisation of outcome measures. Queensland was also involved in a joint project with AMHOCN to develop a training package called 'Sharing Perspectives'. This included a training video demonstrating how to use outcome measures in clinical practice, and provide feedback to consumers and carers via a number of vignettes. The package also included associated training activities.

The lack of consumer and carer involvement in training in some states and territories was identified as an issue, with the belief that there might be better buy-in from clinicians and managers if they gained an understanding of the need for collecting and sharing outcome measures from a consumer and carer perspective. The lack of consumer and carer involvement in training was linked to either a lack of funding or the view that their inclusion was a low priority.

Training was also seen to have an impact on state and territory collection rates, particularly for Western Australia and the Australian Capital Territory. In Western Australia, a decrease in collection coincided with the end of the clinical training program in 2006-07, and has not returned to the level seen during 2005-06 (Figure 20).

In the Australian Capital Territory, an increase in the collection rate in 2008-09 can be explained by the introduction of a dedicated position to drive the collection and use of outcomes across services (Figure 17).

Service level - Training

Participants in the national consultations echoed the responses from states and territories. They noted that there was extensive training provided with the initial rollout of the NOCC, which was supported by both AMHOCN and through states and territories. Whilst support for training continues through AMHOCN via online training and through forums and workshops, it was noted that there had been a marked decline in the investment and support at a state and territory level some ten years on.

Many participants thought that the initial focus of training on collection hindered the uptake of the use of outcome measures, and as a result, viewed it as an administrative task. However, with the shift in focus of training to the use of the measures in practice, they felt that there had also been a shift in attitude and use in services. Some participants suggested that training now needed to focus on the appropriate use of measures within service evaluation and research.

Many participants raised concerns regarding the poor understanding of the appropriate use of measures in practice, and the limited understanding by some managers of how to appropriately interpret the information to support service management. For example, some participants raised concerns regarding the expectation by some managers and executives that there be a significantly lower score on discharge than on admission, rather than being sympathetic to the fact that at times no change will be a good outcome and there may be deterioration for some consumers, especially in services for older persons.

Continuing investments in training were considered particularly important by participants of the national consultations. Dedicated resources for this were also thought important, with participants citing

effective examples of dedicated positions made available for training, and to support processes to facilitate the collection and use of outcome measures.

“If you don’t have dedicated resource it is difficult to keep the momentum; Outcome coordinator positions are essential, they give teams assistance to embed the use of OM into clinical practice” Clinician, Clinician Forum

Other evidence - Training

Studies have investigated the impact of training on the attitudes of staff regarding collection and use of the measures. Training strategies, including face-to-face sessions and the use of CD-ROMs to train staff in completion of the measure and in providing feedback to consumers and carers were trialed across eight New South Wales sites providing both community and inpatient care. The researchers found that after training, staff had a more positive attitude towards outcome measures and were also more positive about the provision of feedback to consumers and carers [89]. In contrast, Webster et al. [90] found that a two-hour training session on the collection of the HoNOS within an inpatient unit did not assist in improving inter-rater reliability, and whilst the completion rate of the measures improved, the change was only marginal [90]. They suggested that other barriers including the lack of importance placed on the collection by the clinical leadership, lack of feedback to staff, and no role modelling about the appropriate use of the scores to enhance patient management may have impacted on this result.

4.3.3.3. Information and reporting systems

National level – Information and reporting systems

There are three components of AMHOCN, aligning with each consortium member, and two of these components are responsible for data management, its analysis and reporting.

The data management component for which Strategic Data Pty Ltd is responsible, performs the following activities:

- > a process to receive and acknowledge the NOCC data submitted by states and territories;
- > the development of a data warehouse to store and aggregate the data, including processes for incorporating annual updates and periodic revisions;
- > the preparation of data validation routines (including online validation), running these routines and reporting back to states and territories to resolve identified data quality problems;
- > building the component files that will comprise the analysis datasets, in consultation with the analysis and reporting component; and
- > a process to return the episode-based datasets to states and territories to enable local analysis.

The analysis and reporting component of AMHOCN for which the University of Queensland is responsible prepares the following products:

- > reports and recommendations on data quality from the perspective of outcomes and casemix measurement development;
- > standard reports for states and territories prepared at the organisational level and stratified by peer group that provide comparative data for benchmarking purposes;
- > a series of periodic national publications that present aggregated data and address priority issues in outcome and casemix measurement; and
- > the publication of normative data for use by mental health services in interpreting individual outcome measures and benchmarking exercises.

Reporting of outcomes occurs at a national level, with the first set of standard reports produced manually in 2005. This included all of the data that had been submitted from 2000-01 to 2004-05. These reports were partitioned by age group and service setting, and provided a number of statistical overviews of outcome data.

National reports have been made more accessible via a reports portal, allowing users to search for particular standard tables via the AMHOCN website. This complements the Web Decision Support Tool (wDST), completed in 2006. The wDST uses data cube technology to enable clinicians to compare their own consumers against normative data from 'like' consumers around Australia.

Reports are available on all of the measures that comprise the NOCC, including the HoNOSCA, HoNOS, HoNOS 65+, LSP-16, RUG-ADL, FIHS, SDQ, CGAS, MHI-38, BASIS-32 and K10+ measures. The tool can report total scores, sub-scale scores, individual item scores and change over time. National level outcomes data has also been reported via conferences and in peer-reviewed journal articles.

Reports on consumer outcomes of care (i.e. if there has been a significant change, no change or significant deterioration) can be found in the Report on Government Services, the National Mental Health Report and the COAG progress report. There has been other development work which has considered different approaches to reporting clinically significant change for children and adolescents [13] and adults and older persons [91, 92], including effect size, the reliable change index and standard error of measurement.

State and territory level – Information and reporting systems

All states and territories have developed or adapted information systems, with many having continued to develop these systems to allow for necessary NOCC data extraction and to improve both the quality and usability of the outcomes information over time. These systems and the data collection processes vary widely across states and territories. In 2004, Pirkis et al. completed a stakeholder consultation highlighting differing levels of infrastructure, with states and territories relying on a combination of direct entry and batch entry of paper-based forms [93]. This remains the case in 2013.

Data entry

Queensland initially introduced the Outcomes Information System (OIS) in 2003 to support collection and use as a stand-alone system connecting to other clinical information systems. Mental health information was held in three separate systems, replaced in 2008 by an integrated system known as the Consumer Integrated Mental Health Application (CIMHA). In Victoria in 2007-08, the client management information system (CMI) was upgraded to include task management in functionality, enabling teams to schedule outcome measurement collection as per the national protocol. In South Australia, the Community Based Information System (CBIS) was developed to incorporate support for the scheduling of the NOCC collection and improved reporting functionality.

Outcomes data can be entered directly into the information system in all states and territories except Tasmania; however, due to a variety of reasons, including limited access to computers and administrative problems, staff are still relying on a combination of direct entry and batch entry of paper-based forms. New South Wales acknowledged that, whilst there is increasing movement toward direct electronic entry by clinicians rather than paper-based collection and batch entry by administrative staff, a combination is still used. South Australia has some services including country and specialist services relying on batch entry.

Data extraction and reporting

Western Australia noted that changes to the PSOLIS information system in 2011 caused major difficulties in terms of usability of data and affected the capacity to provide reports to clinical services.

The Australian Capital Territory uses the Mental Health Assessment Generation and Information Collection (MHAGIC) system, and in 2006, discovered a number of coding issues which impacted on NOCC NMDS submissions, local use of the data and utility in clinical practice. Whilst at an individual record level there is limited impact, there are significant problems with aggregated data. Attempts to rectify the 'hard coded' issues have been hampered by a change in vendor support, disbanding of the IT specialist team, support restructure, staff changes and budget limitations. A business case outlining a solution to rectify these issues is being considered; however, the proposal to merge mental health, justice health and alcohol and drug services into one common information system in the Australian Capital Territory significantly impacts on the prioritisation and timing of the implementation of the NOCC and reporting solutions for mental health.

Whole of health information systems

Other states and territories have noted similar moves towards the development of one electronic database for all of health. In South Australia, the Enterprise Patient Administration System (EPAS), a whole of health system, will replace the specific mental health information system currently used. In Victoria, there is work progressing with the Victorian Health Information Repository System (VHIRS) to bring major health data collections together to increase the availability of information for service analysis. New South Wales is also continuing to develop strategies to bring together information from different information systems, with the implementation of a state unique patient identifier (SUPI) to support linkage of the NOCC, inpatient and ambulatory data collections.

Changes to information systems

A number of states and territories noted that changes to, and introduction of, new information systems particularly impacted on the collection of outcome measures.

Queensland introduced a new state wide clinical information system in 2008-09, and this caused a marked drop in the collection rate. The roll out of the system required a significant change to business practices across all mental health service organisations and impacted on all data entry due to both system performance and other change management issues. The system however is now well implemented and embedded in day-to-day service activities, with collection rates trending upwards again from 2009-10.

Between 2003-04 and 2004-05, the mental health information system in New South Wales was updated, with changes to the specifications for extraction of data to the State Health Information Exchange. This resulted in a decrease in the quantity of data being uploaded during this period, and is reflected in the dip in collection rates for New South Wales for these financial years.

Sometimes, changes to information systems have resulted in improvements in collection rates. For instance, in 2007-08 Victoria implemented changes to its information system that introduced prompts for clinicians to collect outcome measures, in accordance with the NOCC protocol. This resulted in a substantial increase in collection rates for that financial year, with increases recorded each year thereafter.

Service level – Information and reporting systems

Consultation participants from all states and territories, and across all forums, felt that the limitations of their information and reporting systems had impacted significantly on the ability of clinicians and services to effectively collect and utilise outcomes information.

For those services using paper-based forms and batch entry, the participants noted that the process of collection and subsequent lag time for feedback impacted significantly on both the individual clinician, and the ability of the service to implement practice improvement and service development strategies.

Many participants using direct entry noted that access to the data and feedback from the system was often problematic. They felt that this was too time consuming, and that advanced technologies such as computer tablets were needed to facilitate the collection. One youth service is currently trialling the use of iPads to collect the K10+ and reported that this technology facilitated engagement with youth, and enabled immediate feedback regarding progress to both the clinician and the consumer.

In terms of reporting, participants noted that timely, meaningful and user-friendly reports supported the use of outcomes data. Participants in some states and territories lacked access to aggregate level reporting, which presented a barrier to the use of the information for service management, benchmarking, service evaluation and research activities. Many participants raised the issue of limited resources being allocated within the service or by the jurisdiction to support the development and ongoing maintenance of the system.

Although most participants in all states and territories have had access to individual level reports, it was thought that simpler graphical reporting produced for use specifically with consumers and carers were needed.

Whilst significant investment was made when the NOCC was first introduced to support the collection of data by states and territories, and the development of information infrastructure, continued

Figure 18 - New South Wales NOCC occasion rates 2000-01 to 2010-11

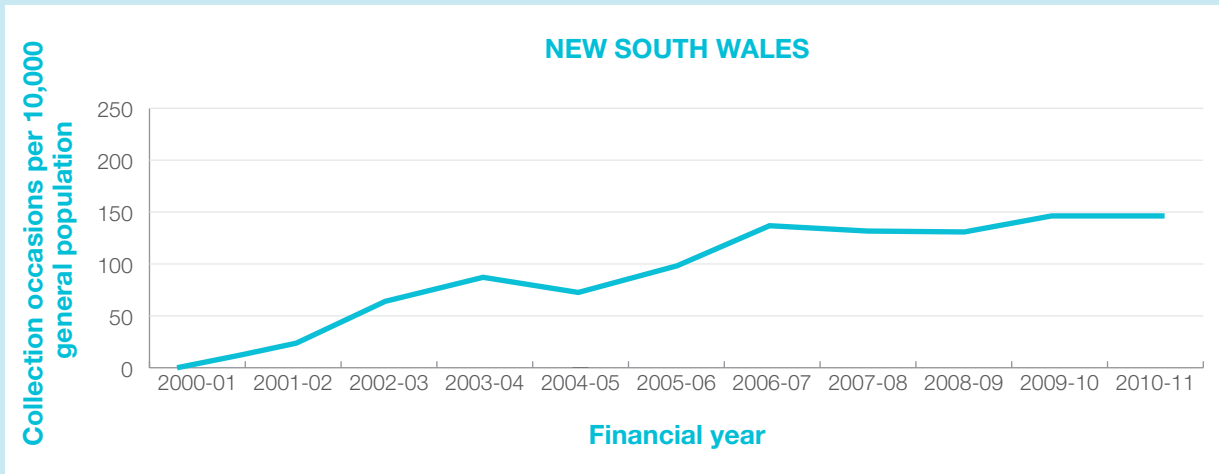
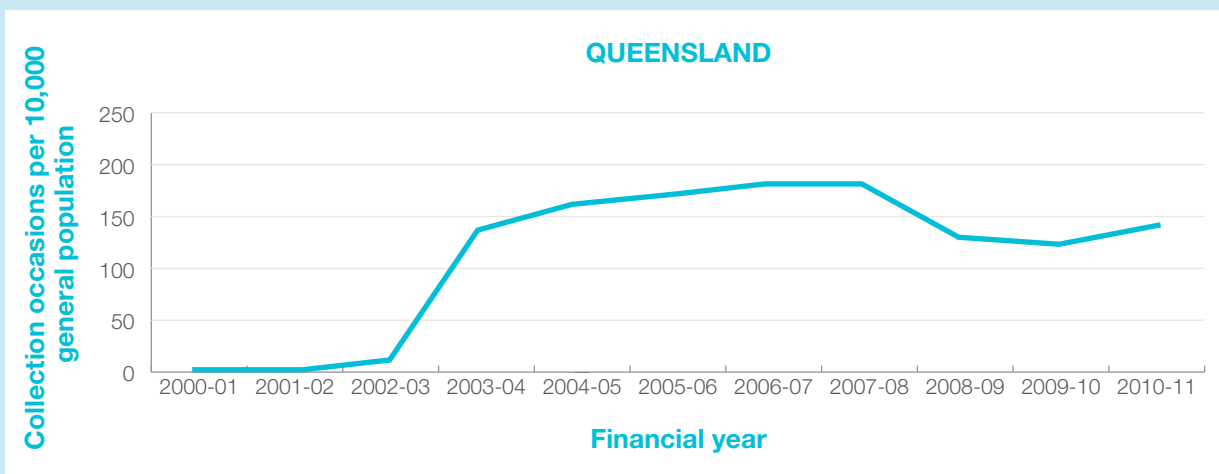


Figure 19 - Victoria NOCC occasion rates 2000-01 to 2010-11



Figure 20 - Queensland NOCC occasion rates 2000-01 to 2010-11



investment by states and territories to maintain and develop those systems was reported by participants as being widely variable. Staff participating in the national consultations felt that the lack of ongoing investment was a major barrier to realising the value of collecting outcome measures, and were therefore less inclined to do so.

“In a world where every child uses a computer we should be able to have computer support for ALL clinicians to standardise our processes, collect this information in the background and get serious about real quality outcomes for the consumer” Clinician, on-line survey

Other evidence – Information and reporting systems

There has been some exploration regarding the effectiveness of the use of technology and its impact on reporting on the use of routine outcome measures. A service in Nova Scotia, a province of Canada, introduced two initiatives that relied upon good systems for the input and extraction of data, namely the provision of timely, relevant and useful reports to clinicians displaying scores for individual consumers and aggregates for caseload, and improved supporting materials to aid in the completion of the measure. Following these initiatives, completion of the consumer self report measure, the Covenant Healthcare System Checklist, rose from 61% to 86% [94].

Furthermore, Close-Goedjen and Saunders (2002) studied the effects of consumer profile reports and a short analysis highlighting areas of consumer need, utilised in a health service in Michigan, USA. This resulted in a more positive attitude by clinicians towards outcome measurement, it did not result however, in improvements in the frequency of use [95].

4.3.3.4 Communication

A number of communication strategies have been employed to promote the implementation of the NOCC. These include various publications, resources located on the AMHOCN website, forums and conferences conducted by AMHOCN, presentations at national and international mental health and general conferences, and publications in peer-reviewed journals.

The importance of outcome measurement has been recognised in National Mental Health Strategy documents from the first National Mental Health Policy and National Mental Health Plan in 1992, with each subsequent plan identifying work in the area of routine outcome measurement as a top priority. These documents are formally approved by all jurisdictions and as such, should provide a clear indication of the value placed upon the NOCC and its continuation.

The AMHOCN website <http://amhocn.org> provides information to jurisdictions regarding training, benchmarking, technical specifications, online reporting and other useful resources.

State-based and national forums and conferences have provided an avenue to promote the use of outcome measures in clinical practice and service management. Journal articles and other publications have communicated the progress, challenges and potential uses of outcome measures to wider audiences across Australia.

4.3.3.5 Culture of the service and attitudes towards outcome measurement

Many participants in the consultations acknowledged that the team or service culture had a marked impact on the extent to which outcome measures were collected and used. The collection of outcome measures was often viewed as an administrative task by the team, and considered a burden to collect. It was seen as an addition to clinical work rather than as an integral aspect of it, and was also viewed as a task to provide information for government departments rather than to support and inform internal practice.

**“Culture within a service is important; if information is seen as important and the process is transparent, there is greater buy in from staff at all levels”
NOCC trainer, National Trainers Meeting**

Some participants commented that clinicians and managers often undervalued outcomes data and did not recognise its link to clinical practice. However, some reported that there had been a shift in this culture, with more clinicians and managers valuing the clinical utility of outcome measures in the development of an accountable and quality service. This shift was, in some cases, thought to tie in with the uptake of benchmarking.

The consultation reflected variation in the culture amongst services, but also highlighted a shift towards a culture where both outcome measures and other information were important to collect and use within practice.

Clinician attitudes towards outcome measurement

A number of surveys and focus groups have been conducted to ascertain the views of clinicians regarding the implementation of the NOCC. Callaly et al. [96] conducted focus groups to determine staff attitudes, with staff members roughly divided in their opinion of the clinical value of the adult suite of outcome measures. Similarly, Meehan et al. [58] found that 40% of clinicians fully supported the collection and use, with 30% openly critical of the routine collection of outcome measures.

Crocker et al. (1998) found that prior to the introduction of NOCC, clinicians in New South Wales were pessimistic about what a greater focus on health outcomes would actually achieve for consumers and the quality of service [97]. A separate paper by Walter [98] described the results of a survey of clinicians following the MH-CASC project, which required clinicians to collect outcome measures. Two thirds (67%) were not in favour of measuring outcomes routinely, even if it meant providing a better service to consumers. Clinicians in both studies indicated concerns regarding burden on time; however, following the MH-CASC project, about half (52%) of the clinicians involved in that project reported that it had not been too time consuming and one quarter (25%) found it less onerous than originally thought [97, 98].

Following the implementation of the NOCC, a wide variation in attitudes to outcome measurement continued to be reported. Trauer et al. [99] found that ease of use of the measure was significantly higher in staff that had been trained, and that staff who had been exposed to feedback found the measures more valuable and easy to use. Burden on time and competing work demands were cited as the most common concerns [58, 96]. Those positively regarding the suite of measures and their use reported them to be clinically valuable in measuring progress over time, and improving the dialogue with consumers [96].

Whilst clinician attitudes vary considerably regarding the importance and use of outcome measures, there is some evidence to suggest that this may be improving. A Queensland follow-up study compared clinician attitudes eight months post implementation to five years post implementation of the NOCC. It found a significant increase in perceived benefits from outcome measures over this period [100]. Whilst the authors noted that some clinicians in the study still questioned the value of outcome measures, attitudes were slowly changing.

Internationally, similar issues are raised in regards to clinician attitudes and the subsequent use of outcome measures within clinical practice. In a United Kingdom study, it was found that the majority of psychiatrists working in the National Health Service rarely used standardised measures, although they are mandated for use. HoNOS was more likely used for assessing social functioning and quality

of life and needs, rather than measuring clinical change over time and the diagnosis, and was only used occasionally or routinely by about one in twenty psychiatrists in these services [101]. Similarly, an American study in San Diego County in California found wide variation in clinician attitudes, ranging from clear opposition regarding effectiveness, scepticism about the methodology, to full support for outcome measurement [102]. However, the majority of respondents indicated that, whilst they may collect the outcome measure, they had never used these. In contrast, staff in two child mental health services in Stanford, California found that practitioners generally had positive attitudes towards outcome measures and thought them important, particularly for research and program improvements rather than for clinical practice [103]. The difference may however, be due to the fact the Stanford services were university-based clinics where training was also undertaken. Although, focussing on child orientated clinicians, Hatfield and Ogles [104] noted that younger therapists and those in public settings were more likely to use routine outcome measures [104]. They found that 54% of surveyed staff were using outcomes compared with the 23% found by Bickman et al. [105] some four years prior.

Whilst the above studies clearly discuss clinician attitudes toward outcome measures, there are also many advocates and opponents to the introduction of outcome measures presented in the literature. Lakeman [27] wrote of his concerns regarding the introduction of the NOCC, proposing that there is little evidence that it could capture individual differences, that aggregated data had limited validity and that it did not fit well with the recovery framework. Happell [106] also raised concerns with the current NOCC suite, proposing that the measures did not reflect the areas considered of most relevance and importance to consumers of mental health services. Although Slade has been generally positive regarding the use of outcome measures, he has questioned the selection of measures and the process of implementation used in England, mandating the use of measures on their introduction, (which is comparable to the approach used in Australia) compared with the approach in Ontario, Canada, in which stakeholder buy-in was the first priority [107].

Consumer and carer perspectives towards outcome measurement

In contrast to clinical staff, consumers and carers were generally positive about the use of outcome measures in clinical practice and would welcome opportunities to discuss the measures with their clinical team.

Consumer and carer participants of the national consultations felt that the routine outcome measures provided a structured approach for discussing the consumer's progress and their current state of health and wellbeing. There was strong support for the continued use of outcome measures. Consumers wanted to be engaged in the process and appreciated the opportunity to complete a self-rated measure and to discuss this with their clinician. There was also consensus that, irrespective of what measure was being used, consumers wished to have the opportunity to provide their perspective and, more generally, to participate in decisions around their care plan. Carers also wanted the opportunity to participate in this process and provide their perspective.

Responses to the online survey showed that 60% of consumers had been offered a consumer-rated measure to complete, but just half had discussed this with a clinician. Two thirds of those who had not been given this opportunity felt that doing so would be very useful.

The perspectives of consumers and carers of mental health services have been explored in two Victorian studies. These showed that consumers and carers are, on the whole, positive regarding the use of a consumer-rated measure, and welcome the opportunity for discussion that it presents, however they reported that clinicians in services are not using the measures to promote dialogue [108, 109].

Guthrie et al. [109] found that 80% of the consumers interviewed reported they had been offered the BASIS-32, and, of those 95% completed it. Just under half (45%) stated that their case manager had discussed the responses with them. Just under one third (31%) were aware that a HoNOS and a LSP-16 were completed by the clinician, and only 35% of these consumers indicated that these measures were discussed with them. Consumers in this study indicated a positive response to the use of BASIS-32, with three quarters (76%) indicating that they thought it helped the case manager understand them better, and two thirds (66%) indicating that it resulted in better care.

Black et al. [108] reported very similar results. Three quarters (76%) of consumers had been offered a BASIS-32, with 92% stating they would complete it if it was offered, and 62% had discussed the results with their case managers. Four-fifths (81%) believed that it helped the case manager to understand them better, with 70% believing it had led to better care. One third (34%) were aware of the HoNOS and LSP-16 and only half (52%) of those that were aware had results discussed with them, with 92% of those believing the discussion was useful. The researchers also found that workshops in which consumers, carers and clinicians participated were regarded as positive in shifting clinician attitudes towards the use of routine outcome measurement.

Happell [106], reported that in contrast to the studies above, consumers were not particularly positive about the use of routine outcome measures in services. They were unsure of the real purpose of their use, and felt that these could be used to determine access to service or funding of services. Study participants suggested that the focus of the measures was on symptoms rather than on factors valued by consumers. It should be noted however, that the cohort comprised just eight consumers, compared with the larger studies by Guthrie et al. (2008) of 50 consumers and Black et al. (2009) of 67 consumers.

A study in the United Kingdom [110] gauged the views of consumers regarding a broad range of measures. Participants were recruited through the Mental Health Research Network, four national mental health charities and two local user groups. The pre-requisites for selection were having experienced mood disorder and/or psychosis, and accessed secondary care mental health services. Twenty four measures were examined in total, including the HoNOS, disorder-specific tools, general mental health measures, measures for medication side effects, functioning and quality of life measures. Although this was a study with just twenty five participants, it provided some useful insights from the consumer's perspective. Of particular note is that participants felt it was not so much the content or length of the tool that was the issue, but the quality of the clinician or researcher using it that was important [110]. Another study in the United Kingdom found that parents and carers of young people attending a London child and adolescent mental health service were positive about outcome measures, and were keen to see a combination of measures used [111].

4.3.4. Summary

Implementation and capacity issues were clearly seen as having a greater impact on whether services used the measures in practice than the measures and the protocol themselves. Issues highlighted as influencing the implementation of routine outcome measures included information systems, feedback and reporting, training, leadership and service culture. Each of these could have strong facilitating or hindering effects on collection and use.

The measures themselves were felt to have a number of positive attributes that have facilitated their use in practice. For example, they are considered simple and relatively short, cover core domains, have sound psychometric properties, are complementary in nature and provide a structure for communication with the consumer and their carer or parent and the service team or with other providers as necessary.

The protocol was seen as supporting the use of the measures and national reporting, and reinforcing national standards regarding the regular review of consumers. Despite limitations in applying it to all pathways of care a consumer may experience, it was found that the basic structure of the protocols is the best available option.

4.4 What modifications or additions should be made to the NOCC measures and the NOCC protocols to achieve these objectives?

4.4.1. Views on the measures

4.4.1.1. Child and adolescent services

There are four measures mandated for use with children and adolescents. These are the Health of the Nation Outcome Scales for Children and Adolescents (HoNOSCA), the Strengths and Difficulties Questionnaire (SDQ), the Children's Global Assessment Scale (CGAS) and Factors Influencing Health Status (FIHS).

Most participants working in child and adolescent services found the HoNOSCA provided information that could inform practice, with only minor changes suggested to the glossary. Almost three quarters (73.6%) of respondents to the survey supported the continued use of the HoNOSCA.

The SDQ was widely supported, with 62.7% of online respondents supporting its continued use. It was suggested that possible adaptation for use with Aboriginal and Torres Strait Islander (ATSI) peoples and culturally and linguistically diverse (CALD) populations needs to be considered into the future.

Opinion regarding the CGAS and FIHS were more divided, with some suggesting the information collected by FIHS in particular, could be collected in other ways. This was also reflected in the online survey, with much less support, and one third of respondents felt that these should not remain in the suite of measures.

A number of gaps in the suite were identified, namely a lack of a measure to cover infants and pre-schoolers aged 0-3 years, a self-report tool for primary school aged children, and a specific youth measure.

4.4.1.2. Adult services

Three clinician-rated measures are mandated for use with adults. These are the Health of the Nation Outcome Scales (HoNOS), the Life Skills Profile (LSP-16) and the Focus of Care (FOC), while another three measures have been selected by states and territories for use as consumer-rated measures. The Kessler 10 (K10+ version with four additional questions) is used in New South Wales, Western Australia, South Australia and the Northern Territory. The Behaviour and Symptom Identification Scale (BASIS-32) is used in Victoria, Tasmania and the Australian Capital Territory, and the Mental Health Inventory 38 item version (MHI-38) is used in Queensland.

Participants from adult services expressed strong support for the HoNOS to remain in the collection, with most acknowledging that the domains were appropriate, but that there needed to be some work on item 8, 'Other psychological symptoms', and minor changes to the glossary. Some participants suggested that the HoNOS was too generic and the flexibility to use more specific diagnostic measures with different consumers would make the collection more clinically useful. Similar support for the continued use of the HoNOS was reflected in the online survey, with 63.4% of respondents indicating it should remain in the suite.

It was acknowledged that the LSP-16 was not widely used in services currently, except perhaps in some rehabilitation settings. Some items were thought to have value, but the language was considered outdated and it was not strength based. It was acknowledged that a functioning measure was needed within the suite of outcome measures for adults. Whilst there was less support for the continuation of the LSP-16, 53% of online respondents thought it should remain in the suite.

Throughout the consultations it was consistently reported that the FOC was not used routinely in clinical practice in adult services, and the relevance and clinical utility of the measure was consistently questioned. Just over half (55.4%) of respondents to the online survey however proposed it should remain in the suite, with many stating they did not understand its purpose in the collection.

4.4.1.3. Services for older persons

Four clinician measures are mandated for use with older persons. These are the Health of the Nation Outcome Scale for Elderly People (HoNOS65+), the Life Skills Profile (LSP-16), the Focus of Care (FOC) and the Resource Utilisation Groups - Activities of Daily Living (RUG ADL).

Participants of services for older persons mostly agreed that the HoNOS65+ covered appropriate domains and was useful in practice, with some suggestions for development of item 8 and changes to the glossary. Support was also reflected in the online survey, with 69% of respondents indicating it should remain in the suite of measures.

The LSP-16 was seen as particularly inappropriate for older persons, however there was acknowledgement that a functioning measure was necessary. Interestingly, 54% of respondents to the online survey thought it should remain in the suite, although this still reflected less support than for the HoNOS65+.

Participants reported that whilst FOC was collected it was not being used in either clinical practice or service management across most services for older persons. This finding is consistent with the feedback from participants working in adult services.

Participants did not have particular issues with the RUG-ADL, but it was not widely used, with clinicians reporting that they relied upon a variety of other measures for this type of information. The Older Persons MHIDEAP reported that the RUG-ADL measured an important aspect of functioning in older people, not adequately measured within the HoNOS 65+. They advised that the RUG-ADL should be used as an outcome measure (that is also collected at admission to care) until the aspects of functioning measured within it were replaced by a new measure.

4.4.1.4. Forensic services

The HoNOS, LSP-16 and FOC are mandated for use with forensic consumers. Whilst the HoNOS was seen to cover domains important in forensic services, the LSP-16 was not thought to be particularly relevant for the forensic population, reflected in its minimal use.

It was suggested that there were additional issues important for this group regarding risk, security and legal issues, which were not being adequately collected in the current suite of outcome measures. Participants from forensic services suggested that these additional domains may require another measure.

Participants in forensic services agreed with their peers in adult and older person's services, in that although the FOC is collected, due to its brevity, it is rarely used in services, and there was no suggestion for change to the measure or any alternative considered.

4.4.1.5. Consumer measures: Adult and older persons

Consumers and carers participating in the national forum at which all three selected consumer-rated measures were discussed, stated a desire for one consumer self-report tool to be used across Australia, providing continuity for consumers who may be re-locating, or receiving services across borders. They also felt that regardless of the consumer-rated measure used, it is the routine offering to consumers and the opportunity to discuss the measure with the clinician that is most important.

Almost two thirds of respondents from states and territories that had selected the K10+ and the BASIS-32 (64% and 66% respectively) as their preferred consumer-rated measure thought that the current consumer-rated measure should remain in the suite. There was less support for the current measure remaining in the suite from respondents in Queensland, where the MHI-38 had been selected as the consumer-rated measure.

Participants suggesting that the consumer-rated measures should be removed from the suite noted issues with the length and complexity of the measure that was selected in their state or territory.

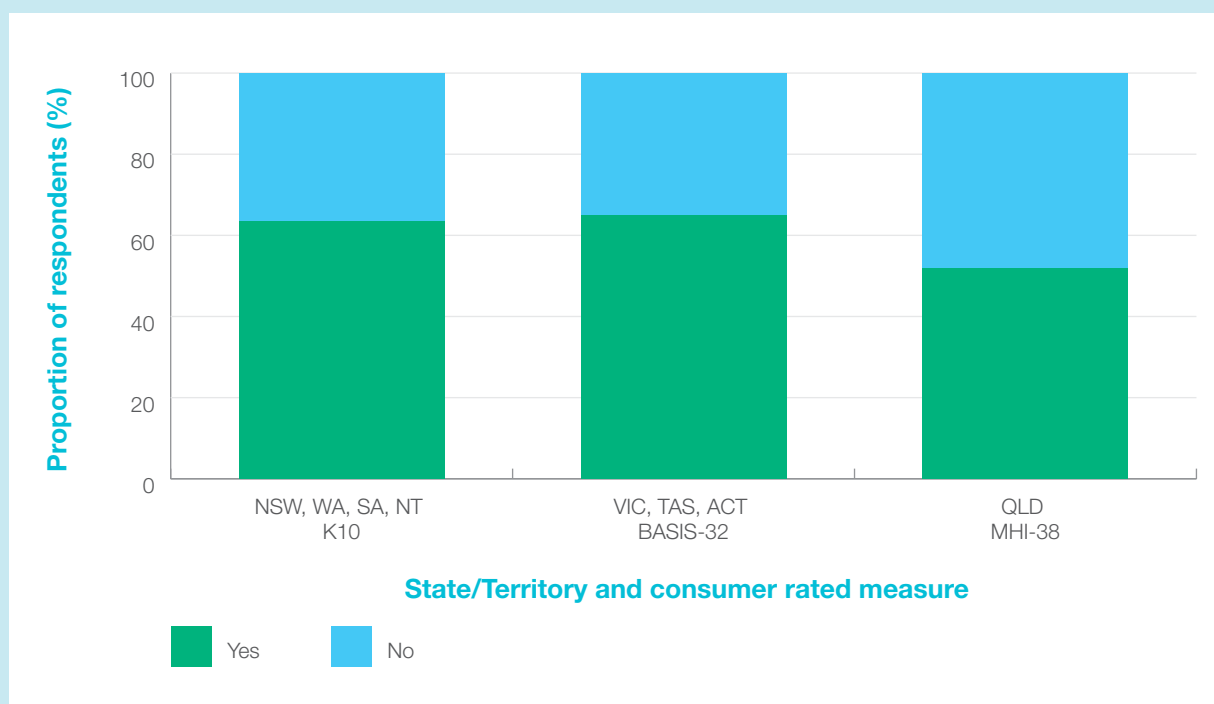
When asked about issues regarding the current consumer-rated measure, respondents from jurisdictions using the K10+ highlighted deficit language fitting poorly with the recovery agenda, the general nature of the consumer-rated measure and a desire to use a measure that was more symptom specific. In contrast, those working in jurisdictions using the MHI-38 stated that there were issues with the complexity and the repetitive questions, and indicated that a shorter, simpler tool would be better.

Similarly, those working in jurisdictions using the BASIS-32 stated that length was a significant issue and that a shorter and simpler tool would be preferable.

Throughout the face-to-face consultations, a number of issues were raised with the consumer-rated measures. The K10+ had the advantage of being relatively short, but was thought to miss some important domains. The BASIS-32 and the MHI-38 were consistently identified as too long for use on a routine basis, but the BASIS-32 covered a broader range of domains thought to be useful by many participants.

In addition, it was noted that consumer-rated measures pose some difficulties in services for older persons, where many consumers have cognitive issues. The Geriatric Depression Scale was repeatedly suggested as a simpler alternative.

Figure 21 - Proportion of respondents who indicated that the consumer rated measure should remain in the suite



4.4.2. Future measures development work

There were a range of other areas that participants thought were important to consider measuring in the future. These included, but were not limited to, social participation, education, employment, housing, quality of life and satisfaction with services.

“It is essential to measure what is important not what is easy” Professor Mike Slade

Consumers and carers participating in the online survey identified what they considered to be four priority areas for collection in addition to the areas already covered by the suite of outcome measures. Recovery, including aspects of hopefulness, self-esteem and empowerment were identified as a top priority by two thirds of participants. Community Living/Social Inclusion (housing, employment and social connectedness) and carer’s/parent’s experience of, and involvement in, care were also identified by around half of respondents as top priorities. Interestingly, public mental health staff had a similar result, with staff from adult services most likely to indicate recovery and social inclusion as a priority into the future, and those from services for older persons most likely to indicate carer burden along with social inclusion as a priority for measure.

Participants in the consultation also felt that there should be a measure for carers, but were not in agreement as to whether this should collect information on the carer’s health and wellbeing (also covering burden), carer’s experience of care and/or the carer’s perspective of consumer health and wellbeing.

4.4.3. Views on the protocols

4.4.3.1. Change of setting

The change of service setting collection was the issue raised most frequently throughout the consultations and in the online survey. Currently, when a consumer is admitted to an inpatient setting, there is a requirement for the collection of measures at discharge from the ambulatory setting and on admission to an inpatient setting. Rather than collection at both points in this transfer of care, participants suggested that there should be one collection, undertaken by the inpatient service at admission.

Although there is the same duplication of measurement at discharge from the inpatient setting and subsequent admission to an ambulatory service, it was proposed that the ambulatory service should still collect outcome measures at this point, but that it may be more meaningful to collect these at 2-4 weeks post discharge.

4.4.3.2. Frequency of collection

There were varying views regarding the frequency of collection. The online survey also found that views were divided in relation to frequency, with just over half of respondents (51%) stating that a 3-monthly review was appropriate. In general, those working in settings with longer lengths of stay thought that 6 monthly review for consumers who have longer lengths of stay may be more appropriate.

It was also raised that the LSP-16 in particular, could be collected less frequently than the current 3-monthly collection interval.

Some staff from child and adolescent services suggested that collection intervals could be based on the number of contacts, however it was acknowledged that this would not work for all service settings.

Consumers and carers were consulted regarding the current collection frequency and most stated that 3-monthly collection intervals were appropriate for services, but there was considerable work needed to ensure that this did occur, particularly in regards to the offering of the consumer-rated measure. This frequency was thought to allow the tracking of a person's progress over time for the consumer and their carers or parents.

4.4.3.3. Services currently out of scope

A number of issues were highlighted by participants regarding services or service types that are currently out of the scope of collection, namely brief ambulatory episodes and consultation liaison services. The collection of a consumer-rated measure for adults and older persons receiving care in an inpatient unit was also considered.

Brief ambulatory episodes

There were divided views regarding the collection of outcome measures for brief ambulatory episodes, also reflected in the online survey, with 53% of respondents proposing these episodes be included within the scope to allow the large group of consumers who are accessing services and not currently captured to be described. It was suggested that if included in the scope, the collection should be restricted to one brief measure rather than the entire suite of measures. Participants who felt that brief ambulatory measures should not be included suggested it would increase the collection burden without adding any value to the service.

Staff from a number of services in different jurisdictions reported that their services were already routinely collecting the clinician-rated outcome measures for brief ambulatory episodes. This was regarded as good clinical practice and thought to provide useful information for the clinician, treating team and service managers.

Consultation liaison

Participants were divided on whether the collection of outcome measures for consultation liaison services should be in or out of scope. The online survey found that 51% of respondents supported the inclusion of consultation liaison services within the scope of collection, to provide the opportunity to describe a group of consumers not currently captured within the NOCC. A large part of the work of child and adolescent services for example, fell into this category, and staff felt it important to describe these children, who may have as complex needs as others seen through the service.

Participants advised that there is the potential for duplication of collection if consumers are also receiving services from another mental health team. This is often the case in community forensic services.

Just as in the case of brief ambulatory episodes, participants suggested that, if consultation liaison services were in scope, then the collection could be restricted to one brief measure rather than the entire suite of measures.

Consumer-rated measure in inpatient settings

There were divided views from staff of services for adults and older persons regarding the appropriateness of offering a consumer-rated measure within an inpatient setting. Some indicated that this would add to collection burden and preferred collection to only occur in the community setting. Others thought that it could be offered according to a person's length of stay, that it should not be mandatory and some thought that it should not be offered at admission, but at a later time.

New South Wales has directed that the consumer-rated measure be routinely offered to adults and older persons receiving inpatient services and a number of services in other jurisdictions are choosing to do the same.

Consumer and carer groups indicated that they would like the consumer-rated measures offered, and if initially declined, for it to be offered again prior to discharge.

Participants from those jurisdictions with the longer consumer-rated measures indicated that a shorter consumer-rated measure may be more appropriate in an inpatient setting.

4.4.3.4. Responding to new service developments

Measures to use with youth

The need for an appropriate set of measures and protocol for the youth population was repeatedly raised in both child and adolescent and adult sessions throughout the consultation.

Currently services working with youth use both child and adolescent and adult sets of outcome measures, with some having to change the set of measures when the youth turned 18 years old. There was however, no agreement on the measures to use for this group. Participants were divided between using the current adult set and the current child and adolescent set. Others proposed different measures, and some indicated that the most appropriate measure might vary according to the developmental phase of the young person.

A study by Brann et al. [76] compared the HoNOSCA and HoNOS for the youth age group. Members of the Adult and Child and Adolescent Expert Panels rated 4 vignettes using both instruments and found that the total scores and sub-scales scores of the measures were strongly correlated, with the HoNOSCA resulting in more severe symptom scores than the HoNOS. The authors concluded whilst either measure could be used, HoNOS will tend to underestimate severity of symptoms in youth, and may not capture the importance of family relationships [76].

Service settings

Some participants raised concerns regarding the current service setting definitions, suggesting that with the development of a range of sub acute service settings, the protocol for a particular setting may not be clinically relevant.

4.4.3.5. Broadening the scope of the protocol to include use of the information

The need to include a section on the use of the measures in the protocol was highlighted by clinical staff, consumers and carers in a number of consultation groups. Whilst the collection of the measures is improving, the focus is still on compliance. Providing direction within the protocol for the appropriate use of the measures may shift this focus.

Consumers and carers particularly noted the need to explicitly state the requirement to discuss the measures with consumers and where appropriate, carers and families to help drive better engagement in services.

4.4.4. Summary

There was strong support for the continuation of the HoNOS family of measures, recording the greatest collection rates and evidence of utilisation that support the goals of NOCC. It was proposed that minor changes to particular items and clarification of the glossary would improve use. There was less support for the use of other clinician-rated measures.

The lack of a nationally consistent, consumer-rated outcome measure for adults and older persons was seen as a significant impediment to implementation. No current measure was considered ideal, however the Kessler-10 plus (K-10+) has the highest uptake of the measures, allows normative population comparisons, is used by a range of other providers of health care and its brevity gives the opportunity for other areas to be included in a self-report measure into the future. The SDQ was strongly supported for continued use by child and adolescent services.

While there was a strong desire to ensure collection burden of measures was stable or reduced, there were additional areas identified as important to consider measuring in the future, including social participation, education, employment, housing, quality of life and satisfaction with services. Forensic services in particular also highlighted risk, security and legal issues as important considerations. A number of gaps in the suite were also identified, namely that no measures covered infants and pre-schoolers aged 0-3 years, that a self-report tool for primary school aged children would be useful and a measure for carers was important.

There was clear agreement during the consultation process that a carer's perspective was important to include within NOCC, however the type of information to collect, for example the carers' health and wellbeing (also covering burden), carer's experience of care and/or the carers' perspective of the consumers' health and wellbeing was not defined. While all are important, the scope of NOCC appears amenable to the inclusion of the last perspective.

Participants raised a number of issues in relation to the protocol and asked that, if changes are to be made, that it be altered to deal with the following:

- > collection protocol for various changes of service setting;
- > routine collection of the consumer self-report in adult and older person inpatient services; and
- > an explicit statement that one of the aims is to provide consumers with the opportunity to participate actively in their care, as well as broadening the scope of the protocol to include information on how to use the outcome measures to engage with consumers, carers or parents.

They would also like to see the following issues resolved:

- > scoping in or out of brief ambulatory episodes;
- > scoping in or out of consultation liaison services;
- > flexibility in the timing and frequency of the collection where this places additional burdens upon staff and/or consumers due to either very short or very long lengths of stay; and
- > responsiveness to new service developments, such as sub-acute care.

Modifications or additions to the NOCC protocol must continue to be focused on the consistent national measurement of the symptoms and functioning of consumers at key points of their care within public mental health services. Additionally, they must support the active participation of consumers, carers and parents in such care. This does not minimise the importance of collection of other information to advance the understanding of, and improvement in, mental health care in Australia. Rather it defines what can be achieved through the NOCC.

4.5 How should we implement changes to the NOCC measures and protocols in ways that maximise benefits and minimise the risks arising from changing a long-established national data collection?

Any changes to the NOCC must build upon the investments to date and utilise a sound change management process. Indeed much has been written regarding elements that are essential to introducing and sustaining change in health organisations. Common elements include strong leadership and management, communication regarding the vision, feedback on progress, engagement with and buy-in from all key stakeholders, and appropriate resourcing in terms of time, funding and expertise [80, 81, 112].

