Australian Mental Health Outcomes and Classification Network

'Sharing Information to Improve Outcomes'

An Australian Government funded initiative

Mental Health National Outcomes and Casemix Collection

Overview of clinician-rated and consumer self-report measures

Version 2.1

Prepared by the Australian Mental Health Outcomes and Classification Network

September 2021

Contents

1. Document information

Title:

Mental Health National Outcomes and Casemix Collection: Overview of clinician-rated and consumer self-report measures, Version 2.1.

Version:

2.1

File:

NOCC Clinician and Self-Report Measures Overview V2.1_20210913.doc

1.1 Document history

Version	Date	Details
2.1	13/09/2021	Version incorporating corrections for K10LM and K10L3D to reflect alignment with National Health Surveys.
2.0	25/11/2020	Revised to align with the Mental Health National Outcomes and Casemix Collection: Technical specification of State and Territory reporting requirements – Version 2.03, 2020
1.50	01/12/2003	Final version for publication
1.50 (Draft 3)	07/11/2003	Version distributed to AHMAC National Mental Health Working Group
1.50 (Draft 2)	17/09/2003	Version distributed to all States and Territories via membership of National Mental Health Working Group Information Strategy Committee
1.50 (Draft 1)	01/09/2003	Version incorporating SDQ and amendments
1.02	08/07/2002	Final version for printing.
1.01	03/06/2002	Distributed to participants in the National Mental Health Outcomes Training Forum.
1.0	18/02/2002	Distributed to all States and Territories via membership of National Mental Health Working Group Information Strategy Committee

2. Acknowledgments

The developers of each of the standard clinical measurements outlined in this document are acknowledged in the sections relating to each scale.

Wherever possible, links to online reference materials are provided. In some instances, these materials may not be in the public domain and may require a licensing/subscription arrangement or fee.

Suggested citation for this document:

Mental Health National Outcomes and Casemix Collection: Overview of clinician-rated and consumer self-report measures, Version 2.1. Department of Health, Canberra, 2021.

Previous versions of the Overview of clinician-rated and consumer self-report measures:

Quality and Effectiveness Section Mental Health & Suicide Prevention Branch Department of Health and Ageing (2003). *Mental Health National Outcomes and Casemix Collection: Overview of clinician rated and consumer self-report measures, Version 1.50*. Department of Health and Ageing, Canberra. [Available from: https://www.amhocn.org/publications/mental-health-national-outcomes-and-casemix-collection-overview-clinician-rated-and accessed 25/1/2020]

Other related publications:

Australian Mental Health Outcomes and Classification Network for the Mental Health Information Strategy Standing Committee, Mental Health Principal Committee, Australian Health Ministers Advisory Council (2019). *Mental Health National Outcomes and Casemix Collection Technical specification of State and Territory reporting requirements, Version 2.02.* Commonwealth of Australia, Canberra. [Available from: https://docs.validator.com.au/nocc/02.02/ accessed 25/1/2020]

Department of Health and Ageing (2005). *National Mental Health Information Priorities 2nd Edition.* Commonwealth of Australia, Canberra. [Available from: https://www1.health.gov.au/internet/main/publishing.nsf/Content/mental-pubs-n-infopri2 accessed 25/1/2020]

National Mental Health Information Development Expert Advisory Panel (2013). *Mental Health National Outcomes and Casemix Collection: NOCC Strategic Directions 2014 – 2024*. Commonwealth of Australia, Canberra. [Available from: https://www.amhocn.org/projects-and-expert-panels/nocc-strategic-directions-2014-2024 accessed 25/1/2020]

Comments on the document should be forwarded to:

Australian Mental Health Outcomes and Classification Network at email: contact@amhocn.org.

3. Background

Since the inception of the National Mental Health Strategy in 1992, Australia has shown its commitment to quality improvement through the implementation of routine outcome measurement and casemix classification in all specialised public mental health services. In the late 1990s, under the Second National Mental Health Plan (1998-2003), State and Territory governments agreed to collect and submit outcome and casemix data and the Australian Government supported the development of the necessary information infrastructure. From 2001, a National Outcomes and Casemix Collection (NOCC) was progressively implemented in all inpatient, residential and ambulatory services in this sector. Today, approximately 85% of services collect these data routinely.

The NOCC comprises a set of outcomes and casemix measures that gather information about a consumer's clinical status and functioning at various points during their engagement with a mental health service. It includes both clinician-rated measures and consumer-rated measures.

The outcome of mental health care can be described at the level of the whole population (e.g. rates of suicide), the service system (e.g. the percent of acute inpatient discharges to residential facilities) or at the level of the individual consumer. The NOCC data can be used to demonstrate the outcomes or the change in the health and wellbeing of an individual because of the repeated collection of standard clinical measures during the consumer's engagement with services. This change in health and wellbeing can also be aggregated to describe the outcomes of care for groups of individuals. The NOCC also gathers casemix information, this is simply information about the mix of people who are receiving mental health services grouped according to their clinical status and the pattern of services they are receiving. This type of casemix information can be used to interpret variation in the difference in outcomes that services are achieving.

For these purposes, the selection of standard clinical measures for inclusion in the NOCC has been guided by literature reviews, stakeholder consultations and field trials[1] and in response to emerging policy priorities, for example, to support the introduction of the first version of the Australian Mental Health Care Classification (AMHCC).[2]

The collection of the standard clinical measures is guided by an underlying conceptual model and national protocol; these are outlined in the NOCC Technical Specifications.[3] Under the NOCC protocol, the clinical

---

[1] Burgess P, Pirkis J, Coombs T (2015). Routine outcome measurement in Australia. *International Review of Psychiatry*, 27(4), 264-275. doi:10.3109/09540261.2014.977234

[2] Independent Hospital Pricing Authority (2018). *Australian Mental Health Care Classification v1.0 User Manual*. IHPA, Sydney. [Available from: https://www.ihpa.gov.au/publications/amhcc-user-manual accessed 9/1/2020].

[3] Australian Mental Health Outcomes and Classification Network for the Mental Health Information Strategy Standing Committee, Mental Health Principal Committee, Australian Health Ministers Advisory Council (2019). *Mental Health National Outcomes and Casemix Collection Technical specification of State and Territory reporting requirements, Version 2.02.* Commonwealth of Australia, Canberra. [Available from: https://docs.validator.com.au/nocc/02.02/ accessed 9/1/2020].

measures are completed at key collection occasions during the consumer's episode of care (i.e., admission, review and discharge). The measures are specific to service setting (inpatient, residential and ambulatory) and the consumers' age group (children and adolescents, adults and older persons). Together, the three concepts of collection occasion, setting and age group determine what measures to collect and when to collect them. For further details, refer to the NOCC Technical Specifications - key concepts underpinning the NOCC protocol are outlined in Section 7; the protocol guiding what to collect when is described in Section 9 (and summarised in Fig. 9.1).

Completion of each of the NOCC clinical measures is based on a period of observation that is specific to each measure, however there may be exceptions according to the Collection Occasion at which it is completed (i.e., admission, review or discharge). In addition, NOCC Reporting Criteria set out the rules for determining whether a measure has been validly completed for the purposes of subsequent statistical reporting.[4]

The remainder of this document focuses on describing the NOCC standard clinical measures and guidelines for their use. For further information about the NOCC protocol and NOCC reporting criteria, readers are referred to the references cited in this section and to the national website managed by the Australian Mental Health Outcomes and Classification Network (https://www.amhocn.org).

[4] Australian Mental Health Outcomes and Classification Network (2019). *NOCC Reporting Criteria* [Available from: https://www.amhocn.org/nocc-reporting/nocc-reporting-criteria accessed 9/1/2020].

4. Purpose and scope of document

This document describes the clinical measures specified in the NOCC protocol. It has been prepared for clinicians in Australia's public sector mental health services who are completing the clinician-rated measures and offering the self-report measures to consumers in their routine practice.

The main body of this document provides an overview of each of the NOCC clinical measures including:

- development history and constructs measured;
- the period of observation to be rated;
- measurement properties (reliability, validity and sensitivity to change); and
- licensing and copyright arrangements pertaining to use within the NOCC.

The appendices provide detailed information about each measure, including:

- the content of the measure and instructions for its completion, as it is used in the NOCC;
- sample rating form(s);
- guidelines for scoring and interpretation; and
- measure variants (e.g., short forms), particularly where that information is not otherwise readily available.

This document focuses on the NOCC clinical measures and the rating periods as specified in the NOCC protocol. It should be noted that these are minimum requirements for routine outcome measurement in Australia's specialised public sector mental health services. Locally, however, services may elect to collect additional measures or to increase the frequency of ratings. The document also does not include some scales that have been developed for use in Australia's specialised mental health services but are not part of the NOCC (e.g., experience of service measures and social inclusion measures). Information about these developments can be found on the AMHOCN website (https://www.amhocn.org).

The information in this document complements technical information provided elsewhere; for example, in the NOCC Technical Specifications and the NOCC Reporting Criteria. It does not purport to be a comprehensive review of any one measure, however a brief summary of the measurement properties of each of the NOCC clinical measures is provided.

5. Overview of the Measures

5.1 Measures specific to adults and older persons

Four measures are collected for adult and older consumers that are completed by clinicians:

- HoNOS/HoNOS65+ (Health of the Nation Outcome Scales for working age adults and older adults, respectively);
- LSP–16 (an abbreviated version of the Life Skills Profile);
- RUG–ADL (Resource Utilisation Groups – Activities of Daily Living Scale) – for over 65s only; and
- Phase of Care.

In addition, an agreed consumer self-rated measure for adults and older persons is collected. The specific measure to be used has been decided by each state and territory, as follows:

- Kessler-10 (K10)/Kessler-10 Plus (K10+) (used in New South Wales, the Northern Territory, South Australia, and Western Australia); or
- Behaviour and Symptom Identification Scale (BASIS-32) (used in the Australian Capital Territory, Tasmania and Victoria); or
- Mental Health Inventory (MHI-38) (used in Queensland).

Some of the above measures can be used for both casemix development and outcome evaluation purposes (HoNOS/HoNOS65+ and LSP-16). Others are outcome measures (K10/K10+, BASIS-32 and MHI-38) or casemix measures (RUG-ADL and Phase of Care).