When NOCC was first introduced it was a significant change to specialised public mental health services, and as such large investments were made, particularly in information infrastructure, establishing reporting and providing training across the sector. As we move to the future other aspects of supporting and sustaining change need to be considered alongside those that have been established, for example leadership, culture change, sustainable resourcing, and creating and communicating a vision for change.

The consultation with international experts also stressed the importance of managing organisational change effectively. The need for strong leadership, the recognition and use of early adopters, the use of peer experts and a focus on consumers, marketing to the sector, the provision of timely feedback, ensuring clear and simple analyses that clinicians and consumers can use, but importantly having a clear strategy for implementation, which encompasses these elements, were highlighted as essential.

4.5.1. Focus on consumers and carers

Clinicians, consumers and carers thought that the focus going forward needs to be on how the use of outcome measures supports effective engagement with consumers and carers. Work to modify existing measures, or to develop new consumer and carer-rated measures must be undertaken in collaboration with consumers and carers to ensure relevance. More importantly, consumer and carer input is needed in relation to marketing changes to the mental health sector, determining strategies for completion of the consumer-rated measures, development of any additional content within the protocol around the practicalities of engaging with consumers and carers, and for training activities.

“Need for consumers to drive the uptake of measures” Consumer, Consumer Forum

The provision of consumer and carer feedback to clinical staff in support of the measures can be a powerful driver for change, as was shown in one of the services that was visited. Such a focus and this kind of feedback can reinforce the meaningfulness of the collection and counteract feelings by staff that it is just an administrative burden.

International experts also agreed there was a need to focus on the consumer rated measures as NOCC is developed into the future. It was identified that there has been greater focus on the clinician-rated measures to the detriment of using the consumer rated measures to date in Australia. The key issues of ‘engagement’ with consumers and establishing a ‘culture of feedback’ were cited as imperative to successful use of consumer rated measure by Dr Miller and Dr Seidel.

4.5.2. Invest in training

Ongoing investment in training was considered a key component in implementing any changes or modifications to the NOCC. Participants felt that consideration needs to be given to the standardisation of training, resourcing key positions within jurisdictions with continued national support, and exploring links with universities to incorporate training into undergraduate courses.

Participants were keen to see training of staff at all levels of the organisation, with an emphasis on the use of the information in regards to all of the key objectives. It was thought both important and useful to include consumers and carers in training sessions.

It was also highlighted by international experts in outcome measurement that the use of early adopters in training programs and marketing to clinicians is important to consider. These key early adopters provide a way to attract interest in others without the coercion of managers.

4.5.3. Keep communicating

Clear communication regarding the purpose and rationale for change is imperative to support the implementation process, and to engage effectively with staff, consumers and carers.

It was clear that the focus for change needs to be on making the measures more clinically useful rather than on routine collection. The current focus on compliance in some services and jurisdictions needs to shift to the use of measures to support clinical practice, service management and to actively engage consumers and carers.

4.5.4. Develop clinical prompts

Clinical prompts on completion of the measures would assist in supporting the clinical utility of the measures and drive uptake and use in practice.

Whilst continued support for training in the collection and particularly the use of measures was identified as important, participants raised the additional need for prompts to guide care planning and support decision-making. Linking prompts to scores on the measures was seen as an effective way to better embed the use of the outcome measures in practice. Clinical prompts were also seen to provide an opportunity to assist clinicians, particularly less experienced clinicians in their practice.

“No interpretation of the score given when it is printed out to take to a clinical review. That would support the clinical utility”, Clinician, Rural Forum

4.5.5. Develop information and reporting systems

It was consistently stated that if the NOCC was to be more successful into the future, current information systems needed to be more user-friendly, with efficient ways to both enter and extract data.

The use of iPads, PC slates or other hand held devices would provide the capability to both effectively capture the information and engage with consumers and carers. Other options, such as the ability to self-rate online and the use of mobile applications, were also proposed. These technologies need to be explored, and provide a particularly relevant engagement strategy for working with young people.

Participants were also keen to see the development of flags on the information system, which may serve to prompt the collection and review of measures and assist managers in monitoring data collection and support clinical decision-making. Whilst flags are built into some information systems, this is not the case in all jurisdictions.

“Consideration should be given to ways of directly entering the data and electronically based self-report by clients is needed urgently” Clinician, Child and Adolescent Forum

Reporting

In terms of extraction of information, the ability to produce graphs in real time was seen as essential to support the use of the information both clinically and at a service management level. In addition, many participants noted that the current reports for their jurisdiction were not user-friendly. It was also considered important to have an effective feedback system facilitating access to the data at all levels within the mental health service.

Time to change information systems

Estimates of the time required for implementation, including system redesign planning and necessary approvals, could be anywhere from six months to two years. Estimates could not be made for some jurisdictions where there were whole-of-health information systems being introduced or developed.

4.5.6. Resource change

Participants expressed the need for appropriate resources to implement any changes to the suite of outcome measures and the protocol. These resources are required to fund changes to information and collection systems, for training and for tailored reporting and analyses. Participants noted that some of these areas required sustained funding.

Additional resources are also necessary for the development of clinical prompts, and to invest in marketing changes and the use of outcome measures more generally within services across the mental health sector.

4.5.7. Collaboration between services and central management

Participants were keen that the jurisdictions and central management areas engage early with services to give sufficient notice of changes, and to ensure necessary resourcing and assistance with the implementation of any changes. These collaborative partnerships were seen as a critical component to successfully implementing change.

4.5.8. Summary

Changes to the NOCC must build upon the investments to date in research and development, training, information systems, feedback and reporting systems, leadership and culture change. Given the review noted the variability of the presence of the outcomes of this investment, and the impact of this upon the implementation of routine measurement, it is essential that the sector continues to address these issues in implementing changes to the NOCC.

Changes to the NOCC must also balance the understandable desire to measure a wide range of important issues with the reality that any routine collection must not impose an excessive collection burden. Collection burden is not only relevant to staff, but also to consumers and carers who are likely to be receiving requests for feedback from multiple sources. Clinical and service utility must be seen as a prerequisite for adequate data to be available for other uses.

Communication regarding accepted changes and their rationale will be essential. This must not only ensure that the sector is informed, but support collaboration between clinicians, service leaders and jurisdictional management in implementing these changes.

Finally, developing a strong focus on the use of routine measures to support the active participation of consumers, carers and parents in care is not only appropriate in terms of improving care, but a recognition that it is essential that consumers and carers are active participants in the evolution of the NOCC.

4.6 What broader changes to mental health service information capacity to record, analyse, report and use information should also be noted and addressed through other planning processes?

Participants identified the need to consider changes to the broader health information systems. For example, in some states and territories the current stand-alone information systems are moving to whole-of-health systems. This will have significant impacts on the ability of the mental health sector to effectively and efficiently implement any changes to the current measures and protocol.

The availability of a national electronic health record also needs to be considered in planning for any potential changes.

The introduction of Activity Based Funding (ABF) requires consideration, and many consultation participants raised concerns about how outcome measures and the NOCC more generally related to Activity Based Funding. Whilst some raised concerns in regards to the potential for gaming, others asserted that the use of aspects of the NOCC to guide ABF may have a positive influence on the uptake and use of the measures. Indeed, many participants suggested that the NOCC would provide a better classification system for ABF than diagnosis alone.

Some participants, particularly those working in the areas of information and quality management, raised the potential for the NOCC or aspects of the NOCC to be included in a National Minimum Data Set (NMDS), suggesting that this would further drive the uptake and use of the NOCC in mental health services.

Many participants raised the issue that, whilst the focus of the NOCC has been on outcome measures, there is not yet a consistently agreed upon set of intervention codes. Many expressed the need to consider outcomes in conjunction with the interventions used. In terms of the effectiveness of the NOCC into the future, the link between outcomes and interventions is important for both improvements in clinical practice and service management. This can also provide a solid base for service evaluation and research.

“Missing part of the information is intervention that follows the assessment” Quality Manager, Information and Data Management Forum

The mental health sector comprises not only public specialised mental health services, but also private providers, private hospitals and a growing non-government sector. Participants across all sessions raised the issue that development, planning and the implementation of any changes need to involve and consider how best to collaborate with key partners in the mental health sector and ensure a consistency of approach to outcome measures where appropriate.

The strategic vision of the NOCC has been informed by, and hopes to inform, the broader information needs of a mental health system encompassing an expanding range of service providers and structures. Mental Health Commissions and structures implementing Activity Based Funding are particularly relevant in this latter category.

Developments in broader health information systems may either facilitate or hinder changes to both the NOCC, and other mental health related information collection. Such work should facilitate linkage of the NOCC with intervention codes and other national mental health data sets. This would appear most appropriately progressed through the establishment of the NOCC as part of a national minimum data set.

CHAPTER 5: NOCC 2014 – 2024: Recommendations

5.1 Future directions

The recommendations outlined in this section have been developed under the auspices of the National Mental Health Information Development Expert Advisory Panel (NMHIDEAP), which was established to provide clinical and technical advice to the Mental Health Information Strategy Standing Committee (MHISSC) on issues and priorities that guide the development of the national mental health information agenda.

They are the result of the consideration of the findings of extensive consultations with the sector, including face-to-face sessions with staff, consumers and carers of public specialised mental health services and community managed organisations, online surveys of staff, consumers and carers, and analysis of National Outcomes and Casemix Collection (NOCC) data.

Drafts were given to the Child and Adolescent, Adult, Older Persons and Forensic Mental Health Information Development Expert Advisory Panels (MHIDEAPs) for comment, and the advice of a specially formed Technical Advisory Group was also sought on several occasions.

The standard set of individual consumer outcome and casemix measures, and associated collection protocol for routine use in public mental health service delivery, aims to be feasible, relevant to consumers and align with developments in other parts of the mental health sector.

5.1.1. Goals of routine outcome measurement 2014 – 2024

The following goals were agreed upon for routine outcome measurement in 2014 -2024.

Routine outcome measures for 2014-2024 should provide information for the following priority uses:

1. For individual consumers, parents/carers and clinicians to support clinical care, dialogue and assessment of progress
2. For service managers and leaders to support reflective care, effective management and the identification and exploration of variations in clinical practice or outcomes
3. For policy makers, planners and funders to support planning and performance monitoring, improve understanding of variations in processes and outcomes between services, and support the further development of casemix in mental health
4. For researchers and academics to support clinical and service research
5. For the community to support knowledge of and accountability by mental health services

5.2 Recommendations and rationale

In total, 25 recommendations were identified. These relate to the continuation of the collection, its vision and scope, particular changes to the measures, research and development activities, and ways in which to improve reporting and support implementation of change. These recommendations have different resource implications for the Commonwealth and states and territories, different timeframes in which implementation could be achieved and different impacts on the various stakeholders in the mental health sector. No prioritisation of recommendations has been proposed, a process of prioritisation and the development of an accompanying action plan will need to be developed following endorsement of the recommendations, as it was out of scope for the NOCC Strategic Directions project.

Key changes for the National Outcomes and Casemix Collection 2014 – 2024 include:

- > an increased focus on active participation by consumers and carers;
- > an increased focus on clinical use;
- > a simplification of the protocol; and
- > a research and development program, which aims to develop or identify;
 - measures for infants and pre-schoolers;
 - a self-report for primary school aged children;
 - one consistent consumer-rated measure for adults and older persons nationally;
 - a carer rated measure for the adult and older persons age groups; and
 - a single clinician-rated measure for adult and older persons.

5.2.1. Vision and scope

RECOMMENDATION 1

NOCC should continue as standardised routine outcome measurement for the purposes of supporting clinical care in partnership with consumers and carers, service management, benchmarking, service evaluation, research and casemix development.

The collection of standardised routine outcome measures, including an agreed national protocol, should continue as part of routine service delivery in public specialised mental health services in Australia. This collection should support the use of information by a range of stakeholders including:

1. Individual clinicians, consumers and carers to support clinical care, dialogue and assessment of progress.
2. Service managers and leaders, to support reflective care, effective management and the identification and exploration of variations in clinical practice or outcomes.
3. Policy makers, planners and funders, to support planning and performance monitoring, improve understanding of variations in processes and outcomes between services, and support the further development of casemix in mental health.
4. Researchers and academics, to support clinical and service research.
5. The community, to support knowledge of and accountability by mental health services.

Additionally, Australia's large investment in NOCC should help to inform developing classification and funding models for mental health.

The agreed national protocol will continue to specify a suite of outcome measures to be collected for each target population, identify the setting in which these are relevant and the timing of when these are to be collected.

Rationale

There is strong support for the routine collection of standardised outcome measures, evidenced by both nationally agreed government policy and extensive consultations with the mental health sector.

It is acknowledged that it is vital to have an accountable and transparent mental health system. The Fourth National Mental Health Plan [113], the National Action Plan on Mental Health 2006-2011 [114] and the National Standards for Mental Health Services [115] all identify the need to monitor and report on the mental health outcomes for people receiving mental health services.

Currently, mental health outcomes for people receiving public specialised mental health services are reported via the routine collection of outcome measures. This collection was first introduced over a decade ago, and while not supported by all, the requirements are well known by clinicians and service managers.

There was very strong support in national consultations for the continued routine collection of outcome measures in public specialised mental health services. This was felt to be necessary to support both clinical and service management, and consumer and carer engagement.

Staff of community managed organisations were also highly supportive of improved processes to facilitate the sharing of information on consumers as relevant to their care, and also of standardisation of outcomes collection within the mental health community managed organisation (CMO) sector.

STAKEHOLDER	IMPACT
Consumers	<ul style="list-style-type: none"> Clarify expectations of collection.
Carers/Parents	<ul style="list-style-type: none"> Clarify expectations of collection.
Clinicians	<ul style="list-style-type: none"> There may be an impact on those clinicians who currently do not collect NOCC.
Managers/Local Services	<ul style="list-style-type: none"> There may be an impact on those services who currently do not collect NOCC.
Jurisdictions	<ul style="list-style-type: none"> Minimal impact.
National	<ul style="list-style-type: none"> Minimal impact.

RECOMMENDATION 2

Work should be commissioned to progress towards inclusion of the NOCC as a national minimum data set (NMDS).

Rationale

An NMDS is contingent upon a national agreement to collect uniform data and to supply it as part of the national collection, but does not preclude agencies and service providers from collecting additional data to meet their own specific needs. As such, it has the advantages of being formally supported, collection and reporting is mandatory, and it can be officially recognised in the National Healthcare Agreements and future national health reform arrangements. It also signals to all stakeholders the importance of the collection.

The amount of work required for specification is considerable, and any future changes would be subject to national information approval processes, as for the other mental health NMDS. These disadvantages however, are considered to be outweighed by the advantages.

A number of issues would need to be resolved in the developmental process, including the following:

- > determination of whether the whole NOCC or selected items would form part of the NMDS;
- > specification of all items, as necessary for inclusion in METeOR;
- > clarification of the data custodian and its role; and
- > a feasible timeline covering development, national approval processes and implementation.

STAKEHOLDER	IMPACT
Consumers	<ul style="list-style-type: none"> No impact.
Carers/Parents	<ul style="list-style-type: none"> No impact.
Clinicians	<ul style="list-style-type: none"> No impact.
Managers/Local Services	<ul style="list-style-type: none"> Support the implementation of NOCC in the NMDS as required.
Jurisdictions	<ul style="list-style-type: none"> Work will need to be undertaken to respond to any new requirements associated with NOCC being included in an NMDS.
National	<ul style="list-style-type: none"> Resourcing the work for the development and approval processes required to enable NOCC to form part of the NMDS.

RECOMMENDATION 3

Episodes of care should remain the counting unit for measuring outcomes and the foundation upon which the NOCC protocol is based.

The NOCC should be limited to the collection of information about the consumer tied to the concept of an episode of care, based upon service provision within inpatient, residential care and ambulatory service settings.

Rationale

Although there was a consistent theme throughout the national consultations that the concept of an episode of care did not always reflect how consumers moved between services in clinical practice, it was equally acknowledged that the episode of care provided clear and simple boundaries upon which the collection of information can occur.

Although the concept of the episode of care raises some particular clinical issues, the most problematic of these, relating to ambulatory care, is addressed in Recommendation 17.

STAKEHOLDERS	IMPACT
Consumers	<ul style="list-style-type: none">No impact, as no changes are required to current practice
Carers/Parents	
Clinicians	
Managers/Local Services	
Jurisdictions	
National	

RECOMMENDATION 4

Work should be commissioned to identify priority domains to be measured for individual consumers receiving mental health services. This will guide the future development of standardised routine outcome measures.

These domains will be described in a framework and will include the domains currently measured – clinical symptoms, behaviour and functioning – and will then identify the domains that should be measured in the future.

Rationale

Work undertaken as part of the initial NOCC development process clearly identified a range of domains currently measured, in addition to those already covered by the suite that could be measured [6, 7]. However, these domains have not to date been brought together in an overarching agreed framework. Since the development of the NOCC, there has been ongoing debate about what should be measured and the prioritisation of these domains.

During the NOCC review consultation process other domains were identified as important outcomes to measure. These domains include, but are not limited to, social participation, employment, education, housing, recovery, quality of life, physical health, family functioning, trauma related issues and risk, as well as information collected from the carer. It must be acknowledged that whilst a number of areas have been identified as important to measure, it is not feasible to include all aspects as part of a national routine collection.

Consideration of the priority and feasibility of these additional domains within the constraints of a routine collection should be guided by the principles and considerations of overall burden on consumers, carers, managers and clinicians.

A program of work needs to be described that brings together key stakeholders so that an overarching framework can be identified and agreed as the basis for future outcome measurement development.

STAKEHOLDER	IMPACT
Consumers	<ul style="list-style-type: none"> • Provide input via representation on national committees for the development of a nationally agreed framework. • Clarify future expectations.
Carers/Parents	<ul style="list-style-type: none"> • Provide input via representation on national committees for the development of a nationally agreed framework.
Clinicians	<ul style="list-style-type: none"> • Provide input via representation on national committees for the development of a nationally agreed framework.
Managers/Local Services	<ul style="list-style-type: none"> • Provide input via representation on national committees for the development of a nationally agreed framework.
Jurisdictions	<ul style="list-style-type: none"> • Provide input via representation on national committees for the development of a nationally agreed framework.
National	<ul style="list-style-type: none"> • Resourcing the development work required to articulate the framework.

RECOMMENDATION 5

Reporting should shift from a focus largely on compliance to also include reporting of outcomes of care and use of the measures, by consumers, carers, clinicians, services and jurisdictions.

Rationale

The need to monitor and report on compliance is recognised, however the focus needs to shift to monitoring and reporting on the use of the measures in recognition of the importance and value of all of the NOCC objectives, namely use in clinical practice, service management, benchmarking, service evaluation and research, and for casemix purposes, as well as reporting on the outcomes of care. This is critical in ensuring the successful uptake and use of the NOCC in services.

There has been some developmental work in regards to the reporting of outcomes of care. Whilst the Report on Government Services currently reports the clinical outcome of care, in terms of significant improvement, no change and significant deterioration, there has been other work considering the most appropriate method for reporting clinically significant change, for children and adolescents [13] and adults and older persons [91, 92]. This work should continue to ensure the most appropriate method to report clinically significant change is implemented.

Participants of the national consultations identified that the reports could either facilitate the use of the NOCC in services, or present considerable barriers. Within the public sector, reporting and analysis should focus on both the collection and the use of information.

STAKEHOLDER	IMPACT
Consumer	<ul style="list-style-type: none"> Reporting of the use of outcome measures will shift the focus of the NOCC, from collection to using the information with consumers and carers. It is envisaged the implementation of this reporting more broadly will lead to clinicians and services using the information collaboratively with consumers and carers/parents. Reporting of the outcomes of care ensures that the mental health sector continues to make progress towards greater transparency and accountability. Consumers need information that assists in understanding the differences that can occur following care provided by a mental health service.
Carer/Parent	<ul style="list-style-type: none"> Reporting of the use of outcome measures will shift the focus of the NOCC, from collection to using the information with consumers and carers. It is envisaged the implementation of this reporting more broadly will lead to clinicians and services using the information collaboratively with consumers and carers/parents. Reporting of the outcomes of care ensures that the mental health sector continues to make progress towards greater transparency and accountability. Carers need information that assists in understanding the differences that can occur following care provided to their relative or friend by a mental health service.
Clinicians	<ul style="list-style-type: none"> Reporting of the use of outcome measures will provide the opportunity for clinicians to better assess how well the information is used in services and with individual consumers and carers. Reporting of the outcomes of care ensures that the mental health sector continues to make progress towards greater transparency and accountability. Clinicians need information that assists in understanding the differences that can occur following the care that they provide consumers accessing their mental health service.
Managers/Local Services	<ul style="list-style-type: none"> Implement any changes required to the reporting of use of outcome measures. Reporting of the use of outcome measures will provide the opportunity for managers to better assess how well the information is used in their service. Reporting of the outcomes of care ensures that the mental health sector continues to make progress towards greater transparency and accountability. Local services need information that assists in understanding the differences that can occur following care provided by the mental health service, and then using this information to drive relevant quality improvement initiatives.
Jurisdiction	<ul style="list-style-type: none"> Provide input into the development of the methods that will help with reporting use of measures and outcomes of care. Support the implementation across services of any nationally agreed methods for reporting use and outcomes of care.
National	<ul style="list-style-type: none"> Resource the work required to develop methods that will assist with the reporting of outcomes of care and use of outcome measures.

5.2.2. Changes to the measures

RECOMMENDATION 6

Work should be commissioned to develop one consistent national consumer-rated measure for adults and older persons. This measure should include the areas of social inclusion, aspects of recovery, social and role functioning and symptoms. The symptom component of this measure should be based on the K10.

Rationale

The consultation clearly found that a number of other areas are important to measure as a self-report.

Consumers and carers participating in the online survey identified what they considered to be four priority areas for collection, in addition to the areas already covered by the suite of outcome measures. Recovery, including aspects of hopefulness, self-esteem and empowerment was identified as a top priority by two thirds of participants. Community living/social inclusion (housing, employment and social connectedness) and carer's/parent's experience of and involvement in care were also identified by around half of respondents as top priorities. Interestingly, public mental health staff had a similar result, with staff from adult services most likely to indicate recovery and social inclusion as a priority into the future, and those from services for older persons most likely to indicate carer burden along with social inclusion as priorities for measurement.

The face to face consultations also supported the views expressed on the online survey, with social inclusion, wellbeing, and recovery identified as key gaps in the current measurement collection.

Currently three consumer-rated measures are selected for use in adult, older persons and forensic services. These are the Kessler 10 Plus (K10+), which is used in New South Wales, Western Australia, South Australia and the Northern Territory, the Behaviour and Symptom Identification Scale (BASIS-32), used in Victoria, Tasmania and the Australian Capital Territory, and the Mental Health Inventory 38 item version (MHI-38), used in Queensland.

One nationally consistent measure will enable comparability across jurisdictions, together with more focused and developed reporting and training materials to support its use. It would also promote consistency in the approach to consumers who receive services in more than one jurisdiction.

The K10 (i.e. with the focus on items 1-10 of the measure) is considered the most appropriate measure to form the basis upon which to build a national consumer-rated measure for the following reasons:

- > It is a clear leader in terms of uptake, and the national data reflects that there is a higher completion rate of the K10+ than the MHI-38 and the BASIS-32, acknowledging that there may be a number of factors that have impacted upon its greater uptake in the jurisdictions that use the measure.
- > It has demonstrated ability to measure change.
- > The brevity of the measure allows a foundation upon which to build other questions that are important to consumers, carers and clinicians, while the MHI-38 and BASIS-32 do not afford the same flexibility.
- > It is used for epidemiological purposes, such as national surveys including the National Health Survey and the various components of the National Survey of Mental Health and Wellbeing.
- > Its use outside of clinical programs is desirable, as the national consumer-rated measure must be relevant and acceptable across a range of mental health service providers, and General Practitioners, for example use the K10 in mental health care plan reviews.
- > There is population normative data upon which to compare.
- > It has been endorsed for use in NSW for Aboriginal populations.
- > The K10 is readily available in a variety of community languages.

Whilst the K10 offers some significant advantages over the other measures, it does not cover all the domains of the other two consumer-rated measures or all key domains that are considered important to capture from the consumer's perspective.

Developmental work is required to determine what other items or domains should also be measured, and the most appropriate mechanism to do this. This should draw upon work already being undertaken, including

development of the Living in the Community Questionnaire, which covers aspects of social participation, education, employment and housing.

STAKEHOLDER	IMPACT
Consumers	<ul style="list-style-type: none"> • Provide input via representation on national committees for the development of a nationally agreed consumer self-report for adult and older persons. • Implementation will result in consumers completing a different self-report measure, which will provide the opportunity for consumers to report on aspects of their life that have been identified as important throughout the consultations.
Carers/Parents	<ul style="list-style-type: none"> • Provide input via representation on national committees for the development of a nationally agreed consumer self-report for adult and older persons.
Clinicians	<ul style="list-style-type: none"> • Provide input via representation on national committees for the development of a nationally agreed consumer self-report for adult and older persons. • Training to be undertaken to collect and use a new measure in practice.
Managers/Local Services	<ul style="list-style-type: none"> • Provision of and support for education in how to collect and use the new measure in practice, in team reviews and in understanding the complexity of the issues for the consumers accessing the service.
Jurisdictions	<ul style="list-style-type: none"> • Changes will be required to information and reporting systems to enable collection and use of a new self-report measure. • Provision of and support for education in how to collect and use the new measure in practice.
National	<ul style="list-style-type: none"> • Resourcing research and development work. • Changes to national reporting systems. • Provision and support for education in how to collect and use the new measure in practice.

RECOMMENDATION 7

Work should be commissioned to develop a single clinician-rated measure that covers the domains of symptoms and functioning for adults and older persons. This should use the HoNOS/HoNOS65+ as the foundation, and include a measure of functioning that replaces the LSP-16.

Rationale

Significant issues have been raised regarding the Health of the Nation Outcomes Scales (HoNOS), the Health of the Nation Outcomes Scales for Elderly Persons (HoNOS65+) and the Life Skills Profile (LSP-16), and these issues need to be addressed as part of the strategic development process.

Modifications to the HoNOS and HoNOS65+

Modifications are required to the glossaries of HoNOS and HoNOS65+ that address specific issues raised by the sector and provide greater clarity to support rating accuracy. Items 8, 11 and 12 were identified as problematic. In particular, for some services, item 8 covers information that would be better provided separately.

Modifications should result in minimal changes to the measures, affecting the core items as little as possible to ensure comparability of data collected over time.

Work on revising the glossary may be considered as a first stage in the development of a new measure. Work was completed in 2006 [116], to identify aspects of the HoNOS requiring revision, and this should be used as a foundation for this work, with modifications able to be completed in the short term.

Improvements in measuring functioning⁵

Development work is required in relation to the clinician-rated measures in adult and older persons suites of outcome measures. The consultations identified that, while the HoNOS and HoNOS65+ were strongly supported and were the measures most collected and often used in clinical practice, the picture of the LSP-16 was very different. Whilst the collection of the LSP-16 is only around 12% lower than that of both the HoNOS and the HoNOS65+, there were problems noted consistently with its use in services during the consultations. Despite some items being identified as useful, overall it was found that the use of the information gathered by the LSP-16 in services is poor, particularly in forensic and older persons. The extended rating period of 3 months, in comparison with the 2 week rating period of the HoNOS and HoNOS65+, was considered problematic and a challenge for raters. Additionally, due to the rating period, the measure was limited to those consumers who had received services for a period of 3 months, capturing approximately 15% of people. It was proposed that the level of functioning is important to measure for all consumers, requiring that a measure be collected at admission to services. Although the HoNOS/HoNOS65+ cover aspects of functioning they were not considered adequate to cover the domain of functioning for consumers in mental health services.

Retaining the LSP-16 in the suite does not assist with the desire of services to increase the simplicity of the suite of measures. One clinician-rated measure has the advantage of reducing the burden on staff whilst increasing the breadth of collection.

Whilst issues have been raised with the LSP-16, a measure of functioning within the suite of outcome measures is both important and strongly supported. The development of an improved measure of functioning that could complement or form part of a modified HoNOS/HoNOS65+, would replace the LSP-16. This work would also include the development of relevant collection protocols. Consideration needs to be given to the issue of scoring when collecting outcomes relating to functioning in the same measure as problem severity, which may show change over very different time scales.

Identification of additional items and domains

The HoNOS and HoNOS65+ are the most accepted and widely used measures, and modifications to the glossaries will further improve the measures and potentially their use, with coverage of symptoms and some aspects of functioning. These measures should form the foundation of future development work for adults and older persons. This work would identify additional items or domains not currently collected by the suite of measures for adults and older persons, which could be added to the measure. This should identify

⁵ 'Functioning' is used in this context in the same broad sense as used within the International Classification of Functioning, Disability and Health (ICF). Priorities for measurement within NOCC will be guided by the work identified in Recommendation 4.

information specific to particular consumer population groups, such as risk and security issues for forensic consumers, and self-care for older persons. It should also be informed by those elements of the LSP-16 reported to be most relevant.

STAKEHOLDER	IMPACT
Consumers	<ul style="list-style-type: none"> • Provide input via representation on national committees for the development of a single clinician-rated measure in adult and older persons. • Implementation will result in a more appropriate measure of functioning.
Carers/Parents	<ul style="list-style-type: none"> • Provide input via representation on national committees for the development of a single clinician-rated measure in adult and older persons.
Clinicians	<ul style="list-style-type: none"> • Provide input via representation on national committees for the development of a single clinician-rated measure in adult and older persons. • Training to be undertaken to collect and use a new measure in practice. • Reduce the burden of collection.
Managers/Local Services	<ul style="list-style-type: none"> • Provision of and support for education in how to collect and use the new measure in practice.
Jurisdictions	<ul style="list-style-type: none"> • Changes will be required to information and reporting systems to enable collection and use of a new measure. • Provision of and support for education in how to collect and use the new measure in practice.
National	<ul style="list-style-type: none"> • Resourcing research and development work. • Changes to national reporting systems. • Provision and support for education in how to collect and use the new measure in practice.

RECOMMENDATION 8

Work should be commissioned to supplement the HoNOSCA glossaries to optimise clarity for particular items (5, 7, 13, 14 and 15).

Rationale

Support for the HoNOSCA was strong throughout the national consultations, and 80% of respondents to the online survey indicated it should remain in the suite. It was highlighted that clarity regarding particular items would assist clinicians with their ratings and subsequent use of the measure. Issues were repeatedly raised with items 5,7,13,14 and 15, which respectively deal with scholastic or language skills, hallucinations and delusions, poor school attendance, problems with knowledge or understanding about the nature of difficulties for the child or adolescent and problems with lack of information about services or the management of identified difficulties.

Whilst modifications may be needed to supplement the glossary, changes are not required to the items themselves. This work can be completed in a relatively short timeframe. This tool has prompted a set of frequently asked questions since its implementation, and a review, combined with a strategy for authorisation and publication may support this to be completed in a relatively short timeframe.

STAKEHOLDER	IMPACT
Consumers	<ul style="list-style-type: none">No significant impact on consumers.
Carers/Parents	<ul style="list-style-type: none">No significant impact on carers/parents.
Clinicians	<ul style="list-style-type: none">Will provide greater clarity when using the HoNOSCA in practice.
Managers/Local Services	<ul style="list-style-type: none">Updates will need to be made to the glossary as advised by the national work and services will need to ensure that clinicians are made aware of these changes.
Jurisdictions	<ul style="list-style-type: none">Updates will be required to be made to the glossary as advised by the national work and jurisdictions will need to assist in dissemination of this information to all services. Small impact on information systems in those jurisdictions that have the glossary embedded in the system.
National	<ul style="list-style-type: none">Resourcing the development work required to refine the HoNOSCA glossary.

RECOMMENDATION 9

Work should be commissioned to review the use of the CGAS, FIHS, Focus of Care and RUG-ADL following specification of Activity Based Funding data requirements.

Any decisions regarding modification or removal from the suite of outcome measures of the CGAS, FIHS, Focus of Care and/or the Resource Utilisation Groups - Activities of Daily Living (RUG ADL), should be deferred until there is further information available regarding their applicability for the purposes of mental health casemix classification, in relation to Activity Based Funding. The RUG-ADL should be further reviewed as a potential outcome measure if a new functioning measure is introduced as part of Recommendation 7.

Rationale

Throughout the national consultations, it was consistently reported that the CGAS, FIHS, Focus of Care and RUG-ADL were not used extensively in clinical practice or to support service management. Although relatively brief, their relevance and utility were questioned by participants.

The CGAS had particular issues with rating the measure and its utility was queried, however it was thought to have applicability in determining if the appropriate group of consumers was receiving services. The collection rates of the CGAS are much higher in an ambulatory setting compared to an inpatient setting. To remain in the suite, work will need to be undertaken to improve the glossary, with additional training provided to support its use.

Whilst it was noted in the national consultations that the FIHS captured important domains, its use in practice was limited. Indeed the collection rate is lower than the HoNOSCA in both ambulatory and inpatient settings. There were issues with rating and potentially the same information could be captured through other methods, such as the use of Z-codes. The decision to remove FIHS also needs to consider the feasibility of the Community Mental Health Care National Minimum Data Set (CMHC NMDS) to record all comorbidities. If it was to remain in the suite, work would be needed to improve the glossary and address issues relating to the rating of the measure.

The Focus of Care was described as an easy measure to complete and as such its collection rate in an ambulatory setting is on par or slightly higher than the HoNOS/HoNOS65+. Whilst it has been used on occasion to better understand community case loads, it does not appear to be used more broadly for casemix adjustment purposes. Although collection rates may be high, the use of this information in services has been limited to date.

The RUG-ADL was noted in the national consultations to be easy to complete, but not used, and the collection rate is much lower than the HoNOS65+ in an inpatient setting. Clinicians indicated that other types of assessments were more commonly used for resource allocation. However, this measure has a low collection burden, shows significant variation (with age) and can therefore be used to inform nursing ratios and costs.

Development of an Activity Based Funding model for mental health that allows for adjustment for casemix may rely upon the ability to provide this kind of information. Given that the contribution of these measures is yet to be determined, decisions regarding the removal or modification of these measures should be postponed until this information becomes available.

STAKEHOLDER	IMPACT
Consumers	<ul style="list-style-type: none"> No significant impact on consumers.
Carers/Parents	<ul style="list-style-type: none"> No significant impact on carers /parents.
Clinicians	<ul style="list-style-type: none"> If measures are removed from collection, reduction in burden of collection.
Managers/Local Services	<ul style="list-style-type: none"> If measures removed from collection, there will be changes to reporting and IT systems. If measures remain in the NOCC, then jurisdictions will need to support additional training to improve their utility.
Jurisdictions	<ul style="list-style-type: none"> If measures are removed, changes will be made to reporting requirements, and IT systems. If measures remain in the NOCC, then jurisdictions will need to support additional training to improve their utility.
National	<ul style="list-style-type: none"> Resourcing of work to review measures following ABF decisions.

RECOMMENDATION 10

Work should be commissioned to develop or identify a carer-rated measure of the carer's perspective of consumer health and wellbeing for adults and older persons.

Research and development work is required to produce a carer-rated measure for use in services for adults and older persons, with a focus on measuring the carer's perspective of consumer health and wellbeing.

Rationale

Currently there is no measure in the suite of outcome measures for adults and older persons that collects information from a carer perspective.

National mental health policy clearly indicates the need for the involvement of carers in the processes of care. The Fourth National Mental Health Plan identifies under Priority Area 4: Quality improvement and innovation: the need to improve carer and consumer experience of engagement with mental health services [113]. The National Standards for Mental Health Services 2010 [115] also recognises the role played by carers, and understands their capacity, needs and requirements as being separate from those of the consumer. There was also strong support from carers, consumers and clinicians in the national consultations for this measure.

The measure should focus on the carer's perspective of consumer health and wellbeing, noting that a carer's experience of care measure is in development. The measure should also capture some of the domains covered by the clinician and consumer-rated measures, as this would enable comparison of perspectives across domains.

The carer's perspective of the health and wellbeing of the consumer was identified as particularly important when the consumer could not complete a self-report measure. A review of HoNOS65+ data indicates that approximately 30% of consumers within services for older persons are rated as having a degree of cognitive impairment on admission that would prevent them from completing a consumer-rated measure. A carer-rated measure in this type of circumstance would enable valuable information on the health and wellbeing of these consumers to inform care and be included in the collection.

This measure would be restricted to use with adults and older persons, as the carer's perspective of consumer health and wellbeing for children and adolescents is already captured by the Strengths and Difficulties Questionnaire (SDQ). The SDQ used by adolescents, parents and carers has a better completion rate than currently evidenced with the adult and older persons consumer-rated measures.

STAKEHOLDER	IMPACT
Consumers	<ul style="list-style-type: none"> • Provide input via representation on national committees for the development or identification of a new measure. • Implementation will provide the opportunity for the carers of adults and older persons perspective to be measured, and will facilitate discussions between consumers, carers and clinicians.
Carers/Parents	<ul style="list-style-type: none"> • Provide input via representation on national committees for the development or identification of a new measure. • Implementation will provide the opportunity for the carers of adults and older person's perspective to be measured and facilitate discussions between consumers, carers and clinicians.
Clinicians	<ul style="list-style-type: none"> • Provide input via representation on national committees for the development or identification of a new measure. • Training to be undertaken to collect and use a new measure in practice.
Managers/Local Services	<ul style="list-style-type: none"> • Provision of and support for education in how to collect and use the new measure in practice.
Jurisdictions	<ul style="list-style-type: none"> • Changes will be required to information and reporting systems to enable collection and use of a new measure. • Provision of and support for education in how to collect and use the new measure in practice.
National	<ul style="list-style-type: none"> • Resourcing research and development work. • Changes to national reporting systems. • Provision and support for education in how to collect and use the new measure in practice.

RECOMMENDATION 11

Work should be commissioned to identify and then where necessary develop appropriate measures and a protocol for use of outcome measures with infants and pre-schoolers.

Existing work by the CAMHIDEAP on reviewing available measures suitable for use with infants should continue.

Consideration should be given to transition to the use of new measures, including developmental work for a Health of the Nations Outcomes Scales Infant (HoNSCI) measure.

Rationale

During the consultations, a gap in the current collection was identified in relation to the health and wellbeing of infants, with a number of services indicating that they had begun using different measures. While this work is commonly referred to as an 'infant' measure, the gap covers pre-schoolers as well, and the CAMHIDEAP has been focused on the 3 years and under age group. Many services indicated a desire to have a nationally agreed measure and agreed rules governing its use.

A review of available measures is currently being undertaken by CAMHIDEAP, and should continue with the aim of providing the basis of the specification, and future introduction of a suite of infant measures.

STAKEHOLDER	IMPACT
Consumers	<ul style="list-style-type: none"> Will provide the opportunity for the outcomes of care to be measured in this population group.
Carers/Parents	<ul style="list-style-type: none"> Provide input via representation on national committees for the development or identification of a new measure. Implementation will provide a measure for parents and carers to support their understanding of and discussion of problems experienced by their infant or pre-schooler.
Clinicians	<ul style="list-style-type: none"> Provide input via representation on national committees for the development or identification of a new measure. Training to be undertaken to collect and use a new measure in practice.
Managers/Local Services	<ul style="list-style-type: none"> Provision of and support for education in how to collect and use the new measure in practice.
Jurisdictions	<ul style="list-style-type: none"> Changes will be required to information and reporting systems to enable collection and use of a new measure. Provision of and support for education in how to collect and use the new measure in practice.
National	<ul style="list-style-type: none"> Resourcing research and development work. Changes to national reporting systems. Provision and support for education in how to collect and use the new measure in practice.

RECOMMENDATION 12

Work should be commissioned to identify and then where necessary develop a self report measure for primary school aged children.

Rationale

Currently there is no self-report measure for primary school aged children, and this is the only consumer group with no self-report measure. There is sufficient evidence that primary school aged children can provide information useful to inform their care, and the inclusion of this measure will enable the perspectives of this group of young consumers to be collected and shared.

STAKEHOLDER	IMPACT
Consumers	<ul style="list-style-type: none"> • A new opportunity for a specific age group, primary school aged children to have their perspective included in the collection.
Carers/Parents	<ul style="list-style-type: none"> • Provide input via representation on national committees for the development or identification of a new measure. • Will provide the opportunity for parents and carers to gain an understanding of the young person's perspective and facilitate discussion between consumers, parents/ carers and clinicians.
Clinicians	<ul style="list-style-type: none"> • Provide input via representation on national committees for the development of a new measure. • Training to be undertaken to collect and use a new measure in practice.
Mangers/Local Services	<ul style="list-style-type: none"> • Provision of and support for education in how to collect and use the new measure in practice.
Jurisdictions	<ul style="list-style-type: none"> • Changes will be required to information and reporting systems to enable collection and use of a new self-report measure. • Provision of and support for education in how to collect and use the new measure in practice.
National	<ul style="list-style-type: none"> • Resourcing research and development work. • Changes to national reporting systems. • Provision and support for education in how to collect and use the new measure in practice.

RECOMMENDATION 13

Work should be commissioned to develop a process for identifying non-mandatory preferred additional measures for use outside the scope of NOCC.

A work program should be developed for the identification of specified, additional measures that are not mandatory, but can be used by mental health services for specific cohorts, diagnostic groups or within service settings. This work should include the identification of a process for selecting these measures.

Rationale

Consultation participants consistently raised the issue that the availability of a range of selected optional measures would enhance the clinical utility of the suite of outcome measures, and may improve uptake of outcome measures across services.

A number of measures, such as the Geriatric Depression Scale (GDS), Brief Psychiatric Rating Scale (BPRS) and the Positive and Negative Syndrome Scale (PANSS), have been identified as clinically relevant to use with particular target populations. These are already used in some services, together with the mandated outcome measures.

In specifying such additional measures, the experience of Western Australia should be considered, where a range of measures were built into the local information system, but had a very limited uptake over a number of years.

The specification of additional measures would necessarily create increasing complexity in the protocol, and possibly impact on resources required for training, information collection and reporting systems. However, this development would directly respond to the request by clinicians for increased flexibility in the measures sometimes used, as well as ensuring consistency of the quality of measures and comparability between services.

An endorsed process providing guidance to services on suitable measures to use was considered the most appropriate way to support these requests.

STAKEHOLDER	IMPACT
Consumers	<ul style="list-style-type: none">• Provide input into the process required to specify additional measures.
Carers/Parents	<ul style="list-style-type: none">• Provide input into the process required to specify additional measures.
Clinicians	<ul style="list-style-type: none">• Provide input into the process required to specify additional measures.
Managers/Local Services	<ul style="list-style-type: none">• Impact will vary across services depending on decisions made regarding use of any additional measures.
Jurisdictions	<ul style="list-style-type: none">• Provide input into the work required to specify additional measures. This input may vary across jurisdictions depending on resources and capacity.
National	<ul style="list-style-type: none">• Resource the development work required to specify a process to select measures that are appropriate for use with specific cohorts.

5.2.3. Changes to the protocol

RECOMMENDATION 14

The consumer-rated measure for adults and older persons should be offered at all collection occasions. The protocol should be changed specifically to include the offering of the measure in inpatient settings.

Rationale

Under the current protocol, it is not mandatory to offer the consumer-rated measure to adults and older persons within inpatient settings. However, throughout the consultations there was strong support from consumers, carers and staff of public specialised mental health services for this to happen.

New South Wales made the offering of the consumer self-reporting measure in inpatient settings mandatory when the NOCC was first introduced.

This change to the protocol would mean that all adults and older persons within inpatient settings would be offered the agreed consumer-rated measure, as has been the case with all child and adolescent consumers.

STAKEHOLDER	IMPACT
Consumers	<ul style="list-style-type: none">• Provide the opportunity to share their perspective in an inpatient setting.
Carers/Parents	<ul style="list-style-type: none">• Provide the opportunity for the carer/parent to understand and share the consumer's perspective in an inpatient setting.
Clinicians	<ul style="list-style-type: none">• Broaden the collection protocol and will be required to collect and use the consumer-rated measure in inpatient services.
Managers/Local Services	<ul style="list-style-type: none">• Implement the changes to the protocol in adult and older persons inpatient settings.
Jurisdiction	<ul style="list-style-type: none">• Implement the change in protocol and ensure this collection is included in local reports and in data provided at the national level.
National	<ul style="list-style-type: none">• Include this collection and measure in national reporting.