5.1.1 Health of the Nation Outcomes Scales (HoNOS) (working age adults) and HoNOS65+ (older adults)

5.1.1.1 Development history and constructs

The HoNOS was developed by the Royal College of Psychiatrists in the United Kingdom for clinicians to measure consumer outcomes in their routine work. It was designed specifically for use with people with a mental illness and is best considered as a measure of overall clinical severity.

The focus of the HoNOS is on health status and severity of symptoms. It consists of 12 scales that cover the sorts of problems that may be experienced by people with a significant mental illness. Each scale is rated on one of five levels of severity (0 = no problem, 1-4 = minor problem to very severe problem). In assigning ratings, the clinician makes use of a glossary that details the meaning of each rating level for the scale being rated. The clinician rates the consumer on each of the scales in terms of their assessment of the consumer's situation over the rating period. The clinician is expected to draw on all information gathered as part of their assessment practice to make their ratings, for example case notes, interviews with the consumer and carers, team meetings and so forth. Because it is designed to easily fit into day-to-day work, it does not need any special interviews or procedures. The HoNOS takes about 5 minutes to complete once the clinician becomes familiar with the scales.

The 12 HoNOS scales can be summed to give a Total score. They can also be aggregated into four subscales (Behavioural problems, Impairment, Symptomatic problems, and Social problems).

The HoNOS65+ is a version of the HoNOS, developed by the Royal College of Psychiatrists in the United Kingdom specifically for use with older people with a mental illness. A study evaluating the HoNOS in an older population found that although the scales performed well, a number of modifications would make them better suited to older people with mental illness. This resulted in the development of the HoNOS65+.

The HoNOS65+ version of the HoNOS consists of the same set of 12 scales and is scored in the same way. However, the accompanying glossary has been modified to better reflect the problems and symptoms encountered when assessing older persons. The modifications address, amongst other things: the inclusion of symptoms frequently occasioning referral of older persons for mental health care (e.g., sleep disturbance, agitation and restlessness); aspects of depression more specific to older persons (e.g., guilt, passive manifestations of suicidal ideation such as not taking care to avoid harm); and behavioural disturbances seen in people with dementia (Burns et al, 1999a).

Table 1 summarises the 12 HoNOS scales for the HoNOS and the HoNOS65+. A copy of each measure is provided in Appendices 1 and 2, respectively.

Table 1: The 12 HoNOS and HoNOS65+ scales

Scale	Description
1	Overactive, aggressive, disruptive or agitated behaviour
2	Non-accidental self-injury
3	Problem drinking or drug-taking
4	Cognitive problems
5	Physical illness or disability problems
6	Problems associated with hallucinations and delusions
7	Problems with depressed mood
8	Other mental and behavioural problems
9	Problems with relationships
10	Problems with activities of daily living
11	Problems with living conditions
12	Problems with occupation and activities

Key references for the HoNOS:

Wing JK, Curtis RH, Beevor AS (1994). 'Health of the Nation': Measuring mental health outcomes. *Psychiatric Bulletin*, 18(11), 690-691. doi:10.1192/pb.18.11.690

Wing JK, Beevor AS, Curtis RH, Park SBG, Hadden S, Burns A (1998). Health of the Nation Outcome Scales (HoNOS). Research and development. *British Journal of Psychiatry*, 172, 11-18. doi:10.1192/bjp.172.1.11

Wing JK, Curtis RH, Beevor AS (1999). Health of the Nation Outcome Scales (HoNOS): Glossary for HoNOS score sheet. *British Journal of Psychiatry*, 174, 432–434. doi:10.1192/bjp.174.5.432

Also see https://www.rcpsych.ac.uk/events/in-house-training/health-of-nation-outcome-scales [accessed 25/1/2020].

Key references for the HoNOS65+:

Burns A, Beevor A, Lelliott P, Wing J, Blakey A, Orrell M, Mulinga J, Hadden S (1999a). Health of the Nation Outcome Scales for Elderly People (HoNOS65+). *British Journal of Psychiatry*, 174, 424-427. doi:10.1192/bjp.174.5.424

Burns A, Beevor A, Lelliott P, Wing J, Blakey A, Orrell M, Mulinga J, Hadden S (1999b). Health of the Nation Outcome Scales for Elderly People (HoNOS65+): Glossary for HoNOS65+ score sheet. *British Journal of Psychiatry*, 174, 435-438. doi:10.1192/bjp.174.5.435

Also see https://www.rcpsych.ac.uk/events/in-house-training/health-of-nation-outcome-scales [accessed 25/1/2020].

5.1.1.2 NOCC rating periods

The clinician rates the consumer's situation over the previous two weeks for both the HoNOS and the HoNOS65+, with an exception at discharge from inpatient psychiatric care, which is based on the previous three days including the day of discharge.

5.1.1.3 Measurement properties

HoNOS

The HoNOS has been shown to have reasonably good content, concurrent and predictive validity, fair-to-moderate test-retest and inter-rater reliability, and adequate sensitivity to change. It has good construct validity, however alternate four- and five-factor structures have been proposed. However, some scales and subscales perform less well than others on inter-rater reliability (scales 9, 11, 12), test-retest reliability (scale 10) and sensitivity to change (scales 11 and 12; social and impairment subscales).

Key references for the HoNOS measurement properties:

Burgess PM, Harris MG, Coombs T, Pirkis JE (2017). A systematic review of clinician-rated instruments to assess adults' levels of functioning in specialised public sector mental health services. *Australian & New Zealand Journal of Psychiatry*, 51(4), 338-354. doi:10.1177/0004867416688098

Te Pou (2012). *The HoNOS Family of Measures: A Technical Review of Their Psychometric Properties.* Auckland: Te Pou o te Whakaaro Nui. [Available from: https://www.tepou.co.nz/uploads/files/resource-assets/the-honos-family-of-measures-a-technical-review-of-their-psychometric-properties.pdf accessed 25/1/2020]

HoNOS65+

The HoNOS65+ has good concurrent validity and inter-rater reliability, and adequate content validity, sensitivity to change, and feasibility. Further investigation of the measure's construct validity, factor structure, internal consistency, predictive validity and test-retest reliability is needed.

Key references for the HoNOS65+ measurement properties:

Te Pou (2012). *The HoNOS Family of Measures: A Technical Review of Their Psychometric Properties.* Auckland: Te Pou o te Whakaaro Nui. [Available from: https://www.tepou.co.nz/uploads/files/resource-assets/the-honos-family-of-measures-a-technical-review-of-their-psychometric-properties.pdf accessed 25/1/2020]

5.1.1.4 Licensing and copyright

The Commonwealth of Australia registered for the use of the HoNOS and the HoNOS65+ through arrangements with the copyright holders, the Royal College of Psychiatrists, in the UK. For further information about use of the HoNOS / HoNOS65+ go to copyright information provided by the Royal College of Psychiatrists at https://www.rcpsych.ac.uk/events/in-house-training/health-of-nation-outcome-scales.

5.1.2 The Abbreviated Life Skills Profile (LSP-16)

5.1.2.1 Development history and constructs

The Life Skills Profile, also known as the LSP, was developed by an Australian clinical research group to assess a consumer's abilities with respect to basic life skills. Its focus is on the consumer's general functioning and disability rather than their clinical symptoms – that is, how the person functions in terms of social relationships, ability to do day-to-day tasks and so forth. The original form of the LSP consists of 39 items, and is scored so that a higher level of functioning (lower disability) leads to higher scores.

Work undertaken as part of the Australian Mental Health Classification and Service Costs (MH-CASC) study saw the 39 items reduced to 16 by the original designers in consultation with the MH-CASC research team. This reduction in item number was undertaken to reduce overlap with the HoNOS and reduce the rating burden on clinicians. When combined with the HoNOS, which requires ratings of the most serious problem encountered, the LSP-16 contributes towards gaining a more comprehensive understanding of the consumer. At the same time the scoring was reversed so that, like the HoNOS, higher scores would reflect higher levels of disability. The final 16 items selected cover four broad domains:

- withdrawal;
- antisocial behaviour;
- self-care; and
- compliance.

The LSP-16 is rated on a four-point scale, with 0 generally indicating no functional impairment and 3 indicating severe functional impairment in that area. When making ratings the clinician rates what the person is capable of doing, not the assistance provided to achieve that functional ability. The LSP-16 takes about five minutes to complete once the clinician becomes familiar with its format and content. A copy of the LSP-16 is provided in Appendix 3.

The original designers subsequently developed the LSP-20, which is a LSP-16 supplemented with four items from the original LSP-39, concerned primarily with difficulties associated with psychosis.

Key references for the LSP-16 (abbreviated 16-item version):

Buckingham W, Burgess P, Solomon S, Pirkis J, Eagar K (1998). *Developing a Casemix Classification for Mental Health Services. Volume 2: Resource Materials*. Canberra: Commonwealth Department of Health and Family Services. [Available from: https://www.amhocn.org/publications/developing-casemix-classification-mental-health-services-volume-2-resource-materials accessed 25/1/2020].

Key references for the LSP-39 (original 39-item version):

Rosen A, Hadzi-Pavlovic D, Parker G (1989). The Life Skills Profile: A measure assessing function and disability in schizophrenia. *Schizophrenia Bulletin,* 15(2), 325-337. doi:10.1093/schbul/15.2.325

Parker G, Rosen A, Emdur N, Hadzi-Pavlovic D (1991). The Life Skills Profile: Psychometric properties of a measure assessing function and disability in schizophrenia. *Acta Psychiatrica Scandinavica,* 83(2), 145-152. doi:10.1111/j.1600-0447.1991.tb07381.x

Trauer T, Duckmanton RA, Chiu E (1995). The Life Skills Profile: A study of its psychometric properties. *Australian and New Zealand Journal of Psychiatry*, 29(3), 492-499. doi:10.3109/00048679509064959

Key references for the LSP-20 (abbreviated 20-item version):

Rosen A, Trauer T, Hadzi-Pavlovic D, Parker G (2001). Development of a brief form of the Life Skills Profile: the LSP-20. *Australian & New Zealand Journal of Psychiatry,* 35(5), 677-683. doi:10.1080/0004867010060518

5.1.2.2 NOCC rating periods

The clinician is required to rate the consumer's overall situation over the previous three months. There are no exceptions to that timeframe. This differs from the HoNOS because it is necessary to take a longer-range view to make a proper assessment in these areas, rather than be swayed by the temporary ups and downs that may occur in a person's day-to-day functioning.

For NOCC purposes, the LSP-16 is generally only used with consumers seen in the community and for those undergoing extended-stay residential care. This is because the LSP-16 is largely designed to measure general levels of functioning and the usual three-month rating period is not suited to brief episodes of hospital care. Individual jurisdictions may however choose to implement the LSP-16 across all treatment settings.

5.1.2.3 Measurement properties

The majority of studies have examined the LSP-39 or LSP-20, rather than the LSP-16 specifically, showing that it has moderately good content, construct, concurrent and predictive validity; high test-retest and moderate to good inter-rater reliability; and good sensitivity to change. Further research into the factor structure of the LSP is required, as some studies suggest alternative subscale structures, and that a 15-item version of the scale demonstrates better fit.

Key references for the LSP-16 measurement properties:

Burgess PM, Harris MG, Coombs T, Pirkis JE (2017). A systematic review of clinician-rated instruments to assess adults' levels of functioning in specialised public sector mental health services. *Australian & New Zealand Journal of Psychiatry*, 51(4), 338-354. doi:10.1177/0004867416688098

5.1.2.4 Licensing and copyright

Copyright on this measure is held by the authors (Rosen A, Parker G & Hadzi-Pavlovic D) who have advised the Commonwealth as follows:

"The authors of the LSP are pleased to give permission for the unlimited use of the LSP-16, LSP-20 and the LSP-39 to all mental health services in Australia, both public and private, for routine use, without cost."

5.1.3 Resource Utilisation Groups – Activities of Daily Living (RUG-ADL)

5.1.3.1 Development history and constructs

This measure is only applicable to consumers aged 65 years and over. The RUG-ADL is a component of the RUG-III, a casemix classification system developed by Fries and colleagues (1994) in the USA for the measurement of nursing dependency in nursing home facilities. The RUG-ADL is a brief measure of motor functioning associated with activities of daily living. It provides information on the consumers' functional status and the assistance that they require to carry out 'late loss' activities of daily living and the resources needed for care. 'Late loss' activities are those activities that are likely to be lost last in life (e.g., eating, mobility). 'Early loss' activities (such as dressing and grooming) are included in the LSP-16.

To complete the RUG-ADL, clinicians are asked to rate the consumer's needs for assistance in four activities of daily living: bed mobility; toileting; transfer and eating. As with the LSP-16, ratings are based on what the person is capable of doing and not what is done for them. The measure is simple to use, taking a few minutes only to complete.

The RUG-ADL comprises 4 items which are rated on a 4 or 3 point scale. A copy of the RUG-ADL is provided in Appendix 4.

Key references for RUG-ADL:

Fries BE, Schneider DP, Foley WJ, Gavazzi M, Burke R, Cornelius E (1994). Refining a casemix measure for nursing homes. Resource Utilisation Groups (RUG-III). *Medical Care*, 32(7), 668-685. doi:10.1097/00005650-199407000-00002

Williams BC, Fries BE, Foley WJ, Schneider D, Gavazzi M (1994). Activities of daily living and costs in nursing homes. *Health Care Financing Review*, 15(4), 117-135.

5.1.3.2 NOCC rating periods

The clinician rates the consumer's current status with no exceptions.

5.1.3.3 Measurement properties

Measurement property studies have focused on the RUG-III as a whole (not just the ADL component), and on its application as casemix tool (rather than an outcome measure). Regarding content validity, the RUG-III has been criticised for its limited attention to mental illness, in particular, dementia. The RUG-III has good predictive validity and sound inter-rater reliability. Its construct and concurrent validity, and test-retest reliability have not been adequately tested; sensitivity to change in functional status is untested.

Key references for the RUG-ADL measurement properties:

Pirkis, J, Burgess, P, Kirk, P, Dodson, S, Coombs, T (2005). *Review of standardised measures used in the National Outcomes and Casemix Collection (NOCC)*. Australian Mental Health Outcomes and Classification Network, Canberra. [Available from: https://www.amhocn.org/publications/review-standardised-measures-used-national-outcomes-and-casemix-collection-nocc accessed 25/1/2020]

Turcotte, LA, Poss, J, Fries, B, Hirdes, JP (2019). An Overview of International Staff Time Measurement Validation Studies of the RUG-III Case-mix System. *Health Services Insights*, 12, 1-11. doi:10.1177/1178632919827926

5.1.3.4 Licensing and copyright

This measure is used widely throughout the Australian public sector with no license costs attached. Usage should acknowledge the source:

Fries BE, Schneider DP, Foley WJ, Gavazzi M, Burke R, Cornelius E (1994). Refining a casemix measure for nursing homes. Resource Utilisation Groups (RUG-III). *Medical Care*, 32, 668-685.

5.1.4 Phase of Care

5.1.4.1 Development history and constructs

Phase of Care is a prospective measure developed by the Independent Hospital Pricing Authority. It is a description of the treating teams' primary goal of care given the severity of symptoms and functional impairment being experienced by the consumer, the intensity of activity required to meet the consumers care needs and the expected duration of that level of activity. While it is recognised that there may be many aspects of each mental health phase of care represented in the consumer's mental health plan, the mental health phase of care is intended to identify the main goal or primary aim that will underpin the next period of care. The mental health phase of care is independent of both the treatment setting and the designation of the treating service, and should not reflect service unit type.

Phase of Care is a single item requiring selection of one of five categories: acute; functional gain, intensive extended, consolidating gain and assessment only.

The item is based on the concept of 'phase' and recognises that, while individual consumers may experience the same illness over prolonged periods:

- their needs often change over time as they move between stages of the illness; and
- the treatment changes as the person moves between these various phases.

The five mental health phases of care are:

- **Acute**: The primary goal is the short term reduction in severity of symptoms and/or personal distress associated with the recent onset or exacerbation of a psychiatric disorder.
- **Functional gain:** The primary goal is to improve personal, social or occupational functioning or promote psychosocial adaptation in a consumer with impairment arising from a psychiatric disorder.
- **Intensive extended**: The primary goal is prevention or minimisation of further deterioration, and reduction of risk of harm in a consumer who has a stable pattern of severe symptoms, frequent relapses or severe inability to function independently and is judged to require care over an indefinite period.
- **Consolidating gain:** The primary goal is to maintain the level of functioning, or improving functioning during a period of recovery, minimise deterioration or prevent relapse where the consumer has stabilised and functions relatively independently. Consolidating gain may also be known as maintenance.
- **Assessment only:** The primary goal is to obtain information, including collateral information where possible, in order to determine the intervention/treatment needs and to arrange for this to occur (includes brief history, risk assessment, referral to treating team or other service).

Phase of Care can provide additional information that provides a better understanding of mental health episodes. For example, rather than viewing a prolonged period of community care as a single episode for an individual consumer it can be potentially viewed as a collection of different phases that may include a phase of acute care nested within a prolonged period of functional gain.

In this way, an understanding of Phase of Care can also be used to interpret differences in consumer outcomes because different outcomes can be expected within different phases of care. For example, while rapid changes in the level of symptomatology may be expected during an Acute phase of care, there is no expectation of rapid changes in the levels of symptomatology observed during a Consolidating Gain phase of care.

Phase of Care was introduced into the NOCC as of 1 July 2017. A copy of the Phase of Care measure is provided in Appendix 5.

Key references for Phase of Care:

Independent Hospital Pricing Authority (2016). *Australian Mental Health Care Classification: Mental health phase of care guide Version 1.2*. Independent Hospital Pricing Authority, Sydney. [Available from: https://www.ihpa.gov.au/publications/mental-health-phase-care-guide accessed 25/1/2020].

Eagar K, Green J, Lago L, Blanchard M, Diminic S, Harris M (2013). *Cost Drivers and a Recommended Framework for Mental Health Classification Development. Final report for Stage B of the Definition and Cost Drivers for Mental Health Services project Volume 1*. [Available from: https://www.ihpa.gov.au/publications/definitions-and-cost-drivers-mental-health-services-project accessed 2/2/2020].

5.1.4.2 NOCC rating periods

As noted above, Phase of Care is a prospective measure of the treating teams' primary goal of care and does not have a rating period. The phase of care changes when the treating team's primary goal of care changes as a result of changes in the consumer's symptoms and/or functioning and the team's expectations of the intensity and duration of care.

5.1.4.3 Measurement properties

One study has investigated the reliability of the Phase of Care measure. Reliabilities were calculated from ratings made by clinicians from specialised public sector mental health service organisations, across all age groups, based on a series of vignettes. Inter-rater reliability (n=408 clinicians) was found to be poor-to-fair. Test-retest reliability was found to be stable, but with low levels of agreement; however this finding should be interpreted with caution due to low participation rates in the test-retest component (n=26 clinicians). Further investigation of the measurement properties of this instrument is needed.

Key references for the measurement properties of Phase of Care

Coombs T (2016). *Mental health phase of care inter-rater reliability study*. Independent Hospital Pricing Authority, Sydney. [Available from: https://www.ihpa.gov.au/publications/mental-health-phase-care-inter-rater-reliability-irr-study-final-report accessed 30/1/2020]

5.1.4.4 Licensing and copyright

5.1.5 Consumer self-report measures

In accordance with the reporting requirements for the outcomes and casemix components of the NOCC[5] the States and Territories can select from three self-report measures which includes the Kessler-10 (K10)/Kessler-10 Plus (K10+), Mental Health Inventory (MHI-38), and Behaviour and Symptom Identification Scales (BASIS-32).

The review of NOCC Strategic Directions 2014-2024 recommended that there should be one consistent national consumer-rated measure for adults and older persons.[6] One nationally consistent measure

---

[5] *National Outcomes and Casemix Collection: Technical specification of State and Territory reporting requirements for the outcomes and casemix components of 'Agreed Data' under National Mental Health Information Development Funding Agreements*. Commonwealth Department of Health and Ageing, Canberra, 2002.

[6] National Mental Health Information Development Expert Advisory Panel (2013). *Mental Health National Outcomes and Casemix Collection: NOCC Strategic Directions 2014 – 2024*. Commonwealth of Australia,

would enable comparability across jurisdictions particularly for consumers who receive services in more than one jurisdiction. The K10 would form the basis for the new measure, contributing items measuring symptoms. Work is currently being undertaken to test other items or domains (e.g., social inclusion, aspects of recovery, social and role functioning) for inclusion.