RECOMMENDATION 15

Brief ambulatory episodes should be explicitly included in scope for the collection, with clarification that episodes extending over 14 days or less do not require discharge outcome measures to be collected.

Brief ambulatory episodes should be explicitly included in scope for the collection, and be clarified in the protocol. Outcome measures are to be collected at admission for all face-face assessments, and are to be collected at discharge when the episode of care (defined by the elapsed days from admission to discharge) is greater than 14 days.

Rationale

The NMHIDEAP considered a number of issues around brief episodes of care, including the impact on clinical practice, service management and policy developments.

It is not always easy to determine if brief contacts will develop into episodes requiring ongoing care, and when to collect information for these brief episodes is currently unclear. The NMHIDEAP proposed that where a clinical assessment occurs on initial contact, the NOCC measures should be completed after this assessment. Additionally, it was noted during the consultations that a number of services had already introduced the completion of the NOCC for brief episodes, as they found it provided useful information to inform clinical practice and to support decision-making regarding continued service provision.

From a service management perspective, it is proposed that the collection of the NOCC for brief episodes of care will assist in describing a large cohort of consumers for whom currently there is no information regarding their presentations or outcomes of care. During the current consultations, many service managers and clinicians who are already collecting this information regarded it as good clinical practice to collect measures for brief episodes and thought that it provided useful information for service managers. Those not currently collecting information acknowledged this information would assist in better understanding the group of consumers who were accessing their services.

Similarly, the NMHIDEAP recognised the usefulness of this information to assist in policy development. Currently, there is no information regarding this significant number of people accessing mental health services in brief ambulatory episodes, and the ability to report on the profiles and outcomes of care for this large group will support decision-making at a departmental level.

The current NOCC protocol is silent on appropriate actions for 'brief episodes'. From a clinical, service management and policy perspective, the NMHIDEAP concluded that it was appropriate for the NOCC outcome measures to be collected routinely at admission for all community episodes regardless of length of the episode.

The NMHIDEAP resolved that a discharge rating should be collected when the elapsed days from admission to ambulatory care to discharge is greater than 14. The rationale for this decision includes:

1. It is clinically appropriate for a discharge rating to be applied after 14 days; it can be argued that it may be less clinically meaningful for a discharge rating to be collected when there has been less than 14 elapsed days since admission. If clinically indicated however a discharge collection can occur for those discharged less than 14 days from admission.
2. Rating period for the HoNOS/HoNOSCA/HoNOS65+ instrument is 2 weeks (14 days).
3. There is a need to consider both the collection burden and utility of the information. Whilst there may be benefits to collect discharge ratings for consumers who have less than 14 elapsed days, the burden of collection on staff and services would outweigh potential use of the data.
4. By only requiring a discharge rating after 14 days, approximately 17% of consumers will not have both an admission and discharge completed for their brief ambulatory episodes. In considering collection burden on both clinicians and consumers versus having a complete collection or matched pairs for all consumers, this level of data loss has been considered acceptable by the NMHIDEAP, and is comparable to that for inpatient services.

STAKEHOLDER	IMPACT
Consumers	<ul style="list-style-type: none"> Consumers will now have outcome measures collected at all initial face to face clinical assessments.
Carers/Parents	<ul style="list-style-type: none"> Once a carer rated measure is created, all carers will have the opportunity to provide their perspectives at this collection occasion.
Clinicians	<ul style="list-style-type: none"> Scope for collection has been clarified, and will require collection of NOCC on all admission occasions, consistent with what is currently happening in many services.
Managers/Local Services	<ul style="list-style-type: none"> Communicate new requirements to clinicians; support and monitor collection and use of information.
Jurisdictions	<ul style="list-style-type: none"> Communicate requirements to services and support the implementation.
National	<ul style="list-style-type: none"> Communicate the new requirements to jurisdictions.

RECOMMENDATION 16

Inpatient consultation liaison should be explicitly included as in scope for collection when there is a face-to-face assessment, with clarification that episodes extending over 14 days or less do not require discharge outcome measures to be collected.

Outcome measures are to be collected at admission for all face-face assessments, and are to be collected at discharge when the episode of care (defined by the elapsed days from admission to discharge) is greater than 14 days.

Rationale

Consultation liaison (CL) services are not currently in scope for the collection of routine outcome measures. It is proposed that the collection of the NOCC for consultation liaison will assist in describing a large cohort of consumers for whom currently there is no information regarding their presentations or outcomes of care.

Whilst this requirement may impact on jurisdictions as they will need to identify inpatient consultation liaison services, this will also become a requirement as part of the introduction of Activity Based Funding.

STAKEHOLDER	IMPACT
Consumers	<ul style="list-style-type: none"> Will now have outcome measures collected and discussed when in contact with CL services.
Carers/Parents	<ul style="list-style-type: none"> Will now have the opportunity for NOCC to be collected and discussed when a consumer is receiving CL services.
Clinicians	<ul style="list-style-type: none"> Scope for collection has broadened; those working in CL services will now need to collect NOCC when a face to face assessment occurs.
Managers/Local Services	<ul style="list-style-type: none"> Communicate new requirements to clinicians; support and monitor collection and use of information in CL services.
Jurisdictions	<ul style="list-style-type: none"> Communicate requirements to services and support collection in CL services.
National	<ul style="list-style-type: none"> Communicate the new requirements to jurisdictions.

RECOMMENDATION 17

The protocol should be amended in relation to consumers receiving treatment in the community, who are admitted to hospital, to remove the requirement that the ambulatory clinician collect discharge outcome measures in respect of the community episode.

Workable arrangements will need to be put in place by jurisdictions to ensure the closure of the NOCC ambulatory episode when this occurs. It is a desirable option that ratings for the admission NOCC in the inpatient unit or the residential care setting are linked to the consumers' discharge from the ambulatory episode.

Rationale

During the consultation clinicians indicated that the collection of 'ambulatory discharge' outcome measures was often confusing and an additional burden particularly where that consumer was anticipated to return to ambulatory care after a brief inpatient admission. They suggested that where ratings were readily available, the inpatient admission outcome measures could serve as the ambulatory discharge outcome measures. This was particularly apparent and feasible where ambulatory and inpatient settings were part of the same mental health service organisation.

It is important to minimise the burden of collection, where possible, while preserving episodes of care as the fundamental building block of NOCC. Jurisdictions may differ in the issues associated with the linking of data at the point of transition from ambulatory care to bed based services depending on state and territory information systems; however, where possible, a valid NOCC collection should be linked to the ambulatory episode. It is important to clarify the closure of the 'NOCC ambulatory episode' relates to the NOCC episode, as opposed to an ambulatory episode which may be related to service delivery in some jurisdictions.

It is worth noting that the data collection protocol used by the private mental health sector in Australia does not require the collection of outcome measures when there is an ambulatory discharge, however it does require the completion of a discharge collection occasion with the date of discharge from the ambulatory service recorded.

The information collected for ambulatory discharge occasions is not used currently in the national reporting of the outcomes of care for the public sector.

STAKEHOLDER	IMPACT
Consumers	<ul style="list-style-type: none">• No significant impact on consumers.
Carers/Parents	<ul style="list-style-type: none">• No significant impact on consumers.
Clinicians	<ul style="list-style-type: none">• Burden of collection will be reduced with the removal of a collection occasion for clinicians working in ambulatory settings.
Managers/Local Services	<ul style="list-style-type: none">• Changes may be required at a service level to link the NOCC collection from the admission to bed-based services to discharge from an ambulatory setting, and to ensure the closure of the NOCC ambulatory episode.
Jurisdictions	<ul style="list-style-type: none">• Workable arrangements will need to be put in place by jurisdictions to ensure the closure of the NOCC ambulatory episode when this occurs. Work will also need to occur to link admission NOCC in bed based services to consumers discharged from the ambulatory episode.
National	<ul style="list-style-type: none">• Communicate new requirements to jurisdictions.

RECOMMENDATION 18

Ambulatory episodes that follow bed based care should be coded 'assessment post discharge' rather than 'ambulatory admission'.

Outcome measures should be collected at the end of an overnight inpatient episode of care or residential care episode, and the beginning of an ambulatory episode of care. For these occasions, the reason for collection should be changed from 'ambulatory admission' to 'assessment post-discharge'.

Rationale

The period following inpatient care is a period in which significant change may occur in the condition of the consumer. It is expected that an initial clinical assessment in this period will be comprehensive. The collection of the suite of outcome measures at the end of an overnight inpatient episode of care, and at the beginning of an ambulatory care episode, therefore, remains appropriate. Rather than a change to the collection points, a change in terminology is required to place greater emphasis on the clinical intent of the collection of the measures. It is proposed to change the collection reason for the beginning of an ambulatory episode of care following an overnight inpatient episode of care to 'assessment post-discharge', one of the categories under 'review (other)'. This will more accurately reflect clinical practice.

STAKEHOLDER	IMPACT
Consumer	<ul style="list-style-type: none">No significant impact on consumers.
Carer/Parent	<ul style="list-style-type: none">No significant impact on carers.
Clinician	<ul style="list-style-type: none">Terminology change to the collection, which will align more closely with clinical practice. Will need to select a different NOCC collection reason on ambulatory admission.
Local Services	<ul style="list-style-type: none">Communicate changes to the collection type to clinicians in the service.
Jurisdiction	<ul style="list-style-type: none">Changes will be required to information systems to allow the change in collection type.
National	<ul style="list-style-type: none">Changes will be required to reports to reflect the change in collection type.

RECOMMENDATION 19

Work should be commissioned to develop guidelines for clinicians to support selection of appropriate NOCC measures for use with youth and there should also be flexibility in information systems to support this. There should also be communication that the age protocol used for an individual should not change within an episode of care.

When collecting outcome measures on youth consumers, youth services should continue to be free to choose either the adolescent or adult suite of outcome measures, based on the developmental and clinical appropriateness of the measures for the individual consumer.

Work is required to develop materials that provide guidance on the selection of appropriate measures.

Regardless of the target population or service setting, the same age-appropriate measures should be used across all collection occasions within that episode. If it is deemed that it is developmentally or clinically appropriate that different measures be used, then in transitioning to the new suite of outcome measures, the episode should be closed and a new episode opened.

Rationale

Youth mental health services are a developing part of the mental health sector. During the consultation process, it was identified that these services have begun using outcome measures, although these varied from service to service, with some using the adult suite of measures, and others using the child and adolescent suite. Measures used should reflect and support good clinical practice; therefore clinicians should be allowed the discretion of using those measures that are developmentally and clinically appropriate for the individual consumer.

No upper age limit to the use of the child and adolescent measures and no lower age limit on the adult measures within the context of youth mental health services should be set. To be clear, it would make little sense to use the child suite with 30 year olds or to use the adult suite with most 16 year olds. The more involved a family is when a young person is a consumer in the youth context, the more likely it is that the HoNOSCA will be the better instrument from the HoNOS family [76].

Guidelines would assist clinicians in selecting the most appropriate suite of measures to be used with individual consumers.

It is appropriate for clinicians to use their clinical judgement in the selection of measures that are developmentally appropriate for the consumer, rather than specify a rigid set of rules. However, it is not appropriate to change measures during the course of an episode of care, and in doing so, lose many of the benefits of the outcome measures.

This principle applies for consumers of all ages.

STAKEHOLDER	IMPACT
Consumers	<ul style="list-style-type: none"> The most appropriate outcome measures will be used when attending youth services, which will be based on developmental appropriateness rather than age. This may result in a change to the measures currently collected.
Carers/Parents	<ul style="list-style-type: none"> The most appropriate outcome measure will be used when attending youth services. This may result in a change in the measures currently collected.
Clinicians	<ul style="list-style-type: none"> May need to attend training to become familiar with both the child and adolescent and adult measures. Ensure guidelines are followed if there is a need to change the selection of measures used with individual consumers.
Managers/Local Services	<ul style="list-style-type: none"> May need to provide training to staff in youth services in both the child and adolescent and adult measures. Communicate requirements to clinicians and monitor.
Jurisdictions	<ul style="list-style-type: none"> May need to make changes within information systems to support the collection of different measures within youth services.
National	<ul style="list-style-type: none"> Clarification of the national protocol to ensure that this flexibility is clear.

RECOMMENDATION 20

The protocol should be amended so that discharge ratings for the HoNOS, HoNOS65+ and HoNOSCA in an inpatient setting are not required for inpatient episodes that are 3 days or less in duration.

Rationale

There has been confusion regarding the NOCC definition of protocol exclusion for the HoNOS suite of measures in Psychiatric Inpatient Services. As stated in the NOCC 1.60 Technical Specifications, as a footnote to Table 4:

**(2) Discharge ratings for the HoNOS, HoNOS65+ and HoNOSCA are not required for inpatient episodes less than 3 days duration.*

Interpretation of the “less than 3 days duration” can be either a separation from inpatient care:

- a. with a length of stay of “less than 3 days”; or
- b. within 72 hours from admission to discharge – which technically translates to “less than 4 days”.

The confusion seems to occur since the technical specification refers to the term duration rather than length of stay. An analysis of the national data found that there have only been 19 collections of a discharge HoNOS/CA/65+ with an episode length of 3 days, since national reporting commenced in 2000-01. From this analysis, it is clear that services and/or jurisdictional NOCC data extractions processes overwhelmingly interpret the 3-day rule as “3-days or less”, i.e. less than 4 days.

Rather than change practice to come in line with the national protocol, it is proposed that the protocol should change to reflect current practices in services. This change in protocol will also have an impact on the estimated coverage reported in the Report on Government Services and COAG progress reports. As it stands, the calculation of coverage estimates draw on the current protocol definition in the technical specifications. If the protocol is amended to reflect current practice, the estimated coverage will increase and will better reflect the current practice in inpatient units.

STAKEHOLDER	IMPACT
Consumers	<ul style="list-style-type: none">No impact as the protocol is to be adjusted to reflect current practice.
Carers/Parents	<ul style="list-style-type: none">No impact as the protocol is to be adjusted to reflect current practice.
Clinicians	<ul style="list-style-type: none">No impact as the protocol is to be adjusted to reflect current practice.
Managers/Local Services	<ul style="list-style-type: none">No impact as the protocol is to be adjusted to reflect current practice.
Jurisdictions	<ul style="list-style-type: none">No impact as the protocol is to be adjusted to reflect current practice.
National	<ul style="list-style-type: none">Change will need to be made to the collection protocol in the NOCC technical specifications.

5.2.4. Supporting use of the measures in practice

RECOMMENDATION 21

Work should be commissioned to develop guidelines to support the use, analysis and reporting of outcome measures data to support good practice by jurisdictions, services, consumers, carers and clinicians. This will include guidelines specifically for use with CALD and ATSI populations. This work should be backed by activities to support the use of these guidelines in practice.

This should include:

- > Recommended minimum requirements within organisations with regards to reporting and analysis of outcomes data, and their use;
- > Processes that ensure further development of the reporting guidelines in ways that respond to ongoing changes within the mental health sector; and
- > Guidelines for use of measures with ATSI and CALD populations.

In developing these guidelines, the focus should be on promoting use of the measures by jurisdictions, service managers, clinical leaders, clinicians, consumers and carers, as well as meeting reporting requirements at various levels.

Activities to support the use of the guidelines may include workshops, forums or educational activities and should be supported by ongoing education in the use of the measures in clinical care, in partnership with consumers and carers, service management and planning, research and evaluation, benchmarking and for casemix purposes.

Rationale

Improvement in the use of outcome measures in clinical practice and for service management, benchmarking, service evaluation, research and casemix development purposes relies upon timely entry of outcomes data and efficient, good quality reporting. Developing common expectations of the reporting requirements and identifying a set of standard products would streamline these processes.

The guidelines would make explicit what was required of clinicians and of services more generally, in terms of data inputs and what they could expect in return through standard reports developed at a state or territory level. It would also inform consumers and carers in relation to how outcomes data can be used, and what reports are also available to them.

It is essential that these guidelines can be adapted as capabilities and requirements change.

The review highlighted significant concerns regarding the cultural appropriateness of the outcome measures used in mental health services. Whilst there has been work progressed through the Transcultural Mental Health Centre in NSW and jointly with AMHOCN and QLD Health in developing guidelines and resources for use with CALD and ATSI populations respectively, this work needs to continue and wider dissemination of this information is required.

STAKEHOLDER	IMPACT
Consumers	<ul style="list-style-type: none"> • Will be involved in the development of the reporting and utilisation guidelines. Provide input into workshops, forums or educational activities aimed at improving the use of outcomes in practice. Participate in activities designed to improve the use of outcome measures in practice. • With the implementation of guidelines for use, it is envisaged that consumers will be more involved in the discussion of their individual outcome measures when receiving services.
Carers/Parents	<ul style="list-style-type: none"> • Will be involved in the development of the reporting and utilisation guidelines. Provide input into workshops, forums or educational activities aimed at improving the use of outcomes in practice. Participate in activities designed to improve the use of outcome measures in practice. • With the implementation of guidelines for use, it is envisaged that carers and parents will be more involved in the discussion of outcome measures when in contact with services.
Clinicians	<ul style="list-style-type: none"> • Support the implementation of any changes to reporting and use of outcomes information. For some clinicians this may involve a change to how they currently use the information. • Provide input into workshops, forums or educational activities aimed at improving the use of outcomes in practice. Participate in activities designed to improve the use of outcome measures in practice.
Managers/Local Services	<ul style="list-style-type: none"> • Support the implementation of any changes to the reporting and use of information according to jurisdictional decisions. • Provide support to consumers, carers/parents and clinicians to participate in activities which will assist with improving the uptake and use of outcome measures in practice.
Jurisdictions	<ul style="list-style-type: none"> • Provide input into the development of the guidelines and support the implementation across services. Provide input into the coordination and selection of activities that will best support the use of outcome measures in practice. Input may vary between jurisdictions according to resources and capacity issues.
National	<ul style="list-style-type: none"> • Resource the work required to develop the reporting and utilisation guidelines, and resource and coordinate activities that will promote the use of the guidelines in practice.

RECOMMENDATION 22

Work should be commissioned to explore new ways to collect and report information that takes advantage of technology that will better support clinicians, consumers and carers in the efficient collection and use of outcome measures in practice.

Funding should be allocated to pilot projects that explore technologies to support the collection and use of outcome measures.

Rationale

There is wide variation in the capabilities and functionality of information systems across jurisdictions. Some required paper-based entry of information, with reporting only at a jurisdiction level, while others allowed direct entry by clinicians and produced a variety of reports for clinical and management purposes.

In each state and territory there were particular issues, presented as barriers to the efficient collection and use of outcomes data.

Whilst it was outside the scope of this project to recommend that national standards for information systems be adopted, there would be value in national work to explore different technological options, which may support the collection and use of the measures.

Options need to be explored in relation to particular target populations. For instance, some services have already trialled the use of platforms like the iPad and phone applications to support the collection and use of the consumer-rated measure in clinical practice, and found them to work well with young consumers.

STAKEHOLDER	IMPACT
Consumers	<ul style="list-style-type: none">• Provide input into the selection of pilot project sites, and implementation and evaluation of the projects.
Carers/Parents	<ul style="list-style-type: none">• Provide input into the selection of projects, implementation and evaluation of the projects.
Clinicians	<ul style="list-style-type: none">• Support the implementation and evaluation of pilot projects within services.
Managers/Local Services	<ul style="list-style-type: none">• Consideration from local services of options for pilot projects. Support the implementation and evaluation of pilot projects within services.
Jurisdictions	<ul style="list-style-type: none">• Assist with identifying potential pilot projects and support the coordination of implementation and evaluation.
National	<ul style="list-style-type: none">• Resourcing and coordination of pilot projects.

RECOMMENDATION 23

Work should be commissioned to develop decision support tools related to outcome measures. Initially this should focus on the further refinement of clinical prompts, and explore technology options that may support their use in practice.

Rationale

Whilst the collection of the measures has increased over time, there are still significant issues with the use of information in clinical practice. It was noted throughout the consultations, by both clinical staff and managers, that the addition of clinical prompts may assist in increasing the use of the measures by making explicit their relevance to supporting clinical practice and decision making. In developing clinical prompts, the needs of clinical supervisors and managers should be taken into consideration, with prompts that assist the use of relevant reports for these groups.

The benefits are not only for clinicians but also service managers, potentially in terms of standard follow up and system alerts, particularly when there are multiple service providers. Consumers and their carers also benefit from a system that backs up the individual clinician in terms of the care that they provide.

Developmental work has already occurred on the clinical prompts project led by AMHOCN. Whilst significant progress was made through this project, further development of clinical prompts must be supported by parallel work on the information technology and applications necessary to enable this to proceed.

STAKEHOLDER	IMPACT
Consumers	<ul style="list-style-type: none">• Input into the process for the development, implementation and evaluation of clinical prompts.
Carers/Parents	<ul style="list-style-type: none">• Input into the process for the development, implementation and evaluation of clinical prompts.
Clinicians	<ul style="list-style-type: none">• Input into the process for the development, implementation and evaluation of clinical prompts.
Managers/Local Services	<ul style="list-style-type: none">• Support the implementation and use of clinical prompts within services.
Jurisdiction	<ul style="list-style-type: none">• Input into the process for the development and implementation of clinical prompts. This may include changes to information systems or the development of applications. This input will vary across jurisdictions depending on resource and capacity issues.
National	<ul style="list-style-type: none">• Resourcing of further developmental work to improve the utility of clinical prompts.

RECOMMENDATION 24

Work should be commissioned to integrate all mental health data sets with the aim of improving national reporting.

This should include:

1. unique person identifiers that remain across financial years to enable accurate reporting of episodes of care that do not exclusively sit within one financial year; and
2. all occasions of services collected as part of Community Mental Health Care National Minimum Data Set (CMHC NMDS) should have an episode identifier to enable linkage of service utilisation data to the NOCC.

Rationale

The need was identified for a greater integration of national mental health data sets to achieve the objectives of use of the measures in clinical practice, and for service management, benchmarking, research, evaluation and casemix purposes.

Considerable efforts go into the collection of data, and it is only fitting that data sets and items within are defined and identified in ways that maximise their use. The potential for links across and between data sets should be maximised to allow for optimal use of the data, particularly to assist with service management, benchmarking and service evaluation.

STAKEHOLDER	IMPACT
Consumers	<ul style="list-style-type: none">• No significant impact on consumers.
Carers/Parents	<ul style="list-style-type: none">• No significant impact on carers/parents.
Clinicians	<ul style="list-style-type: none">• No significant impact on clinicians.
Managers/Local Services	<ul style="list-style-type: none">• No significant impact on managers and local services.
Jurisdictions	<ul style="list-style-type: none">• Input into the process for linking mental health data sets, which may require changes to information systems. The level of input will vary across jurisdictions according to needs, resources and capacity.
National	<ul style="list-style-type: none">• Resourcing of work to link mental health data sets.

RECOMMENDATION 25

There is a need for continuation of an independent body to provide key national infrastructure and leadership for routine outcome measurement.

This should provide:

1. support to both jurisdictional and service level managers and clinical leaders, as necessary to lead work into the future, and ensure the resources and training necessary to support the collection of outcome measures;
2. a central data repository allowing for national data collation and reporting; and
3. standardised reporting with comparisons at a national level.

Rationale

During the consultations, participants consistently identified that leadership was a vital component in the collection and use of outcome measures within services. Indeed, those services that demonstrated good practice in terms of use of the information for service management and in working clinically with consumers and carers, more often had leaders who were investing in the usefulness of the NOCC for a variety of purposes. In contrast, services with poor uptake of the measures often reported that service management was, at best, disengaged in the information agenda, through to those who were actively opposed to the collection and use of measures.

The AMHOCN in Australia and TePou in New Zealand have been instrumental in providing support and leadership within their respective countries for the implementation, ongoing development and training needs of the sector. The AMHOCN has assisted with this by providing opportunities to share outcomes information, training clinicians and service managers in the use of outcome measures in both clinical practice and service management, and conducting benchmarking forums.

During the consultations, participants noted that such a national body is important in providing consistency of training, and supporting key leaders in jurisdictions.

STAKEHOLDER	IMPACT
Consumers	<ul style="list-style-type: none"> Support for the use of outcome measures in practice will continue via a national body that will promote the use of information to support discussion between consumers, carers/parents and clinicians. Involvement of consumers will continue to form an important part of the work conducted by the national body.
Carers/Parents	<ul style="list-style-type: none"> Support for the use of outcome measures in practice will continue via a national body that will promote the use of information to support discussion between carers/parents, consumers and clinicians. Involvement of carers/parents will continue to form an important part of the work conducted by the national body.
Clinicians	<ul style="list-style-type: none"> Access to national support for the training in the use of and development of routine standardised measures will continue. Access to national data and reporting will continue.
Managers/Local Services	<ul style="list-style-type: none"> Access to national support for the training in the use of and development of routine standardised measures will continue. Access to national data and analysis will continue to allow comparisons between services.
Jurisdictions	<ul style="list-style-type: none"> Support will continue for training, data management and reporting.
National	<ul style="list-style-type: none"> Continued resourcing of a national body with responsibility for supporting training and development in jurisdictions, managing a central data repository and national analysis and reporting.

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APPENDIX A

Objectives for national mental health information development in Australia and the original NOCC information development objectives

Mental Health Information Development Objectives ⁶⁷	NOCC Information Development Objectives	Contribution of the National Outcomes and Casemix Collection (NOCC)	Related Key Developments and Initiatives
1. Strengthen the focus on consumer outcomes.	1. The routine use of outcome measures in all publicly funded or managed mental health services where such measures contribute both to improved practice and service management.	<ul style="list-style-type: none"> • Specification of standardised outcome measures for completion by consumers, clinicians and carers/parents. • Specification of protocols to promote consistency and comparability. 	<ul style="list-style-type: none"> • State and territory investments in workforce development, information systems. • Australian Mental Health Outcomes and Classification Network (AMHOCN). • Commonwealth-State/Territory funding agreements. • National Standards for Mental Health Services.
2. Support improvements in service quality.	2. a) An informed mental health sector, in which benchmarking is the norm, with each service having access to regular reports on its performance relative to similar services that can be used in a quality improvement cycle.	<ul style="list-style-type: none"> • Provision of outcome-focused data for reporting and benchmarking, both cross-sectional and longitudinal. 	<ul style="list-style-type: none"> • National Key Performance Indicators (KPIs). • National Mental Health Benchmarking Project. • State and territory reporting and benchmarking. • National reports and reporting initiatives - AMHOCN. • Accreditation processes.
	2. b) A culture of research and evaluation within mental health services and academic institutions that supports reflection on practice and debate about ongoing development.	<ul style="list-style-type: none"> • Provision of a national dataset on consumer outcomes suitable for analysis and dissemination. • Provision of training, education and cultural change within mental health services regarding outcome concepts and measurement. 	<ul style="list-style-type: none"> • Broader education, training and research initiatives and structures. • National Mental Health Information Development Priorities and Guidelines. • Workshops, outcome conferences.
3. Shift the focus of concern from cost to value for money.	3. The informed use of casemix to understand the role of variation between agencies in costs and outcomes.	<ul style="list-style-type: none"> • Specification of standardised clinical measures for further development of mental health casemix. • Provision of national data collection for use in the further development of casemix classification. 	<ul style="list-style-type: none"> • AMHOCN • National Health Reform initiative that includes major reforms to the organisation, funding and delivery of health care e.g. the introduction of Activity Based Funding (ABF) • Changes in service system and providers.
4. Improve our understanding of population needs.			<ul style="list-style-type: none"> • Survey of Mental Health and Well Being.

⁶ Department of Health and Aged Care (1999) *National Information Priorities and Strategies under the Second National Mental Health Plan 1998-2003*. Commonwealth of Australia, Canberra.

⁷ Department of Health and Ageing (2005) *National Mental Health Information Priorities 2nd edition*. Commonwealth of Australia, Canberra.

APPENDIX B

Further methodology information

INPUTS TO THE REVIEW PROCESS

State and territory input

State and territory representatives on the Mental Health Information Strategy Subcommittee (MHISS) were sent a questionnaire to complete in February 2012. This covered their experiences with the implementation of the NOCC and included questions on training, communication, management and resources, information systems and data collection, reporting, consumer and carer engagement, quality improvement and evaluations, and information use. This input, along with information collected during the consultations, has been incorporated into the review.

Face-to-face consultations

The Australian Mental Health Outcomes and Classification Network (AMHOCN) undertook face-to-face consultations from May 2012 to September 2012 in all states and territories. These consultations ranged from one-on-one meetings to facilitated discussions with groups as large as 25.

In total, 47 forums of 10 to 20 participants (lasting between two - three hours), 22 meetings with smaller groups (lasting about an hour), 25 site visits and 5 videoconferences were held nationally with a total of 866 participants.

Participants of these sessions included staff from public specialised mental health services (including clinicians, service managers, clinical directors, peer support workers, consumer and carer consultants, data and quality managers, and mental health executives), workers within the non government sector (NGO) or community managed organisations (CMO), and consumers and carers.

Separate meetings were also held with representatives of a number of peak bodies, including the Australian Council on Healthcare Standards (ACHS), headspace, the Private Mental Health Alliance (PMHA), the College of Mental Health Nursing, the Royal Australian and New Zealand College of Psychiatrists (RANZCP) and the Australian Association of Social Workers (AASW).

International experts were also invited to share their experiences of implementing and using outcome measures in practice, and to advise on how this outcome and casemix measurement should develop into the future. Two teleconferences were held and written feedback was received from one international expert.

A semi-structured approach was used during consultations. Participants were asked specific questions to gauge how far the mental health services they had involvement with had progressed the NOCC objectives and if these objectives remained pertinent into the future.

Consultations then focused on the suite of measures, and identified benefits and areas for improvement for each measure, as well as issues or gaps in the suite of measures as a whole. Participants were also given the opportunity to identify potential alternative measures where they felt these were needed. They were then invited to consider particular issues with the current protocol, and suggest potential amendments to better support the collection and use of outcome measures in practice.

Seven of the forums targeted the non-government sector, and focused on the current use of outcome measures within these services and the interest in a more structured approach to this.

A consumer and carer forum was held in each state and the Northern Territory, focusing primarily on the consumer-rated measure selected for use in each jurisdiction, while the national consumer and carer forum covered all three of the consumer-rated measures selected for use across Australia, in adult and older persons services.

Each consultation was transcribed. This transcription was combined with written responses from state and territory representatives and examined at a global level to identify themes under each of the six key questions.

Although implementation issues were not a specific focus of the consultations, participants provided feedback regarding system issues, and necessary supports for mental health services to routinely collect and better use the measures.

This feedback is included within the full summary of the national consultations provided at **APPENDIX C**.

Online surveys

Surveys were made available online to allow people who were unable to attend the face-to-face consultations to provide feedback for the NOCC Strategic Directions project.

To facilitate maximum input, the link was distributed via AMHOCN to approximately 2,500 people across the mental health sector, and was also provided to nominated state and territory representatives for dissemination throughout their networks.

The content of the survey for staff of public specialised mental health services was similar to that covered in the face-to-face sessions, with respondents considering the following areas:

- > the progress of the service towards the original NOCC objectives and the future relevance of these objectives;
- > their views and experience with using outcome measures, focusing on the activities identified in the NOCC objectives including clinical practice, service management, benchmarking, service evaluation and research, and casemix development;
- > whether each of the measures should remain in the suite of routine outcome measures and, if not, to identify any alternative measures that might be considered; and
- > additional priority areas considered important to include in the suite of outcome measures in the future.

In addition, respondents were asked about a number of specific issues relating to the protocols raised in the face-to-face consultations, such as whether the three-monthly review frequency was appropriate.

A second survey tailored for completion by consumers and carers was also distributed. Similar in content to the public specialised mental services staff survey, but with less detail, this survey included questions about the respondent's experience with the consumer-rated measures.

A full summary of the findings of the two surveys is provided at **APPENDIX D**.

Review of the literature

A review of the published literature on outcome measurement development and collection in Australia has been undertaken to supplement the findings of the national consultations.

In addition, a review of the published literature on the introduction and collection of outcome measures outside Australia has been conducted. This has assisted to identify settings with which to compare Australia's progress in outcome measurement, and to highlight particular overseas developments or lessons learnt that might improve the collection and use of outcomes data in this country.

A summary of the findings is provided at **APPENDIX E**.

NOCC data

Summary data from the NOCC have been included to track the development of the collection and factors that might both hinder or promote collection.

A summary of national NOCC data is included at **APPENDIX F**.

Expert input

Development of the recommendations was an iterative process.

A two-day workshop of the National Mental Health Information Development Expert Advisory Panel was held from 15 - 16 November 2012, with participants asked to review the findings of the face-to-face consultations, jurisdictional responses and online surveys. Informed by their knowledge of technical matters affecting the use of outcome measures, participants developed a set of recommendations. These recommendations were reviewed by the Child and Adolescent, Adult, Older Persons and Forensic Mental Health Information Development Expert Advisory Panels, to provide additional input into the vision, scope and potential impact that the recommendations could have on the mental health sector.

A technical advisory group was formed to determine the final set of recommendations, comprising the panel chairs, the chair of the Mental Health Information Strategy Standing Committee (MHISSC), a representative of the Australian Government Department of Health and Ageing and members of the Australian Mental Health Outcomes and Classification Network (AMHOCN) consortium.



APPENDIX C

Face to face consultation

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1.0 EXECUTIVE SUMMARY OF CONSULTATIONS WITH KEY STAKEHOLDERS

The NOCC Strategic Directions project aims to:

- > document the implementation of the NOCC to date, including both the benefits and costs;
- > identify factors that have helped or hindered implementation; and
- > develop recommendations for the future of the NOCC over the next ten years.

Broad consultation with key stakeholders across the mental health sector was considered an essential element of input to the project. This input was gathered through face-to-face consultations and via on-line surveys.

A total of 866 people participated in the face-to-face consultations nationally. These included staff of public specialised mental health services, workers within the non government sector, representatives of professional peak bodies, and consumers and carers.

The consultations focused on the currently recommended suite of outcome measures and the protocol for their use. These consultations also explored the extent to which services had achieved the original objectives of the NOCC, the importance of continuing this work, and potential improvement strategies.

This paper outlines the key themes that emerged from the face-to-face consultations conducted with the mental health sector from May 2012 to September 2012.

It was apparent from the comments of participants across the various sessions that the extent to which the original NOCC objectives had been achieved varied across jurisdictions and across services within those

jurisdictions. Irrespective of this, participants generally felt that the focus to date had been on the collection of the measures rather than utility in practice, with participants in all jurisdictions noting significant improvements in the rates of collection. Progress towards the other objectives was considerably less, but participants reported pockets of excellence in clinical practice and use of the outcomes data for service management. There was general enthusiasm for the continued development of a benchmarking culture and use of outcome measures for service evaluation and research, but cases of this were far less. Lastly, feedback suggested that there had been minimal progress with the use of the measures for casemix purposes.

Overall, the consultations identified considerable support from public mental health services, with the majority of participants in all sessions supporting the continued collection of routine outcome measures. Participants felt that routine outcome measurement was necessary to support and inform practice, to ensure the continued funding of services and to guarantee accountability.

Those who did not support the collection suggested that it had little value or that there might be less onerous ways to collect similar information, such as through a yearly census. Many of these participants admitted that they had not used the data in clinical practice, or seen how it might support service planning or other activities.

The measures themselves were felt to have a number of positive attributes that have facilitated their use in practice, as they:

- > are simple and relatively short;
- > cover core domains;
- > have sound psychometric properties;
- > are complementary in nature; and
- > provide a structure for communication with the consumer and their carer or parent, within the service team and with other providers as necessary.

A number of issues however, were raised in relation to particular measures, including changes required to some items and glossaries, the cultural appropriateness of the measures for some populations and pragmatic issues of offering measures to consumers with limited literacy and poor cognitive functioning. A wide variety of additional areas to consider within the scope of the collection were also suggested.

There are four measures mandated for use with children and adolescents. These are the Health of the Nation Outcome Scales for Children and Adolescents (HoNOSCA), the Strengths and Difficulties Questionnaire (SDQ), the Children's Global Assessment Scale (CGAS) and Factors Influencing Health Status (FIHS).

Most participants working in child and adolescent services found that the HoNOSCA provided information to inform practice, with only minor changes suggested to the glossary.

The SDQ was widely supported, with the suggestion that possible adaption for use with Aboriginal and Torres Strait Islander (ATSI) peoples, and culturally and linguistically diverse (CALD) populations needs to be considered into the future.

Opinion regarding the CGAS and FIHS was more divided, with some suggesting the information collected by FIHS in particular, could be collected in other ways.

A number of gaps in the suite were identified, namely that no measure covered infants aged 0-3 years, that a self-report tool for primary school aged children would be useful and that a specific youth measure was needed.

Three clinician-rated measures are mandated for use with adults. These are the Health of the Nation Outcome Scales (HoNOS), the Life Skills Profile (LSP-16) and the Focus of Care (FOC). Another three measures have been selected by states and territories for use as the consumer-rated measure. The Kessler 10 (K10+ version with four additional questions) is used in New South Wales, Western Australia, South Australia and the Northern Territory, while the Behaviour and Symptom Identification Scale (BASIS-32) is used in Victoria, Tasmania and the Australian Capital Territory, and the Mental Health Inventory 38 item version (MHI-38) is used in Queensland.

Participants from adult services expressed strong support for the HoNOS to remain in the collection, with most acknowledging that the domains were appropriate, but that there needed to be some work on item 8, 'Other psychological symptoms', and minor changes to the glossary. Some participants however, suggested

that the HoNOS was too generic, and the flexibility to use more specific diagnostic measures with different consumers would make the collection more clinically useful.

It was acknowledged that currently, the LSP-16 was not widely used in services, except perhaps in some rehabilitation settings. Some items were thought to have value, but the language was considered inappropriate, and the content was outdated and not strength based. It was however, acknowledged that a functioning measure was needed for adults.

It was consistently reported that the FOC was not used routinely in clinical practice and the relevance and clinical utility of the measure was consistently questioned by participants. However, some participants noted that the FOC was an easy measure to complete with a small number of teams using it to better understand community caseloads to facilitate appropriate allocation.

A number of issues were raised with the consumer-rated measures. The K10+ had the advantage of being relatively short, but was thought to miss some important domains. The BASIS-32 and the MHI-38 were consistently identified as too long for use on a routine basis, but the BASIS-32 covered a broader range of domains considered useful by many participants.

Four clinician measures are mandated for use with older persons. These are the Health of the Nation Outcome Scale for Elderly People (HoNOS65+), the Life Skills Profile (LSP-16), the Focus of Care (FOC) and the Resource Utilisation Groups - Activities of Daily Living (RUG ADL).

Participants from services for older persons mostly agreed that the HoNOS65+ covered appropriate domains and was useful in practice, with some suggestions for the development of item 8 and changes to the glossary.

The LSP-16 was seen as particularly inappropriate for older persons, however it was acknowledged that a functioning measure was necessary.

The FOC was reported as being completed on a routine basis, however this information was not used to support clinical practice or service management.

Participants did not have particular issues with the RUG-ADL, but it was not widely used, with clinicians reporting that they relied upon a variety of other measures for this type of information.

Consumer-rated measures pose some difficulties in services for older persons, where many consumers have cognitive issues. The Geriatric Depression Scale was repeatedly suggested as a simpler alternative.

The HoNOS, LSP-16 and Focus of Care are mandated for use with forensic consumers. Whilst the HoNOS was seen to cover domains important in forensic services, the LSP-16 was not used. The FOC being a relatively brief measure was collected routinely but not used in practice.

It was suggested that there were additional issues important for this group, including risk, security and legal issues not being adequately collected in the current suite of outcome measures. Participants from these services suggested that these additional domains might require another measure.

Participants reported that a wide variety of measures were currently used in non-government organisations (NGOs) or community managed organisations (CMOs). The type of measure and the frequency of collection varied across organisations and also between programs within organisations. This was thought to be mainly due to different funding requirements, but it was also a product of the diversity of services provided by NGOs and CMOs.

There was general enthusiasm for the continuation and development of the use of outcome measures, but it was felt that any progress must rely upon a number of issues being addressed. Standardised practices for the non-government sector, both in terms of the measures used and the collection protocol, would need to be developed. Participants thought that there was value in these being aligned with measures collected in public specialised mental health services, but others considered it more relevant to focus on measures of social inclusion and recovery. The variability in reporting requirements from funders also needed to be addressed to allow non-government mental health service providers to implement a routine set of measures.

Participants agreed that a common approach to the development and use of outcome measures across the whole mental health sector was highly desirable. Indeed participants generally agreed that the NOCC

objectives would also be appropriate for non-government mental health service providers. This could enable efficiencies in terms of national infrastructure for training, collation of outcome measures, reporting and analysis, as well as facilitating the information sharing and streamlining information collection for consumers required to cross service provider boundaries.

Consumers and carers had a consistently held view that the routine outcome measures provided a structured approach for discussion regarding consumer progress and their current health and wellbeing. When utilised in practice participants found value in discussion with a clinician. While considered valuable by participants, most consumers and carers had not been offered a consumer-rated measure, and when they had, no discussion with a clinician had been offered.

Consumers and carers participating in the national forum at which all three selected consumer-rated measures were discussed, stated that they would like to see just one consumer self-report measure for consumers used across Australia. This would ensure that consumers who relocated or received services across borders could continue to be offered a self-report measure with which they were familiar. They also felt that regardless of the consumer-rated measure used or selected nationally or indeed if these differed across jurisdictions, the key issue remained to ensure a routine offering to consumers, and the opportunity to discuss it with the clinician.

There were a range of other areas that participants thought were important to consider measuring in the future. These included, but were not limited to social participation, education, employment, housing, quality of life and satisfaction with services.

Participants also felt that there should be a measure for carers, but were not in agreement as to whether this should collect information on the carer health and wellbeing (also covering burden), carer experience of care or the carer perspective of the consumer's health and wellbeing.

Participants raised a number of issues in relation to the protocol, and requested that any alterations consider the following:

- > collection protocol for various changes of service setting;
- > routine collection of the consumer self-report measure within inpatient services for adults and older persons; and
- > an explicit statement that one of the aims is to provide consumers with the opportunity to participate actively in their care, as well as broadening the scope of the protocol to include information on how to use the outcome measures to engage with consumers and their carers or parents.

Additionally, participants requested a resolution to the following:

- > scoping in or out of brief ambulatory episodes;
- > scoping in or out of consultation liaison services;
- > flexibility in the timing and frequency of the collection to avoid additional burdens upon staff and consumers due to either very short or very long lengths of stay; and
- > responsiveness to new service developments, such as subacute.

Participants across all sessions noted that information systems, feedback and reporting, training, leadership and the service culture have all impacted on how well services had implemented the measures. Interestingly, these issues were seen as having a greater impact on whether services used the measures in practice than the measures and the protocol themselves. It was therefore important to consider these issues when implementing any changes. It was also considered important to ensure that messages about why changes were being made were marketed well to the sector and that consumers and carers were involved.

2.0 BACKGROUND

The National Outcomes and Casemix Collection (NOCC) was first specified in 2002, setting out the suite of measures and protocol for their use for the various target populations. It was understood at this time that the measures and collection protocol would require future review and development and some ten years later, the Mental Health Information Strategy Standing Committee (MHISSC) determined that a review was necessary to investigate key issues associated with the NOCC.

The NOCC Strategic Directions Project aims to:

- > document the implementation of NOCC to date, including both the benefits and costs;
- > identify factors that have helped or hindered implementation; and
- > develop recommendations for the NOCC over the next ten years, including possible changes to the suite of measures used and the protocol governing their use.

To address these aims, participants in the consultation sessions were asked a range of questions based on the following:

PROGRESS TO DATE

1. To what extent have the original objectives of the NOCC been achieved?
2. What factors in (i) the measures (ii) the protocol and (iii) broader implementation and capacity have influenced the extent to which the NOCC has achieved its objectives?

STRATEGIC DIRECTIONS

3. Are the original objectives of the NOCC still current, and if not, how should they be amended to be relevant over the next ten years?
4. What modifications or additions should be made to (i) the outcome measures and (ii) the protocol to achieve these objectives?

RISKS AND IMPLEMENTATION ISSUES

5. How should changes to the outcome measures and the protocol be implemented in ways that maximise benefits and minimise the risks arising from changing an established national data collection?
6. What broader system issues need to be considered in moving forward?