5.1.6 Kessler–10 (K10)/Kessler-10 Plus (K10+)

5.1.6.1 Development history and constructs

The K10 measure was developed by Kessler and Mroczek during 1992-1994 at the Institute for Social Research, University of Michigan, and subsequently by Kessler at the Department of Health Care Policy, Harvard Medical School (Kessler et al, 2002). The measures were designed to form the mental health component of the 'core' of the annual United States National Health Interview Survey.

The K10 is a self–report measure intended to yield a global measure of 'non-specific psychosocial distress' based on ten questions about the level of nervousness, agitation, psychological fatigue and depression in the relevant rating period. The measure was developed to be informative about those levels of distress that are associated with impairment, in the 90th to 99th percentile of the general population range.

The consumer can respond by simply ticking how often they have been experiencing a particular thought, feeling or behaviour with a corresponding score, 1 = None of the time, 2 = A little of the time, 3 = Some of the time, 4 = Most of the time and 5 = All of the time. A total score for the 10 questions is generated by the sum of individual responses.

The K10+ contains additional questions to assess functioning and related factors. Overall, the K10+ is an extremely brief 'symptom and functioning' measure, validated against diagnosis, that is intended to be supplemented with additional measures of domains relevant to consumers. Overall, the K10+ is a purpose-designed measure that operates well across the range from the general population through primary care and specialist mental health care. The results have a 'normative' basis in population data, and the National Health Survey data in Australia allow this to be available to local services using the measure. Both at the population level and the individual level it is regarded as a simple 'thermometer' that detects general distress without identifying its cause. With further development it may also suit other purposes, because it is a brief standard measure of psychological distress which has a known relationship to other measures of physical and mental health.

The NSW Transcultural Mental Health Centre (TMHC) has translated the K10+ into 27 different languages (Arabic, Bengali, Bosnian, Burmese, Croatian, Dari, Farsi, French, Greek, Hindi, Indonesian, Italian, Khmer, Korean, Macedonian, Polish, Punjabi, Russian, Serbian, Spanish, Tagalog/Filipino, Tamil, Thai, Traditional Chinese, Turkish, Urdu, and Vietnamese) with accompanying consumer pamphlets. Translated versions are available from the TMHC website https://www.dhi.health.nsw.gov.au/transcultural-mental-health-centre-tmhc/resources/multilingual-resources-by-title/kessler-10 [accessed 25/1/2020].

Canberra. [Available from: https://www.amhocn.org/projects-and-expert-panels/nocc-strategic-directions-2014-2024 accessed 25/1/2020].

Copies of the K10 and K10+ are provided in Appendix 6.

Key references for Kessler-10 and Kessler-10 Plus:

Andrews G. Sanderson K. Beard J (1998). Burden of disease. Methods of calculating disability from mental disorder. *British Journal of Psychiatry*, 173, 123-131. doi:10.1192/bjp.173.2.123

Andrews G, Slade T (2001). Interpreting scores on the on the Kessler Psychological Distress Scale (K10). *Australian and New Zealand Journal of Public Health*, 25(6), 494-497. doi:10.1111/j.1467-842x.2001.tb00310.x

Furukawa TA, Kessler RC, Slade T, Andrews G (2003). The performance of the K6 and K10 screening scales for psychological distress in the Australian National Survey of Mental Health and Well-Being. *Psychological Medicine,* 33(2), 357-362. doi: 10.1017/s0033291702006700

Kessler R, Costello EJ, Merikangas KR, Ustun TB (2000). Psychiatric Epidemiology: Recent Advances and Future Directions Chapter 5 in Manderscheid R, Henderson MJ (2000). *Mental Health, United States, 2000.* Rockville MD: Substance Abuse & Mental Health Services Administration. [Available from: https://eric.ed.gov/?id=ED469203 accessed 25/1/2020]

Kessler RC, Andrews G, Colpe LJ, Hiripi E, Mroczek DK, Normand S-LT, Walters EE, Zaslavsky A (2002). Short screening scales to monitor population prevalences and trends in nonspecific psychological distress. *Psychological Medicine*, 32(6), 959-976. doi:10.1017/s0033291702006074

Kessler RC, Barker PR, Colpe LJ, Epstein JF, Gfroerer JC, Hiripi E, Howes MJ, Normand S-L T, Manderscheid RW, Walters EE, Zaslavsky AM (2003). Screening for serious mental illness in the general population. *Archives of General Psychiatry*, 60(2), 184-189. doi:10.1001/archpsyc.60.2.184

5.1.6.2 NOCC rating periods

The standard rating period for the K10 is the previous 30 days, however in Australian use the rating period has become the previous four weeks. All jurisdictions collecting the K10+LM (the label "LM" stands for Last Month) are using the rating period of the previous four weeks. The K10L3D is a variation of the K10 designed for use in inpatient settings where the episode is of less than three days duration. The rating period for the K10L3D is the previous three days. There are no exceptions to these timeframes.

5.1.6.3 Measurement properties

The K10 appears to have adequate to good content, construct and concurrent validity, and test-retest reliability. More research is needed to examine its predictive validity and sensitivity to change.

Key references for the K10 measurement properties:

Pirkis J, Burgess P, Kirk P, Dodson S, Coombs T (2005). *Review of standardised measures used in the National Outcomes and Casemix Collection (NOCC)*. Australian Mental Health Outcomes and Classification Network, Canberra. [Available from: https://www.amhocn.org/publications/review-standardised-measures-used-national-outcomes-and-casemix-collection-nocc accessed 25/1/2020]

5.1.6.4 Licensing and copyright

The most recent information from the Harvard Medical School website (https://www.hcp.med.harvard.edu/ncs/k6_scales.php) notes:

"Q. Is a formal request to use the scale needed? If yes, how?

No formal request is needed, but we would appreciate it if you cited the following article (see below) when you use the scale and if you would send us citations to all publications that use the scale.

Kessler, R.C., Barker, P.R., Colpe, L.J., Epstein, J.F., Gfroerer, J.C., Hiripi, E., Howes, M.J, Normand, S-L.T., Manderscheid, R.W., Walters, E.E., Zaslavsky, A.M. (2003). Screening for serious mental illness in the general population Archives of General Psychiatry. 60(2), 184-189."

5.1.7 Behaviour and Symptom Identification Scale (BASIS-32)

5.1.7.1 Development history and constructs

The BASIS-32 was developed in the early 1990s by a team in the United States for use in outcome assessment. It is described by its authors as being derived from consumer perspectives and covers the major symptoms and functioning difficulties often experienced by people as a result of a mental illness.

The BASIS-32 asks the consumer to respond to 32 questions that assess the extent to which the person has been experiencing difficulties on a range of dimensions. The questions differ slightly in their format but each one offers a choice of five responses. The consumer can respond by simply ticking the box to indicate whether they are having no difficulty; a little difficulty; moderate difficulty; quite a bit of difficulty; and extreme difficulty.

The 32 questions are grouped into five domains, representing:

- relation to self and others;
- daily living and role functioning;
- depression and anxiety;
- impulsive and addictive behaviour; and
- psychosis.

Scores can be derived for each of these groups, and for the whole measure. A copy of the BASIS-32 is provided in Appendix 7.

Key references for BASIS-32:

Eisen, SV, Dill DL, Grob MC (1994). Reliability and validity of a brief patient-report instrument for psychiatric patient outcome evaluation. *Hospital and Community Psychiatry*, 45(3), 242-247. doi:10.1176/ps.45.3.242

Eisen SV, Dickey B, Sederer LI (2000). A self-report symptom and problem rating scale to increase inpatients' involvement in treatment. *Psychiatric Services*, 51(3), 349-353. doi:10.1176/appi.ps.51.3.349

5.1.7.2 NOCC rating periods

Although the developer of the BASIS-32, McLean Hospital, recommends a rating period of the 'last one week', the jurisdictions that have incorporated the BASIS-32 into their routine collections have amended the rating period to the 'past two weeks' primarily to align the measure with the clinician-rated measure to facilitate comparison. There are no exceptions to that timeframe.

5.1.7.3 Measurement properties

The BASIS-32® has been shown to have adequate content, construct, concurrent and predictive validity and good test-retest and inter-rater reliability, and to be sensitive to change during treatment. The Impulsive and addictive behaviours subscale and the Psychosis subscale perform less well in terms of construct validity, internal consistency, and reliable change than the other three subscales.

Key references for the BASIS-32 measurement properties:

Pirkis, J, Burgess, P, Kirk, P, Dodson, S, Coombs, T (2005). *Review of standardised measures used in the National Outcomes and Casemix Collection (NOCC)*. Australian Mental Health Outcomes and Classification Network, Canberra. [Available from: https://www.amhocn.org/publications/review-standardised-measures-used-national-outcomes-and-casemix-collection-nocc accessed 25/1/2020]

Jerrell, JM (2005). Behavior and symptom identification scale 32. *The Journal of Behavioral Health Services & Research*, 32, 341–346. doi:10.1007/BF02291833

5.1.7.4 Licensing and copyright

This measure is not in the public domain and copyright for this measure is held by McLean Hospital, Massachusetts, USA. Use of the measure requires an end-user license through McLean Hospital. Further information can be found at the McLean Hospital website at https://www.ebasis.org/service-levels.

5.1.8 The Mental Health Inventory (MHI-38)

5.1.8.1 Development history and constructs

The MHI-38 was designed to measure general psychological distress and well-being in the RAND Health Insurance Experiment (Veil & Ware, 1983), a study designed to estimate the effects of different health care financing arrangements on the demand for services as well as on the health status of the patients in the study.

Reflecting its roots in measurement in the general population, the measure includes positive aspects of well-being (such as cheerfulness, interest in and enjoyment of life) as well as negative aspects of mental health (e.g., anxiety and depression). The MHI-38 can be completed either as a self-report measure or as part of an interview.

The full form contains 38 questions. Each question includes a description of a particular symptom or state of mind, and the respondent indicates on a scale the degree to which they have experienced this in the

past month, measured in terms of frequency or intensity. All of the scales, except two, are scored on a six-point scale.

A number of summary scores are derived from the MHI-38. These include:

- six sub-scale scores representing anxiety (e.g., feeling tense or highly-strung, feeling nervous or jumpy), depression (e.g., low spirits, moody), loss of behavioural or emotional control (e.g., feeling like crying, concern about losing control of mind), general positive affect (e.g., daily life interesting, feeling calm and peaceful), emotional ties (e.g., feeling loved and wanted) and life satisfaction; and
- psychological distress and well-being global scores; and
- a Mental Health Index score.

A copy of the MHI-38 is provided in Appendix 8.