3.0 METHOD

The Australian Mental Health Outcomes and Classification Network (AMHOCN) undertook face-to-face consultations from May 2012 to September 2012 in all states and territories. These consultations ranged from one-on-one meetings to facilitated discussions with groups as large as 25. Additionally, each jurisdictional representative on the Mental Health Information Strategy Standing Committee (MHISSC) was sent a template with key questions to complete from their state and territory perspective. This aimed to elicit information on the implementation of the NOCC, and included questions across the areas of training, communication, management and resources, information systems and data collection, reporting, consumer and carer engagement, quality improvement and evaluation, and information use.

A total of 47 forums were held, involving 10 to 20 participants and lasting three hours. Additionally, 22 smaller group meetings lasting approximately one hour were held, along with 25 site visits and 5 videoconferences involving 866 participants nationally. A complete list of the various consultation sessions is provided at Appendix 1.

Participants of these sessions included staff from public specialised mental health services (including clinicians, service managers, clinical directors, peer support workers, consumer and carer consultants, data and quality managers, and mental health executives), workers within the non government sector (NGO) or community managed organisations (CMO), consumers and carers.

Separate meetings were also held with representatives of a number of peak bodies, including the Australian Council on Healthcare Standards (ACHS), headspace, the Private Mental Health Alliance (PMHA), the College of Mental Health Nursing, the Royal Australian and New Zealand College of Psychiatrists (RANZCP) and the Australian Association of Social Workers (AASW).

A semi-structured approach was used during these consultations. Participants were asked specific questions on their views of how far the mental health services they were involved with had progressed with achieving the NOCC objectives, and if these objectives remained pertinent into the future.

Consultations then focused on the suite of measures, and identified the benefits and any issues with each measure. Participants were also asked to identify issues or gaps in the suite of measures as a whole, and identify potential alternative measures where they felt these were needed. They were also invited to consider particular issues with the current protocol and suggest any amendments that had the potential to better support the use of outcome measurement in practice.

Seven of the forums focused on the current use of outcome measures in the non-government sector, and the interest in a more structured approach to this.

A consumer and carer forum was held in each state and the Northern Territory, focusing primarily on the consumer-rated measure selected for use within their jurisdiction. The consumer and carer national forum differed in that it covered all three of the consumer rated measures selected for use across Australia with adults and older persons.

Implementation issues were not a specific focus of the consultations, however the feedback provided by participants on system issues, and necessary supports for mental health services to routinely collect and better use the measures has been documented within this paper.

Each consultation was transcribed. This transcription was combined with written responses from state and territory representatives and examined at a global level to identify themes under each of the six key questions.

4.0 KEY FINDINGS

4.1 NOCC original objectives

It is recognised that the original objectives of the NOCC were not specifically stated in documents developed at the time of the NOCC implementation. The following objectives have been implied from those outlined for the overall development of the mental health information agenda, and the establishment of a national structure to facilitate the implementation and use of outcome measurement in Australia.

Objective One

The routine use of outcome measures in all publicly funded or managed mental health services where such measures contribute both to improved practice and service management.

Objective Two

An informed mental health sector, in which benchmarking is the norm, with each service having access to regular reports on its performance relative to similar services that can be used in a quality improvement cycle.

Objective Three

A culture of research and evaluation within mental health services and academic institutions that supports reflection on practice and debate about ongoing development.

Objective Four

The informed use of casemix to understand the role of variation between agencies in costs and outcomes.

Participants in the consultations were asked to comment on:

- > the extent to which each of the four NOCC objectives had been achieved;
- > whether these were still current some ten years after they were agreed; and
- > how the objectives could be amended for use over the next 10 years.

4.1.1 Have the NOCC objectives been achieved?

It was evident that the extent to which the original objectives had been achieved varied across jurisdictions, and across services within jurisdictions. The focus to date has been very much on the collection of outcome measures rather than utility in practice. This is also evidenced in the use of compliance reports in many jurisdictions, with stipulated targets for collection and monitoring. However, it was also a consistent theme across the consultations that participants noted progress towards the objectives, particularly in terms of improvements in routine collection, as well as pockets of excellence in the use of the information in clinical practice and service management. There was enthusiasm for the continued development of a benchmarking culture and an appreciation of the value of the measures for service evaluation and research. By contrast, minimal use or understanding of the measures for casemix development was reported.

Information collected from participants in relation to each of the four objectives is reported below.

OBJECTIVE ONE

The routine use of outcome measures in all publicly funded or managed mental health services where such measures contribute both to improved practice and service management.

Whilst there appears to be considerable progress with routine collection of outcome measures and pockets of excellence with their use in clinical practice and service management, there still remains variability between services and between clinicians in the use of the information.

Participants reported that where the outcome measures were being used, they were being used fairly routinely to assist with a wide variety of activities, including to inform care plans, support team reviews, support decision-making, particularly in relation to discharge planning, and inform referrals to other services. They were also reported as being used, mainly in child and adolescent services, to support engagement with consumers and carers and parents regarding planning and reflecting on progress over time.

The use of outcome measures for service management was reported to be more limited, with many services having only recently introduced reports with outcomes data at quality and management meetings. In these cases the use of these reports in these meetings appears to be still in the early stages of development, with the information being used to assist with caseload management and to explore consumer profiles for particular services. Participants generally reported that management was often more focused on the collection rates rather than exploring ways to use the information.

OBJECTIVE TWO

An informed mental health sector, in which benchmarking is the norm, with each service having access to regular reports on its performance relative to similar services that can be used in a quality improvement cycle.

Participants in all jurisdictions reported some level of involvement in benchmarking through the National Benchmarking Project and the Health Round Table. In New South Wales and Queensland there have been state-wide initiatives to promote benchmarking, however, in other jurisdictions, benchmarking at the local level seems ad hoc or only supported for a limited time.

Where local benchmarking is occurring, outcome measures often do not form part of the information used and some services appear to be benchmarking purely for compliance with collection.

Whilst the participants noted that benchmarking has not yet been consistently embedded in service practices, they thought that it was an important activity. Participants from smaller specialist areas and rural services noted the need to be able to benchmark across jurisdictions.

OBJECTIVE THREE

A culture of research and evaluation within mental health services and academic institutions that supports reflection on practice and debate about ongoing development.

Although service evaluation and research are seen as important for services, to date there has been limited use of outcomes measures to support these activities within mental health services. There were some examples of the use of outcome measures to evaluate particular programs, such as the Housing and Accommodation Support Initiative (HASI) in New South Wales, and some services have utilised outcome measures for research purposes.

Participants also highlighted that access to the data and resources to engage in evaluation and research were limiting factors in progressing towards this objective. Formation of collaborative arrangements with local universities seemed to assist with this kind of activity.

OBJECTIVE FOUR

The informed use of casemix to understand the role of variation between agencies in costs and outcomes.

Participants reported that outcome measures were not being used for casemix adjustment purposes to date, though a few reported that some community mental health services had begun to explore the use of outcomes data to manage caseloads.

There appeared to be limited understanding of casemix generally amongst participants and there was concern about how outcome measures and the NOCC more generally related to Activity Based Funding.

4.1.2 Are the NOCC objectives still current?

Participants were specifically asked if the NOCC should continue into the future. Participants felt that the routine nature of the collection enabled clinicians to use this information to support and inform clinical practice. Others expressed the need to continue to ensure ongoing funding and ensure quality and accountability of mental health services. Some felt there were significant risks associated with discontinuing at this point, particularly in terms of introducing any similar initiatives in the future.

A relatively small number of participants suggested that the same type of information might be collected with less burden on services, for example through a yearly census. Some also questioned whether the

investment of time and resources into the implementation of the NOCC had resulted in an equivalent improvement in clinical practice or service management. The majority of participants in all sessions however, supported the ongoing routine collection of outcome measures.

A number of concerns were raised regarding the breadth of objectives. The focus to date in many services had been on implementation and compliance with the routine collection of outcome measures and their use within clinical practice. Participants suggested that the suite of measures that supports clinical practice and service management may well not be the same suite that is utilised for casemix development purposes.

Most participants felt that the objectives were appropriate moving forward for the next ten years, and rather than focusing on changing these, the focus should be on how to implement the suite of measures to achieve all the objectives of the NOCC.

Participants views were quite strong that there should only be minimal changes to the current measures and protocol, with the focus on how best to support services (through enhanced reporting, analysis, information system and clinical support) to ensure that outcome measures are utilised to their full potential in clinical practice, service management and to support research and evaluation.

4.1.3 How could the NOCC objectives be changed?

Focus on clinical practice and service management

Consistent feedback from the consultations highlighted the need for a greater emphasis on objective one than on the other objectives. Participants thought that, if there was appropriate support for the use of outcome measures in clinical practice and service management, then the objectives of benchmarking, service evaluation and research, and casemix development would be more easily met. For example, if clinicians are confident in using the measures, then the quality and quantity of information available will better support these other activities.

Explicit focus on consumers and carers

Participants in many sessions raised the issue that one of the key objectives of the NOCC should be to actively engage consumers, carers and parents, and provide them with the opportunity to participate actively in care, as this is not currently stated in the objectives.

4.2 Measures

Participants in the consultations were asked to comment on:

- > aspects of the measures that have influenced the extent to which NOCC has achieved its objectives; and
- > modifications or additions that could be made to the outcome measures that would assist in achieving initial NOCC objectives.

4.2.1 What aspects of the NOCC measures have influenced achieving the NOCC objectives?

A number of common themes emerged in relation to key factors that have influenced how well the measures have been integrated into practice.

Structured approach

Outcome measures and the suite as a whole were viewed by participants as providing an effective structure to support clinical review. The NOCC also provided a structured or standardised way to present information, with a common format and language to assist with both service team and external communication.

Domains

The domains captured by the current suite of measures are broad and generally thought to be relevant to the consumer groups receiving services, and provide cues to guide care planning.

Whilst many participants noted that key domains were captured by the current suite of outcome measures, others noted that these domains were not always relevant or the most important for particular consumer groups. Some clinicians strongly believed that the current set of measures do not provide any additional or useful information for clinical practice to that which is currently collected in a comprehensive assessment.

Psychometric properties

Participants were at times divided regarding the psychometric properties of the measures. Whilst many identified that they were valid, reliable and sensitive to change, there was a small number of participants who raised concerns regarding the ability of the measures to show changes over time.

Complementary information and duplication

Whilst many participants noted one of the key strengths of the NOCC to be complementary information provided by the suite of outcome measures, others felt that there was some duplication. When the issue of duplication was discussed in more detail, participants stated that this was not so much about the measures themselves, but rather in relation to their other assessment and documentation requirements.

Certainly it was frequently noted that a suite of outcome measures covering a number of domains collected from different perspectives was a key aspect driving the use of the NOCC in practice.

Cultural aspects

It was frequently noted throughout the consultations, particularly in Queensland and the Northern Territory, that there was concern about the cultural appropriateness of the measures for Aboriginal and/or Torres Strait Islander (ATSI) peoples and culturally and linguistically diverse (CALD) populations. Indeed participants often cited this as a reason that the consumer self-report measure in adult and older persons and also the SDQ in child and adolescent services were not being offered to consumers and parents.

4.2.2 Comments on specific measures by age group

4.2.2.1 Child and adolescent

The NOCC protocol currently mandates the use of four instruments with children and adolescents:

- > Health of the Nation Outcome Scales for Children and Adolescents (HoNOSCA);
- > Strengths and Difficulties Questionnaire (SDQ), both the parent report and youth (11-17 years) report measures;
- > Children's Global Assessment Scale (CGAS); and
- > Factors Influencing Health Status (FIHS).

HoNOSCA

Benefits and issues

The HoNOSCA was widely supported throughout the consultation, with participants noting that it covers important domains and that it is brief and easy to use in practice, with the ability to highlight areas to focus on with the consumer and parent.

Whilst most participants indicated it had reasonable inter-rater reliability, there were a small number who expressed concerns regarding the variability in clinical ratings.

It was also raised that the HoNOSCA may not be appropriate for young people aged 16 – 17 years, particularly in cases when school related questions are no longer relevant. Some services are choosing to use the HoNOS in these cases.

Proposed changes or additions to the measure

It was raised that the HoNOSCA does not capture contextual information about other key aspects of young people's lives, such as housing, foster and other care arrangements, juvenile justice and income support, nor does it adequately capture physical health and communication issues.

Issues were repeatedly raised with items 5, 7, 13, 14 and 15, which respectively deal with scholastic or language skills, hallucinations and delusions, poor school attendance, problems with knowledge or understanding about the nature of difficulties for the child or adolescent, and problems with lack of information about services or the management of identified difficulties. These items require clarification in the glossary.

SDQ

Benefits and issues

The SDQ was widely supported throughout the consultations as a useful measure to support clinical practice. Participants reported that it was easy to use, it complemented the HoNOSCA well and it focused on strengths.

The value of capturing the different perspectives of the parent, clinician and the young person, was continually highlighted as assisting with establishing dialogue between the young person, parent and the clinician.

Some participants mentioned that the community norms for the SDQ were useful for comparison.

Issues were noted regarding the appropriateness of the measure for young people who were no longer residing with their family, or no longer attending school.

Proposed changes or additions to the measure

There were no consistent themes identified in terms of modifications to the SDQ, however, the appropriateness of the measure for ATSI and CALD populations needs to be considered into the future.

CGAS

Benefits and issues

Opinion regarding the CGAS was more divided than for the other child and adolescent measures. Some participants highlighted that it was quick and easy to use, was useful to monitor progress over time and provided useful casemix information to managers about groups of consumers using the services. However, the majority of participants stated that it was not a clinically useful measure and did not provide any additional information to that provided by the HoNOS and the SDQ.

Issues with ratings were noted, including the large variability in these between clinicians in some services.

Proposed changes or additions to the measure

If the CGAS remained in the suite, participants noted there would need to be developmental work to improve the glossary, and additional training to support its use in practice.

FIHS

Benefits and issues

There were varying views on the utility of the FIHS in practice. Whilst it was consistently identified that the FIHS captured important domains, it was also noted that its use in practice was limited.

There were difficulties noted with the rating of the measure and participants wanted clearer item descriptors in the glossary. Particular issues were noted in relation to questions 6 and 7, with too many concepts thought to be bundled into each item.

Proposed changes or additions to the measure

In regards to changes it was suggested frequently that this measure could be removed from the suite. It was also proposed that the same information could potentially be captured through the use of Z-codes.

Gaps in the child and adolescent collection

Participants noted that the current suite of measures did not fully cover all consumers of child and adolescent services. In particular, they noted the following additional measures should be considered:

- > 0-3 years infant measure or suite of measures;
- > self-report for primary school aged children; and
- > a specific youth measure.

Participants identified gaps in the domains covered by the current suite and that collecting information in a number of key areas should be considered for future development. These areas included:

- > quality of life;
- > social inclusion;
- > trauma-related issues;
- > family functioning;
- > therapeutic alliance;
- > consumer, carer and parent experiences of care;
- > attachment;
- > social functioning;
- > positive protective factors; and
- > resilience.

A number of existing measures were suggested that might be considered for inclusion in the suite of measures. These included:

- > Child Behaviour Checklist (CBCL);
- > Social and Occupational Functioning Scale (SOFAS);
- > Child Outcome Rating Scale (CORS) and Child Session Rating Scale (CSRS);
- > Trauma Symptom Checklist for Children (TSCC);
- > Conners' Rating Scales;
- > SCORE 15 (Systemic Clinical Outcome and Routine Evaluation);
- > Parent-Infant Relationship Global Assessment Scale (PIR-GAS);
- > Edinburgh Postnatal Depression Scale (EPDS);
- > North Carolina Family Assessment Scale;
- > Global Family Environment Scale (GFES);
- > Ages and Stages Developmental Questionnaires (ASQ); and
- > Bayley Scales of Infant and Toddler Development

4.2.2.2 Adult

The NOCC protocol currently mandates the use of four instruments for adults:

- > Health of the Nation Outcome Scales (HoNOS);
- > Life Skills Profile (LSP-16);
- > Focus of Care (FOC); and
- > a consumer-rated measure.

HoNOS

Benefits and issues

The HoNOS was thought to have a number of benefits, and was considered valid and reliable, brief and easy to use, and covered broad domains. It was also considered sensitive to change by most participants, although this was questioned by some. Additionally, it was noted that the HoNOS provided a structure to support clinical review and communication between clinicians, and acted as a guide for care planning and decision making.

Some participants noted issues with the measure, considering it too general and not specific enough for particular consumer groups, and thus difficult to use for care planning. Some thought that it did not always reflect the clinical presentation and some raised concerns about its inter-rater reliability.

Proposed changes or additions to the measure

Participants in all sessions identified problems with items 8, 11 and 12. It was suggested that clarification was needed in the glossary for items 11 and 12, whilst there needed to be significant change to item 8 to allow identification of more than one issue.

No alternative measures were identified that could provide the same level of overview, and in general, most participants were very supportive of the continued use of the HoNOS as part of the suite of routine outcome measures.

LSP-16

Benefits and issues

The LSP-16 has not been used widely in adult services. It was suggested that the measure is not relevant for the youth population in particular. Additionally it was noted that benchmarking and evaluation have focused heavily on the HoNOS family of measures. There were however, some longer-term rehabilitation services for which this measure provided useful information and was used in practice to support care planning. Participants noted that the items regarding activities of daily living and medication compliance were particularly useful.

Issues were noted in relation to particular items, including domains that are not captured, the glossary and the language of the measure. Participants consistently raised concerns regarding items 10, 11 and 16, which they thought required clarification in the glossary. Some participants suggested that the tool does not capture fluctuations in functioning between reviews, which they thought was of particular clinical relevance. The language was felt to be outdated, not strengths based and not supporting the recovery agenda.

Proposed changes or additions to the measure

Participants suggested that there were more useful types of information to collect, including capturing aspects of social inclusion, using the Camberwell Assessment of Need (CANSAS) or the replacement of this measure with a carer measure.

Focus of Care

Benefits and issues

Throughout the consultations, it was consistently reported that the Focus of Care (FOC) was not used routinely in clinical practice in adult services, and the relevance and clinical utility of the measure was consistently questioned by participants. However, some participants noted that the FOC was an easy measure to complete with a small number of teams using it to better understand community caseloads to facilitate appropriate allocation.

Proposed changes or additions to the measure

The participants did not suggest any changes or alternatives to the measure.

Consumer-rated measures

K10+

Benefits and issues

Staff of adult services thought that the measure was brief, captured the consumer perspective, was useful to show progress over time and encouraged dialogue when used in clinical practice. The collection of the self-report however, remains low across most services.

Participants thought that the four additional questions were difficult for the consumer to rate.

Many participants also proposed that the measure was not relevant for particular groups of consumers, for example youth, and while focusing on distress, did not capture other domains that are important to consider measuring from a consumer perspective.

Proposed changes or additions to the measure

Participants did not identify any specific changes to the measure, but thought it important to note other areas not covered by the measure, but considered important to collect from the consumer perspective. These included social participation, employment, housing, drug and alcohol use and quality of life.

BASIS-32

Benefits and issues

Participants identified strengths in the measure and reported that it gave a good picture of the consumer's perspective and the ability to track change over time. The domains were considered relevant, with significant breadth to capture important information from a consumer perspective. However, the BASIS-32 was consistently noted as being too long, with particular difficulties for those with cognitive impairment.

Issues with items 27 and 28 were repeatedly raised. Participants reported that many consumers did not want to answer item 27 regarding sexual activity and preoccupation and the wording on item 28 relating to drinking alcoholic beverages was often considered ambiguous and misleading.

Proposed changes or additions to the measure

It was consistently suggested that simpler wording and a briefer tool would be more appropriate to gather the consumer perspective and would be better suited for use in routine practice.

MHI-38

Benefits and issues

Participants identified a range of factors in the MHI-38 that facilitated its use in practice. It was thought to offer a comprehensive picture from the consumer perspective, show progress over time and identify strengths. A few participants thought that it was useful in guiding care planning.

It was consistently noted that the measure was too long, affecting its routine use in practice. Clinicians viewed the length of the measure as posing difficulties for most consumers to complete, and considered it particularly difficult for those with cognitive impairment.

Proposed changes or additions to the measure

Participants in all sessions agreed that a briefer measure would be desirable.

It was suggested that there were domains other than those covered by the MHI-38 that were also important to collect from the consumer perspective, including substance use, engagement with services, and aspects of social inclusion.

Gaps in the adult collection

Participants repeatedly raised the need for a carer measure in the suite of outcome measures. Capturing the carer perspective was considered very important, however there was no consensus as to whether this should be a measure of carer health and wellbeing, the carer experience of care or the carer perspective of consumer's health and wellbeing.

Participants also noted that there were gaps in the domains measured through the current suite of measures recommended for use with adults. If additional information was to be collected or changes made to the existing suite in the future, then the following areas should be considered:

- > aspects of social inclusion, including social participation, employment and housing;
- > quality of life;
- > risk;
- > therapeutic alliance;
- > family functioning;
- > alcohol and drug use;

- > experiences of care and/or engagement with services;
- > recovery;
- > trauma related issues; and
- > physical health.

In addressing these gaps, participants noted a number of existing measures with the potential to be considered. These included the following:

- > Camberwell Assessment of Need Short Appraisal Schedule (CANSAS);
- > Global Assessment of Functioning (GAF);
- > Social and Occupational Functioning Scale (SOFAS);
- > World Health Organisation Quality of Life (WHOQoL);
- > Mental Health Recovery Star;
- > Activity and Participation Questionnaire (APQ6); and
- > Depression Anxiety Stress Scales (DASS).

Participants proposed that a range of optional measures to choose from when needed could enhance the clinical utility of routine outcome measurement. For example, the use of the Brief Psychiatric Rating Scale (BPRS) or the Positive and Negative Syndrome Scale (PANSS) would be useful on occasion. It should be noted that in one jurisdiction where a range of measures were built into the local information systems, there was a very limited uptake over a number of years.

4.2.2.3 Older persons

For older persons, the suite differs as follows:

- > Health of the Nation Outcome Scales for Elderly Persons (HoNOS65+);
- > Life Skills Profile (LSP-16);
- > Focus of Care (FOC);
- > Resource Utilisation Groups - Activities of Daily Living (RUG-ADL); and
- > a consumer-rated measure.

HoNOS65+

Benefits and issues

It was consistently noted that the HoNOS 65+ covered appropriate domains, and as such had been introduced for use in many services as a tool for clinical review, primarily within the service team. Some participants however, raised concerns that it was a crude measure, which did not provide information that could be used in supporting practice or management.

Proposed changes or additions to the measure

Participants raised issues in relation to individual items on the HoNOS65+, particularly in relation to items 8, 11 and 12. These are the same problems noted in relation to the HoNOS, with participants indicating a need to clarify the glossary for items 11 and 12, and item 8 requiring development to capture more than one issue for consumers.

Participants also identified a number of domains not adequately captured by the HoNOS65+ including decision making capacity, risk, elevated mood and physical health.

LSP-16

Benefits and issues

Staff of services for older persons had particular concerns regarding the appropriateness of the LSP-16 for older persons. Indeed many participants stated that this was not widely collected or used in their services.

Participants noted issues with items 10, 11 and 12 for those consumers living in a nursing home and receiving assistance with daily activities as part of their care, making it difficult to meaningfully rate these items. Question 15 was an issue for people with dementia, and Question 16 was often proposed as particularly inappropriate for older persons.

Proposed changes or additions to the measure

It was suggested by some that the LSP-16 could be removed from the suite of measures. Others suggested that it be replaced by a more appropriate functioning measure.

RUG-ADL

Benefits and issues

While considered easy to complete, the RUG-ADL was not regularly utilised, with clinicians indicating that other types of assessments were used to determine dependencies and resourcing. A small number of participants indicated that the RUG-ADL had been used in some services to inform resource needs and support care planning for the individual consumer and also at the service unit level.

It was raised that physical capacity in terms of movement was not adequately captured by the measure, nor was any behavioural component, which participants argued would contribute to decision making regarding staff allocations.

Proposed changes or additions to the measure

There was no consistent message regarding any proposed changes or the retention of the measure in the suite of outcome measures.

Focus of Care

Benefits and issues

Participants indicated that the FOC was completed, but was not being used in either clinical practice or service management across most services for older persons.

Proposed changes or additions to the measure

There was no direct feedback regarding whether the FOC should remain in the suite or be replaced by another measure.

Consumer-rated measures

K10+

Benefits and issues

Although it was recognised that it is important to gain the consumer's perspective, it was raised that the K10+ is difficult to use with consumers with cognitive impairment. The last four questions, in particular, were considered difficult to complete. A response scale that is less complex was suggested as being more appropriate, with Yes/No responses rather than a 5-point scale.

Proposed changes or additions to the measure

Whilst it was acknowledged that distress was important to measure, other areas of psychosis, agitation, pain and adjustment to living in care were also noted as important for older consumers.

Participants acknowledged the need for a self-report measure with a simpler rating scale, and suggested that the Geriatric Depression Scale with its Yes/No responses may be more appropriate for use with older persons.

BASIS-32

Benefits and issues

Some participants indicated that the BASIS-32 was useful with the 'young old' and could track progress over time in a number of relevant areas. Most participants however, indicated that the length of the BASIS-32 prevented routine use in practice. Additionally, specific items were noted as problematic, particularly items 27 and 28. Participants felt that most consumers did not want to answer questions relating to sexual

activity (item 27) and they also indicated that the language was ambiguous in places, particularly for item 28 regarding alcoholic beverages.

Proposed changes or additions to the measure

Most participants supported the need for a consumer-rated measure for older persons, however thought that the BASIS-32 was too lengthy. The Geriatric Depression Scale was proposed as an alternative measure, and while it does not cover all that the BASIS-32 covers, all versions require simple Yes/No responses, therefore staff might be more inclined to offer the measure and consumers may be better able to complete it.

MHI-38

Benefits and issues

The MHI-38 was generally considered to be too long and complicated to use in services for older persons, and as such was rarely used in practice. It was also noted that it was particularly difficult to use for consumers with cognitive impairment.

Proposed changes or additions to the measure

The Geriatric Depression Scale, with Yes/No responses, was noted to be better than the MHI-38. It was also suggested that the MHI-18 would be worth exploring.

Gaps in the older persons collection

Participants identified gaps in the domains measured through the current suite of outcome measures for older persons, requiring consideration in the future. These included:

- > a carer measure covering carer health and wellbeing, carer experiences of care and/or carer perspective of the consumer health and wellbeing;
- > aspects of social inclusion, including social participation and housing;
- > quality of life;
- > consumer experiences of care;
- > decision making capacity;
- > consumer self-report of psychosis, agitation, pain and adjustment to living in care; and
- > physical health.

Participants suggested the following existing measures be considered for inclusion in the suite of outcome measures in the future:

- > Geriatric Depression Scale and Geriatric Anxiety Scale;
- > Behavioral and Psychological Symptoms of Dementia (BPSD); and
- > Barthel Index of Activities of Daily Living.

4.2.2.4 Forensic

The NOCC protocol mandates the use of the same four instruments for the forensic population as for adults:

- > Health of the Nation Outcome Scales (HoNOS);
- > Life Skills Profile (LSP-16);
- > Focus of Care (FOC); and
- > a consumer-rated measure.

HoNOS

Benefits and issues

Staff of forensic services generally considered the HoNOS to be a measure capturing broad domains that were appropriate for forensic services and one that provided a framework to prompt discussion in clinical reviews.

Although most participants identified benefits in relation to the domains captured, some stated that the measure was too broad and therefore it was not seen as clinically useful within a forensic setting. Some felt that it was not sensitive to change for those consumers with long lengths of stay, who were undertaking multiple reviews.

Proposed changes or additions to the measure

Staff of forensic services also raised issues with items 8, 11 and 12 and suggested that clarification was needed in the glossary for items 11 and 12. There also needed to be changes made to item 8 to allow identification of more than one issue.

Staff identified some other domains as important to consumers of forensic services, namely risk, security and legal issues. It was suggested that these aspects could be incorporated into the HoNOS, or that an alternative measure be found to cover these issues.

LSP-16

Benefits and issues

The LSP-16 was repeatedly identified as a measure that was not used in forensic services, with participants noting it was clinically irrelevant and of limited value in a forensic setting. There were a small number of participants however, that considered the LSP-16 to be a useful tool to support care planning in practice, with particular reference to the longer versions (20 and 39 items) being more appropriate than the LSP-16.

Proposed changes or additions to the measure

Although it was noted that functioning was important to measure, the LSP-16 was not considered the appropriate tool to do so. The Camberwell Assessment of Needs Forensic version (CAN-FOR) was suggested as an alternative measure to consider.

Focus of Care

Benefits and issues

Feedback from forensic services staff on the FOC was similar to that of adult services. The FOC was not used in either clinical practice or to support service management, and the relevance of the measure and its clinical utility was questioned by participants.

Proposed changes or additions to the measure

Participants did not suggest any changes to the measure or alternatives and the consistent message was that it was not being used in most services.

Consumer-rated measures

A difficulty in engaging with consumers, particularly those under involuntary orders, was consistently noted as an issue in the forensic environment for all of the consumer self-report measures. Forensic consumers on involuntary orders were particularly difficult to engage, and problems with literacy which affect many of the forensic population, make the offering and completion of a consumer self-report particularly difficult.

K10+

Benefits and issues

Participants noted that the question relating to days out of work was not appropriate for the forensic setting. In addition it was suggested that the narrow focus on distress did not allow for other important aspects to be captured, such as psychosis and level of functioning.

Proposed changes or additions to the measure

Participants noted difficulty using the current measure with the forensic population group, often preventing its routine use in practice, however no alternative measure was suggested.

BASIS-32

Benefits and issues

Some participants felt that the BASIS-32 was a useful tool to gain the consumer perspective. It could be used to track progress over time, and was considered to provide useful additional information to that gained in the clinical assessment. However, most participants indicated the use of the BASIS-32 was limited.

Proposed changes or additions to the measures

No alternative measure to the BASIS-32 was suggested.

MHI-38

Benefits and issues

The questions on the MHI-38 were not always seen as relevant, and participants noted that forensic consumers often entered zero ratings. Although the length of the measure was raised as a concern, the nature of the self-report with regards to this population group was seen as the major barrier to implementation.

Proposed changes or additions to the measure

No alternative measure was suggested.

Gaps in the forensic collection

Participants noted that there were gaps in the domains of the current suite of outcome measures for use with forensic consumers, and areas to be considered in the future included:

- > risk and security issues;
- > legal issues;
- > recovery;
- > consumer's understanding of the relationship between offending and mental health and motivation to change;
- > quality of life; and
- > consumer self-report of psychotic symptoms and level of functioning.

Participants also noted that a number of existing measures covered some of these issues and should be considered in the future. These were:

- > Health of the Nation Outcomes Scale – Secure (HoNOS Secure);
- > Short Term Assessment of Risk and Treatability (START);
- > Depression Anxiety Stress Scales (DASS);
- > Historical Clinical Risk – 20 (HCR-20);
- > Camberwell Assessment of Needs Forensic version (CAN-FOR);
- > Brief Psychiatric Rating Scale (BPRS);
- > Clinical Global Impressions Scale (CGI); and
- > Schwartz Outcome Scale – 10 (SOS – 10).

4.3 Protocols

Consultation participants were asked to comment on modifications or additions to the protocols, in order to assist in achieving the initial NOCC objectives.

A number of key themes emerged from the consultation sessions in regards to changes to the protocol, and were similar for services targeting all population groups. The key themes focused on:

- > change of setting;
- > frequency of collection;
- > services currently out of scope, including brief ambulatory episodes, consultation liaison and the use of the consumer-rated measure in inpatient settings;
- > responding to new service developments; and
- > broadening the scope of the protocol to include the use of information.

4.3.1 Change of setting

The change of service setting collection was the issue raised most frequently throughout the consultations. Currently, when a consumer is admitted to an inpatient setting, there is a requirement for collection of measures at discharge from the ambulatory setting and on admission to an inpatient setting. The main concerns were the unnecessary duplication of measurement and the reinforced view that outcome measurement is an administrative task rather than clinically relevant. Collection of outcomes data at such close intervals also highlighted issues with inter-rater reliability between inpatient services and community teams.

Rather than collection at both points in this transfer of care, participants suggested a process of one collection by the inpatient service at admission.

Although there is the same duplication of measurement at discharge from the inpatient setting and subsequent admission to an ambulatory service, it was proposed that the ambulatory service should still collect outcome measures at this point, but that it may be more meaningful to collect these at 2-4 weeks post discharge.

4.3.2 Frequency of collection

There were varying views regarding the frequency of collection. Many participants indicated that a 3-monthly collection was appropriate, met needs for consumers and service providers and was useful as it aligned with the National Standards for Mental Health Services review interval. However, there were many participants who felt there was a need for greater flexibility within the protocol. In particular, those working in settings with longer lengths of stay thought that 6 monthly review for consumers who had longer lengths of stay might be more appropriate.

It was also raised that the LSP-16 in particular could be collected less frequently, that is 6-monthly.

Some staff from child and adolescent services suggested that collection intervals could be based on number of contacts. It was however, acknowledged that this would not be appropriate for all services.

Consumers and carers were consulted regarding the current collection frequency, and most stated that 3-monthly was appropriate for services, but there was considerable work needed to ensure that this did occur, particularly in regards to the offering of the consumer-rated measure. This frequency was thought to allow tracking of a person's progress over time for the consumer and their carers or parents.

4.3.3 Services currently out of scope

A number of issues were highlighted by participants regarding services or service types currently out of scope for collection, namely brief ambulatory episodes and consultation liaison services. The collection of a consumer-rated measure for adult and older inpatients was also considered.

Brief ambulatory episodes

There were divided views regarding the collection of outcome measures for brief ambulatory episodes. Those participants who thought these should be included argued that a large number of consumers not currently captured within this collection, could be described. They suggested that, if in scope, the collection should be restricted to one brief measure rather than the entire suite of measures. Those participants that thought these

should not be included suggested it would increase the collection burden, without adding any value for the service. Staff from a number of services in different jurisdictions reported that their services were already routinely collecting the clinician-rated outcome measures for brief ambulatory episodes. This was regarded as good clinical practice and thought to provide useful information for the clinician, treating team and service managers.

Consultation liaison

Participants were divided regarding whether the collection of outcome measures on consultation liaison services should be in or out of scope. Those who indicated the need to include these stated that they would be able to describe an additional group of consumers not currently captured within the collection. Staff from child and adolescent services advised that this forms a large part of the work of child and adolescent services, and it was important to describe these children, who may have as complex needs as others seen through the service.

Participants highlighted the potential for duplication of collection if consumers are also receiving services from another mental health team. This is often the case in forensic services in some states and territories.

As in the case of brief ambulatory episodes, participants suggested that if consultation liaison services were in scope, then the collection could be restricted to one brief measure rather than the entire suite of measures.

Consumer-rated measure in inpatient settings

There were divided views from staff of services for adult and older persons as to whether it was appropriate to offer a consumer-rated measure in an inpatient setting. Some indicated that this would add to collection burden and preferred collection to only occur in the community setting. Others thought that it could be offered according to a person's length of stay, that it should not be mandatory and some stated it should be not offered at admission, but at a later time.

New South Wales has directed that the consumer-rated measure be routinely offered to adults and older persons receiving inpatient services, and a number of services in other jurisdictions are also choosing to do so.

Consumer and carer groups indicated that they would like the consumer-rated measures offered, and if initially declined, that they be reoffered prior to discharge.

Participants from those jurisdictions with longer consumer-rated measures indicated that a shorter consumer-rated measure may be more appropriate in an inpatient setting.

4.3.4 Responsiveness to new service developments

Measures to use with youth

The need for an appropriate set of measures and associated protocol governing their use for the youth population was repeatedly raised in both child and adolescent, and adult sessions throughout the consultations.

Currently, services working with youth use both child and adolescent and adult sets of outcome measures, with some having to change the set of measures when the youth turned 18 years old. There was however, no agreement on the measures to use for this group. Participants were divided between using the current adult set and the current child and adolescent set, while others proposed different measures and some indicated that the most appropriate measure might vary according to developmental phase of the young person.

Service settings

Some participants raised concerns regarding the current service setting definitions. In particular, they noted that with the development of a range of sub acute service settings, the protocol for a particular setting was at times not clinically relevant.

4.3.5 Broadening the scope of the protocol to include use of the information

The need to include a section on the use of the measures in the protocol was highlighted by clinical staff, consumers and carers in a number of consultation sessions. Whilst the collection of the measures is improving, the focus is still on compliance, and providing direction in the protocol on the appropriate use of the measures may shift this focus.

Consumers and carers particularly noted the need to explicitly state the requirement to discuss the measures with consumers, and where appropriate carers and families, to help drive better engagement in services.

4.4 Issues identified during implementation

Consultation participants were asked to comment on the broader factors that have influenced the extent to which the NOCC objectives have been achieved.

Although the measures and protocol have had a significant impact on the extent to which the NOCC objectives have been achieved, staff of public specialised mental health services identified a range of other factors that they thought had a more significant impact on the ability of services and jurisdictions to implement outcomes measures in practice. These included:

- > information systems, approaches to data collection and reporting;
- > approaches to training and support;
- > leadership;
- > team and service culture;
- > effective partnerships; and
- > competing interests and service demands.

4.4.1 Information systems, approaches to data collection and reporting

Participants from all states and territories felt that the limitations of their information and reporting systems had impacted significantly on the ability of clinicians and services to effectively collect and utilise outcomes information.

All but one state could directly enter outcomes data into their systems. Some states and territories were however, relying on a combination of direct entry and batch entry of paper-based forms. Participants of services using paper-based forms and batch entry noted that the process of collection and subsequent lag time for feedback impacted significantly on the individual clinician and the service to utilise timely information to support practice and service management.

In addition, many participants using direct entry noted that access to the data and feedback from the system were often problematic. Those with the ability to directly enter data raised issues about doing so with 'a clunky system', that it was too time consuming and that updated technologies were needed to facilitate the collection, such as the use of iPads and tablets. It was noted that one youth service was currently trialling the use of iPads to collect the K10+ and reported having found the technology to facilitate engagement with young people, and instantaneously provide feedback regarding progress over time to both the clinician and the consumer.

In terms of reporting, participants noted that timely, meaningful and user friendly reports supported the use of outcomes data. Participants in some jurisdictions noted that there is currently no access to aggregate level reporting, which presented a barrier to utilising information for service management, benchmarking, service evaluation and research activities. Many participants raised the issue of limited resources being allocated within the service, or by the jurisdiction to support the development and ongoing maintenance of the system to provide this.

Although most participants in all jurisdictions have had access to individual level reports, it was thought that simpler graphs produced for use specifically with consumers and carers were needed.

Whilst significant investment had been made when the NOCC was first introduced to support development of an information infrastructure and collection of the data by jurisdictions, continued investment by states and territories in the maintenance and development of those systems was reported as being widely variable. Where investment was less or not ongoing, staff felt that this was a major barrier preventing them from realising the value of collecting outcome measures and were therefore more disinclined to do so.

4.4.2 Approaches to training and support

Participants noted that there was extensive training provided with the initial rollout of the NOCC, supported by AMHOCN and through jurisdictions. Whilst support for training continues through AMHOCN via online training and other forums and workshops, it was reported that there had been a marked decline in the investment and support at a jurisdictional level some 10 years on.

Continuing investment in training was considered particularly important. Dedicated resources for this were also thought important, with participants citing examples, considered particularly effective, where dedicated positions were created to both train and support processes to facilitate the collection and use of outcome measures.

Most participants proposed that the initial focus of training on collection hindered the uptake of the use of the measures, with many viewing it as an administrative task. However, with the shift in focus to training in the use of the measures in practice, there has also been a shift in attitudes and use in services. Some participants suggested that training now also needed to include the effective use of outcome measures in service evaluation and research.

Many participants raised concerns over the lack of understanding of how to use the measures in practice, as well as a limited understanding by some managers of how to appropriately interpret the information to support service management. For example, some participants raised concerns of the expectation by some managers and executives for a significantly lower score on discharge than on admission, rather than being sympathetic to the fact that at times no change will be a good outcome and there may be deterioration for some consumers, especially in those accessing services for older persons.

4.4.3 Leadership

It was universally acknowledged that strong leadership was required to drive the uptake and use of the measures in practice. Many participants raised concerns over a lack of clinical leadership, acting as a barrier to the individual clinician, the teams and services utilising outcome measures in clinical practice and in service management. Participants reported a high degree of scepticism regarding outcome measures amongst this leadership group, and often managers were not looking at the aggregated level data nor were clinical leaders promoting its use in team reviews. It was highlighted, particularly in the site visits, that those services collecting and using outcome measures well had strong leadership and executive support to facilitate this.

Leadership at a jurisdictional level was also cited as problematic by a number of participants, with responsibility and accountability for the collection and use of data often unclear. Others had concerns that the leadership at a jurisdictional level was too often focused on compliance, with teams and services being benchmarked only on collection rates rather than understanding issues related to casemix. Participants felt that this focus further reinforced to staff that outcome measurement was an administrative task rather than information that can inform practice and service management.

Strong leadership can promote a service culture where there was an expectation that outcome measures will be collected and the information used at all levels within the service.

4.4.4 Team and service culture

Many participants acknowledged that the team or service culture had a marked impact on the extent to which outcome measures were collected and used. The collection of outcome measures was often viewed as an administrative task by the team, and considered a burden. It was seen as an addition to clinical work rather than an integral aspect of it. It is also often viewed as information for government departments rather than information that can support and inform practice. Some participants commented that clinicians and managers often undervalued the NOCC and did not recognise its link to clinical practice.

Other participants reported that there had been a shift in this culture with more clinicians and managers valuing its clinical utility, as well as recognising that outcome measurement forms part of an accountable and quality service. This shift was, in some cases, thought to tie in with the uptake of benchmarking.

The consultations reflected variation in the culture amongst services, but also highlighted a shift towards a culture in which outcome measures and other information were important to collect and use in practice.

4.4.5 Effective partnerships

Consumer and carer involvement has been limited throughout the roll out of the NOCC and the ongoing collection and use of the information. Throughout the consultations it was noted that where consumers and carers were involved in training and marketing of outcome measures to consumer groups and clinicians, the uptake and use of the measures was seen to improve.

Many participants also raised the issue of limited collaboration with academic institutions. Although there are

some examples of established relationships and one-off collaborative projects between health services and universities, this is often not the case, and is seen as a barrier to achieving the NOCC objectives in relation to service evaluation and in particular, research.

4.4.6 Competing interests and service demands

Staff from all states and territories acknowledged the limited budget available to health services in the current environment. Such limitations on resourcing have an impact on the ability of services to continue to develop information systems and reporting.

Participants noted that often other service demands take precedence over the collection of outcome measures. This is compounded by the view of many clinicians that it is an administrative task and thus an activity that can be left uncompleted when service demand is high. Many participants also raised issues with an increase in paperwork, which can often duplicate aspects of the outcomes information that has already been collected. These increased requirements for reporting and collection of data are seen as burdensome.

In some states and territories, service restructures have significantly impacted on the ability to collect and use data appropriately, as there is a shift in corporate knowledge and a possible change in information and reporting systems, accountabilities and responsibilities.

4.5 Considerations when changing NOCC

Consultation participants were asked to comment on changes that could be implemented to the measures and protocol in ways that maximise benefits and minimise the risks arising from changing a long established national data collection?

The comments centred on several key themes:

- > consumer and carer focus;
- > information and reporting systems;
- > training and marketing; and
- > resourcing the change process.

4.5.1 Consumer and carer focus

Clinicians and consumers and carers thought that the focus going forward should be on how the use of outcome measures supports effective engagement with consumers and carers regarding consumer health and wellbeing. The input of consumers and carers into any work to modify existing measures or develop new consumer and carer measures is necessary to ensure their relevance. More importantly, consumer and carer input is needed in relation to marketing changes to the mental health sector, training, determining strategies for completion of the consumer-rated measures and for the development of any additional content in the protocol around the practicalities of engaging consumers and carers.

Feedback from consumers and parents to clinical staff that the information collected was useful and they wanted to be engaged in a discussion regarding the measures can be a powerful driver for change, as was shown in one of services that were visited. This kind of feedback can reinforce the meaningfulness of the collection and counteract feelings by staff that it is just an administrative burden.