Key references for MHI-38:

Veit CT, Ware JE (1983). The structure of psychological distress and well-being in general populations. *Journal of Consulting and Clinical Psychology*, 51(5), 730-742. doi:10.1037//0022-006x.51.5.730

Davies AR, Sherbourne CD, Peterson JR, Ware JE (1998). *Scoring manual: Adult health status and patient satisfaction measures used in RAND's Health Insurance Experiment*. Santa Monica: RAND Corporation. [Available from: https://www.rand.org/pubs/notes/N2190.html accessed 25/1/2020].

5.1.8.2 NOCC rating periods

The rating period is the previous four weeks. There are no exceptions to that timeframe.

5.1.8.3 Measurement properties

The MHI-38 has been shown to have adequate-to-good content, construct, concurrent and predictive validity, test-retest and inter-rater reliability. It has demonstrated sensitivity to change.

Key references for the MHI-38 measurement properties:

Pirkis, J, Burgess, P, Kirk, P, Dodson, S, Coombs, T (2005). *Review of standardised measures used in the National Outcomes and Casemix Collection (NOCC)*. Australian Mental Health Outcomes and Classification Network, Canberra. [Available from: https://www.amhocn.org/publications/review-standardised-measures-used-national-outcomes-and-casemix-collection-nocc accessed 25/1/2020]

5.1.8.4 Licensing and copyright

The Rand Health Care website (https://www.rand.org/health-care/surveys_tools/mos/mental-health.html), which contains the MHI-38, notes the following:

"Permissions Information

All of the surveys from RAND Health Care are public documents, available without charge.

Translations

If you are interested in translating any surveys into another language, see our translation guidelines."

5.2 Measures specific to child and adolescent consumers

Four measures are collected for child and adolescent consumers that are completed by clinicians:

- HoNOSCA (Health of the Nation Outcome Scales for Children and Adolescents);
- Children's Global Assessment Scale (CGAS);
- Factors Influencing Health Status (FIHS); and
- Phase of Care.

In addition, an agreed consumer self-rated measure for child and adolescent consumers is collected:

- SDQ (Strengths and Difficulties Questionnaire.

Some of the above measures can be used for both casemix development and outcome evaluation purposes (HoNOSCA and CGAS). Others are outcome measures (SDQ) or casemix measures (FIHS and Phase of Care).

5.2.1 Health of the Nation Outcome Scales for Children and Adolescents (HoNOSCA)

5.2.1.1 Development history and constructs

The Department of Child and Adolescent Psychiatry at the University of Manchester developed a brief rating measure for application by child and adolescent mental health services. The resulting measure is a clinician-rated measure modelled on the Health of the Nation Outcomes Scales (HoNOS) and designed specifically for use in the assessment of child and adolescent consumer outcomes in mental health services (see Table 2). It comprises 15 scales. Scales 1–13 require assessment of a specific aspect of the young person's mental health, while the remaining two items concern environmental aspects related to lack of information or access to services.

Each HoNOSCA scale is rated on one of five levels of severity (0 = no problem, 1-4 = minor problem to very severe problem). In assigning ratings, the clinician makes use of the special glossary prepared for the measure.

Table 2: The 15 HoNOSCA scales

Scale	Description
1	Disruptive, antisocial or aggressive behaviour
2	Problems with over-activity, attention or concentration
3	Non-accidental self-injury
4	Alcohol, substance or solvent misuse
5	Problems with scholastic or language skills

Scale	Description
6	Physical illness or disability problems
7	Problems associated with hallucinations, delusions, or abnormal perceptions
8	Problems with non-organic somatic symptoms
9	Problems with emotional and related symptoms
10	Problems with peer relationships
11	Problems with self-care and independence
12	Problems with family life and relationships
13	Poor school attendance
14	Problems with lack of knowledge or understanding about the nature of the child or adolescent's difficulties
15	Problems with lack of information about services or management of the child or adolescent's difficulties

A copy of the HoNOSCA is provided in Appendix 9.

Key references for HoNOSCA:

Gowers SG, Harrington RC, Whitton A, Lelliott P, Beevor A, Wing JK, Jezzard R (1999a). Brief scale for measuring the outcomes of emotional and behavioural disorders in children: Health of the Nation Outcome Scales for Children and Adolescents (HoNOSCA). *British Journal of Psychiatry*, 174, 413-416. doi:10.1192/bjp.174.5.413

Gowers SG, Harrington RC, Whitton A, Beevor A, Lelliott P, Jezzard R, Wing JK (1999b). Health of the Nation Outcome Scales for Children and Adolescents (HoNOSCA): Glossary for HoNOSCA score sheet. *British Journal of Psychiatry*, 174, 428-431. doi:10.1192/bjp.174.5.428

Also see https://www.rcpsych.ac.uk/events/in-house-training/health-of-nation-outcome-scales [accessed 25/1/2020].

5.2.1.2 NOCC rating periods

The clinician rates the consumer's situation over the previous two weeks, with an exception at discharge from inpatient psychiatric care, which is based on the previous three days including the day of discharge.

5.2.1.3 Measurement properties

The HoNOSCA appears to have adequate content, construct and predictive validity; good concurrent validity; and can discriminate between groups of consumers based on their clinical and/or treatment profiles. Its test-retest reliability and inter-rater reliability are generally sound, and it appears to be sensitive to change. More research is needed to examine the internal consistency and factor structure of the HoNOSCA.

Key references for the HoNOSCA measurement properties:

Deighton, J, Croudace, T, Fonagy, P, Brown, J, Patalay, P, Wolpert, M (2014). Measuring mental health and wellbeing outcomes for children and adolescents to inform practice and policy: a review of child self-report measures. *Child and Adolescent Psychiatry and Mental Health*, 8(1), 14. doi:10.1186/1753-2000-8-14

Te Pou (2012). *The HoNOS Family of Measures: A Technical Review of Their Psychometric Properties.* Auckland: Te Pou o te Whakaaro Nui. [Available from: https://www.tepou.co.nz/uploads/files/resource-assets/the-honos-family-of-measures-a-technical-review-of-their-psychometric-properties.pdf accessed 25/1/2020]

5.2.1.4 Licensing and copyright

The Commonwealth of Australia registered for the use of the HoNOSCA through arrangements with the copyright holders, the Royal College of Psychiatrists, in the UK. For further information about use of the HoNOSCA go to copyright information provided by the Royal College of Psychiatrists at https://www.rcpsych.ac.uk/events/in-house-training/health-of-nation-outcome-scales.

5.2.2 Children's Global Assessment Scale (CGAS)

5.2.2.1 Development history and constructs

The CGAS is used as the measure of level of functioning for children and young people seen by specialist child and adolescent mental health services. The measure was developed by Schaffer and colleagues at the Department of Psychiatry, Columbia University to provide a global measure of severity of disturbance in children and adolescents. Similar to the HoNOSCA, it is designed to reflect the lowest level of functioning for a child or adolescent during a specified period.

The measure provides a single global rating only, on a scale of 1–100. Clinicians assign a score, with 1 representing the most functionally impaired child, and 100 the healthiest. The CGAS contains detailed behaviourally oriented descriptions at each anchor point that depict behaviours and life situations applicable to children and adolescents.

A copy of the CGAS is provided in Appendix 10.

Key references for CGAS:

Shaffer D, Gould MS, Brasic J, Ambrosini P, Fisher P, Bird H, Aluwahlia S (1983). A children's global assessment scale (CGAS). *Archives of General Psychiatry,* 40(11), 1228-1231. doi:10.1001/archpsyc.1983.01790100074010

5.2.2.2 NOCC rating periods

The clinician rates the consumer's situation over the previous two weeks with no exceptions to that timeframe.

5.2.2.3 Measurement properties

Evaluation of the CGAS's measurement properties show it performs well on concurrent validity and inter-rater reliability, and has adequate content validity, predictive validity, test-retest reliability and sensitivity to change. Concerns have been expressed about its vulnerability to rater manipulation, its lack of any overarching organising principles, and its accuracy.

Key references for the CGAS measurement properties:

Pirkis, J, Burgess, P, Kirk, P, Dodson, S, Coombs, T (2005). *Review of standardised measures used in the National Outcomes and Casemix Collection (NOCC)*. Australian Mental Health Outcomes and Classification Network, Canberra. [Available from: https://www.amhocn.org/publications/review-standardised-measures-used-national-outcomes-and-casemix-collection-nocc accessed 25/1/2020]

Schorre, BE, Vandvik, IH (2004). Global assessment of psychosocial functioning in child and adolescent psychiatry. *European Child & Adolescent Psychiatry*, 13(5), 273–286. doi:10.1007/s00787-004-0390-2

5.2.2.4 Licensing and copyright

Usage should acknowledge the source:

Schaffer D, Gould MS, Brasic J, Ambrosini P, Fisher P, Bird H, Aluwahlia S (1983). A children's global assessment scale (CGAS). *Archives of General Psychiatry*, 40(11), 1228-1231.

5.2.3 Factors Influencing Health Status (FIHS)

5.2.3.1 Development history and constructs

The Factors Influencing Health Status measure is a checklist of 'psychosocial complications' based on the problems and issues identified in the chapter of ICD-10 regarding Factors Influencing Health Status. It was developed specifically as part of the MH-CASC project. The ICD-10 code descriptors constituting the factors are shown in Table 3.

Table 3: Factors influencing health status in child and adolescent mental health consumers

Item	Description
1	Maltreatment syndromes
2	Problems related to negative life events in childhood
3	Problems related to upbringing
4	Problems related to primary support group, including family circumstances
5	Problems related to social environment
6	Problems related to certain psychosocial circumstances
7	Problems related to other psychosocial circumstances

The purpose of these items is to identify the degree to which the child or adolescent has 'complicating psychosocial factors' that require additional clinical input during the episode of care. They are important

in understanding variations in outcomes, as children or adolescents seen by specialist mental health services may present in the context of a range of circumstances which influence their health status but are not in themselves a current illness or injury. For example, the child may be severely affected by a history of sexual abuse but does not have a formal psychiatric diagnosis.

The FIHS comprises a simple checklist, requiring the clinician to indicate whether one or more factors is present. The seven categories of ICD codes included in the scale were selected on the basis of advice from clinicians about the most frequently occurring factors.

A copy of the FIHS is provided in Appendix 11.

Key references for FIHS:

Buckingham W, Burgess P, Solomon S, Pirkis J, Eagar K (1998). *Developing a Casemix Classification for Mental Health Services. Volume 1: Main Report*. Commonwealth Department of Health and Family Services, Canberra. [Available from: https://www.amhocn.org/publications/developing-casemix-classification-mental-health-services-volume-1-main-report accessed 25/1/2020]

5.2.3.2 NOCC rating periods

The clinician rates the consumer's period of care which is bound by the current collection occasion and the preceding collection occasion. There are no exceptions to that timeframe.

5.2.3.3 Measurement properties

There is no published evidence regarding the measurement properties of the FIHS.

5.2.3.4 Licensing and copyright

5.2.4 Phase of Care

Phase of Care is collected for child and adolescent consumers, as well as for adults and older persons. Phase of Care is described in section 5.1.4.

5.2.5 Parent and Consumer Self-Report - Strengths and Difficulties Questionnaire (SDQ)

5.2.5.1 Development history and constructs

The SDQ is a brief behavioural screening measure developed by Goodman in the United Kingdom designed for 4-17 year olds. While not included under the first release version of the National Outcome and Casemix Collection protocol (Aug 2002)[7] it was incorporated in version 1.5 (Oct 2003).[8]

The SDQ exists in several versions to meet the needs of researchers, clinicians and educationalists. Each version includes between one and three of the following components:

(A) 25 items on psychological attributes

All versions of the SDQ ask about 25 attributes, some positive and others negative. These 25 'statements' are divided between 5 scales:

- emotional symptoms;
- conduct problems;
- hyperactivity/inattention;
- peer relationship problems; and
- prosocial behaviour.

The following scales are summed to generate the total difficulties score: emotional symptoms, conduct problems, hyperactivity/inattention and peer relationship problems.

(B) An impact supplement

The extended versions of the SDQ and all recommended versions contain an "impact supplement" to assess the effect of the problems on the young person and his/her family. The items ask whether the respondent thinks the young person has an emotional, concentration or behaviour problem, and if so, enquire further about chronicity (how long the problem has been present), distress, social impairment, and burden to others in the areas of family, friends, leisure activities and class room activities. The impact questions are preceded by a question that seeks an overall opinion, and about the perception of other informants (teachers and or parents) opinions on the young person's behaviour. Irrespective of the

---

[7] *National Outcomes and Casemix Collection: Technical specification of State and Territory reporting requirements for the outcomes and casemix components of 'Agreed Data' under National Mental Health Information Development Funding Agreements.* Commonwealth Department of Health and Ageing, Canberra, 2002.

[8] *Mental Health National Outcomes and Casemix Collection: Technical specification of State and Territory reporting requirements for the outcomes and casemix components of 'Agreed Data', Version 1.50.* Department of Health and Ageing, Canberra, 2003.

answers to the previous 25 questions, if the answer to this probe is “No”, the impact questions are not asked.

This provides useful additional information for clinicians and researchers with an interest in psychiatric ‘caseness’ and the determinants of service use (Goodman, 1999).

(C) Cross Informant Questions

A special feature of the versions of the SDQ collected as part of the NOCC is the inclusion of cross informant questions. While a single informant SDQ (Parent or Young person) can provide useful information in the case of overactivity or hyperkinetic disorder this may be most evident in structured situations such as a school and requires information from additional informants such as teachers. As a result, additional cross informant questions have been added to provide additional clinical information giving a sense of how pervasive any difficulties may be.

Parent Report (Child) and Parent Report (Young Person)

Over the last six months, has your child’s teachers complained of:

- fidgetiness, restlessness or overactivity?
- poor concentration or being easily distracted?
- acting without thinking, frequently butting in, or not waiting for his or her turn?

Young Person

- Does your family complain about you having problems with overactivity or poor concentration?
- Do your teachers complain about you having problems with overactivity or poor concentration?
- Does your family complain about you being awkward or troublesome?
- Do your teachers complain about you being awkward or troublesome?

(D) Follow-up questions

The follow-up versions of the SDQ include not only the 25 basic items and the impact questions, but also two additional follow-up questions for use after an intervention. Has the intervention reduced problems? Has the intervention helped in other ways, e.g., making the problems more bearable?

To increase the chance of detecting change, the follow-up versions of the SDQ ask about 'the last month', as opposed to 'the last six months‘, which is the reference period for the standard versions. Follow-up versions also omit the question about the chronicity of problems.

Copies of the SDQ are provided in Appendix 12.

Key references for SDQ:

Goodman R (1997). The Strengths and Difficulties Questionnaire: A Research Note. *Journal of Child Psychology and Psychiatry*, 38(5), 581-586. doi:10.1111/j.1469-7610.1997.tb01545.x

Goodman R, Scott S (1999). Comparing the Strengths and Difficulties Questionnaire and the Child Behaviour Checklist: Is small beautiful? *Journal of Abnormal Child Psychology*, 27(1), 17-24. doi:10.1023/a:1022658222914

Goodman R (1999). The extended version of the Strengths and Difficulties Questionnaire as a guide to child psychiatric caseness and consequent burden. *Journal of Child Psychology and Psychiatry*, 40(5), 791-801.

Goodman R, Ford T, Simmons H, Gatward R, Meltzer H (2000). Using the Strengths and Difficulties Questionnaire (SDQ) to screen for child psychiatric disorders in a community sample. *British Journal of Psychiatry*, 177, 534-539. doi:10.1192/bjp.177.6.534

Also see https://www.sdqinfo.org/[9] [accessed 25/1/2020].

5.2.5.2 NOCC rating periods

The NOCC includes six versions of the SDQ (four parent-report and two youth self-report). The parent or youth consumer (depending on the version) rates the consumer for the six months prior to admission to the service or for the one month prior to review and to discharge. There are no exceptions to these timeframes.

5.2.5.3 Measurement properties

The SDQ performs well in terms of construct and concurrent validity, and test-retest and inter-rater reliability. Its test-retest reliability has been found to vary across informants; it is poor-to-moderate for self-report and moderate-to-good for parent/carer. The SDQ performs well on content validity, predictive validity, and sensitivity to change, although relatively fewer studies have examined these properties.

Key references for the SDQ measurement properties:

Pirkis, J, Burgess, P, Kirk, P, Dodson, S, Coombs, T (2005). *Review of standardised measures used in the National Outcomes and Casemix Collection (NOCC)*. Australian Mental Health Outcomes and Classification Network, Canberra. [Available from: https://www.amhocn.org/publications/review-standardised-measures-used-national-outcomes-and-casemix-collection-nocc accessed 25/1/2020]

Deighton, J, Croudace, T, Fonagy, P, Brown, J, Patalay, P, Wolpert, M (2014). Measuring mental health and wellbeing outcomes for children and adolescents to inform practice and policy: a review of child self-report measures. *Child and Adolescent Psychiatry and Mental Health*, 8(1), 14. doi:10.1186/1753-2000-8-14

5.2.5.4 Licensing and copyright

The various versions of the SDQ, whether in English or in translation, are copyright documents. Australian jurisdictions have approval from the copyright owner, Dr Robert Goodman, to use the adapted SDQ and supporting resources in public mental health services. For further information about use of the SDQ, go to the Youth in Mind website at https://www.sdqinfo.org.

---

[9] Extensive support materials are available on the SDQ developers' website, including copies of the various versions of the instrument, background information and scoring instructions. See http://www.sdqinfo.org. There are six versions (parent-report and youth-self report) currently specified for NOCC reporting.

Appendices

APPENDIX 1: Health of the Nation Outcome Scales for working age adults (HoNOS)

Content of the HoNOS and instructions for completion[10]

HoNOS rating guidelines

- Rate items in order from 1 to 12.
- Use all available information in making your rating.
- Do not include information already rated in an earlier item.
- Consider both the degree of distress the problem causes and the effect it has on behaviour.
- Rate the most severe problem that occurred in the period rated.
- The rating period is generally the preceding two weeks, except at discharge from inpatient care, when it is the previous three days.
- Each item is rated on one of five levels of severity (0 to 4) as follows:

  0 No problem.

  1 Minor problem requiring no formal action.

  2 Mild problem.

  3 Moderately severe problem.

  4 Severe to very severe problem.

  9 Not known or not applicable.
- As far as possible, the use of rating point 9 should be avoided, because missing data make scores less comparable over time or between settings.
- Specific information on how to rate each point on each item is provided in the glossary.

HoNOS glossary

	HoNOS glossary
Item	**Description and rating levels**
1	**Overactive, aggressive, disruptive or agitated behaviour**
	Include such behaviour due to any cause, e.g., drugs, alcohol, dementia, psychosis, depression, etc.
	Do not include bizarre behaviour, rated at Scale 6.
	0 No problems of this kind during the period rated.

[10] In the NOCC, HoNOS 'scales' are referred to as HoNOS items.

		HoNOS glossary
Item	**Description and rating levels**	
	1	Irritability, quarrels, restlessness etc. Not requiring action.
	2	Includes aggressive gestures, pushing or pestering others; threats or verbal aggression; lesser damage to property (e.g., broken cup or window); marked over-activity or agitation.
	3	Physically aggressive to others or animals (short of rating 4); threatening manner; more serious over-activity or destruction of property.
	4	At least one serious physical attack on others or on animals; destruction of property (e.g., fire-setting); serious intimidation or obscene behaviour.
2	**Non-accidental self-injury**	
	Do <u>not</u> include <u>accidental</u> self-injury (due e.g., to dementia or severe learning disability); the cognitive problem is rated at Scale 4 and the injury at Scale 5.	
	Do <u>not</u> include illness or injury as a direct consequence of drug or alcohol use rated at Scale 3, (e.g., cirrhosis of the liver or injury resulting from drunk driving are rated at Scale 5).	
	0	No problem of this kind during the period rated.
	1	Fleeting thoughts about ending it all, but little risk during the period rated; no self-harm.
	2	Mild risk during period; includes non-hazardous self-harm e.g., wrist–scratching.
	3	Moderate to serious risk of deliberate self-harm during the period rated; includes preparatory acts e.g., collecting tablets.
	4	Serious suicidal attempt or serious deliberate self-injury during the period rated.
3	**Problem drinking or drug-taking**	
	Do <u>not</u> include aggressive or destructive behaviour due to alcohol or drug use, rated at Scale 1.	
	Do <u>not</u> include physical illness or disability due to alcohol or drug use, rated at Scale 5.	
	0	No problem of this kind during the period rated.
	1	Some over-indulgence, but within social norm.
	2	Loss of control of drinking or drug-taking; but not seriously addicted.
	3	Marked craving or dependence on alcohol or drugs with frequent loss of control, risk taking under the influence, etc.
	4	Incapacitated by alcohol or drug problems.
4	**Cognitive problems**	
	<u>Include</u> problems of memory, orientation and understanding associated with any disorder: learning disability, dementia, schizophrenia, etc.	
	Do <u>not</u> include temporary problems (e.g., hangovers) resulting from drug or alcohol use, rated at Scale 3.	
	0	No problem of this kind during the period rated.
	1	Minor problems with memory or understanding e.g., forgets names occasionally.
	2	Mild but definite problems, e.g., has lost way in a familiar place or failed to recognise a familiar person; sometimes mixed up about simple decisions.
	3	Marked disorientation in time, place or person, bewildered by everyday events; speech is sometimes incoherent, mental slowing.