4.5.2 Information and reporting systems

Information system issues

It was consistently stated that if the NOCC was to be more successful into the future, current information systems needed to be more user-friendly, with more efficient methods required to enter and extract data.

The use of iPads, PC slates or other hand held devices would provide the capability to effectively capture the information and engage with consumers and carers. Other options, such as the ability to self-rate online, and the use of mobile applications were also proposed. It was clear that, particularly for the successful engagement of young people, these technologies needed to be explored.

Participants were also keen to see the development of flags on the information system, which may serve to

prompt the collection and review of measures, and assist managers to monitor the collection of data and to support clinical decision making. Whilst flags are built into some information systems, this is not the case for all jurisdictions.

Participants identified the need to consider changes to the broader health information systems. For example, in some states and territories the current stand-alone information systems are moving to whole of health systems. This will have a significant impact on the ability of the mental health sector to effectively and efficiently implement any changes to the current measures and protocol.

Estimates of the time required for implementation, including system redesign planning and necessary approvals, could be anywhere from six months to two years. Estimates could not be made for some jurisdictions where there were whole of health information systems in development.

The availability of a national electronic health record also needs to be considered in planning for any potential changes.

Many participants raised the issue that, whilst the focus of NOCC has been on outcome measures, no consistently agreed set of intervention codes has been in operation. Many expressed the need to consider outcomes in conjunction with the interventions used. In terms of the effectiveness of the NOCC into the future, the link between outcomes and interventions is important for both improvements in clinical practice and service management. This can also provide a solid base for service evaluation and research.

The mental health sector comprises not only public specialised mental health services, but also private providers, private hospitals and a growing non-government sector. Participants across all sessions raised the issue that development, planning and implementation of any changes needs to involve and consider how best to collaborate with these key partners in the mental health sector, and ensure a consistency of approach to outcome measures where appropriate.

Reporting

In terms of extraction of information, the ability to produce graphs in real time was seen as essential to support the use of the information both clinically and at a service management level. In addition, many participants noted that the current reports for their jurisdiction were not user-friendly. It was also considered important to have an effective feedback system, facilitating access to the data at all levels within the mental health service.

4.5.3 Training and marketing

Ongoing investment in training was considered a key component in implementing any changes or modifications to the NOCC. Participants felt that consideration needed to be given to the standardisation of the training, resourcing key positions within jurisdictions with continued national support, and exploring links with universities to incorporate training into undergraduate courses.

Participants were keen to see training of staff at all levels of the organisation, with an emphasis on the use of the information in regards to all of the key objectives. It was thought both important and useful to include consumers and carers in training sessions.

Clear communication about the purpose and rationale for change is imperative to support the implementation process, and to effectively engage staff, consumers and carers.

It was clear that the focus for change needs to be on making the measures more clinically useful rather than on routine collection. The current focus on compliance in some services and jurisdictions needs to shift to the use of measures to support clinical practice, service management and to actively engage consumers, and their carers, in their care.

Clinical prompts

Clinical prompts on completion of the measures would assist in supporting the clinical utility of the measures and drive their uptake and use in practice.

Whilst continued support for training in the collection and particularly the use of measures was identified as important, participants raised the additional need for prompts to guide care planning and support decision

making. Linking prompts to scores on the measures was seen as an effective way to better embed the use of the outcome measures in practice. Clinical prompts were also seen to provide an opportunity to assist clinicians, particularly those with less experience, in their practice.

4.5.4 Resourcing the change process

Participants expressed the need for appropriate resources to implement any changes to the suite of outcome measures and the protocol. These resources are required to fund changes to information and collection systems, for training and for tailored reporting and analysis. Participants noted that some of these areas required sustained funding.

Additional resources are also necessary for work in relation to key pieces of work, such as the development of clinical prompts, and to invest in marketing changes and the use of outcome measures more generally within services and across the mental health sector.

Collaboration between services and central management

Participants were keen that the jurisdictions and central management areas engage early with services to give sufficient notice of changes and to ensure necessary resourcing and assistance with the implementation of any changes. These collaborative partnerships were seen as a critical component to successfully implementing change.

4.6 Specific consultations with community managed organisations

Forums specifically targeting the non-government sector were held in New South Wales, Victoria, Western Australia, South Australia, Tasmania, the Australian Capital Territory and the Northern Territory. The focus of these sessions was on gaining an understanding of staff experiences with outcome measures, their use of these in their work in the non-government sector and in collaboration with the public specialised mental health services, as well as exploring their views on what might be done in the future.

4.6.1 Measures used

Participants reported that a wide variety of measures are currently used in non government organisations (NGOs) or community managed organisations (CMOs). Often the measures used even varied across programs within the same organisation. This was thought to be primarily due to different funding requirements.

The Camberwell Assessment of Need Short Appraisal Schedule (CANSAS), K10+, BASIS-32, the World Health Organization Quality of Life (WHOQoL), and recovery measures, such as the Stages of Recovery Instrument (STORI), the Recovery Assessment Scale (RAS) or the Mental Health Recovery Star, were reported as being the most commonly used. In some services, the HoNOS and LSP-16 had been used.

Participants reported that some organisations were working with local universities to identify, develop or trial new outcome measures. For example, an NGO in the Northern Territory developed a recovery measure for use in its youth mental health program, in partnership with a university. Additionally, a South Australian NGO is trialing the use of the Partners in Health Scale in care planning, with support from a university, and one of the larger NGOs operating in South Australia and Victoria is working with a university to identify appropriate measures for use across different programs.

4.6.2 Frequency of collection

Not only the measures used, but also the frequency of collection of the measures varied across organisations and even between programs. This was thought to be, in part, a function of funding agreements requirements, but also due to a lack of resources to develop standards for practice, and a lack of guidance around the appropriate selection and use of the measures. Organisations that collected any outcome measures usually did so at entry and exit, but the review intervals varied widely from monthly, 3-monthly and 6 monthly to yearly.

4.6.3 Current experiences

It was repeatedly reported that the sharing of outcomes information with other service providers was variable and occurred at the discretion of individual service providers. Whilst information might be shared at the point of referral to the NGO/CMO, ongoing outcome information was not routinely received or shared.

On reflection of the NOCC objectives, participants generally agreed that the objectives would also be appropriate for the non-government sector.

However, it was acknowledged by most participants that the use of measures to support service provision needed to be further progressed.

In terms of promoting communication with consumers, it appeared that the measures were only discussed with the consumer on a very limited basis.

It was also recognised that, if the measures used differed to those used in other mental health services, then the benefit of promoting communication between mental health service providers could not be realised. There were however, differing views on the value of using the more clinical measures in NGOs/CMOs. Whilst many thought that this was appropriate and they were useful in providing a common language with other parts of the mental health sector, others thought that measures focusing more on social inclusion and recovery were more relevant for consumers of these services.

Participants were enthusiastic about the idea of benchmarking their services in the future, but they felt that the current competitive nature of the tendering process for organisational funding did not promote this level of collaboration and shared learning between organisations.

Participants reported that outcome measures were most commonly used for the evaluation of programs and services, primarily in support of tendering processes. Indeed many viewed the use of outcome measures as having a competitive advantage in this process. There were also some examples of using outcome information in service planning.

4.6.4 Future directions

Participants across all sessions in all jurisdictions supported the continued use of outcome measures into the future. They believed that the focus needed to shift from these being viewed as activity data to support funding requirements, to supporting service provision and service management.

To continue to develop the use of routine outcome measures in the non government sector, ongoing training is needed, with suggestions that this could be done in collaboration with the public specialised mental health sector.

The importance of feedback and analysis was raised. Whilst some of the larger non government providers have systems and reporting processes in place, there are currently distinct limitations in terms of infrastructure and resourcing within most organisations to carry out activities that are not funded. It was also suggested that a central data repository would support the dissemination and use of information, with potential benefit in this information being combined with that from public specialised mental health services.

It was repeatedly raised by participants that the differing reporting requirements, including the specification of different outcome measures under the terms of contracts of different funders and for different programs, was a major issue that needed to be addressed if non-government mental health service providers were to routinely collect and use outcome measures as outlined in the NOCC objectives. Development of standard practices for the non government sector would be a necessary first step to this happening.

Participants were keen for the alignment of their practices with other mental health service providers. However, whilst there was some support for the use of common measures to achieve this, there was also support for different, but complementary measures better suited to the differing focus of services provided by NGOs and CMOs.

Although participants differed in their views on how best to enhance collaboration with other mental health service providers, it was generally agreed that a common approach to the development and use of the outcome measures across the whole mental health sector was highly desirable. This would require better coordination at both a Commonwealth level and a jurisdictional level. If this was achieved, there could be efficiencies in national infrastructure for collation of outcome measures, reporting and analysis and training. This might also facilitate the sharing of information between service providers, and place less burden on consumers through protocols that cross service provider boundaries.

4.7 Specific consultations with consumers and carers

Seven consumers and carers forums were held in all states and the Northern Territory, with participants asked to focus specifically on the consumer-rated measure selected for use in their jurisdiction. Where time allowed, the clinician-rated measures were also discussed. The national forum for consumers and carers looked at all three consumer-rated measures selected for use in Australia with adults and older persons, and was therefore also able to consider the relative merits of the tools.

4.7.1 Consumer-rated measures

It was a consistently held view that the consumer-rated measures provided a structured approach for the discussion of consumer health and wellbeing and progress. Most participants identified value in discussing this with a clinician. Unfortunately, most consumers and carers in the consultation had not been offered a consumer-rated measure to fill in, and of those who had, most had not discussed this with a clinician.

Consumers and carers noted that two of the current consumer-rated measures, namely the K10+ and the BASIS-32, were not strengths based. The cultural appropriateness of the tools was questioned, especially in the jurisdictions of Queensland and Western Australia.

Consumers and carers thought it would be beneficial that just one consumer self-report measure was used across Australia, allowing for a consistency of approach, particularly where consumers were receiving services across state borders or had moved interstate. There was agreement among consumers and carers that regardless of the tool used or selected nationally or indeed if there is only one selected, it was imperative that the tool be offered routinely to the consumer, with the opportunity to discuss this with the clinician.

Information from both the clinician and consumer perspective are necessary to support the recovery process.

Consumers and carers listed a variety of additional areas considered useful to collect information from the consumer perspective, suggesting some aspects be added to existing measures or collected through new measures if found to be burdensome to collect. They felt that these should, at the least, be considered in any future changes to the suite of outcome measures.

K10+

Benefits and issues

The K10+ was noted to have a range of benefits, including its effectiveness for self monitoring and brief length. Consumers and carers noted however, that it was not a strengths based tool. Participants were concerned with the language used in the measure, and thought that a positive rating scale was more appropriate.

The cultural appropriateness of the measure for the ATSI and CALD populations was questioned.

Proposed changes or additions to the measure

Although distress is an important domain to measure, consumers and carers suggested other areas considered important to capture from the consumer perspective, including:

- > accommodation, relationships, employment, education, income and support networks;
- > hope for the future and purpose in life;
- > self-esteem;
- > functioning;
- > quality of life;
- > drug and alcohol use;
- > satisfaction with service provision and expectations of the service;
- > physical health;
- > therapeutic relationship;
- > recovery;
- > irritability and aggressiveness;

- > other symptomology, such as psychosis and mania; and
- > some form of general comment, such as ‘How are you feeling today?’ or ‘What are the main issues distressing you?’, to set the context for discussion with the clinician and to understand issues affecting ratings at different times.

BASIS-32

Benefits and issues

The BASIS-32 was identified as covering broader and appropriate domains, and consumers and carers generally expressed the view that the BASIS-32 fitted better with the recovery approach. However, some participants suggested that there were issues with the wording on the rating scale, particularly as it is deficit based. For example, rather than rating the extent of difficulty, it was thought more appropriate to rate the extent to which the consumer was managing. They also felt that an option of ‘not applicable’ would be useful.

Proposed changes or additions to the measure

When discussing the BASIS-32, consumers and carers also suggested that it was important to gather contextual information at the time of completion, which may impact on the ratings and also to ask if the consumer was experiencing improvement in the areas covered.

MHI-38

Benefits and issues

There were varying views regarding the MHI-38. Some participants thought that the MHI-38 was strengths based, provided a good picture of how a person was feeling, enabled tracking of progress over time, was simple and clear, and promoted discussion between the clinician and the consumer.

Other consumer and carer participants noted issues with the length of the measure and found it to be repetitive, confusing, complicated to complete and too symptoms focused.

Participants also had concerns about questions on suicidality, especially in relation to consumers completing these with limited support from clinicians and particularly when not completed in the service.

Proposed changes or additions to the measure

Participants thought that it would be useful to provide additional space on the form so that consumers could make a general comment about how they were feeling.

Consumers and carers also identified some areas that should be covered in addition to that already covered by the MHI-38, including:

- > alcohol and substance use;
- > social and relationship issues; and
- > education and employment.

Additional information to collect through self-report

Consumers and carers identified some areas that would be useful to collect from the consumer perspective in addition to what was being covered by the consumer measures. These additional areas were not prioritised and are as follows:

- > physical health;
- > alcohol and drug use;
- > social participation;
- > employment and education;
- > housing/accommodation;
- > recovery (self-esteem, self-confidence, hope, level of acceptance, resilience, abilities and tenacity);
- > quality of life;

- > support and assistance from carers, family, community and other services;
- > daily living and functioning in roles;
- > ability to cope with stress and/or current stressors;
- > trauma and abuse;
- > satisfaction with service provision; and
- > hope for the future and purpose in life.

In addition consumers and carers thought it important to collect information from the carer's or parent's perspective on the following:

- > carer perspective of consumer's health and wellbeing;
- > carer experiences of care; and
- > carer health and wellbeing.

4.7.2 Clinician-rated measures

Consumers and carers generally felt that the use of clinician-rated measures ensured a level of accountability. Most consumers and carers had not seen the clinician-rated measures, but indicated that a discussion regarding the information would have been useful.

Whilst the content of the HoNOS was considered in general to be appropriate to measure, some participants indicated that physical health issues and drug and alcohol issues could be measured in greater depth.

Participants consistently raised concerns regarding the language used in the LSP-16, expressing that it was pejorative and not an appropriate measure to continue using into the future. Although participants considered it important to consider compliance with medication, it was suggested that engagement with treatment was a more appropriate way to frame the item and that this item should also be broadened to cover more than medication. It was raised by some, that the consumer perspective of functioning may be preferable to a clinician completed measure, and worth considering into the future.

APPENDICES

Appendix 1: NOCC strategic directions project consultation sessions

DATE	Target audience	Session type	Jurisdiction
15/11/11	Older persons Mental Health Information Development Expert Advisory Panel (MHIDEAP)	Forum	All
30/11/11	Forensic MHIDEAP	Forum	All
01/12/11	Adult MHIDEAP	Forum	All
02/12/11	CAMHS MHIDEAP	Forum	All
11/05/12	National Mental Health Performance Subcommittee	Meeting	National
22/05/12	CAMHS	Forum	SA
22/05/12	Adult services	Forum	SA
23/05/12	Consumers and carers	Forum	SA
24/05/12	Data/Quality managers	Forum	SA
24/05/12	NGO	Forum	SA
25/05/12	Youthlink	Site visit	SA
29/05/12	Rural mental health staff	Videoconference	SA
30/05/12	Southern Medicare Local	Meeting	SA
01/06/12	MH-KIDS clinical leadership	Meeting	NSW
04/06/12	Public mental health staff	Site visit	NT – Alice Springs
05/06/12	Public mental health staff	Forum	NT – Darwin
06/06/12	NGO and consumers	Forum	NT – Darwin
06/06/12	TEAMHealth	Site visit	NT – Darwin
14/06/12	Data/Quality managers and trainers	Forum	NSW – Sydney
25/06/12	Mental health executive	Forum	WA
25/06/12	Public mental health staff	Forum	WA
25/06/12	Data/Quality managers and trainers	Forum	WA
26/06/12	Mental Health Commission and NGO	Forum	WA
26/06/12	Forensic services	Site visit	WA
27/06/12	Consumer and carers	Forum	WA
27/06/12	Private – Perth Clinic	Site visit	WA
27/06/12	Centre for Clinical Interventions	Site visit	WA
28/06/12	Rural services	Videoconference	WA
28/06/12	Public mental health staff	Forum	WA
29/06/12	YouthReach South	Site visit	WA
02/07/12	Public mental health staff	Forum	TAS – Hobart
02/07/12	Consumers and carers	Forum	TAS – Hobart
03/07/12	Information/Quality managers, trainers	Meeting	TAS – Hobart

03/07/12	Mental health executive	Meeting	TAS – Hobart
03/07/12	NGO	Forum	TAS – Hobart
04/07/12	Peacock Centre – Adult Community	Site visit	TAS – Hobart
05/07/12	Clare House – CAMHS Community	Site visit	TAS – Hobart
05/07/12	Forensic	Site visit	TAS – Hobart
06/07/12	Public mental health staff	Forum	TAS – Launceston
16/07/12	City Mental Health Team	Site visit	ACT
16/07/12	Information Manager	Meeting	ACT
17/07/12	Inpatient unit	Site visit	ACT
18/07/12	Forensic service	Site visit	ACT
18/07/12	College of Mental Health Nurses	Meeting	National
19/07/12	NGO	Forum	ACT
25/07/12	Frankston Team	Site visit	VIC
25/07/12	Forensic - Forensicare	Site visit	VIC
26/07/12 – 27/07/12	Consumer and carer	Forum	National
30/07/12	CAMHS	Forum	VIC
30/07/12	Adult	Forum	VIC
31/07/12	Older persons	Forum	VIC
31/07/12	Consumers and carers	Forum	VIC
01/08/12	Information/Data managers	Forum	VIC
01/08/12	NGO	Forum	VIC
02/08/12	Rural mental health	Forum	VIC – Bendigo
02/08/12	Rural mental health	Videoconference	VIC – Bendigo
03/08/12	Werribee Hospital	Site visit	VIC
13/08/12	Mental health executive	Meeting	NSW – Orange
13/08/12	CAMHS	Meeting	NSW – Orange
13/08/12	Psychogeriatric	Meeting	NSW – Orange
13/08/12	Adult acute/Non-acute	Meeting	NSW – Orange
13/08/12	Rehabilitation and forensic	Meeting	NSW – Orange
13/08/12	Community mental health	Meeting	NSW – Orange
14/08/12	CAMHS	Forum	NSW
14/08/12	Adult	Forum	NSW
15/08/12	Older persons	Forum	NSW
15/08/12	Consumer and carer	Forum	NSW
16/08/12	NGO	Forum	NSW
16/08/12	Macquarie Hospital	Site visit	NSW
17/08/12	Forensic – Justice Health	Site visit	NSW

17/08/12	Mental Health Program Council	Meeting	NSW
20/08/12	Adult and Older Persons	Forum	QLD – Cairns
20/08/12	CAMHS	Forum	QLD – Cairns
20/08/12	Information managers	Meeting	QLD – Cairns
27/08/12	Public mental health staff	Videoconference	QLD – Rockhampton
27/08/12	Public mental health staff	Forum	QLD – Rockhampton
27/08/12	Inpatient unit	Site visit	QLD – Rockhampton
27/08/12	Mental health executive	Meeting	QLD – Rockhampton
28/08/12	CAMHS	Forum	QLD – Brisbane
28/08/12	Older persons/Adult	Forum	QLD – Brisbane
29/08/12	Consumer and carers	Forum	QLD – Brisbane
29/08/12	Information/Quality managers	Forum	QLD – Brisbane
30/08/12	Royal Brisbane Hospital	Site visit	QLD – Brisbane
30/08/12	Caboolture Mental Health Service	Site visit	QLD – Caboolture
31/08/12	Forensic	Site visit	QLD – Brisbane
03/09/12	Hunter New England	Forum	NSW
04/09/12	Illawarra Health Service	Forum	NSW – Wollongong
05/09/12	Rural mental health	Videoconference	NSW – Sydney
10/09/12	Headspace	Meeting	National
10/09/12	Royal Children's Hospital	Site visit	VIC
11/09/12	AMHOCN National Trainers	Forum	All
17/09/12	Forensic	Site visit	SA
17/09/12	Australian Association of Social Workers – SA Branch	Meeting	SA
18/09/12	Marion CAMHS	Site visit	SA
19/09/12	Private sector	Meeting	National
20/09/12	Royal Australian and New Zealand College of Psychiatry	Meeting	National
21/09/12	NSW Clinical Advisory Council	Meeting	NSW
21/09/12	Australian Council on Healthcare Standards	Meeting	National
14/11/12	SANE Australia	Meeting	National

Additional meetings

16/01/13	National Mental Health Commission	Meeting	National
18/02/13	NSW Mental Health Commission	Meeting	NSW
08/03/13	Dr. Kevin Freele	Teleconference	VIC
18/03/13	Professor Mike Slade	Teleconference	International
19/03/13	A/Professor Sally Merry	Teleconference	International

Written Correspondence

	Australian Association of Social Workers	Written	National
	Dr. Scott Miller	Written	International



APPENDIX D

Online surveys

From the 19th September to 19th October 2012, online surveys were available to provide people who had not attended face-to-face consultations with the opportunity to provide input into the NOCC Strategic Directions Project. A survey was prepared for completion by staff of public specialised mental health services and, another was developed to collect input from consumers and carers.

1.0 EXECUTIVE SUMMARY OF ONLINE SURVEY RESPONSES

Public mental health service staff

Responses to the online survey for staff of public specialised mental health services highlighted opposing attitudes towards both the national outcome and casemix collection (NOCC) and the practice of outcome measurement more broadly. Many respondents aired their frustrations, but just as many indicated that they valued the information and were keen to see an increase in the use of the outcome measures, particularly to support clinical care.

Whilst outcome measures are being routinely collected in most public specialised mental health services and there is improving use of these in clinical practice and to support service management, the responses highlighted that there is only limited use of the information to support quality improvements and for benchmarking, service evaluation and research and casemix development purposes. In terms of meeting the NOCC objectives, good progress was only really reported in relation to routine collection. However, respondents viewed all the objectives relating to these various uses of outcome information as equally important moving into the future.

Around three quarters of respondents supported continued use of each of the HoNOS measures. Fewer, but still a majority of respondents, supported the retention of the other outcome measures in the suite.

Respondents wanted the protocol to be more flexible in relation to collection, particularly for different types of settings and when consumers moved between services. Views were divided regarding the frequency of collection and whether the collection should also cover inpatient consultation liaison and brief episodes of community care.

Even those respondents who were positive about outcome measures commented on a range of issues that were acting as barriers to implementation and greater use. They reported that local information systems more often did not support data entry and timely and efficient access to reports, no ongoing access to training, insufficient resourcing to support staff to use the measures, and a perceived lack of support from both clinical leaders and managers. From comments and the number of times these issues were raised, it appears that changes to these aspects, rather than changes in the measures and protocol themselves, may have the greatest impact on the uptake and use of routine outcome measures in public specialised mental health services in the future.

Consumers and carers

Responses to the consumer and carer survey highlighted that there has been limited engagement to date with consumers and carers in regards to both the collection and use of outcome measures. Respondents indicated that both the offering and discussion of the outcome measures with consumers, carers and parents of young people are important. When the self report measures were discussed, they were viewed as a useful activity. Discussion of the clinician-rated measures was also seen as useful.

Consumers and carers identified their top four priority areas for collection in addition to those already covered by the suite of outcome measures. Recovery, including aspects of hopefulness, self-esteem and empowerment was identified as a top priority by two thirds of participants. Community living (housing, employment and social connectedness), carer/parent experience of and involvement in care, trauma related issues and the consumer's understanding of their own illness and treatment were also identified by around half of respondents as top priorities.

2.0 METHOD AND PURPOSE

Surveys were made available online to allow people who were unable to attend the face-to-face consultations to also provide feedback into the NOCC Strategic Directions project.

To ensure broad input, the link was distributed via AMHOCN to approximately 2,500 people across the mental health sector. It was also provided to nominated state and territory representatives for dissemination through their networks.

The content of the survey targeting staff of public specialised mental health services was similar to that covered in the face-to-face sessions in that it asked respondents to consider the following areas:

- > progress of the service towards the original NOCC objectives and future relevance of these objectives;
- > their views and experience with using outcome measures, particularly focused on activities identified in the NOCC objectives, that is clinical practice, service management, benchmarking, service evaluation and research, and casemix development;
- > whether each of the measures should remain in the suite of routine outcome measures and if not, to identify any alternative measures that might be considered; and
- > if there were other priority areas that would be important to include in the suite of outcome measures in the future.

In addition, respondents were asked about a number of specific issues relating to the protocols that were raised in the face-to-face consultations, such as whether the 3-month review frequency was appropriate.

A second survey tailored for completion by consumers and carers was also sent out. The survey covered most of the same basic content as the other public specialised mental services staff survey, but in less detail, and varied in that it also asked questions about the respondent's experience with the consumer-rated measures.

3.0 KEY FINDINGS OF PUBLIC MENTAL HEALTH SERVICE STAFF SURVEY

A total of 511 responses were received from staff of public specialised mental health services.

Table 1 provides a breakdown of responses by the state and territory in which they worked. The number of responses in each jurisdiction roughly approximated the distribution of the population, except that there were proportionally more responses from Western Australian and less from Queensland.

Table 1 - Respondents by state/territory in which they worked

STATE/TERRITORY	RESPONDENTS
ACT	3
NSW	166
NT	1
QLD	50
SA	54
TAS	10
VIC	120
WA	100
Unknown	7
TOTAL	511

Those who responded comprised 257 nurses, 55 occupational therapists, 27 psychiatrists, 78 psychologists, 50 social workers and 35 staff of other professional backgrounds, which included information technology or management.

Respondents reported working in a variety of roles, with almost three quarters (365 or 71%) employed as clinicians/service providers. Almost one-fifth (97) were managers, two were carer workers and three were consumer workers. The remaining 36 respondents were employed in other roles, predominately as educators, researchers and quality managers.

3.1 Original objectives of the NOCC

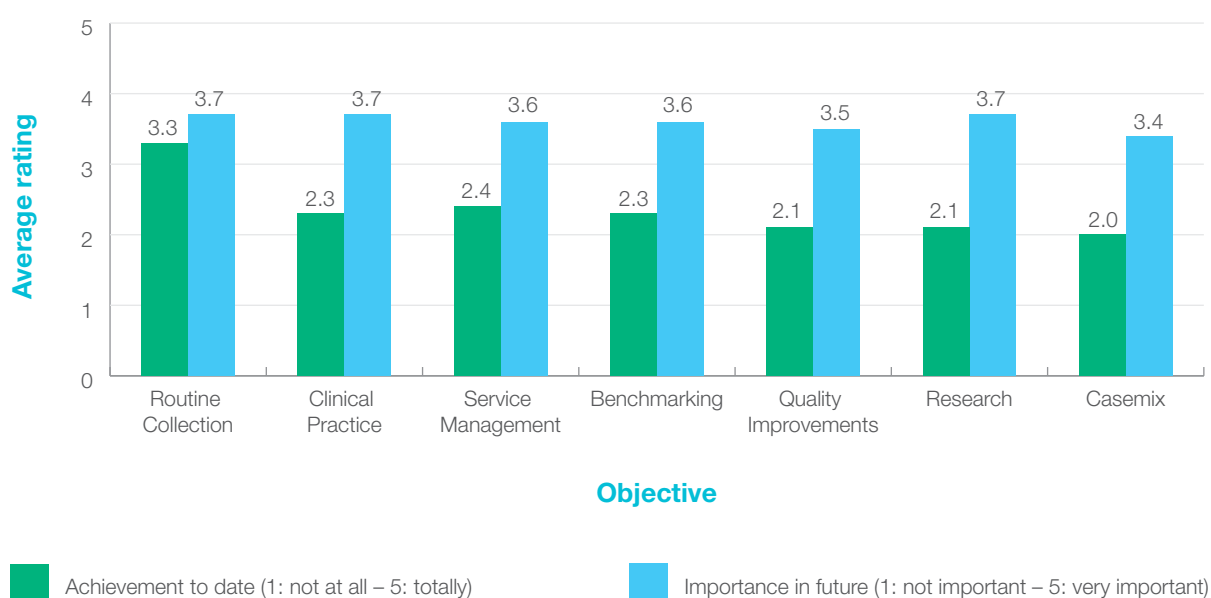
Respondents were asked a number of questions relating to the current objectives of the NOCC, as follows:

- > The routine use of outcome measures in all publicly funded or managed mental health services where such measures contribute both to improved practice and service management.
- > An informed mental health sector, in which benchmarking is the norm, with each service having access to regular reports on its performance relative to similar services that can be used in a quality improvement cycle.
- > A culture of research and evaluation within mental health services and academic institutions that supports reflection on practice and debate about ongoing development.
- > The informed use of casemix to understand the role of variation between agencies in costs and outcomes.

The first questions related to the extent to which these current objectives had been achieved. Figure 1 outlines the responses, firstly on the extent to which services have achieved the current NOCC objectives and, secondly, on how important respondents thought each of the objectives was going into the future. To assist respondents with understanding the underlying intent of the objectives, questions were asked about 'quality improvements' rather than service evaluation.

Respondents generally reported that, whilst routine collection was becoming embedded in services, relatively equal, but much less progress had been achieved in all other areas. Though interestingly respondents thought all areas or objectives were equally important into the future.

Figure 1 - Average ratings of extent to which NOCC objectives achieved and importance into the future



3.1.1 Opportunities with the introduction of NOCC

Responses to the survey highlighted how the introduction of outcome measures into services had supported the review process, both by acting as a trigger for it to occur, and also by providing a framework for the discussion of issues and progress with consumers. Outcome measures also provided a common tool for communication amongst the clinical team and when consumers transfer between services, often saving staff time.

“(The NOCC) provides a framework to consolidate assessments, need and care deficits.”

Outcome measures have been reported as assisting with early detection of deterioration, supporting clinical decision-making and providing a greater focus when care planning. It was raised a number of times that, when used well in practice, the introduction of the NOCC had facilitated engagement with the consumer.

“HoNOS helps structure initial assessment interviews and gives clearer indication of what is clinically significant, which leads well into care management planning. Consumer-rated tools has gone some way towards moving the service out of the embedded medical model and towards collaborative person centred care. Helps junior and less experienced staff to make connections between social problems, symptom management and distress and plan effective interventions.”

3.1.2 Challenges with the introduction of the NOCC

The introduction of routine outcome measures has increased the burden on clinical staff, resulting in increased paperwork and reporting requirements. It was noted that there had also been costs associated with resources necessary to collect the measures and training in the use of the measures, with many feeling that there was little return in terms of clinical value. For most of these respondents, the suite of outcome measures was thought to provide little additional clinical information, with many preferring to reflect on qualitative assessments and care plans for identification of issues and monitoring of consumer progress.

Many respondents felt that the focus was on data entry and administrative requirements, rather than the consumer, with considerable time being taken away from direct clinical care.

“Valuable clinician time is spent on data entry/stats. I didn’t enter this profession to become a slave to the computer. There is so much duplication in our documentation, it’s cumbersome and takes much time away from helping people.”

It was often viewed as a bureaucratic process, with the routine collection of outcome measures becoming a management tool rather than a means to support clinical practice.

“Collection is enforced in a punitive way rather than educating and nurturing clinicians to see the value in its use.”

“Measures punitive instead of enabling good practice; outcomes used to reprimand rather than investigate.”

3.2 Use of the measures in practice

Respondents were asked a number of questions regarding the use of the measures for particular purposes, which aligned with the NOCC objectives. If the respondent indicated that they did not use or only sometimes used the measures for these purposes, they were also asked what factors contributed to them not using them for this purpose.

Clinical practice

Nurses were the most likely to use the measures to support their clinical practice, with 77% indicating that they used the outcome measures sometimes or consistently. Psychiatrists were the least likely to use the measures, with 55% indicating they used the measures sometimes or consistently in practice.

The setting in which the staff member worked was also associated with the extent to which the measures were used, with those working in residential settings most likely to indicate they used the measures in practice consistently (68.2%), compared with 41% in community and 46% in inpatient settings.

The most commonly cited reasons for not using the outcome measures to support clinical practice were that it did not provide useful information, respondents had insufficient time to do so or it was burdensome. Around one fifth of respondents reported difficulty in accessing information on the use of outcome measures, there was a lack of reporting or there was a lack of training (22%, 23% and 20% respectively).

Some respondents commented that there was limited support from leadership and management to support the use of measures, and often limited feedback regarding the information.

Service management and monitoring

Of the managers who completed the survey, two thirds (67%) indicated that they used outcome data to support management and monitoring sometimes or consistently at work.

The third who reported that they did not use the measures to support management and monitoring most often reported that was because outcome measures did not provide useful information, there was difficulty accessing information on them or there was a lack of reporting to support its use.

Benchmarking

The survey responses reaffirmed the view that the use of outcome measures to support benchmarking is still a developing area, with just over two thirds (69%) of respondents reporting that they do not use the information in this way. It is important however, to note that one third (34.5%) of respondents reported that benchmarking was not a part of their current role in the mental health service. Many respondents reported that their services were not participating currently in any benchmarking activities or that there were no like services to benchmark against.

Quality improvement initiatives

Just over half (56%) of respondents indicated that they did not use outcome measures to support quality improvements in their service. Respondents reported the reasons for this as also being that they did not provide useful information, were a time burden, or there were system problems in collecting information and accessing reports. In addition, many simply did not as it was not part of their current role in the mental health service.

Some respondents reported that services were often not supported to use the information in this way. There was a lack of knowledge of how to use outcome measures appropriately, and the value and the importance of collecting good quality data routinely to support service planning decisions was not well understood.

Service evaluation and research

Just over two thirds (68%) of respondents reported that they did not use outcome measures for the purposes of service evaluation or research.

Whilst reasons for not doing so included that outcome measures do not provide useful information, the time burden, and difficulty in accessing information and reporting, more respondents reported that they did not consider this part of their current role.

Understanding differences between consumers

Three-fifths (60%) of respondents indicated that they did not use outcome measures to help them understand differences between consumers.

Whilst the aim of this question was to assess whether staff were using the measures for the purposes of casemix development, many respondents indicated that they were confused by the question or were focussed on the needs of the individual rather than on the broader concept of understanding groups of consumers.

3.3 NOCC Measures

Survey responses were analysed on the basis of where respondents worked, namely in child and adolescent services, services for adults, services for older persons and forensic services. The findings below describe the responses from child and adolescent, adult, older persons and forensic staff groups in relation to the specific measures.

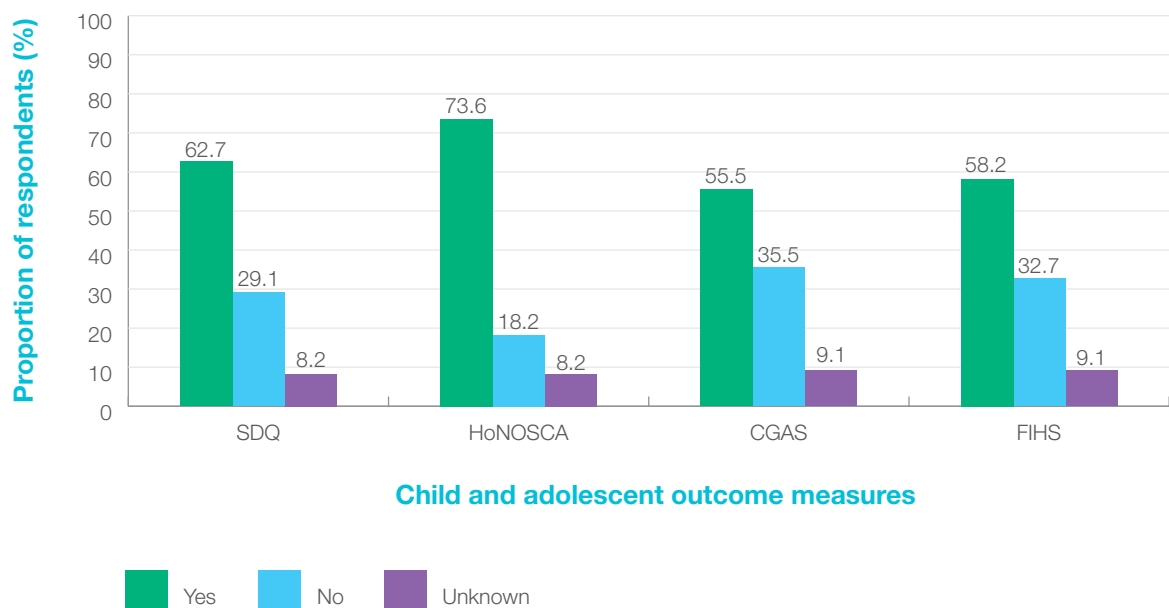
3.3.1 Child and adolescent

The protocol currently mandates the use of four instruments for children and adolescents:

- > Health of the Nation Outcome Scales for Children and Adolescents (HoNOSCA);
- > Strengths and Difficulties Questionnaire (SDQ);
- > Children’s Global Assessment Scale (CGAS); and
- > Factors Influencing Health Status (FIHS).

One-fifth (110) of respondents reported that they worked in child and adolescent services. The majority of these indicated that all the current measures in the child and adolescent suite should remain (Figure 2). Almost three quarters (73.6%) of respondents supported the use of the HoNOSCA and 62.7% the SDQ. There was less support for keeping the CGAS and the FIHS, and approximately one third of the respondents responded that each of these should not remain in the suite of measures.

Figure 2 - Proportion of respondents working in child and adolescent mental health services indicating whether a measure should or should not remain in the suite



HONOSCA

Respondents identified more training and improvements to information systems as the best means to improve the utility of the HoNOSCA. A small number also suggested that a self-rated HoNOSCA should perhaps be included in the suite of measures.

The majority of respondents (94 of the 110 or 85.6%) supported the retention of the HoNOSCA in the suite of measures. Of the 16 respondents who stated that the HoNOSCA should be removed from the suite, 12 indicated that it did not capture key issues for specific consumer groups, 11 indicated that it did not provide useful information and 9 suggested there were issues with its psychometric properties.

SDQ

The SDQ was viewed by almost two thirds (62.7%) of respondents as a measure that should remain in the suite. Improvements to information systems were frequently cited as necessary to improve the collection and utility of the data, with some proposing the use of iPads would enhance engagement with this population group.

Alternative measures suggested by the third of respondents who did not support continued use of the SDQ included Conners' Rating Scale, the Child Behaviour Checklist (CBCL), the Depression Anxiety Stress Scale (DASS) and the Children's Depression Inventory (CDI).

FIHS AND CGAS

Whilst just over half of respondents indicated that these measures should remain in the suite, there were many who considered these measures could be removed or replaced. Whilst alternatives were not suggested for the CGAS, some respondents proposed that Z-codes could be used to capture the same information that was collected by the FIHS.

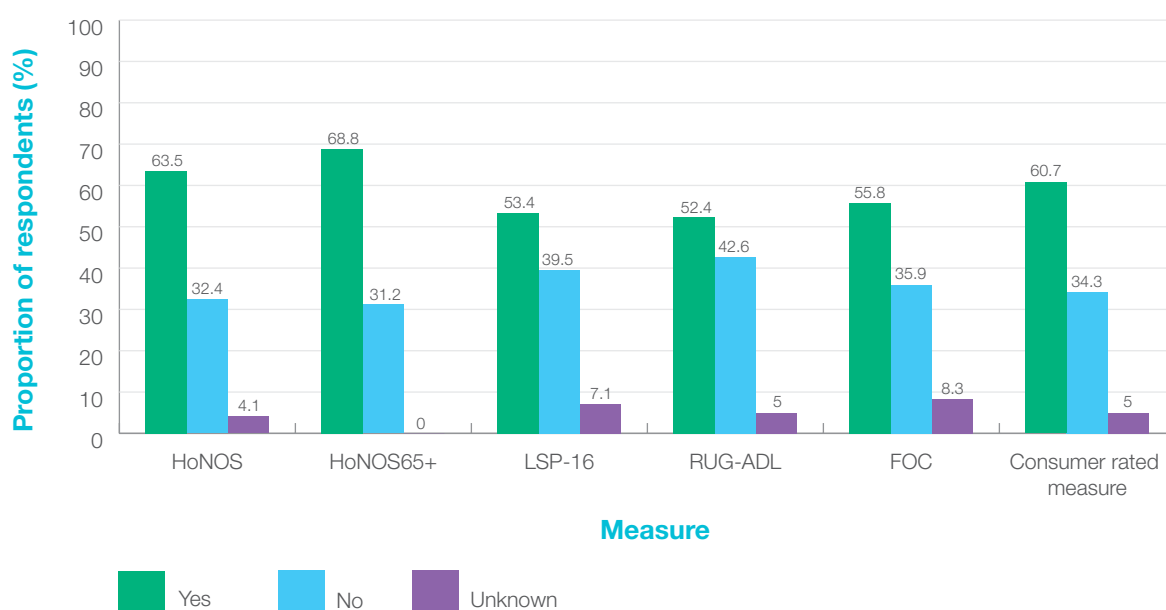
3.3.2 Adult, older persons and forensic

The NOCC protocol currently mandates the use of the following instruments for adults, older persons and forensic consumers:

- > Health of the Nation Outcome Scales (HoNOS) for adult and forensic;
- > Health of the Nation Outcome Scales for Elderly Persons (HoNOS65+);
- > Life Skills Profile (LSP-16);
- > Focus of Care (FOC);
- > Resource Utilisation Groups - Activities of Daily Living (RUG-ADL) for older persons; and
- > a consumer-rated measure.

The collated responses from all staff in adult, older persons and forensic services to the question of whether each of the outcome measures currently in the suite should remain are shown in Figure 3.

Figure 3 - Proportion of respondents working in adult, older persons and forensic mental health services indicating whether a measure should or should not remain in the suite



Information is also provided separately for the adult, older persons and forensic mental health services staff in Figures 4, 5 and 6 respectively. This highlights some variation in responses for different services, which is discussed in more detail in relation to each measure below.

Responses from staff have been reported under each of the service areas in which they reported working, and therefore their views may be reported more than once.