	HoNOS glossary
Item	**Description and rating levels**
	4 Severe disorientation, e.g., unable to recognise relatives, at risk of accidents, speech incomprehensible, clouding or stupor.
5	**Physical illness or disability problems**
	Include illness or disability from any cause that limits or prevents movement, or impairs sight or hearing, or otherwise interferes with personal functioning.
	Include side-effects from medication; effects of drug/alcohol use; physical disabilities resulting from accidents or self-harm associated with cognitive problems, drunk driving etc.
	Do not include mental or behavioural problems rated at Scale 4.
	0 No physical health problem during the period rated.
	1 Minor health problem during the period (e.g., cold, non-serious fall, etc).
	2 Physical health problem imposes mild restriction on mobility and activity.
	3 Moderate degree of restriction on activity due to physical health problem.
	4 Severe or complete incapacity due to physical health problem.
6	**Problems associated with hallucinations and delusions**
	Include hallucinations and delusions irrespective of diagnosis.
	Include odd and bizarre behaviour associated with hallucinations or delusions.
	Do not include aggressive, destructive or overactive behaviours attributed to hallucinations or delusions, rated at Scale 1.
	0 No evidence of hallucinations or delusions during the period rated.
	1 Somewhat odd or eccentric beliefs not in keeping with cultural norms.
	2 Delusions or hallucinations (e.g., voices, visions) are present, but there is little distress to patient or manifestation in bizarre behaviour, that is, moderately severe clinical problem.
	3 Marked preoccupation with delusions or hallucinations, causing much distress and/or manifested in obviously bizarre behaviour, that is, moderately severe clinical problem.
	4 Mental state and behaviour is seriously and adversely affected by delusions or hallucinations, with severe impact on patient.
7	**Problems with depressed mood**
	Do not include over-activity or agitation, rated at Scale 1.
	Do not include suicidal ideation or attempts, rated at Scale 2.
	Do not include delusions or hallucinations, rated at Scale 6.
	0 No problems associated with depressed mood during the period rated.
	1 Gloomy; or minor changes in mood.
	2 Mild but definite depression and distress: e.g., feelings of guilt; loss of self-esteem.
	3 Depression with inappropriate self-blame, preoccupied with feelings of guilt.
	4 Severe or very severe depression, with guilt or self-accusation.
8	**Other mental and behavioural problems**

		HoNOS glossary
Item	**Description and rating levels**	
	*Rate only the most severe clinical problem not considered at items 6 and 7 as follows: specify the type of problem by entering the appropriate letter: **A** phobic: **B** anxiety; **C** obsessive-compulsive; **D** stress; **E** dissociative; **F** somatoform; **G** eating; **H** sleep; **I** sexual; **J** other, specify.*	
	0	No evidence of any of these problems during period rated.
	1	Minor non-clinical problems.
	2	A problem is clinically present at a mild level, e.g., patient/client has a degree of control.
	3	Occasional severe attack or distress, with loss of control e.g., has to avoid anxiety provoking situations altogether, call in a neighbour to help, etc., that is, a moderately severe level of problem.
	4	Severe problem dominates most activities.
9	**Problems with relationships**	
	Rate the patient's most severe problem associated with active or passive withdrawal from social relationships, and/or non-supportive, destructive or self-damaging relationships.	
	0	No significant problems during the period.
	1	Minor non-clinical problems.
	2	Definite problems in making or sustaining supportive relationships: patient complains and/or problems are evident to others.
	3	Persisting major problems due to active or passive withdrawal from social relationships, and/or to relationships that provide little or no comfort or support.
	4	Severe and distressing social isolation due to inability to communicate socially and/or withdrawal from social relationships.
10	**Problems with activities of daily living**	
	Rate the overall level of functioning in activities of daily living (ADL): e.g., problems with basic activities of self-care such as eating, washing, dressing, toilet; also complex skills such as budgeting, organising where to live, occupation and recreation, mobility and use of transport, shopping, self-development, etc.	
	Include any lack of motivation for using self-help opportunities, since this contributes to a lower overall level of functioning.	
	Do not include lack of opportunities for exercising intact abilities and skills, rated at Scale 11 and Scale 12.	
	0	No problems during period rated; good ability to function in all areas.
	1	Minor problems only e.g., untidy, disorganised.
	2	Self-care adequate, but major lack of performance of one or more complex skills (see above).
	3	Major problems in one or more areas of self-care (eating, washing, dressing, toilet) as well as major inability to perform several complex skills.
	4	Severe disability or incapacity in all or nearly all areas of self-care and complex skills.
11	**Problems with living conditions**	
	Rate the overall severity of problems with the quality of living conditions and daily domestic routine.	
	Are the basic necessities met (heat, light, hygiene)? If so, is there help to cope with disabilities and a choice of opportunities to use skills and develop new ones?	

		HoNOS glossary
Item	**Description and rating levels**	
	Do not rate the level of functional disability itself, rated at Scale 10.	
	***NB:** Rate patient's usual accommodation. If in acute ward, rate the home accommodation. If information not obtainable, rate 9.*	
	0	Accommodation and living conditions are acceptable; helpful in keeping any disability rated at Scale 10 to the lowest level possible, and supportive of self-help.
	1	Accommodation is reasonably acceptable although there are minor or transient problems (e.g., not ideal location, not preferred option, doesn't like food, etc).
	2	Significant problems with one or more aspects of the accommodation and/or regime (e.g., restricted choice; staff or household have little understanding of how to limit disability, or how to help develop new or intact skills).
	3	Distressing multiple problems with accommodation (e.g., some basic necessities absent); housing environment has minimal or no facilities to improve patient's independence.
	4	Accommodation is unacceptable (e.g., lack of basic necessities, patient is at risk of eviction, or 'roofless', or living conditions are otherwise intolerable making patient's problems worse).
12	**Problems with occupation and activities**	
	Rate the overall level of problems with quality of day–time environment. Is there help to cope with disabilities, and opportunities for maintaining or improving occupational and recreational skills and activities? Consider factors such as stigma, lack of qualified staff, access to supportive facilities, e.g., staffing and equipment of day centres, workshops, social clubs, etc.	
	Do not rate the level of functional disability itself, rated at Scale 10.	
	***NB:** Rate the patient's usual situation. If in acute ward, rate activities during period before admission. If information not available, rate 9.*	
	0	Patient's day–time environment is acceptable; helpful in keeping any disability rated at Scale 10 to the lowest level possible, and supportive of self-help.
	1	Minor or temporary problems, e.g., late pension cheques, reasonable facilities available but not always at desired times etc.
	2	Limited choice of activities, e.g., there is a lack of reasonable tolerance (e.g., unfairly refused entry to public library or baths etc.); or handicapped by lack of a permanent address; or insufficient carer or professional support; or helpful day setting available but for very limited hours.
	3	Marked deficiency in skilled services available to help minimise level of existing disability; no opportunities to use intact skills or add new ones; unskilled care difficult to access.
	4	Lack of any opportunity for daytime activities makes patient's problem worse.

HoNOS sample rating sheet

Enter the severity rating for each item in the corresponding item box to the right of the item.[11] Rate 9 if Not Known or Not Applicable.

Item	Description	Rating levels					
1	Overactive, aggressive, disruptive or agitated	0	1	2	3	4	*9*
2	Non-accidental self-injury	0	1	2	3	4	*9*
3	Problem drinking or drug-taking	0	1	2	3	4	*9*
4	Cognitive problems	0	1	2	3	4	*9*
5	Physical illness or disability problems	0	1	2	3	4	*9*
6	Problems with hallucinations and delusions	0	1	2	3	4	*9*
7	Problems with depressed mood	0	1	2	3	4	*9*
8	Other mental and behavioural problems	0	1	2	3	4	*9*
	(specify disorder A, B, C, D, E, F, G, H, I, or J)						
9	Problems with relationships	0	1	2	3	4	*9*
10	Problems with activities of daily living	0	1	2	3	4	*9*
11	Problems with living conditions	0	1	2	3	4	*9*
12	Problems with occupation and activities	0	1	2	3	4	*9*

Rating levels: 0, No problem; 1, Minor problem requiring no formal action; 2, Mild problem; 3, Moderately severe problem; 4, Severe to very severe problem; 9, Not known or not applicable.

Key for Item 8

A Phobias – including fear of leaving home, crowds, public places, travelling, social phobias and specific phobias.

B Anxiety and panics.

C Obsessional and compulsive problems.

D Reactions to severely stressful events and traumas.

E Dissociative ('conversion') problems.

F Somatisation – persisting physical complaints in spite of full investigation and reassurance that no disease is present.

G Problems with appetite, over- or under-eating.

H Sleep problems.

I Sexual problems.

J Problems not specified elsewhere including expansive or elated mood.

[11] For the purposes of this document, the areas where the responses would be recorded have been replaced by the item coding values.

Scoring the HoNOS

All 12 HoNOS items are rated on an item-specific anchored five-point scale with higher scores indicating more problems.

The 12 HoNOS items can be aggregated into four subscales as a total as shown below.

Subscale and brief item description			Item scores (range)	Subscale scores (range)
A	Behavioural problems			0–12
	1	Aggression	0–4	
	2	Self-harm	0–4	
	3	Substance use	0–4	
B	Impairment			0–8
	4	Cognitive dysfunction	0–4	
	5	Physical disability	0–4	
C	Symptomatic problems			0–12
	6	Hallucinations and delusions	0–4	
	7	Depression	0–4	
	8	Other symptoms	0–4	
D	Social problems			0–16
	9	Personal relationships	0–4	
	10	Overall functioning	0–4	
	11	Residential problems	0–4	
	12	Occupational problems	0–4	
E	Total score (items 1–12)		0–48	

A subscale score can be calculated if all of its items are rated in the range 0 to 4. Ratings of 9 are excluded from the calculation of subscale scores. The subscale score is then the simple sum of its item scores.