Figure 4 - Proportion of respondents working in adult mental health services indicating whether a measure should or should not remain in the suite

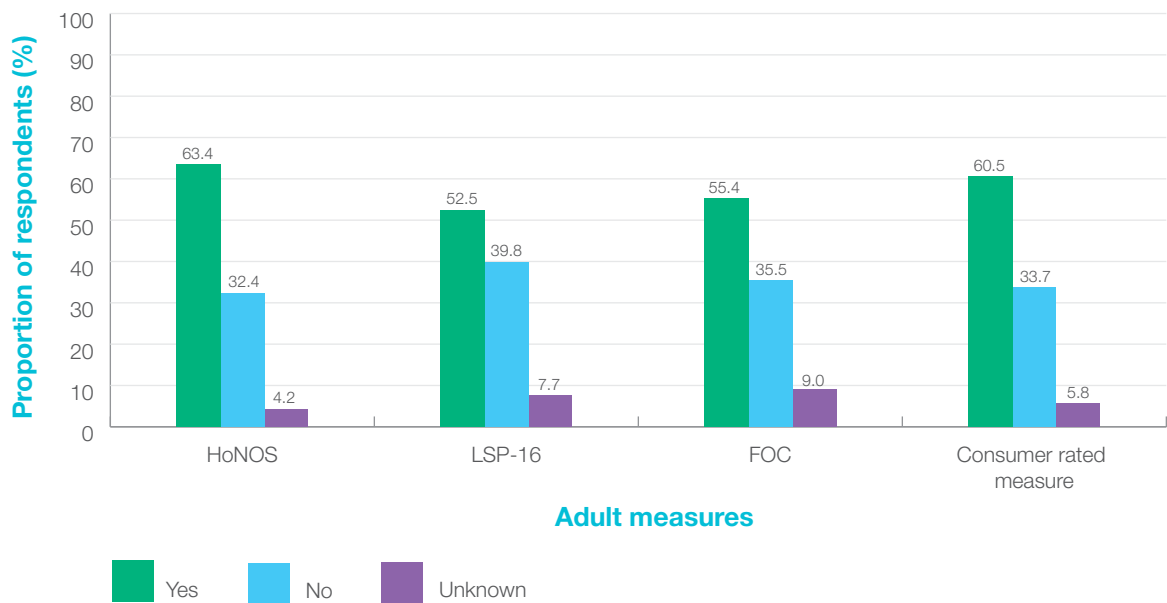


Figure 5 - Proportion of respondents working in older persons services indicating whether a measure should or should not remain in the suite

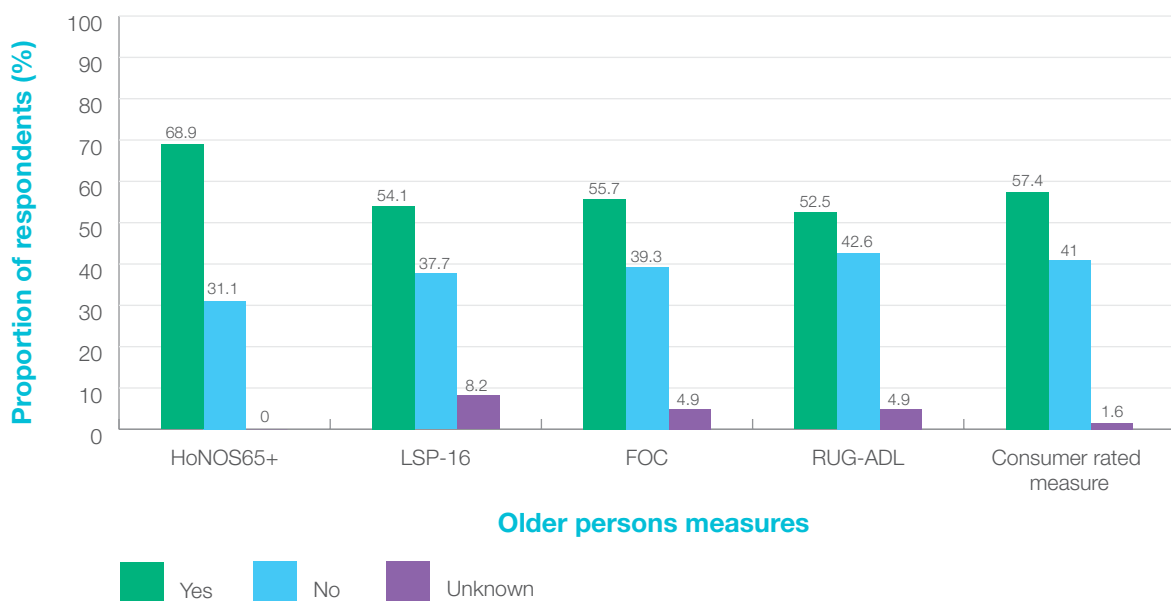
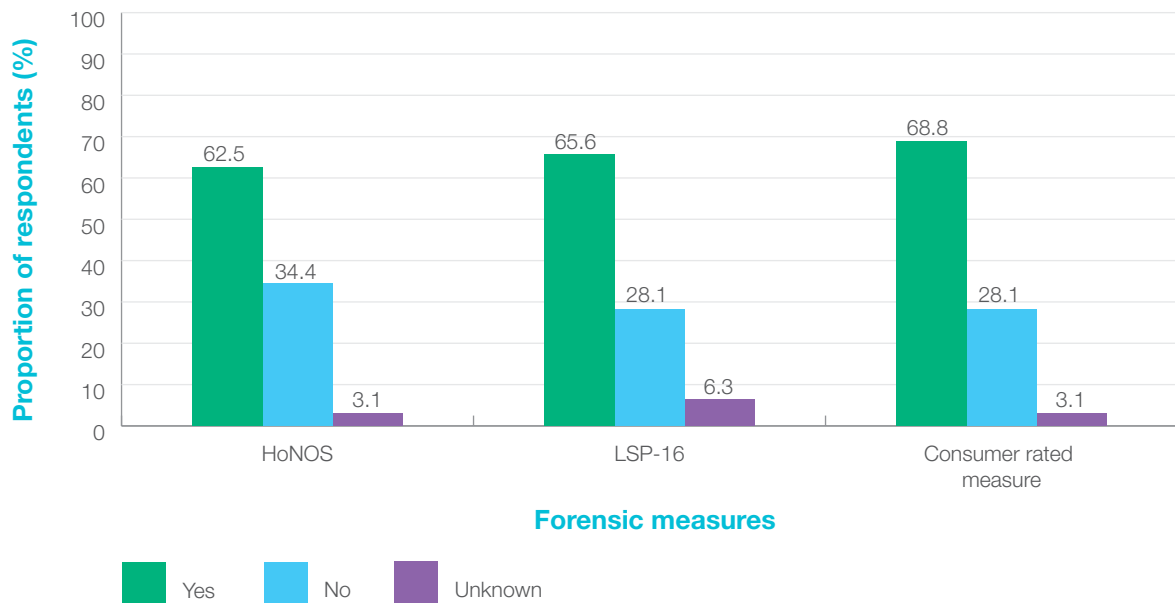


Figure 6 - Proportion of respondents working in forensic services indicating whether a measure should or should not remain in the suite



HONOS

Almost two thirds (63.4%) of respondents working in adult and forensic services thought that the HoNOS should remain in the suite. More consistent training and improvements to the information system were considered key to improving the use of the measure in services. It was also noted that issues with scale 8 and the cultural appropriateness of the tool for Aboriginal and Torres Strait Islander (ATSI) and culturally and linguistically diverse (CALD) populations needed to be addressed.

Most of those who considered the HoNOS should be removed or replaced, reported that this was because it did not provide useful information, did not capture key issues for specific consumer groups and the measure was too subjective, with concerns regarding the inter-rater reliability.

Those who did not support its retention in the suite were also asked what might be an alternative to HoNOS. Respondents noted the use of recovery measures, quality of life measures and more disorder specific measures, such as the Brief Psychiatric Rating Scale (BPRS), as well as capturing additional domains, including insight, risk, self-esteem, elevated mood and more robust measurement of alcohol and other drug use and problems.

HONOS65+

Just over two thirds (68.9%) of respondents who worked in older person services indicated that the HoNOS65+ should remain in the suite. Respondents reported that more training in the use of the measure, and improvements to local information systems, both for data entry and extraction of reports, could improve its use in services.

Those who indicated it should be removed or replaced did not provide a clear indication of an alternative measure.

LIFE SKILLS PROFILE

Half (52.5%) the respondents indicated that the Life Skills Profile (LSP-16) should remain in the suite of outcome measures for use with adult, older and forensic persons, however the respondents were clearly divided on its value.

Those that wanted the LSP-16 removed cited varying reasons for this, including that it did not provide useful information, especially for different population groups, and more specifically, for older persons, it was problem focused and the language out dated. Proposed alternatives included the Camberwell Assessment of Need -

Short Appraisal Schedule (CANSAS), Global Assessment of Functioning (GAF) Scale, Life Skills Profile (LSP-20) or a recovery measure.

FOCUS OF CARE

Just over half of all respondents indicated that the Focus of Care (FOC) should remain in the suite. Those proposing its removal indicated that it had limited clinical utility, with many stating that they did not understand its purpose in the collection.

RESOURCE UTILISATION GROUPS - ACTIVITIES OF DAILY LIVING

The Resource Utilisation Groups - Activities of Daily Living (RUG-ADL) is used in services for older persons. Respondents were quite divided regarding the continued inclusion of this measure, with just over half (52.5%) proposing that it remain. Of those who indicated it should be removed, the majority thought that it did not need to be replaced with any alternative measure.

CONSUMER-RATED MEASURES

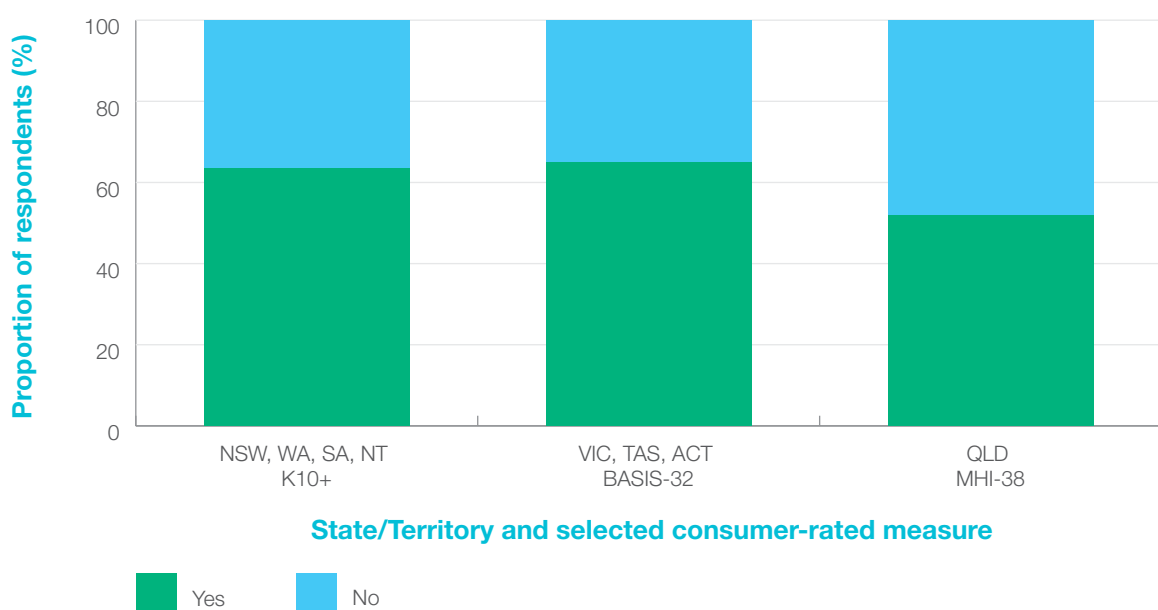
Different consumer-rated measures have been selected for use in different jurisdictions. In New South Wales, Western Australia, South Australian and the Northern Territory, the Kessler 10 with an additional four questions (K10+) is used. The 32 item Behaviour and Symptoms Identification Scale (BASIS 32) is used in Victoria, Tasmania and the Australian Capital Territory, and the 38 item Mental Health Inventory (MHI-38) is used in Queensland.

Respondents were asked to indicate whether they felt that the consumer-rated outcome measure should remain in the suite. Figure 7 shows that the responses were slightly more positive from staff in those states and territories where the K10+ and BASIS-32 are routinely used.

Almost two thirds of respondents from states and territories that had selected the K10+ and the BASIS-32 (64.4% and 65.7% respectively) as their preferred consumer-rated measure thought that the current consumer-rated measure should remain in the suite. There was less support for the current measure remaining in the suite from respondents in Queensland, where the MHI-38 had been selected as the consumer-rated measure.

Those that suggested the consumer-rated measures should be removed from the suite noted issues with the length and complexity of the measure that was selected in their state/territory.

Figure 7 - Proportion of respondents who indicated the consumer-rated measure should remain in the suite



When asked about any issues with the current consumer-rated measure, respondents from jurisdictions using the K10+ highlighted issues with deficit language thought to not fit well with the recovery agenda, the general nature of the consumer-rated measure, and the desire for a more symptom specific measure. In contrast, those working in jurisdictions using the MHI-38 cited issues with the complexity and repetitiveness of questions, and indicated that a shorter, simpler tool would be better. Similarly, those working in jurisdictions using the BASIS-32 stated that length was a significant issue, and that a shorter, simpler tool would be preferable.

Responses in relation to ways to increase the utility of the measure fell under a number of themes, including improvements to systems/processes, training on how to use the measures effectively in clinical practice, marketing and improvements to local information systems facilitating input, and use of the data. It was suggested that the use of iPads and online completion by consumers would improve uptake and efficiency, and that prompts to use the information in care plans would also encourage greater use. Clinical leaders supporting the use of the information was seen as particularly important.

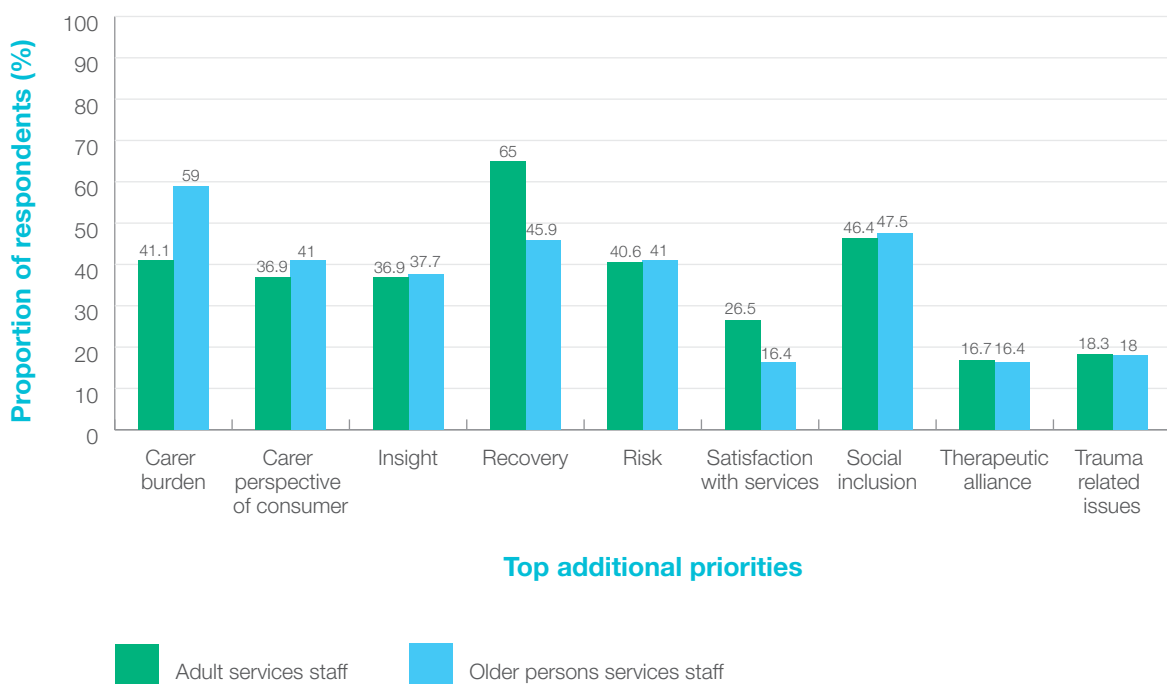
When considering changes for the future, respondents generally thought that the consumer-rated measure needed to be short, simple and more positive. Some highlighted the domains of wellness, recovery and social inclusion as important for future measures. Some thought that it was worth exploring other measures that were not currently being used, such as the World Health Organization Quality of Life (WHOQoL), the self-rated version of the Camberwell Assessment of Need (CANSAS-P), Depression Anxiety Stress Scales (DASS) and the Geriatric Depression Scale (GDS). However, none of these measures had the same level of support as those currently used, and no single measure was proposed as an alternative that met all of these criteria.

3.3.3 Additional domains for collection

Respondents were asked to select the top four areas that are not currently covered by the suite of outcome measures, as priorities to consider for future measurement. As indicated in Figure 8, recovery, social inclusion, carer burden and risk were the four areas selected by the most respondents.

The ordering of these priorities varied across services with staff from services for older persons highlighting

Figure 8 - Proportion of respondents indicating selected domains as a top priority to measure into the future



the need for a measure of carer burden as the top priority into the future, whilst staff from services for adults were more likely to prioritise recovery and social inclusion.

Infant

The current measures do not currently cover infants or, more particularly, those aged 0 to 3 years. Respondents indicated a range of domains to consider for infants, and most frequently noted were attachment, social and emotional development and the parent-infant relationship. A few respondents suggested trauma, parental distress and behaviour. The Brief Infant Toddler Social Emotional Assessment (BITSEA) and the Ages and Stages questionnaire were regarded by the most respondents as appropriate measures to consider for inclusion in a future suite of measures.

Youth

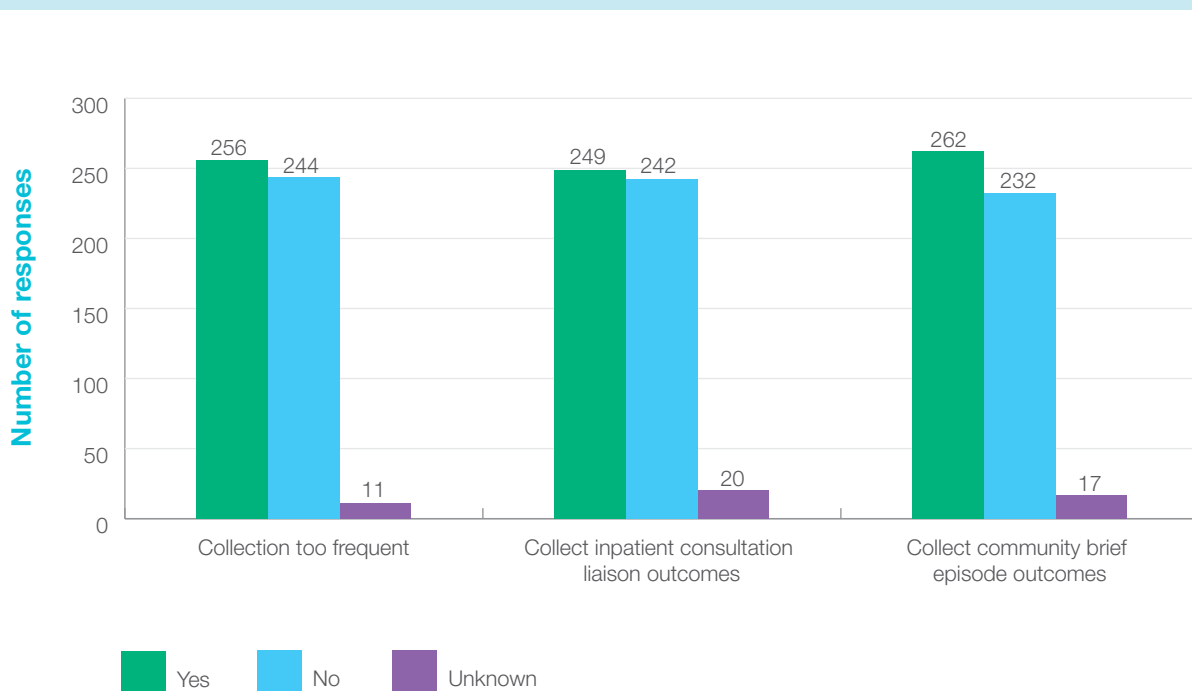
The approach to outcome measurement for youth varied considerably, largely depending upon the service setting. When asked about other priorities for collection, they indicated that depression, anxiety and stress, alcohol and other drug use, and social inclusion were also important to measure for youth. A few respondents suggested that the Depression Anxiety Stress Scales (DASS 21), the Outcome Rating Scale (ORS), the Social Responsiveness Scale (SRS) and the Child Behaviour Checklist-youth self-report might be considered as potential measures for this consumer group in the future.

3.4 NOCC Protocols

The online survey also sought input from respondents on a number of issues that were raised in the face-to-face consultations and on which there has been considerable debate over the years, namely the frequency of collection of outcome measures, whether consultation-liaison services were in scope, and whether brief episodes in community care should also be included in scope.

Figure 9 shows that respondents were roughly equally divided in their views on each issue, providing no clear direction as to how to resolve these issues.

Figure 9 - Responses to additional questions about the NOCC protocol



3.4.1 Length of time to review

The majority of those who reported that the collection of outcome measures was too frequent, stated that this was primarily a problem for longer-term community and residential consumers. Many felt that collection was also too frequent for consumers engaged in the mental health service for monitoring, via clinics or for longer-term consumers attending services for Clozapine management, those receiving a set number of psychological therapy sessions over an extended period, and consumers receiving services in rural and remote areas with infrequent face-to-face contact and where measures might have to be collected at every contact if the protocol were followed. Some respondents raised the issue of the burden for consumers who have frequent short term episodes.

Of those respondents who indicated a preferred frequency for review, most suggested 6-monthly, with some proposing 12-monthly and a small number reporting that collection should just be at admission and discharge.

3.4.2 Changes to the protocols that would support clinical practice

When questioned regarding what modifications to the protocols could be put into place to better support clinical practice, a number of key themes were identified, as described below.

Change of service setting

It was frequently suggested that the current protocol for the NOCC collection at discharge from community services and admission to bed-based care, and the converse collection at discharge from bed-based care and admission to community services, did not appropriately reflect clinical practice. It was proposed that there be only one collection at transfer to reduce the burden on clinical staff and consumers. The feasibility of this working in practice would rely upon the timely transfer of outcomes information between these services.

Flexibility

Respondents indicated a desire for greater flexibility within the protocol based on the type of service setting and length of stay. For example, it was proposed that less frequent collection was necessary for consumers in rehabilitation settings, and more frequent collection required in acute settings.

Lightening the collection load

There was the suggestion that the same information collected through outcome measures might instead be collected through a less resource intensive method. Conducting a census at 6 or 12 monthly intervals was suggested by two respondents.

Resource and system supports

It was proposed that training, resourcing of more positions to support collection and analysis, better and more timely access to information, more user friendly reporting and support from management were important elements to consider into the future, and key enablers of the routine use of outcome measures.

“In a world where every child uses a computer we should be able to have computer support for ALL clinicians to standardise our processes, collect this information in the background and get serious about real quality outcomes for the consumer.”

4.0 KEY FINDINGS OF CONSUMER AND CARER SURVEY

A total of 134 surveys were received from respondents identifying themselves as consumers and/or carers.

Table 2 provides a breakdown of responses by state and territory. These roughly approximated the distribution of the population across jurisdictions, however there were proportionally more responses from South Australia and less from Queensland.

Table 2 - Consumer and carer respondents by state/territory

STATE/TERRITORY	RESPONDENTS
ACT	2
NSW	33
NT	1
QLD	19
SA	27
TAS	2
VIC	26
WA	19
Unknown	5
TOTAL	134

Those who responded comprised 58 consumers, 46 carers and 6 parents. Another 11 indicated they had a role as both a consumer and a carer, and 13 as both a carer and a parent. Just over two-fifths (56 or 42%) of respondents were employed as a consumer or carer worker in a mental health service.

Of the consumers who responded, most (66 or 96%) had contact with services for adults in the last ten years, with very small numbers having had contact with child and adolescent services, youth services and services for older persons (6, 7 and 2 respectively).

Of those who identified as carers and/or parents, the majority (65 or 86%) had contact with services for adults in the last 10 years. Proportionally, more than those in the consumer group had contact in the last ten years with child and adolescent services (14 or 18%), youth services (20 or 26%) and services for older persons (13 or 17%), and nine (12%) had contact with forensic services.

4.1 Experience with the consumer-rated measures

Three-fifths (41 or 59%) of consumer respondents reported that they had been offered a consumer-rated measure to complete, but half (21 or 51%) had not discussed this with a clinician.

Of the 17 consumers that reported discussing the measure with a clinician, 12 (71%) indicated that this had generally been a useful activity.

Two thirds of those that did not have their measure discussed with them indicated that it would have been very useful to have discussed their responses.

In general, consumer respondents found it difficult to comment on the measures and their use as many did not feel that they had sufficient experience of these.

4.2 Experience with the parent/carer rated measure

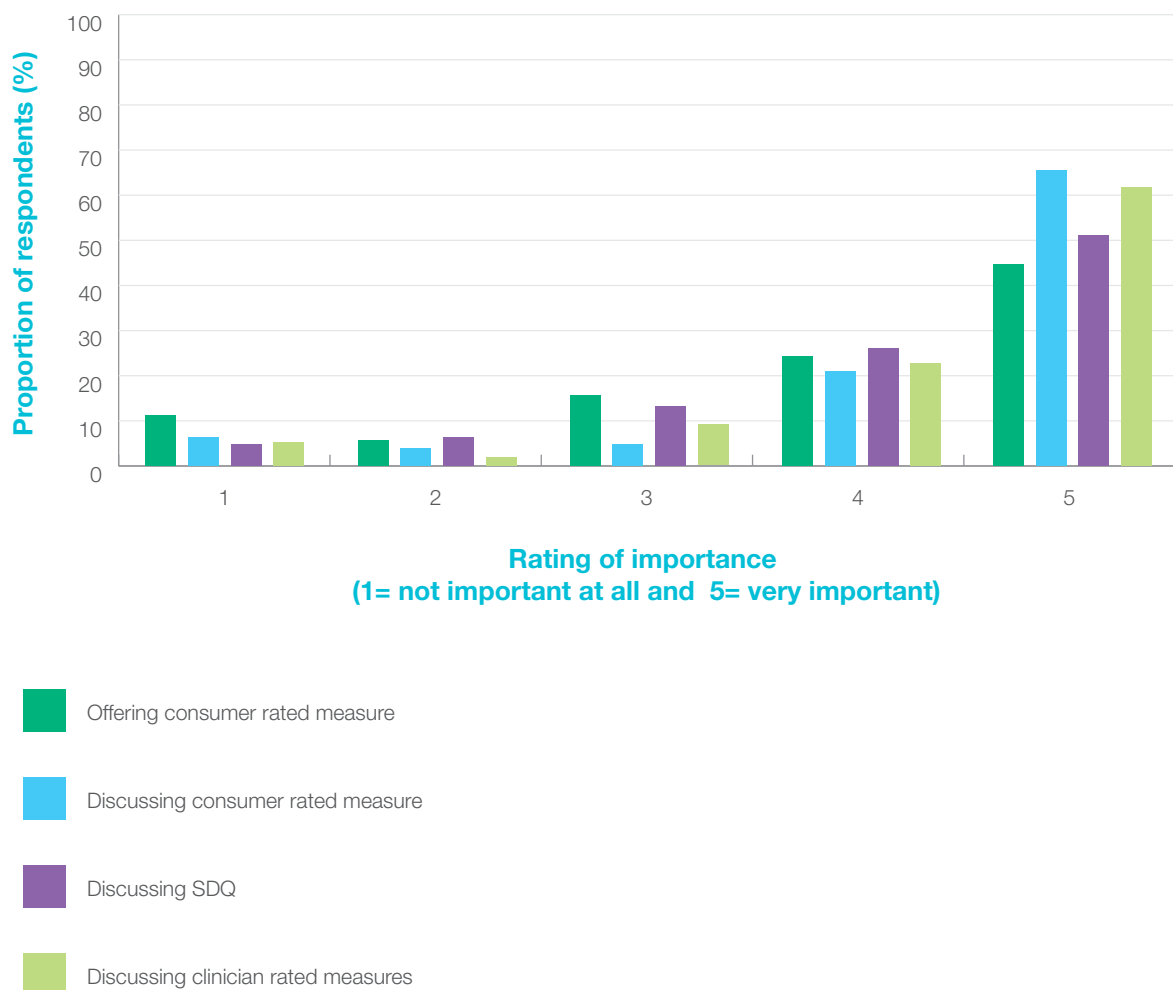
Of the 35 carer/parent respondents who had been in contact with child and adolescent services, 27 had never been offered the SDQ. Of the ten that had been offered the measure, seven reported that they had discussed the responses with a clinician and only one indicated that they had not had a discussion.

When asked to consider other issues with the measures or other experiences in services carers and parents reported that in general, their experiences with mental health services were ones of exclusion. They felt that there was limited collaboration on many elements of assessment and planning, and that the use and discussion of measures was just one part of this.

4.3 Experience with the clinician-rated measures

Over four-fifths (87.9% or 116) of consumer respondents had never had the results of any of the clinician-rated measures discussed with them. Of the ten respondents who had discussed these with a clinician, all but one thought this useful. Of those respondents who had not had a discussion regarding the clinician-rated measures, only four of 111 thought this would not be useful, whereas 67 thought it would be very useful.

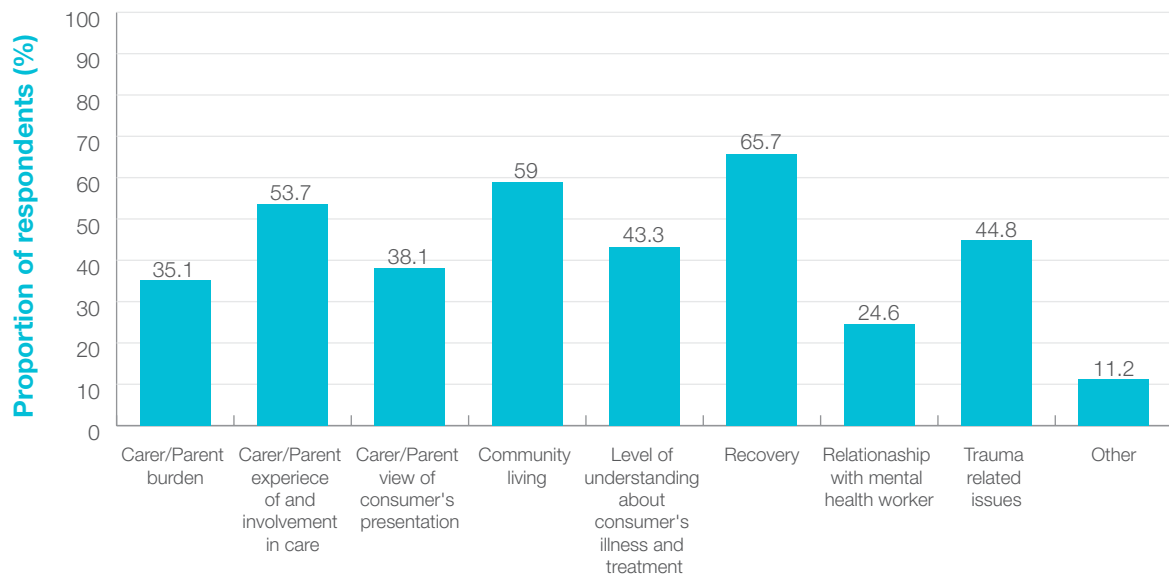
Figure 10 - Respondent ratings of importance of offering the consumer-rated measure and discussing the consumer, carer and clinician-rated measures



4.4 Other areas for consideration into the future

Respondents were asked to consider other areas that may be important to measure into the future and select the top four of these as their priority areas.

Figure 11 - Proportion of respondents indicating selected areas as a top priority to measure into the future



Almost two thirds (65.7%) of consumer and carer respondents identified recovery (hopefulness, self esteem and empowerment) as one of their top four priority areas for possible inclusion in the suite of measures in the future. Community living (housing, employment and social connectedness), carers/parents experience of and involvement in care, trauma related issues (events or situations that cause great distress or disruption) and the consumer understanding of their own illness and treatment were identified as top priorities by 59.0%, 53.7% 44.8% and 43.3% of respondents respectively.

Carer and parent views of the consumer's presentation, burden on carers and parents and the relationship with mental health workers were also identified as top priorities by 38.1%, 35.1% and 24.6% of respondents respectively.



APPENDIX E

Review of international literature

When Australia first introduced routine outcome measures in public mental health services across the country, no other country had introduced a mandated national collection. Australia is still recognised as a world leader in the development and implementation of routine outcome collection. In 2012 the Mental Health Commission of Canada [3] noted the following:

Despite some improvements in recent years, far too little is known about the effect that many mental health programs and activities actually have on people's mental health outcomes. Not enough data are collected, and what are collected are too rarely shared across jurisdictions, government departments, and the mental health sector. Ideally, robust and comprehensive data collection systems would make it possible to set and monitor clear targets for the availability and effectiveness of services, as is being done in Australia and other countries that are leading the way with regard to mental health data. Such data would also make it possible to monitor critical elements of a recovery-oriented system, such as quality of life, satisfaction with services, and how involved people with lived experience are in making decisions at all levels.

The following presents a summary of work on routine outcome measurement being undertaken in other countries. National or larger scale introduction and major developmental projects are described in New Zealand, the United Kingdom and other European countries, Canada and the United States of America.

NEW ZEALAND

In 2005 New Zealand started collecting the HoNOS family of measures in all Department of Health Boards mental health services, including all mental health inpatient services and community services, as well as forensic mental health services and intellectual disability mental health services and this became part of the national collection in July 2008. More recently, in July 2012 the HoNOS Secure and the HoNOS-LD were added to the list of measures to be used [117].

Five outcome domains were identified as necessary to be covered by a measure of symptomatology, a Maori culturally specific tool, an alcohol and drug tool, a consumer-rated measure and a measure of functioning. Symptomatology and in a more limited way functioning are covered by the currently mandated HoNOS measures [118]. The Alcohol and Drug Outcome Measure (ADOM) is available for voluntary use in services and it is envisaged that this may become a mandated tool. The Taku Reo, Taku Mauri Ora tool, which is a tangata whaiora/service user self-report outcome measure, is being used in some services, but has not been validated as yet [119].

New Zealand is also examining the clinical utility of outcome measures in particular settings [120, 121], as well as evaluating factors affecting the implementation of outcome measures [122]. Similar strategies to those adopted in Australia to improve implementation have been trialled, including the development of a mental health information system, a decision support system and nationally consistent training, as well as ensuring that the use of the measures and training were culturally relevant to the Maori population [118].

UNITED KINGDOM

England has mandated the use of outcome measures in its National Health Services, however routine outcomes collections are not being undertaken in other parts of the United Kingdom in the same way.

England introduced the use of outcome measures in 2000, but the use of the HoNOS and HoNOS65+ was mandated later in 2003. These measures are required to be collected at a minimum, yearly in all mental healthcare providers in National Health Services in England [123]. Jacobs and Moran [123] reported that not all providers are currently collecting this data and the volume of collection varies widely. Whilst this is the only mandated outcome measure, other services in England have commenced the introduction of a suite of measures. For example, the early intervention services in London, as part of the MiData project, selected a range of measures, implemented an information system to support their collection and use, and have produced service level and aggregated data [124].

The Child and Adolescent Mental Health Services Outcome Research Consortium (CORC) was established in 2002. This is a voluntary collaboration, whose members aim to find the best way of routinely evaluating outcomes across the full range of child and adolescent services. They have identified appropriate measures to use routinely, have a common dataset, and aggregate and analyse information from participating services [125]. With an increase in funding, its membership has broadened to services in other parts of the United Kingdom and Scandinavia [126].

Particular issues noted with the introduction of outcome measurement in England included the lack of funding allocated, no central information strategy, no coordinated approach to training, and the decision to use HoNOS was made centrally with limited consultation [125].

More recently, there has been a decision to use the HoNOS and HoNOS65+ to form part of the assessment process for the Payments by Results (PbR) initiative. This is a rules based system under which commissioners pay healthcare providers, taking into account the consumers' health care needs [127]. Consumers are grouped on the basis of a set of scales, comprising HoNOS/65+ and six additional items that capture 'historical' information. This tool, known as the Mental Health Clustering Tool (MHCT), is used to assess and allocate a person to a cluster, providing the basis for funding [128]. Use of the mental health clusters was mandated from April 2012, but at this point national tariffs had not been set, and there were still local agreements between commissioners and providers regarding prices for clusters [127].

The impact of PbR on routine outcome measurement has been considered. It has been proposed that whilst there may be management support for routine collection as it is now a financial imperative, it remains to be seen whether PbR enhances the routine collection in practice, or if it will further isolate clinical from management priorities [128].

Other European countries

GERMANY

Routine outcome measurement is yet to be introduced in a standardised way in Germany. There are, however, examples of the use of outcome measures in local services and units, but this has mostly been for research purposes [129]. For example, Puschner et al [130] conducted a randomised trial to investigate the short-term effectiveness of the use of outcome measurement and feedback in an inpatient setting. People receiving the inpatient care found the outcome measures meaningful and relevant, however, feedback to the person by the clinician was rare. Whilst there was no overall short-term effect in this study, the authors proposed that routine outcome monitoring is feasible, and strategies were needed to improve the use of the outcome information between the consumer and clinician.

Andreas et al [129] also noted that to introduce outcome measures in a more routine way, there is a need to identify strategies to convince consumers and clinicians of the benefits. Efforts are also needed to bring together researchers and clinicians to identify commonalities in best practice and identify measures that may be useful in daily clinical practice, as well as to inform research [129].

ITALY

In Italy, there is currently no national imperative to collect routine outcome measures across mental health services [131]. The most systematic approach to outcome measurement to date has been the South Verona Outcome Project, which ran from 1994 to 1997. This project implemented a suite of measures to cover the domains of global functioning, psychopathology, social disability, need for care, quality of life and service satisfaction [132]. The measures selected were the Global Assessment of Functioning Scale, Brief Psychiatric Rating Scale, Disability Assessment Schedule, Camberwell Assessment of Need, Lancashire Quality of Life Profile and the Verona Service Satisfaction Scale [133]. The first three measures were to be collected six-monthly, whilst the need for care, quality of life and service satisfaction were to be collected yearly.

Use of the data is predominately for service planning, evaluation and research. There has been much less focus on the individual clinical utility level than is the case in Australia. Whilst feedback is given to clinical staff on the results, this is aimed at assessing improvements in service provision [134].

Collaborative study across European countries

Whilst the South Verona model focused on service planning, evaluation and research, the Towards More Effective European Community Care for Patients with Severe Psychosis (MECCA) study was focused on the use of outcome measures to inform clinical decisions and to engage consumers in dialogue. This randomised controlled trial was conducted in community mental health teams in six European countries - England, Germany, Sweden, Switzerland, Spain and the Netherlands was conducted over a 12-month period. Quality of life, treatment satisfaction and consumers' need for different or additional assistance were measured every two months following the same protocol. Information was entered directly onto hand held devices and feedback to the clinician and consumer was immediate [135]. Priebe et al [136] reported that after 12 months, consumers involved in the intervention group had better subjective quality of life, fewer unmet needs and higher treatment satisfaction.

NORWAY

Routine outcome measurement is not widely established in Norway to date. There are however, some minimum requirements for data collection imposed nationally. A split version of the Global Assessment of Functioning (GAF) is required to be completed at admission and discharge from mental health services. The reported rates of completion as at 2009 were 65% at admission and 55% at discharge [137]. The Norwegian Health Board has also developed a number of clinical guidelines, which include the recommendation of the use of outcome measures, but nothing further in relation to this. There have also been some research initiatives utilising outcome measures, including the use of HoNOSCA across four child and adolescent inpatient units to assess effectiveness of the services [138] and some services have continued to use the measures, but this has not translated into a more systematic uptake of routine collection.

THE NETHERLANDS

In 2009, the Netherlands began introducing routine outcome measures in clinical practice with the aim that that these would support clinical practice and improve quality of care, support service evaluation, contribute to an understanding of service effectiveness and cost-effectiveness, and support research [139]. In 2011, a study by de Beurs et al undertaken in a number of mental health clinics in the Rivierduinen region (a catchment of about one million) showed that it was feasible to implement routine outcome measurement into practice, and that it also supported research [140].

The approach was to identify key domains to measure (problem severity, general functioning and quality of life), then to identify target groups (Autism Spectrum Disorder in child, youth, adults and elderly; children and youth; elderly with subgroups of geriatric psychiatry and psychogeriatric disorders; addiction; and adults with subgroups of bipolar disorder, severe psychiatric disorders, personality problems and mood and anxiety disorders and somatoform disorders) and then identify appropriate measures for each target group that covered the identified domains [141].

The measures included both clinician-rated and self-report measures, and were to be collected at admission and discharge from services, with review still to be determined, but at various suggested intervals of three, six or nine months, but a minimum of at least once per year.

A central data agency was established in 2010 to collect and analyse data, and distribute reports to mental health services. Expert groups were also formed to guide decisions about the selection of the outcome measures.

The approach is very similar to that of Australia in terms of using one approach across the country, the collection protocol, expert panels and centralised data collection. It differs in that measures have been chosen for disorder specific groups and that there is greater flexibility in the choice of measures.

CANADA

In Canada there is no national framework for the collection of outcome measures. Indeed the system of healthcare makes this particularly difficult at a national level, as responsibilities for the delivery and funding of health fall to the individual provinces, territories and first nations [142].

In the province of Ontario, a systemised approach has been used to implement routine outcome measurement in mental health services. The Camberwell Assessment of Need (CAN) was initially chosen from a review of over 80 tools, and this now forms the basis for the Ontario Common Assessment of Need (OCAN) [143]. It is the approach to implementation that differed significantly to that of other countries, in that they invested heavily in a change management process. The methodology included focusing on delivery of benefits for key stakeholders, involving key stakeholders in leading the project, using subject matter experts, maximising supports, implementing ongoing monitoring, piloting, delivering meaningful reporting early, conducting formal evaluation and undertaking continual improvement [142]. Indeed, Slade [107] asserts that using change management involving key stakeholders who are directly impacted by, and benefit from the use of measures in practice, is a better approach than a more centrally imposed model such as in Australia. No data is publicly available to compare with Australia to determine if this has indeed resulted in a better use of the measures.

UNITED STATES OF AMERICA

In the USA, there are examples of the use of routine outcome measures in particular services, and in a more coordinated way in some states, notably Ohio and Michigan. There is also now a push nationally to implement an integrated approach to the collection, analysis and use of data.

Ohio

In 1996, Ohio's mental health system launched an initiative to establish a uniform outcome measurement and reporting system, with piloting of the measures in 1998. Grants to assist with implementation occurred in 2000, with the requirement that those services receiving funding provide data by 2001. Although initially a voluntary collection, it became mandated in 2003. Services were required to collect and report data to their local alcohol, drug addiction and mental health (ADAMH) board or local community mental health board by 2004, as well as provide evidence that outcomes data was being used in treatment planning and agency performance improvement activities by 2005. Collection became voluntary again in 2008 to reduce administrative burden, and there was an associated reduction by 50% in administrations that were reporting outcome data following this [144].

In August 2009, the Ohio Department of Mental Health discontinued reporting requirements for instruments identified with the previous Outcome System [145].

The measures used were specifically designed in Ohio to measure the domains of clinical status, quality of life, functional status, and safety and health. Information is used to support clinical practice, service management and evaluation, and aggregated data is available at a state-wide level for the purpose of policy development and planning [146].

From 2010, Ohio has now indicated an alignment to the requirements stipulated as part of the National Outcome Measures (NOMS), which include client level information and random surveys on consumer perceptions of care, social functioning and social connectedness, collected on a yearly basis [147]. Although the outcome measures originally mandated are still available for use throughout Ohio, there is no longer a state level mandate to do so.

Michigan

Michigan has introduced mandatory collection of outcomes state wide, however evidence of the introduction of outcome measurement can only be found in child and adolescent services, where they received block funding in 2005 to develop common assessment and outcome measures for children and families. Regular reporting and benchmarking between services does occur [82].

Federal and multi-state initiatives

At a federal level, there have been a number of initiatives aimed at standardising outcomes data collection in the United States. These include the National Outcome Measures (NOMS) developed in 2005 in a collaboration between the Substance Abuse and Mental Health Services Administration (SAMHSA) and the states, and the Sixteen State Study [148, 149].

The aim in collecting NOMS is to provide standardised information to a reporting system that will enable a national picture of mental health services. Categories include indicators to assess multiple domains, such as morbidity, employment and education, crime and criminal justice, stability in housing, social connectedness, access and capacity, retention, perceptions of care, cost effectiveness and use of evidence-based practices [149]. Data for these indicators comes from a number of state based systems. The data from the centre for mental health services is collected voluntarily and there is large variation ranges due to systems, capacity, collection methods and variable definitions [150].

The domains of perceptions of care, functioning and social connectedness are captured via survey, through the Mental Health Statistics Improvement Program (MHSIP) Youth Services Survey for Families (YSS-F). This information is to be collected on a yearly basis. This national system has established performance indicators rather than routine collection of outcome measures in services to support clinical practice.

The Sixteen State Study had the aim of applying the same standardised definitions to obtain comparable performance and outcome indicators on public mental health services. Interestingly, both the indicator for percentage of consumers with maintained or improved level of functioning and the indicator for percentage of consumers experiencing symptom relief were not progressed, given the difficulties with lack of uniformity across states in the measures used and collection protocols [148].

It has been suggested that although there has been much activity in developing indicators and outcome measures for use, there is still a lack of coordination federally [144, 149]. The Substance Abuse and Mental Health Services Administration (SAMHSA) has identified steps to create common standards for measurement and data collection to better document the quality and outcomes of behavioural health services in its plan covering 2011-2014 [151].

SUMMARY

Table 1 - Extent of routine outcome collection internationally

COUNTRY	National Collection	Local or State Initiatives	National Clinician-rated Measure	National Consumer-rated Measure	National Carer-rated Measure	Coverage: All age groups	Reported Nationally
Australia	√	N/A	√	√	√ (child & adolescent)	√	√
USA	X	√	X	X	X	X	X
Canada	X	√	X	X	X	X	X
Germany	X	√	X	X	X	X	X
Italy	X	√	X	X	X	X	X
Norway	√	N/A	√	X	X	√	√
England	√	N/A	√	X	X	√	√
New Zealand	√	N/A	√	X	X	√	√
Netherlands	√	N/A	√	√	X	√	√

Whilst many would like to see the collection rates of outcomes measures improve, particularly those of the consumer rated measures, and better use made of the data, the routine collection of outcomes measures in Australia is progressing relatively well compared with other countries. The international literature shows that other countries have embarked on similar routine outcome initiatives. However, Australia is at the forefront of this work and has been the most ambitious and systematic in its introduction of a suite of standard measures for routine collection, with a national collection that covers all age groups and service settings in public mental health services and collation of information and reporting at a national level.

In the United States of America, whilst states such as Ohio and Michigan successfully implemented routine outcome systems, these state wide initiatives have not resulted in a standardised system or wider implementation across the country. Michigan continues its work on routine outcome measurement, but, from 2010 the collection is no longer being undertaken at the state level in Ohio.

There is no consistent national collection in Canada. However one province, Ontario has introduced routine outcome measurement in mental health services. After a review of over 80 measures, the province adopted one measure the Ontario Common Assessment of Need, which was based on the Camberwell Assessment of Need. The main distinction between Australia and the province in Canada is their approach to implementation, which differed significantly to that of other countries, in that they invested heavily in a change management process, with many services and clinical staff involved in the initial selection and development

of the measure which was introduced routinely into services. The change management process focussed on delivering benefits for key stakeholders, involving key stakeholders in leading the project, using subject matter experts, maximising supports, implementing ongoing monitoring, piloting, delivering meaningful reporting early, conducting formal evaluation and undertaking continual improvement. Whilst AMHOCN provided leadership and support for change management nationally in Australia, there was wide variation in how local services and states and territories implemented, managed and supported the introduction of routine outcome measurement.

Germany and Italy, although involved in a number of projects and research initiatives have not progressed towards national routine outcome collection. The South Verona project in Italy and the Towards More Effective European Community Care for Patients with Severe Psychosis (MECCA) study across six European countries (England, Germany, Sweden, Switzerland, Spain and the Netherlands) both specified suites of outcome measures. The former operated between 1994 and 1997 and the MECCA study lasted just one year. Whilst Norway has implemented the GAF nationally at admission and review to mental health services, and this is reported nationally, they are still progressing with broader use of outcome measures to support clinical practice.

England and New Zealand have routine outcome collections at the national level, but by the end of 2012 they had only mandated HoNOS measures which are clinician-rated, rather than a broader suite that captures additional information such as functioning. They have also not included a self-report measure to capture the consumer perspective in their national collection.

Outcomes collection in the Netherlands probably most resembles that of Australia in that it is a national collection with clinician-rated and consumer-rated measures, has expert panels guiding developments and has a centralised data collection. It differs in that measures have been chosen for disorder specific groups and there is greater flexibility in the choice of measures.



APPENDIX F

Data and reporting

States and territories have undertaken to provide the outcomes data that they collect annually to the Australian Government Department of Health and Ageing. From 2003, these data were collated nationally and held in a national data bureau. Strategic Data Pty Ltd has been contracted to perform this role since the establishment of AMHOCN in 2003.

Data must be extracted in conformance with the NOCC technical specifications [11] and are to be validated using a specially developed online validator tool. Data may be submitted quarterly, but a complete and final extract covering the full financial year is required to be submitted by 31 December following the end of that financial year.

Data are then available through a number of mechanisms, including password-protected access to own submitted records. Reports are generated for use by states and territories, services and clinicians, as well as for national reporting. A web decision support tool has also been developed that allows for queries to be run on the data, with data available by state and territory, sex, age group, diagnosis, legal status and financial year.

States and territories have submitted their annual data back to 2000-01 where this was available. All states and territories submitted some data from 2003-04.

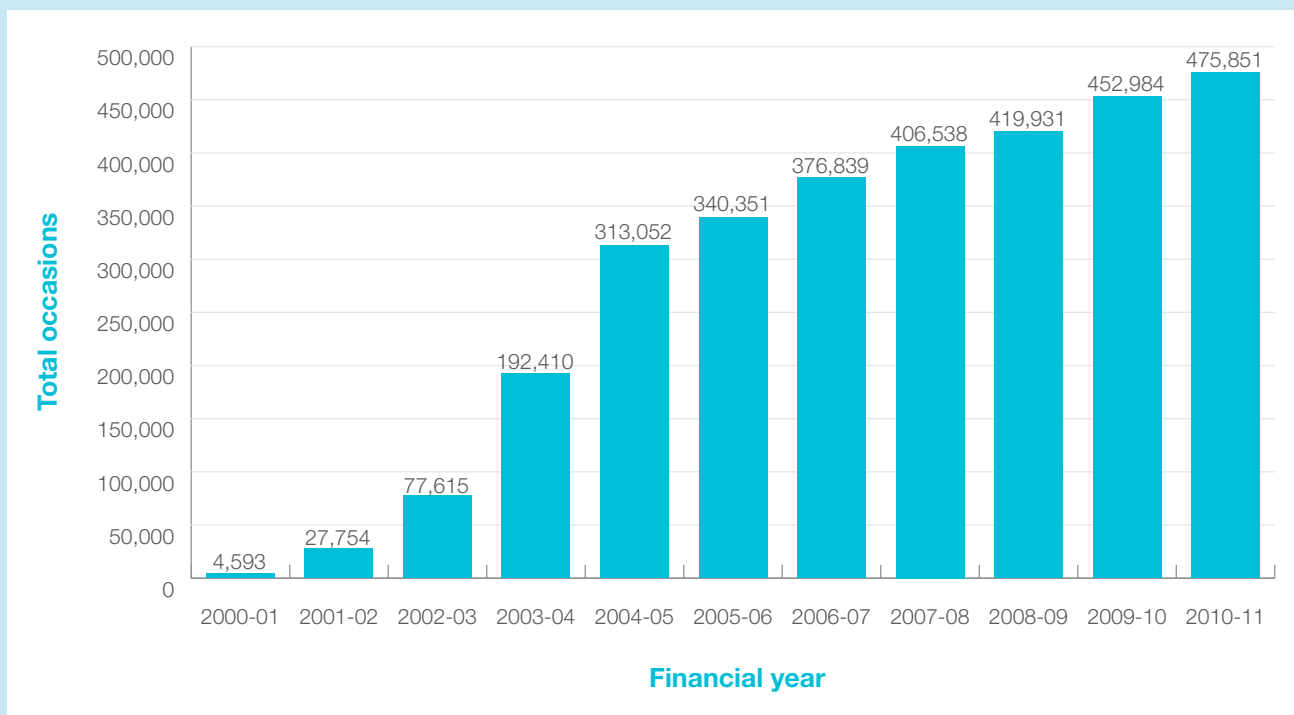
6.1 Collection rates

The annual collection of outcomes data has grown each year since states and territories first began to introduce outcome measurement from 2000-01, with the biggest change seen in 2003-04, by which time all states and territories began routine collections. It was estimated that by June 2008, routine measurement of consumer outcomes was in place in an estimated 98% of public mental health services, and states and territories were contributing approximately 420,000 de-identified records annually to the collection. In recent years there have continued to be annual increases in the national collection rates, albeit much smaller ones, with outcome measures reported for 475,851 occasions of service in public mental health services in 2010-11 (Figure 1).

De-identified consumer level outcomes data were provided from 2000-01 by Victoria, from 2001-02 by New South Wales and Tasmania, from 2002-03 by Western Australia, Queensland, Northern Territory and the Australian Capital Territory, and from 2003-04 by South Australia.

'Collection occasions' may be at admission, review or discharge.

Figure 1 - Collection occasions, 2000-01 to 2010-11



6.1.1 Variation across jurisdictions and time

To allow for comparisons with the national average and across states and territories, data are reported below relative to the total population sourced from the Australian Bureau of Statistics, Census of Population and Housing estimates.

Data for states and territories highlight when the collection began in each jurisdiction and also, in most cases, some marked annual variation. Figures 2 to 10 provide a clear indication of the early, introductory years of outcome measurement in Australia. They show very varied activity from 2000-01, but by 2003-04 all states and territories had introduced routine outcome measurement in their public specialised mental health services.

Figure 2 - NOCC occasion rates 2000-01 to 2010-11

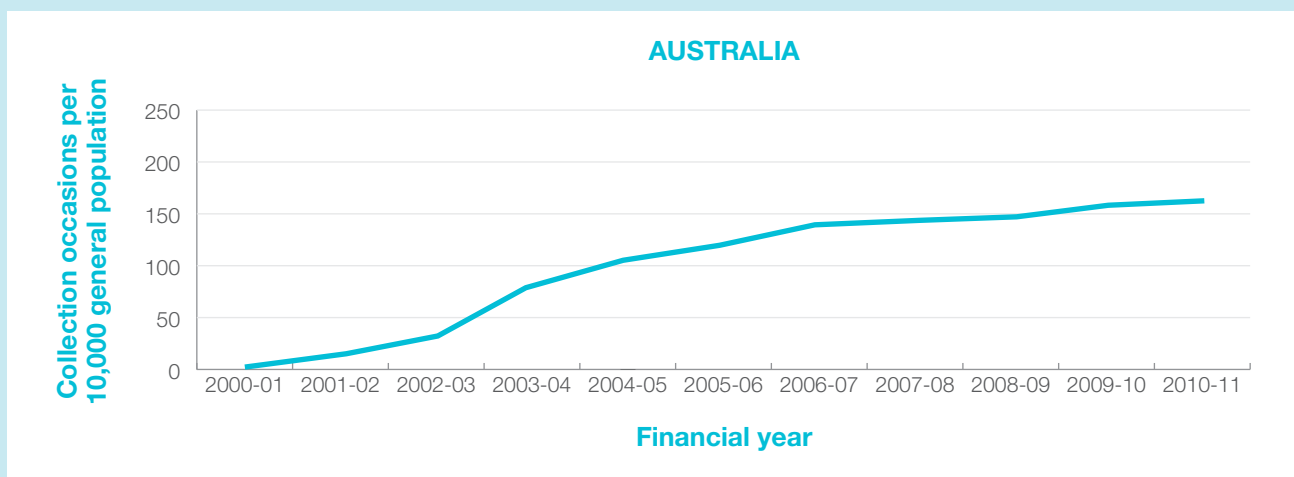


Figure 3 - New South Wales occasion rates 2000-01 to 2010-11

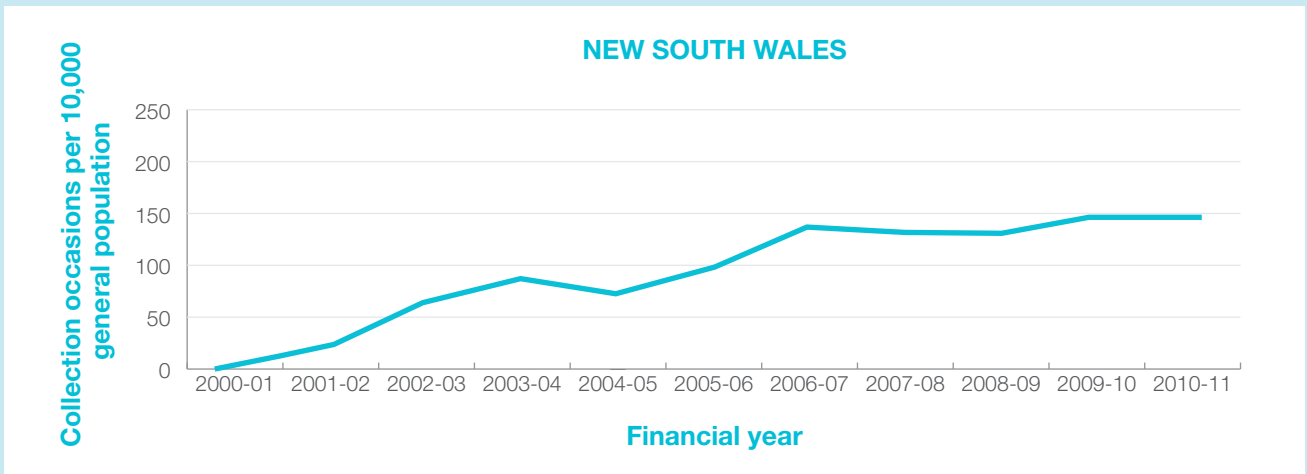


Figure 4 - Victoria occasion rates 2000-01 to 2010-11



Figure 5 - Queensland occasion rates 2000-01 to 2010-11

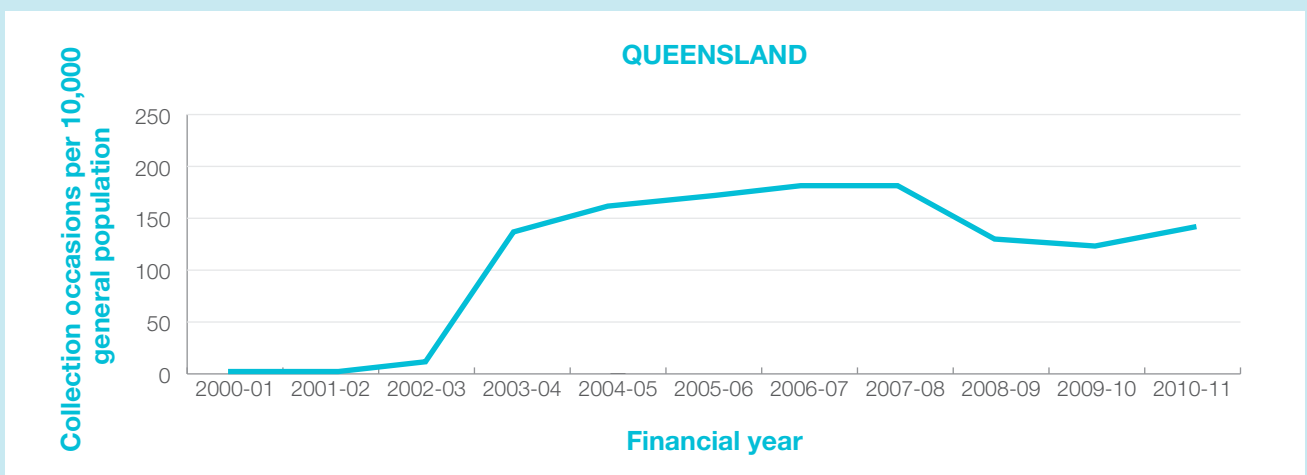


Figure 6 - Western Australia occasion rates 2000-01 to 2010-11

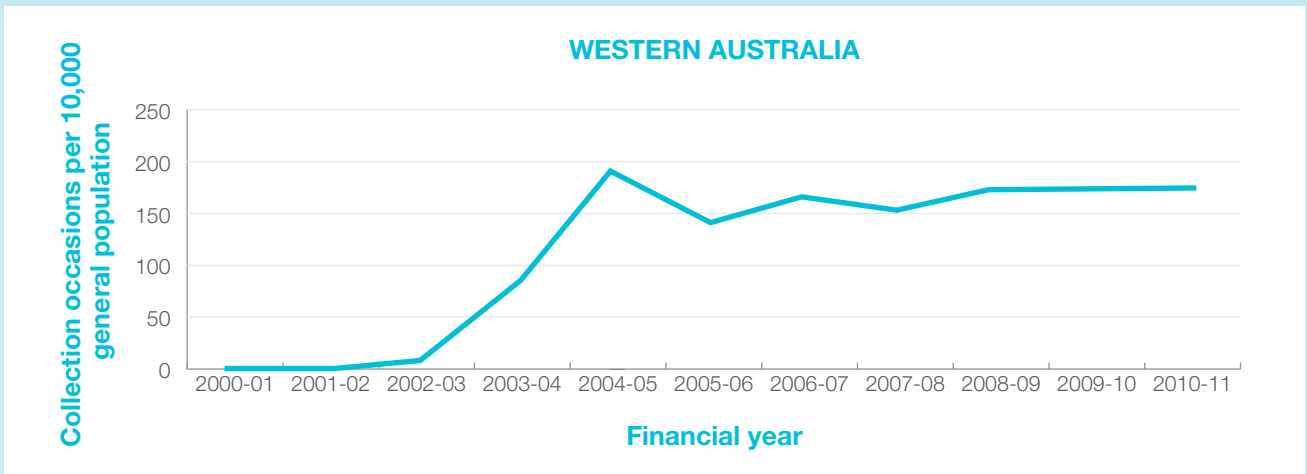


Figure 7 - South Australia occasion rates 2000-01 to 2010-11

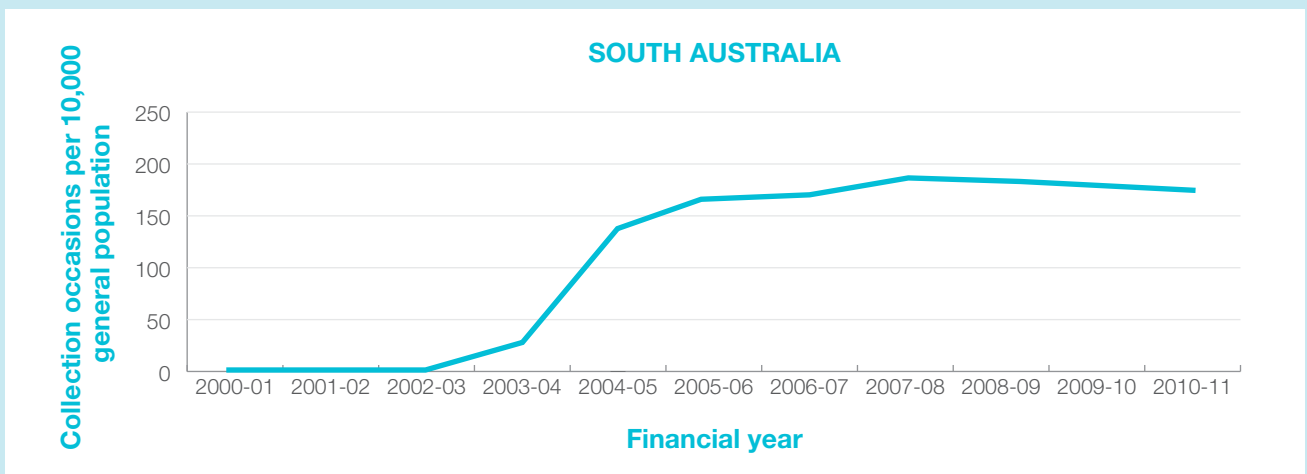


Figure 8 - Tasmania occasion rates 2000-01 to 2010-11

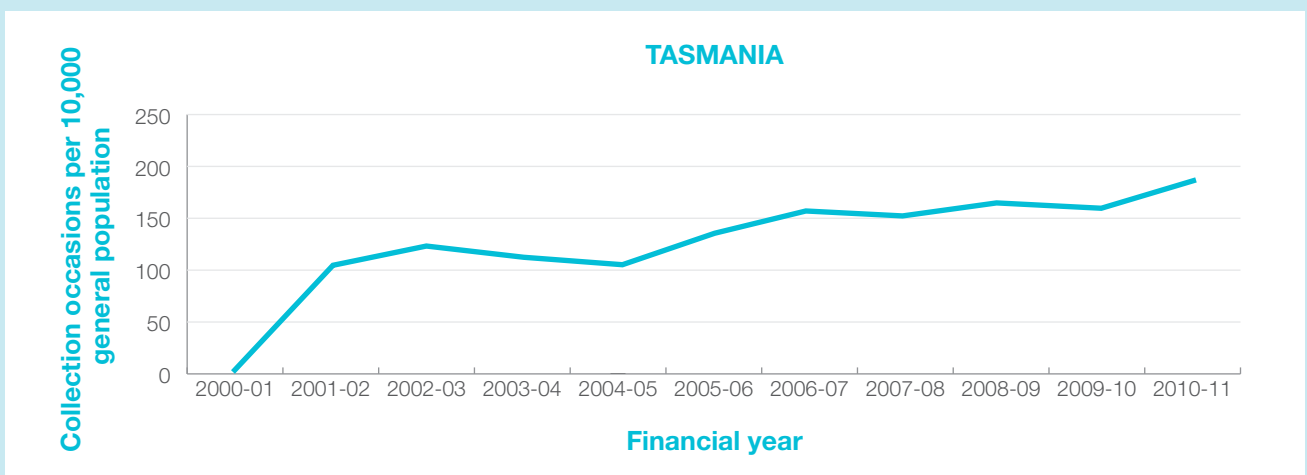


Figure 9 - Australian Capital Territory occasion rates 2000-01 to 2010-11

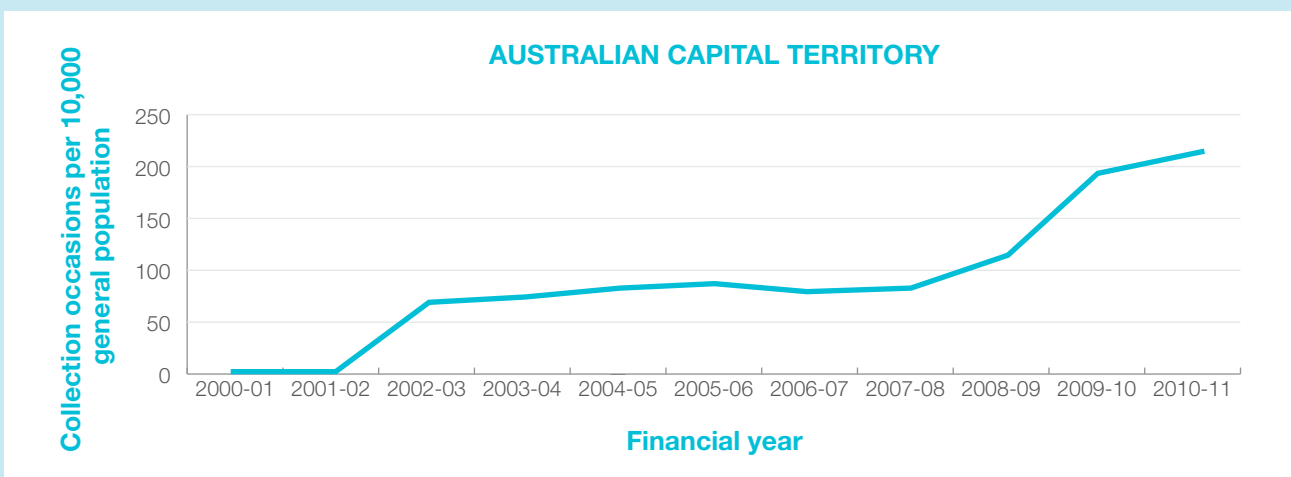
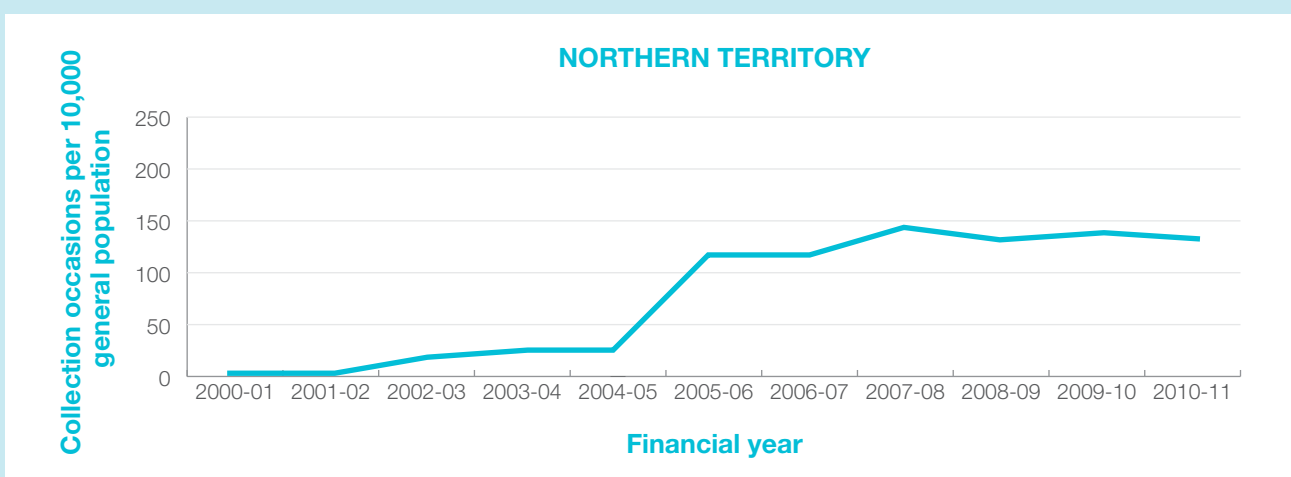


Figure 10 - Northern Territory occasion rates 2000-01 to 2010-11



6.1.2 Factors influencing collection rates

The annual data from 2003-04 sometimes show marked changes from year to year. States and territories have reported that changes to information systems, service restructures and leadership changes, and variation in investment in training explain many of the more marked changes in rates.

6.1.2.1 Information systems and reporting

A number of states and territories noted that changes to and introduction of new information systems particularly impacted on the collection of outcome measures.

For instance, Queensland introduced a new state-wide clinical information system in 2008-09, and this is reflected in a marked drop in the collection rate. The roll out of the system required a significant change to business practices across all mental health service organisations, and impacted on all data entry due to system performance and other change management issues. The system however, is now well implemented and embedded in day-to-day service activities, with collection rates trending upwards again from 2009-10.

Between 2003-04 and 2004-05, the mental health information system in New South Wales was updated, with changes to the specifications for extraction of data to the State Health Information

Exchange. This resulted in a decrease in the quantity of data being uploaded during this period, and is reflected in the dip in collection rates for New South Wales for those financial years.

Sometimes, changes have been reflected in improvements in the rates. For instance, in 2007-08 Victoria completed changes to its information system that introduced prompts for clinicians to collect outcome measures in accordance with the NOCC protocol. This resulted in a substantial increase in the collections rates for that financial year, with continuing increases being recorded annually.

New South Wales noted that regular six-monthly mental health performance reporting back to local health districts and benchmarking, which began in 2005-06, was in part responsible for an increase in collections over this time.

6.1.2.2 Reorganisation of services and consistency of leadership

Restructuring of services and consistency of leadership have also been identified as having major impacts on the continued collection of routine outcome measures.

Area health service amalgamations in New South Wales in 2004-05 contributed to a decrease in outcomes collection, as services reorganised under new structures. However, it is important to note that a similar change in infrastructure in 2010-11 did not appear to have had the same impact.

New South Wales also noted that the improvements seen in the collection in 2005-06 and 2006-07 may be due in part to the relative lack of upheaval in the organisation of area health services, which meant that support for outcomes collection and training systems remained much the same over this period.

Western Australia noted a change in executive leadership in 2005, which resulted in a substantial decrease in the collection rate for 2005-06.

In the Australian Capital Territory, it was noted that a change in focus by the existing executive on the collection of measures, rather than a change in leadership, contributed to the increase in collection rates for 2008-09.

6.1.2.3 Training

In Western Australia, a decrease in collection coincided with the end of the clinical training program in 2006-07, and the level has not returned to the heights of 2005-06.

In the Australian Capital Territory, an increase in the collection rate in 2008-09 can be explained by the introduction of a specifically funded position to drive the collection and use of outcomes across services.

6.1.3 Differences in the collection by collection occasion

It is more likely for measures to be collected at admission (on 22.2% of occasions) and review (24.9% of occasions) than at discharge (6.9% of occasions). It is less likely for the measure to be collected when the consumer has transferred from another setting (14.1% of occasions) than a new (23.7% of occasions) or other (29.4% of occasions) referral.

6.1.4 Differences in collection rates by measure

6.1.4.1 Clinician measures

In section 4.3.1, Figures 13 and 14 present the collection rates for the different NOCC measures for the 2010-11 financial year. The following three figures present the collection separately for the 2005-06 to 2010-11 financial years and by age group and setting.

Figure 11 - Proportion of NOCC occasions with a HoNOSCA, CGAS, FIHS or SDQ collected in an inpatient setting, by financial year, for children and adolescents (0-17years).

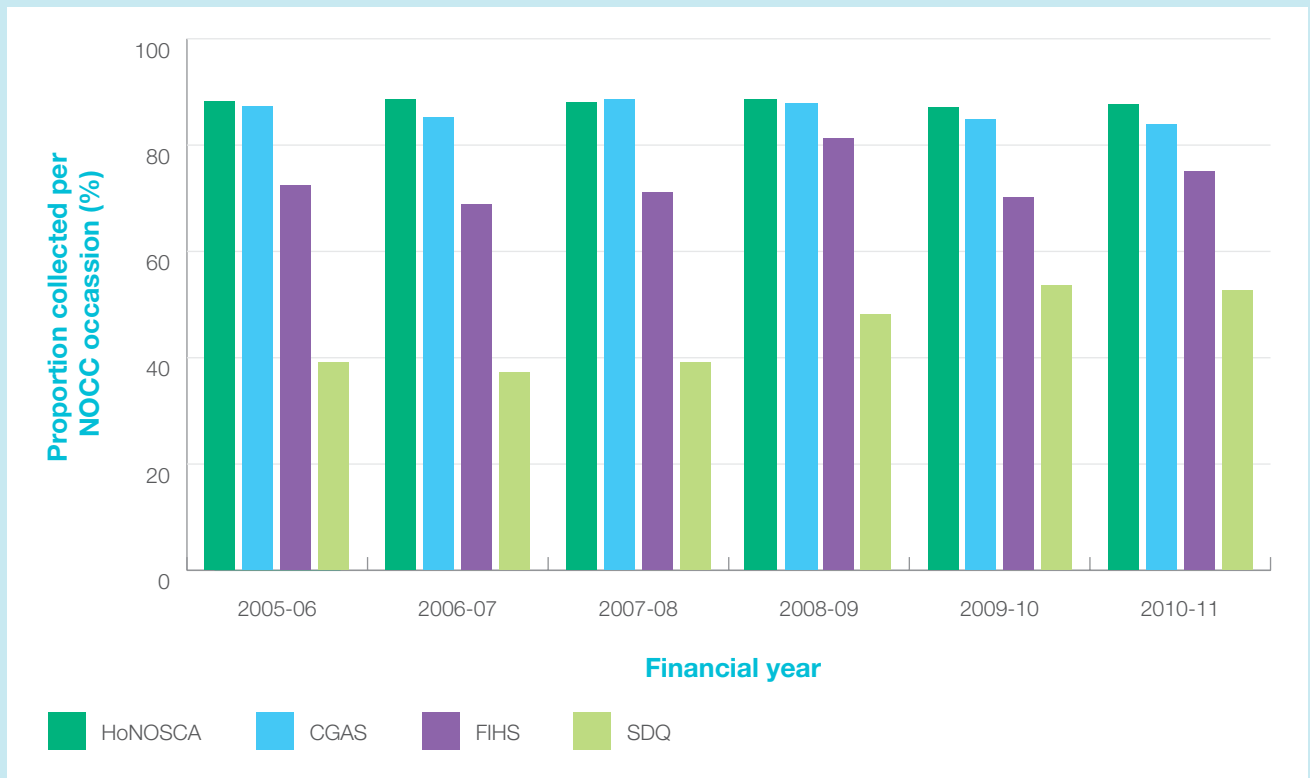


Figure 12 - Proportion of NOCC occasions with a HoNOSCA, CGAS, FIHS or SDQ collected in an ambulatory setting, by financial year, for children and adolescents (0-17years).

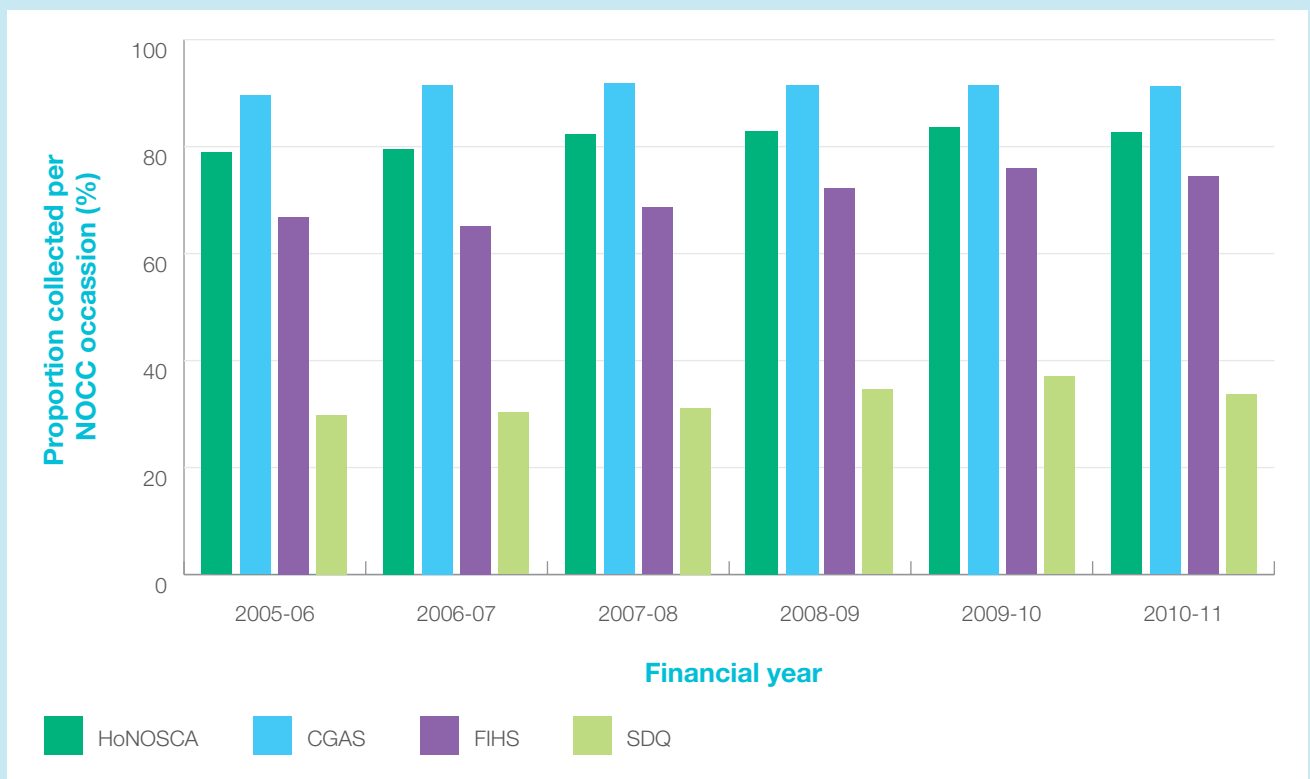


Figure 13 - Proportion of NOCC occasions with a HoNOS, LSP-16, Focus of Care or Consumer rated measure collected in an ambulatory and inpatient setting, by financial year, for adults (18-64years).

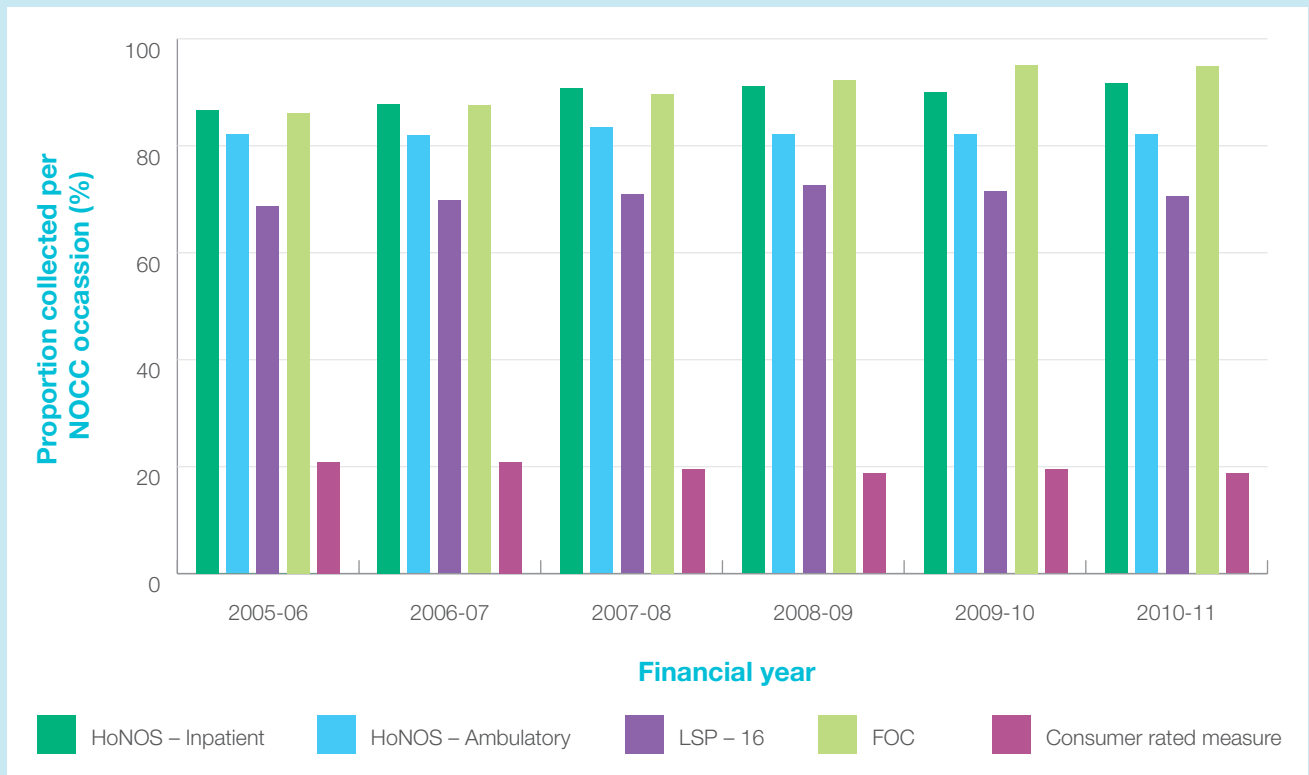
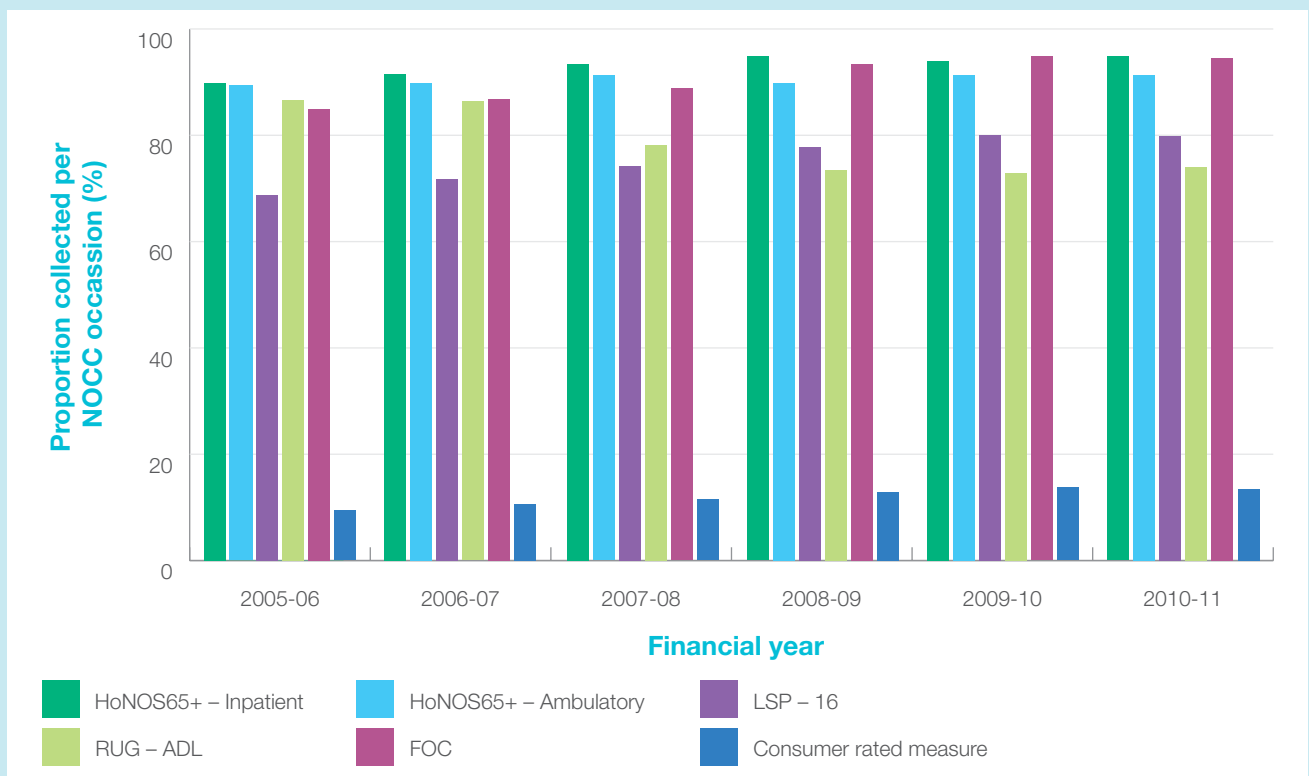


Figure 14 - Proportion of NOCC occasions with a HoNOS 65+, LSP-16, Focus of Care, RUG-ADL or Consumer rated measure collected in an ambulatory and inpatient setting, by financial year, for older persons (65+ years).



6.1.4.2 Consumer-rated measures

Three consumer-rated measures have been selected for use with adults and older persons. The K10+ is used in New South Wales, South Australia, Western Australia and Northern Territory, the BASIS-32 is used in Victoria, Tasmania, Australian Capital Territory, and the MHI-38 is used in Queensland.

The SDQ is used nationally to collect information from parents or carers of children and adolescents receiving services. There are separate versions of the SDQ for parents of those aged 4-10 years and those aged 11-17 years. There is also a self-report version for young people that can be used in addition to the parent-rated version for those aged 11-17 years.

The consumer-rated measures are also not 'mandated' in the way that the clinician-rated measures are expected. The NOCC protocol 'expects' consumer-rated measures only to be 'offered'. Moreover, there are 'protocol' exclusions whereby it is not expected that the measure be offered, for example if the consumer is too unwell, or it would otherwise interfere with treatment. They are also not required for adults and older persons receiving inpatient care, and the SDQ is not required when the rating would occur within 28 days of the initial rating.

In terms of clinician-rated measures, the HoNOS suite of measures (HoNOSCA for children and adolescents, the HoNOS for adults and the HoNOS 65+ for older persons) is specified for all three service settings and for all three broad reasons for collection. The only exception is in those instances where a consumer is discharged from an inpatient setting within 3 days of admission, when a HoNOS rating is not required as the rating periods would overlap.

Figures 15, 16 and 17 show the relative collection rates for each HoNOS measure and the comparable consumer-rated measure. The overall numbers of HoNOS suite ratings were pooled across all three settings (admitted patient care, residential care and ambulatory care) and all three collection occasions (admission, review and discharge from mental health care episode) to estimate the reporting rate. It is important to note that the collection rates reported are per 10,000 of the general population, enabling a picture of change over time. Further analysis would be required to determine collection rates per population seen.

Although the collection rates of the consumer-rated measures have increased over the years, they remain very low for adult and older persons in comparison to the clinician-rated measures. The SDQ is most frequently collected and is collected on around half of the occasions of the HoNOSCA (Figure 15). The data also show that the consumer-rated measure is seldom used in services for older persons (Figure 17).

Figure 15 - HoNOS for Children and Adolescents (HoNOSCA) and SDQ collection occasion rates for consumers aged 0-17 years, 2000-01 to 2010-11

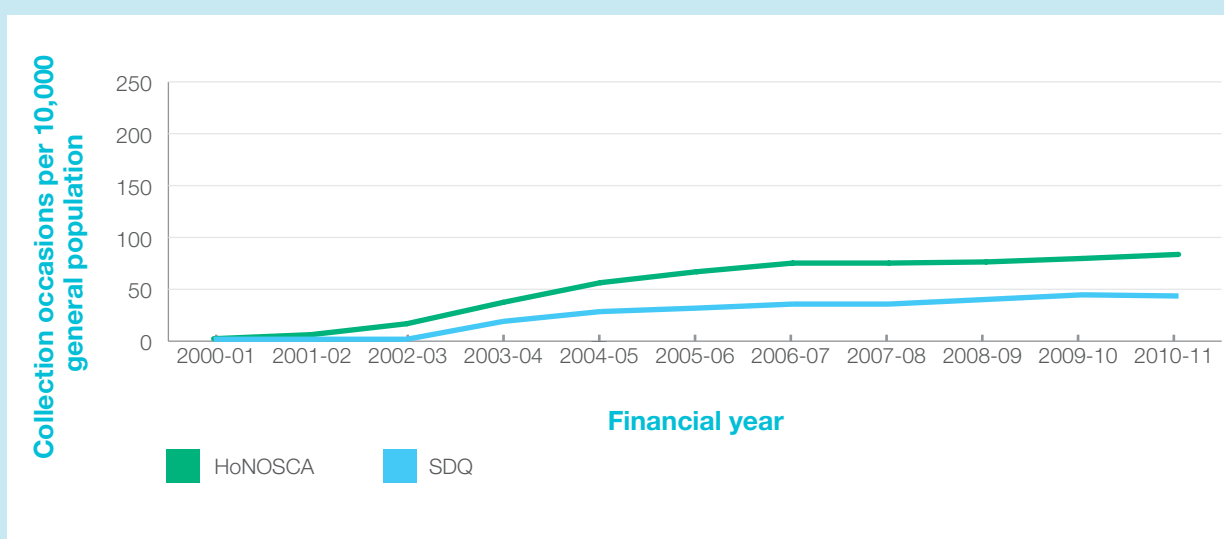


Figure 16 - HoNOS and consumer-rated measure collection occasion rates for consumers aged 18-64 years, 2000-01 to 2010-11

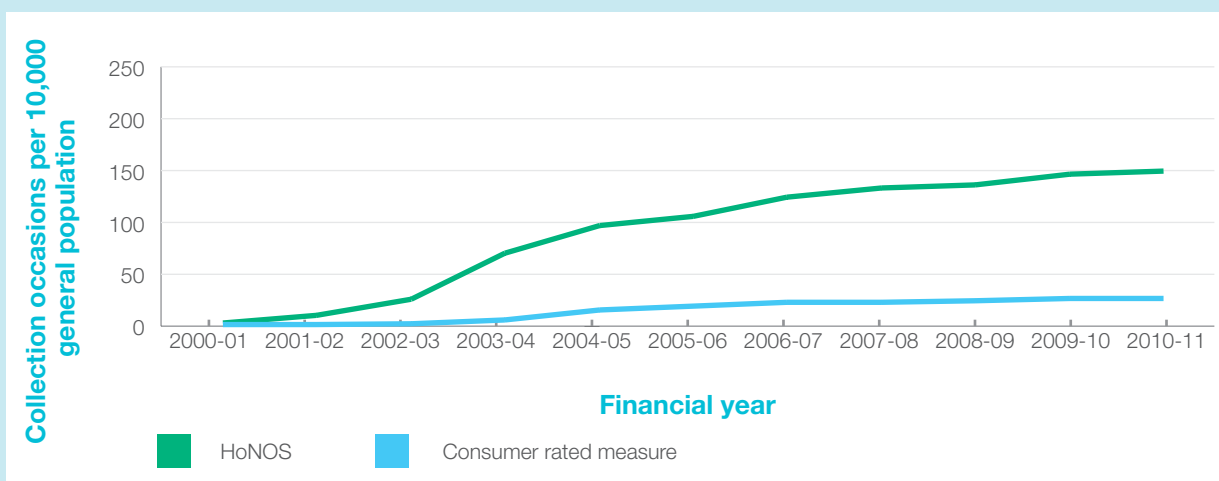
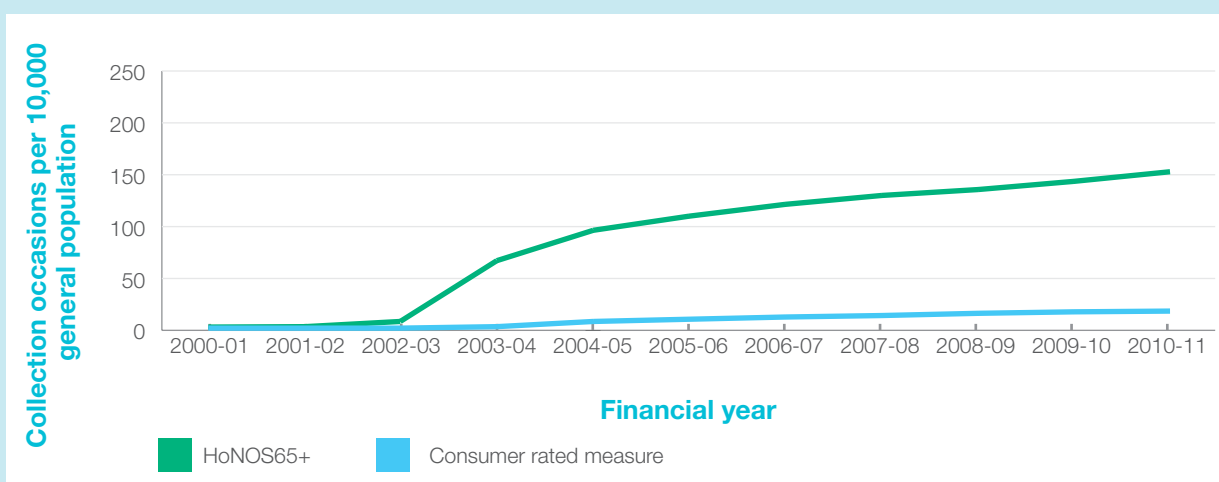


Figure 17 - HoNOS for Elderly Persons (HoNOS65+) and consumer-rated measure collection occasion rates for consumers aged 65 years and over, 2000-01 to 2010-11



6.1.4.3 Relative collection rates by other factors for adults (18-64 years) in ambulatory care

Figures 18 to 23 show the variation in collection rates of consumer-rated measures, for adults aged 18-64 years in an ambulatory setting, by a number of other variables. In particular, low rates are seen when the consumer's care needs are assessed as 'acute' (Figure 19), when the consumer is involuntarily being treated (Figure 20) and when there is no diagnosis (Figure 21). The rates also decrease markedly the higher the score, on either the HoNOS Behavioural subscale (Figure 22) or LSP-16 Compliance subscale (Figure 23). However, the most significant factor appears to be the measure itself, with the K10+ completed more than twice as often as the BASIS-32 or MHI-38 (Figure 18). It is not possible to tell from the data if this is because the measure is offered more in those jurisdictions using the K10+, whether consumers are more willing to complete it or due to other factors, such as its shorter length or state/territory incentives and requirements that encourage its use.

Figure 18 - Proportion of occasions with consumer-rated measure completed, for adults 18-64, in an ambulatory setting, 2005-06 to 2010-11

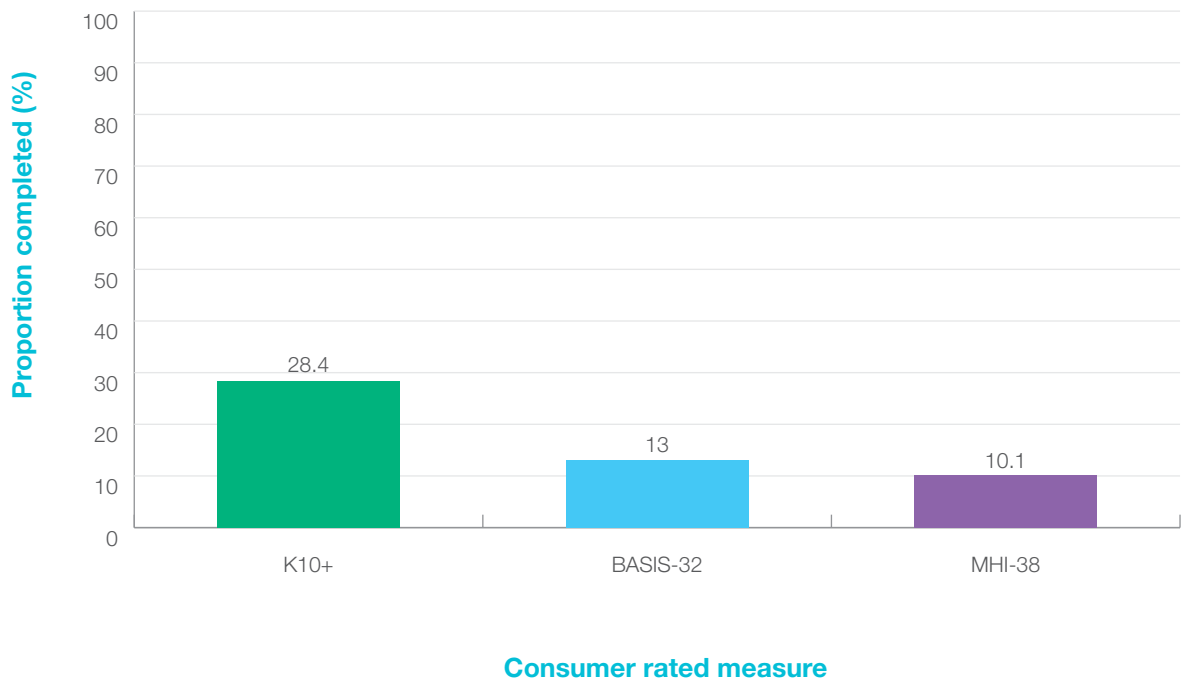


Figure 19 - Proportion of occasions with consumer-rated measure, for adults 18-64, in an ambulatory setting, completed by Focus of Care category, 2005-06 to 2010-11

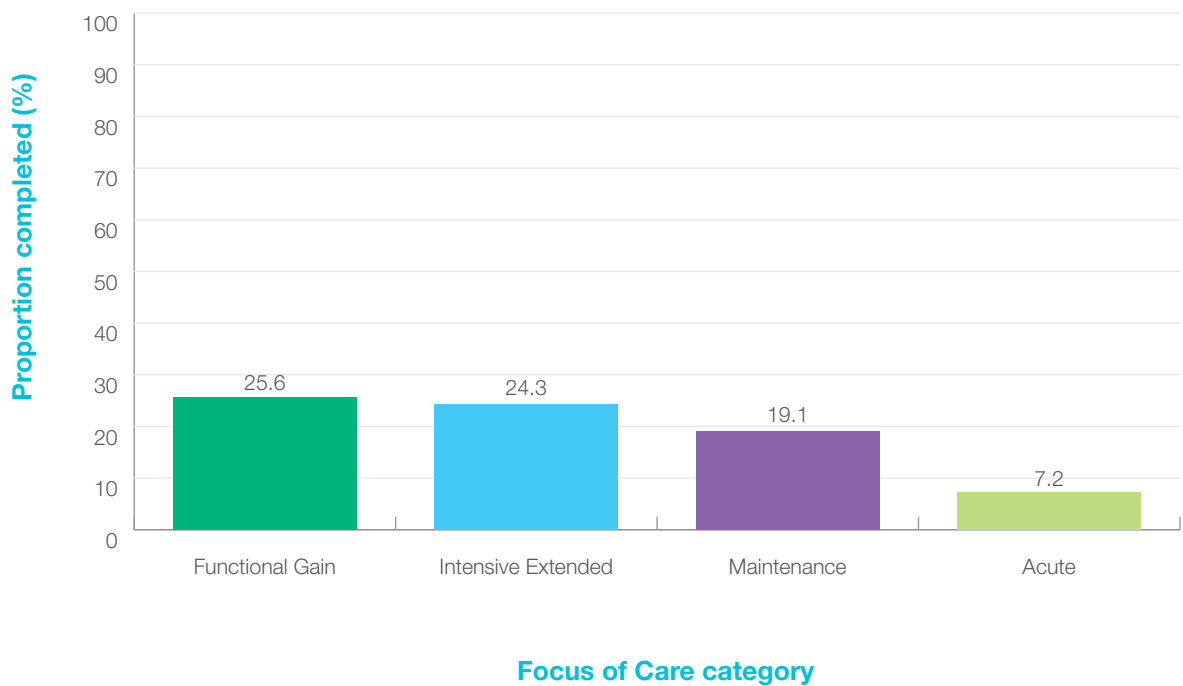


Figure 20 - Proportion of occasions with consumer-rated measure completed, for adults 18-64, in an ambulatory setting, by legal status, 2005-06 to 2010-11

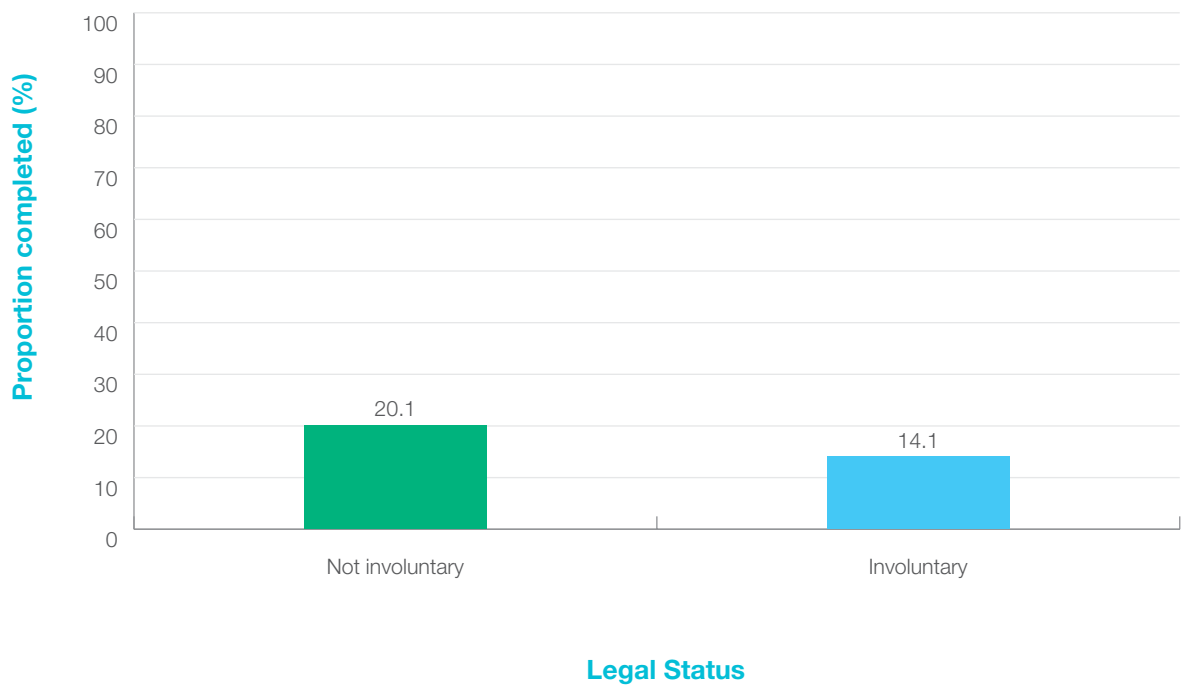


Figure 21 - Proportion of occasions with consumer-rated measure, for adults 18-64, in an ambulatory setting, completed by diagnosis, 2005-06 to 2010-11

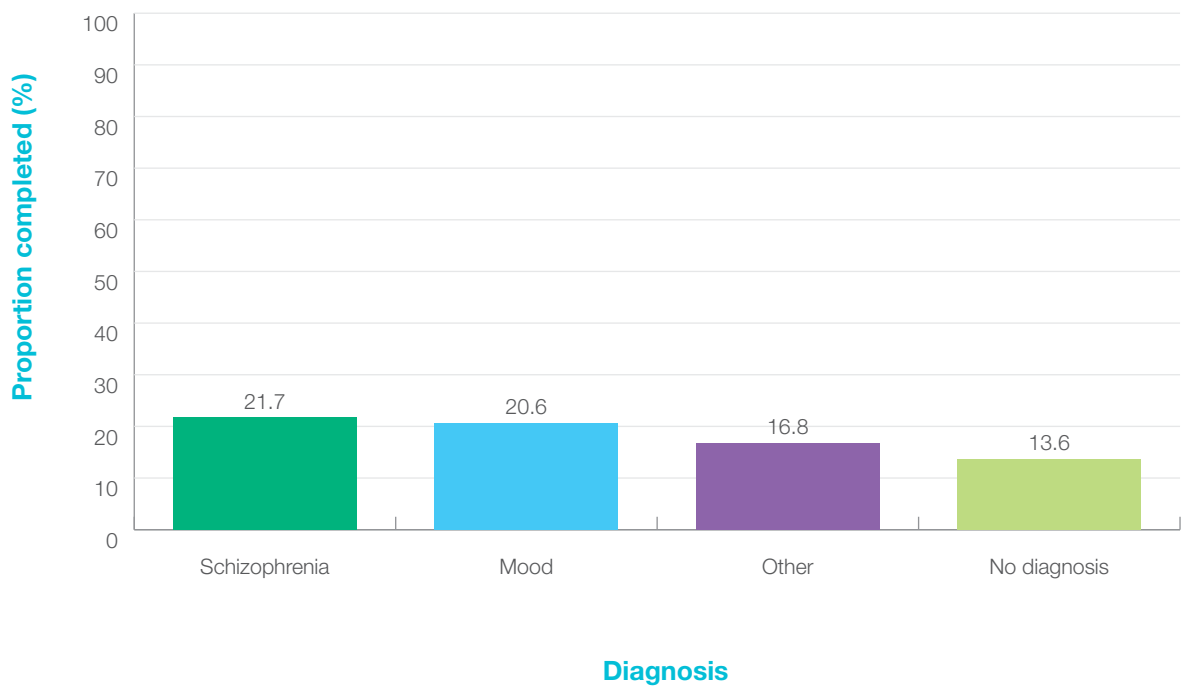


Figure 22 - Proportion of consumer-rated measure completed, for adults 18-64, in an ambulatory setting, by HoNOS Behavioural subscale rating, 2005-06 to 2010-11

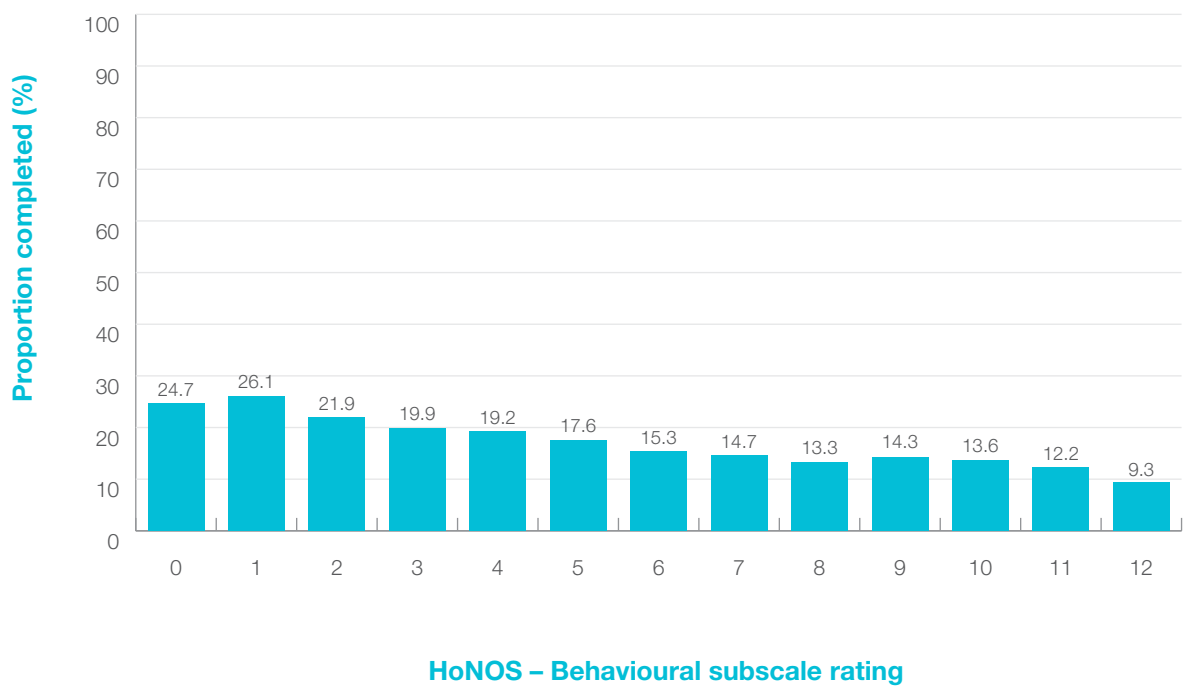
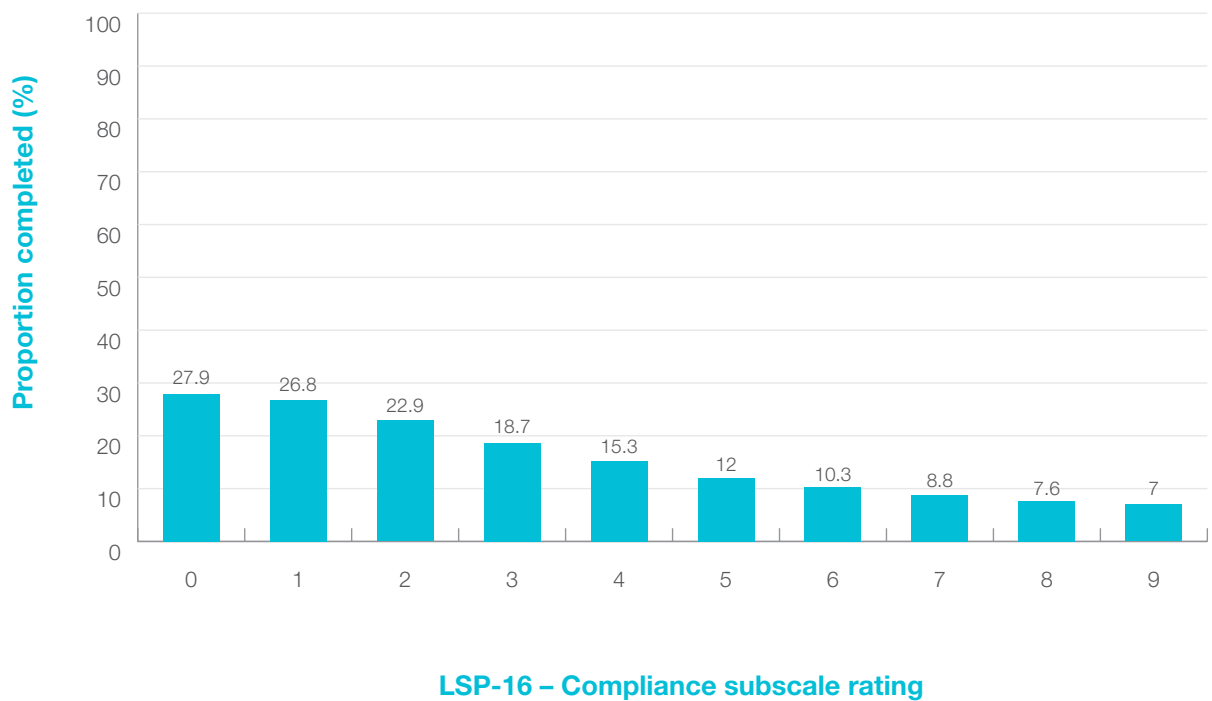


Figure 23 - Proportion of occasions with consumer-rated measures completed, for adults 18-64, in an ambulatory setting, by LSP-16 Compliance subscale rating, 2005-06 to 2010-11

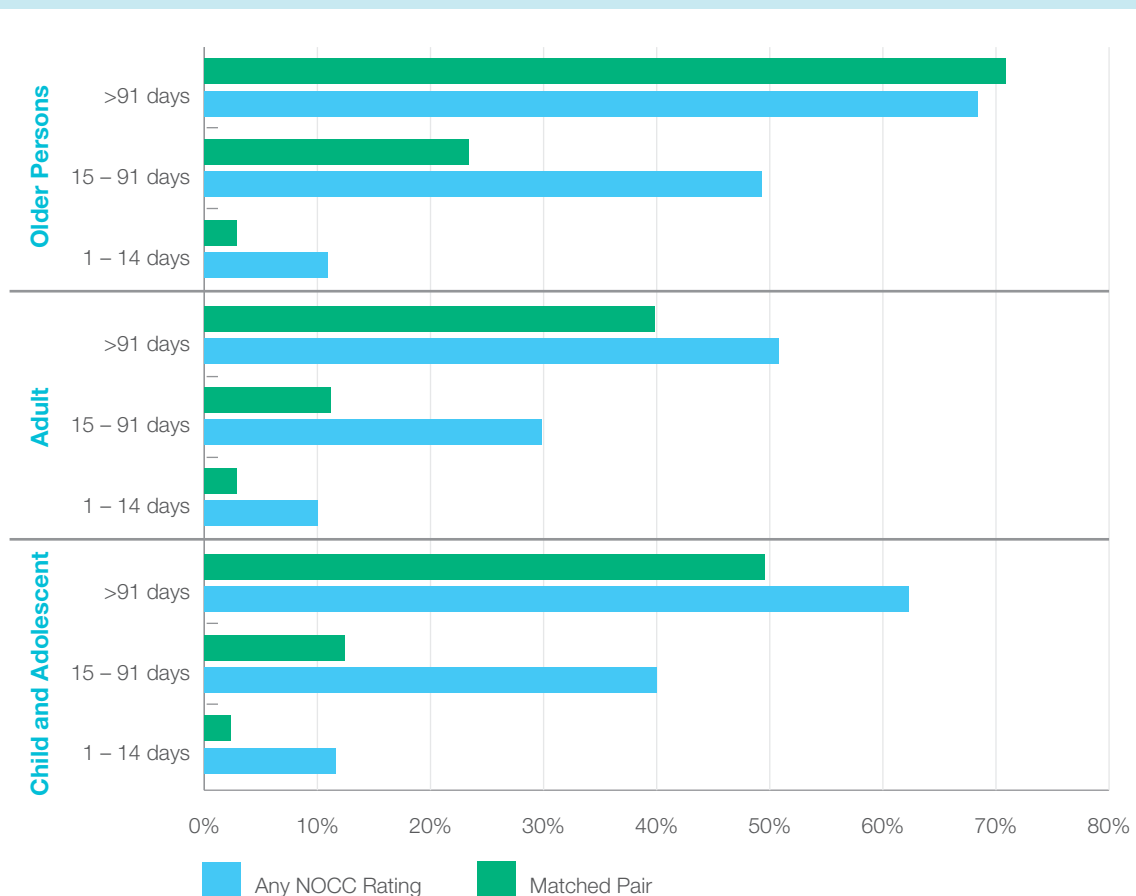


6.2 Estimated participation and coverage by age groups

In Section 4.1.1.1, Table 5 presented participation and coverage estimates for the overall population of consumers receiving treatment in specialised ambulatory mental health settings. The following three tables present those estimates separately for consumers in ambulatory settings aged 0 – 17years, 18-64 years and those aged 65+ years. Figure 24 shows a comparison of the participation and coverage rates in ambulatory setting for the three age groups for the 2010-11 financial year.

Not surprisingly, the general pattern of participation and coverage estimates follows that of the national aggregate, although there are differences between the three age groups. Participation estimates for consumers aged 18-64 years, with CMHC Treatment Periods of 15-91 days and greater than 91 days, are approximately 10% and 20% lower than those for consumers aged 0-17 years and 65+ years respectively. Coverage estimates for consumers aged 18-64 years are approximately 10% and 30% lower, with CMHC Treatment Periods greater than 91 days, than those for consumers aged 0-17 years and 65+ years respectively. There is also a difference of approximately 10% between adult and older person consumers with respect to coverage for CMHC Treatment Periods between 15 and 91 days.

Figure 24 - Proportion of episodes with any clinician rated outcome measure completed compared to the proportion of episodes with a 'matched pair' completed, in an ambulatory setting, by treatment period and age group for the 2010-11 financial year.



Days	Child and Adolescent			Adult			Older Person		
	1 – 14	15 – 91	>91	1 – 14	15 – 91	>91	1 – 14	15 – 91	>91
Matched Pair	2.30%	12.40%	49.60%	2.90%	11.20%	39.80%	2.90%	23.40%	70.90%
Any NOCC Rating	11.60%	40.00%	62.30%	10.00%	29.80%	50.80%	10.90%	49.30%	68.40%

Table 1 - NOCC participation and coverage indicators for ambulatory settings for consumers aged 0-17 years

CMHC Treatment Period	REPORTING PERIOD	NOCC PARTICIPATION: Any NOCC Rating	NOCC COVERAGE: Matched Start & End Ratings
Very Brief Episode 1-14 days	2007-2008	12.5%	2.5%
	2008-2009	12.5%	2.1%
	2009-2010	12.4%	2.1%
	2010-2011	11.6%	2.3%
Short Term Episode 15-91 days	2007-2008	37.7%	11.0%
	2008-2009	35.3%	9.7%
	2009-2010	39.8%	11.6%
	2010-2011	40.0%	12.4%
Medium to Longer Term Episode >91 days	2007-2008	54.3%	43.0%
	2008-2009	52.8%	40.7%
	2009-2010	61.2%	45.3%
	2010-2011	62.3%	49.6%

Table 2 - NOCC participation and coverage indicators for ambulatory settings for consumers aged 18-64 years

CMHC Treatment Period	REPORTING PERIOD	NOCC PARTICIPATION: Any NOCC Rating	NOCC COVERAGE: Matched Start & End Ratings
Very Brief Episode 1-14 days	2007-2008	8.7%	2.3%
	2008-2009	10.0%	2.7%
	2009-2010	10.2%	2.9%
	2010-2011	10.0%	2.9%
Short Term Episode 15-91 days	2007-2008	28.2%	10.8%
	2008-2009	27.3%	9.8%
	2009-2010	30.9%	11.7%
	2010-2011	29.8%	11.2%
Medium to Longer Term Episode >91 days	2007-2008	40.8%	29.2%
	2008-2009	42.0%	29.4%
	2009-2010	49.5%	38.3%
	2010-2011	50.8%	39.8%

Table 3 - NOCC participation and coverage indicators for ambulatory settings for consumers aged 65+ years

CMHC Treatment Period	REPORTING PERIOD	NOCC PARTICIPATION: Any NOCC Rating	NOCC COVERAGE: Matched Start & End Ratings
Very Brief Episode 0-14 days	2007-2008	12.2%	3.6%
	2008-2009	12.6%	3.1%
	2009-2010	11.2%	2.8%
	2010-2011	10.9%	2.9%
Short Term Episode 15-91 days	2007-2008	46.4%	22.5%
	2008-2009	46.4%	22.3%
	2009-2010	47.7%	22.4%
	2010-2011	49.3%	23.4%
Medium to Longer Term Episode >91 days	2007-2008	57.7%	55.0%
	2008-2009	58.1%	53.9%
	2009-2010	65.7%	67.5%
	2010-2011	68.4%	70.9%

6.3 Community coverage: Profiling Community Mental Health Care (CMHC) treatment periods

This section describes findings from analyses that have been undertaken to inform the NOCC 2014-2024 Strategic Directions Project, particularly with respect to the specific question whether *Brief ambulatory episodes should be explicitly included in scope for the collection* (see Recommendation 15)⁸.

Analyses were undertaken with activity reported to the Community Mental Health Care (CMHC) National Minimum Data Set (NMDS) matched to the NOCC and are based on the finalised returns for the 2010-2011 reporting period.

The CMHC NMDS is an activity based collection that captures service contact information for individual consumers. Whereas the nature of service contacts is likely to be related to discrete “episodes of mental health care”, the CMHC does not include an “episode of mental health care” identifier.

For the purposes of these analyses, the number of days between a consumer’s first and last service contact dates (“CMHC Treatment Period”) was considered a proxy measure for “episodes” of mental health⁹.

A CMHC Treatment Period of 1 day occurs for an individual consumer when there is only one single day where service contact information is reported. A CMHC Treatment Period of 365 days occurs where service contacts are recorded for 1 July 2010 – the first day in the reporting period – and 30 June 2011 – the last day in the reporting period.

CMHC Treatment Periods were identified for individual consumers and then considered in terms of the 2010-11 NOCC. The individual “patient” identifiers were linked between the two collections, at the Mental Health

⁸An overarching matter, however, is the coverage of the National Outcomes and Casemix Collection (NOCC) in relation to the specialised mental health services provided to consumers. These services are reported to three mandated National Minimum Data Sets (NMDS): the Admitted Patient Mental Health Care (APMHC), the Residential Mental Health Care (RMHC) and the Community Mental Health Care (CMHC).

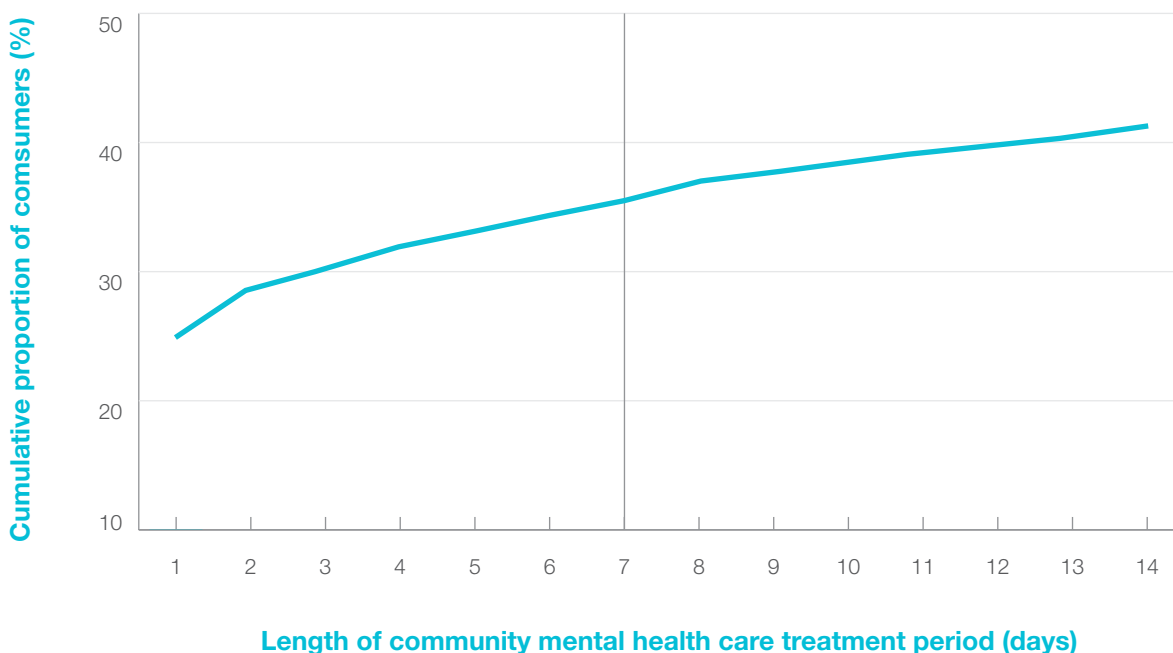
⁹It is important to note that there are limitations to this approach. For example, an individual consumer’s episodes of care may have “started” in earlier reporting periods and/or is not “completed” at the end of the reporting period. Unfortunately, it is not possible to reliably link service contact information for individuals across annual reporting periods.

Service Organisation level. CMHC consumers who had at least one “valid and complete” NOCC clinical rating on one of the HoNOS family of measures (i.e., the HoNOS/CA/65+) were considered “matched”; approximately 28% of all CMHC “patients” meet this criterion.

The following Figure shows the distribution of CMHC Treatment Periods for all patients. Approximately 25.0% of all patients have only one service contact day (a CMHC Treatment Period of 1 day), a further 3.6% of patients receive services on 2 consecutive days, meaning that 28.6% of all patients have a CMHC Treatment Period of no more than 2 days.

About 41.1% of all patients receiving community mental health care in 2010-2011 have a CMHC Treatment Period of no more than 14 days; when considering the relative amount community mental health provided in 2010-2011, this group of patients accounted for approximately 6% of service contacts, service contact days and only 5% of all service contact minutes.

Figure 25 - Cumulative proportion of consumers receiving Community Mental Health Care (CMHC) by length of treatment period, 2010-11 financial year.



6.4 Clinical outcomes of care

The figures below outline the proportion of people receiving various types of mental health care who have significantly improved, had no significant change or who have significantly deteriorated, for children and adolescents (0-17 years), adults (18 – 64 years) and older persons (65+ years). Indicators for change for all groups are based on changes in ratings of the HoNOS family of measures completed by clinicians at various points over the course of a consumer’s treatment and care. The classification of ‘significant improvement’, ‘significant deterioration’ or ‘no significant change’, is based on Effect Size. Effect size is a statistic used to assess the magnitude of a treatment effect. It is based on the ratio of the difference between pre- and post- scores to the standard deviation of the pre- score. Individual episodes were classified as either: ‘significant improvement’ if the Effect Size index was greater than or equal to positive 0.5; ‘significant deterioration’ if the Effect Size index was less than or equal to negative 0.5; or ‘no change’ if the index was between -0.5 and 0.5 [29].

Figure 26 - Clinical outcomes of care of children and adolescents (0-17years) receiving various types of mental health care, 2010-11 financial year.

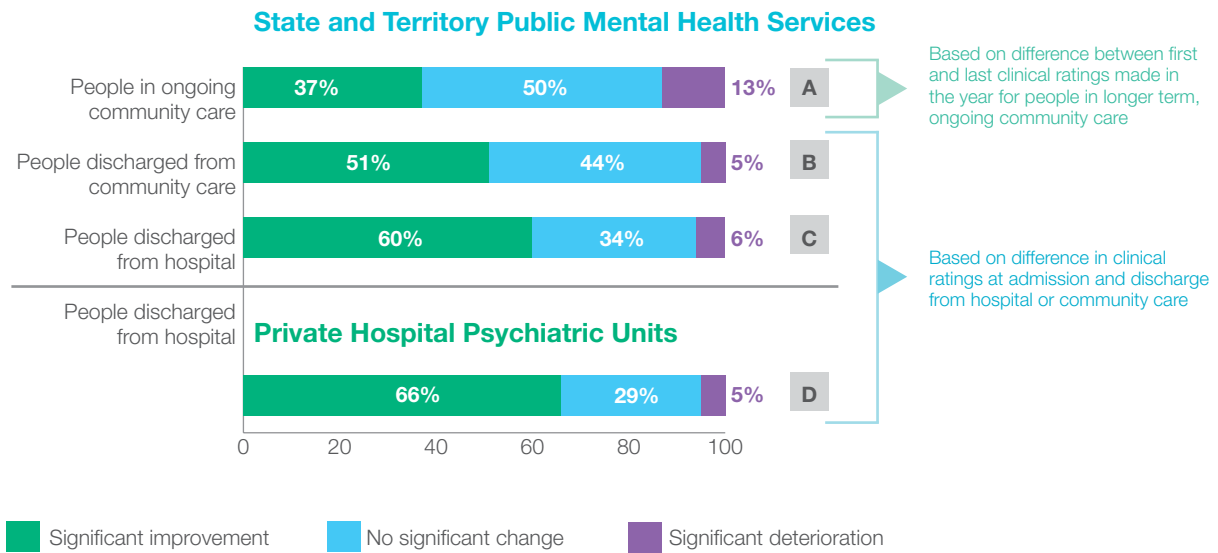


Figure 27 - Clinical outcomes of care of adults (18-64years) receiving various types of mental health care, 2010-11 financial year.

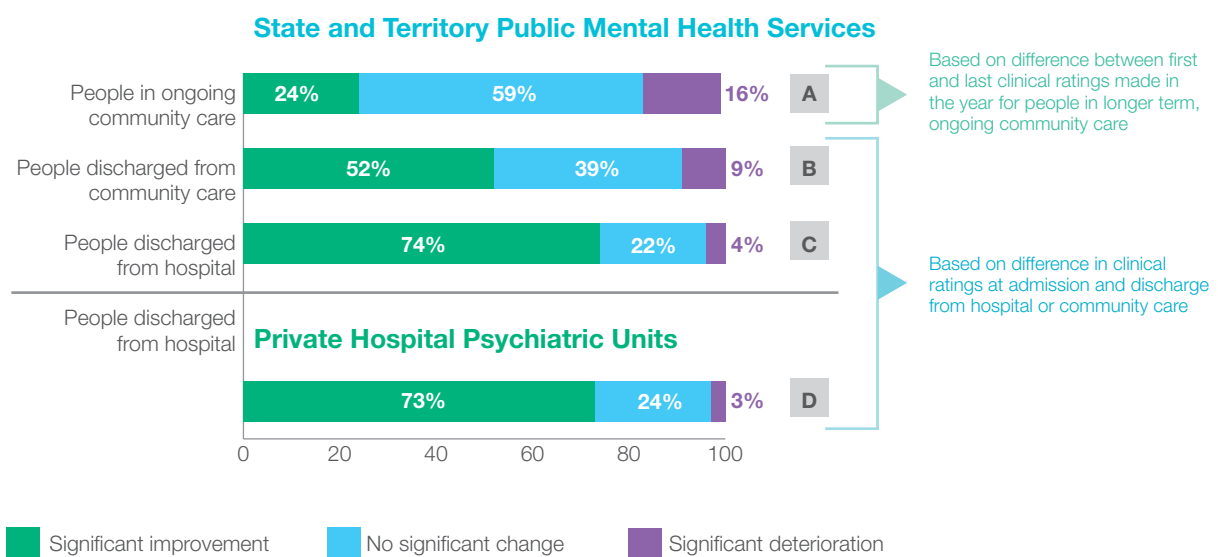
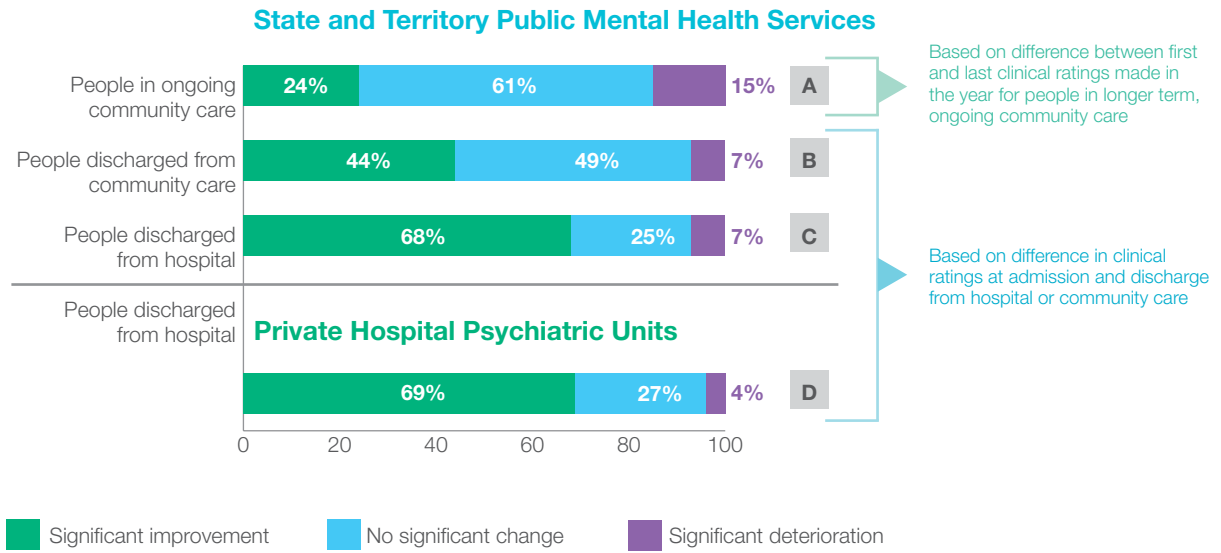


Figure 28 - Clinical outcomes of care of older persons (65+ years) receiving various types of mental health care, 2010-11 financial year.





APPENDIX G

Membership of Expert Panels

National Information Development Expert Advisory Panel

Dr Rod McKay (chair)
Dr Grant Sara
A/Prof Meg Smith
Ms Judy Hardy
Ms Liz Prowse
Dr Peter Brann
Dr Titia Sprague
Dr David Barton
Dr Darren Neillie
Mr Bill Buckingham
Mr Gavin Stewart
Ms Sandra Keppich Arnold
Mr Allen Morris Yates
Dr Mark Smith
Dr Tom Meehan
Ms Robyn Milthorpe
Prof Tom Trauer

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Dr Titia Sprague
Ms Margaret Jones
Ms Margaret Hoyland
Ms Vittoria Tonin
Ms Kylie Scoullar
Ms Pauline McEntee
Ms Wendy Preston
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Ms Kathy Stapley
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Ms Allison Kokany
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