A total score can be calculated if at least 10 of the 12 items are rated in the range 0 to 4. Ratings of 9 are excluded from the calculation of the total score. The total score is then the simple sum of its item scores.

Variants of the HoNOS

Since the release of the original HoNOS, additional versions have been developed for different mental health consumer groups. Two of these are included in the NOCC:

- HoNOS65+: for services for older adults (see Appendix 2); and
- HoNOSCA: for services for children and adolescents (see Appendix 9).

Other versions are not mandated for use as part of the NOCC:

- HoNOS-LD: for services for people with learning disabilities;

- HoNOS-Secure: for secure and forensic services, including those in the community; and
- HoNOS-ABI: for services for people with acquired brain injury.

The glossary for the HoNOS (working age adults) was reviewed and updated in 2018 by the Royal College of Psychiatrists in the United Kingdom .[12] The updated version is called the HoNOS 2018; it is not used in the NOCC.

[12] James M, Painter J, Buckingham B, Stewart MW (2018). A review and update of the Health of the Nation Outcome Scales (HoNOS). *British Journal of Psychiatry Bulletin,* 42(2), 63-68. doi:10.1192/bjb.2017.17

APPENDIX 2: Health of the Nation Outcome Scales for Older Adults (HoNOS65+)

Content of the HoNOS65+ and instructions for completion[13]

HoNOS65+ rating guidelines

- Rate items in order from 1 to 12.
- Use all available information in making your rating.
- Do not include information already rated in an earlier item.
- Consider both the degree of distress the problem causes and the effect it has on behaviour.
- Rate the most severe problem that occurred in the period rated.
- The rating period is generally the preceding two weeks, except at discharge from inpatient care, when it is the previous three days.
- Each item is rated on one of five levels of severity (0 to 4) as follows:

  0 No problem.

  1 Minor problem requiring no formal action.

  2 Mild problem.

  3 Problem of moderate severity.

  4 Severe to very severe problem.

  9 Not known or not applicable.
- As far as possible, the use of rating point 9 should be avoided, because missing data make scores less comparable over time or between settings.
- Specific information on how to rate each point on each item is provided in the glossary.

HoNOS65+ glossary

	HoNOS65+ glossary
Item	**Description and rating levels**
1	**Behavioural disturbance (e.g., overactive, aggressive, disruptive or agitated behaviour, uncooperative or resistive behaviour)**
	<u>Include</u> such behaviour due to any cause, e.g., dementia, drugs, alcohol, psychosis, depression, etc.
	<u>Do not</u> include bizarre behaviour, rated at Scale 6.
	0 No problems of this kind during the period rated.

[13] In the NOCC, HoNOS65+ 'scales' are referred to as HoNOS65+ items.

	HoNOS65+ glossary
Item	**Description and rating levels**
	1 Occasional irritability, quarrels, restlessness etc., but generally calm and co-operative and not requiring any specific action.
	2 Includes aggressive gestures, pushing or pestering others; threats or verbal aggression; lesser damage to property (e.g., broken cup, window); significant over-activity or agitation; intermittent restlessness or wandering (day or night); uncooperative at times, requiring encouragement and persuasion.
	3 Physically aggressive to others or animals (short of rating 4); more serious damage to, or destruction of, property; frequently threatening manner, more serious or persistent over-activity or agitation; frequent restlessness or wandering; significant problems with co-operation, largely resistant to help or assistance.
	4 At least one serious physical attack on others (over and above rating of 3); major or persistent destructive activity (e.g., fire–setting); persistent and threatening behaviour; severe over-activity or agitation; sexually disinhibited or other inappropriate behaviour (e.g., deliberate inappropriate urination or defecation); virtually constant restlessness or wandering; severe problems related to non-compliant or resistive behaviour.
2	**Non-accidental self-injury**
	Do not include accidental self-injury (due e.g., to dementia or severe learning disability); any cognitive problem is rated at Scale 4 and the injury at Scale 5.
	Do not include illness or injury as a direct consequence of drug or alcohol use rated at Scale 3, (e.g., cirrhosis of the liver or injury resulting from drunk–driving are rated at Scale 5).
	0 No problem of this kind during the period rated.
	1 Fleeting thoughts of self-harm or suicide; but little or no risk during the period rated.
	2 Mild risk during period; includes more frequent thoughts or talking about self-harm or suicide (including 'passive' ideas of self-harm such as not taking avoiding action in a potentially life-threatening situation, e.g., while crossing a road).
	3 Moderate to serious risk of deliberate self-harm during the period rated; includes frequent or persistent thoughts or talking about self-harm; includes preparatory behaviours, e.g., collecting tablets.
	4 Suicidal attempt or deliberate self-injury during period.
3	**Problem drinking or drug-taking**
	Do not include aggressive or destructive behaviour due to alcohol or drug use, rated at Scale 1.
	Do not include physical illness or disability due to alcohol or drug use, rated at Scale 5.
	0 No problem of this kind during the period rated.
	1 Some over-indulgence but within social norm.
	2 Occasional loss of control of drinking or drug-taking; but not a serious problem.
	3 Marked craving or dependence on alcohol or drug use with frequent loss of control, drunkenness, etc.
	4 Major adverse consequences or incapacitated due to alcohol or drug problems.
4	**Cognitive problems**
	Include problems of orientation, memory, and language associated with any disorder: dementia, learning disability, schizophrenia, etc.

	HoNOS65+ glossary
Item	**Description and rating levels**
	<u>Do not</u> include temporary problems (e.g., hangovers) which are clearly associated with alcohol, drug or medication use, rated at Scale 3.
	0 No problem of this kind during the period rated.
	1 Minor problems with orientation (e.g., some difficulty with orientation to time) or memory (e.g., a degree of forgetfulness but still able to learn new information), no apparent difficulties with the use of language.
	2 Mild problems with orientation (e.g., frequently disorientated to time) or memory (e.g., definite problems learning new information such as names, recollection of recent events; deficit interferes with everyday activities); difficulty finding way in new or unfamiliar surroundings; able to deal with simple verbal information but some difficulties with understanding or expression of more complex language.
	3 Moderate problems with orientation (e.g., usually disorientated to time, often place) or memory (e.g., new material rapidly lost, only highly learned material retained, occasional failure to recognise familiar individuals); has lost the way in a familiar place; major difficulties with language (expressive or receptive).
	4 Severe disorientation (e.g., consistently disorientated to time and place, and sometimes to person) or memory impairment (e.g., only fragments remain, loss of distant as well as recent information, unable to effectively learn any new information, consistently unable to recognise or to name close friends or relatives); no effective communication possible through language or inaccessible to speech.
5	**Physical illness or disability problems**
	<u>Include</u> illness or disability from any cause that limits mobility, impairs sight or hearing, or otherwise interferes with personal functioning (e.g., pain).
	<u>Include</u> side–effects from medication; effects of drug/alcohol use; physical disabilities resulting from accidents or self-harm associated with cognitive problems, drunk driving etc.
	<u>Do not</u> include mental or behavioural problems rated at Scale 4.
	0 No physical health, disability or mobility problems during the period rated.
	1 Minor health problem during the period (e.g., cold); some impairment of sight or hearing (but still able to function effectively with the aid of glasses or hearing aid).
	2 Physical health problem associated with mild restriction of activities or mobility (e.g., restricted walking distance, some degree of loss of independence); moderate impairment of sight or hearing (with functional impairment despite the appropriate use of glasses or hearing aid); some degree of risk of falling, but low and no episodes to date; problems associated with mild degree of pain.
	3 Physical health problem associated with moderate restriction of activities or mobility (e.g., mobile only with an aid – stick or zimmer frame – or with help); more severe impairment of sight or hearing (short of rating 4); significant risk of falling (one or more falls); problems associated with a moderate degree of pain.
	4 Major physical health problem associated with severe restriction of activities or mobility (e.g., chair or bed bound); severe impairment of sight or hearing (e.g., registered blind or deaf); high risk of falling (one or more falls) because of physical illness or disability; problems associated with severe pain; presence of impaired level of consciousness.
6	**Problems associated with hallucinations and delusions**
	<u>Include</u> hallucinations and delusions (or false beliefs) irrespective of diagnosis.

	HoNOS65+ glossary
Item	**Description and rating levels**
	Include odd and bizarre behaviour associated with hallucinations or delusions (or false beliefs).
	Do not include aggressive, destructive or overactive behaviours attributed to hallucinations, delusions or false beliefs, rated at Scale 1.
	0 No evidence of delusions or hallucinations during the period rated.
	1 Somewhat odd or eccentric beliefs not in keeping with cultural norms.
	2 Delusions or hallucinations (e.g., voices, visions) are present, but there is little distress to patient or manifestation in bizarre behaviour, that is, a present, but mild clinical problem.
	3 Marked preoccupation with delusions or hallucinations, causing significant distress or manifested in obviously bizarre behaviour, that is, moderately severe clinical problem.
	4 Mental state and behaviour is seriously and adversely affected by delusions or hallucinations, with a major impact on patient or others.
7	**Problems with depressive symptoms**
	Do not include over-activity or agitation, rated at Scale 1.
	Do not include suicidal ideation or attempts, rated at Scale 2.
	Do not include delusions or hallucinations, rated at Scale 6.
	Rate associated problems (e.g., changes in sleep, appetite or weight; anxiety symptoms) at Scale 8.
	0 No problems associated with depression during the period rated.
	1 Gloomy; or minor changes in mood only.
	2 Mild but definite depression on subjective or objective measures (e.g., loss of interest or pleasure, lack of energy, loss of self-esteem, feelings of guilt).
	3 Moderate depression on subjective or objective measures (depressive symptoms more marked).
	4 Severe depression on subjective or objective grounds (e.g., profound loss of interest or pleasure, preoccupation with ideas of guilt or worthlessness).
8	**Other mental and behavioural problems**
	*Rate only the most severe clinical problem not considered at Scales 6 and 7 as follows: specify the type of problem by entering the appropriate letter: **A** phobic: **B** anxiety; **C** obsessive–compulsive; **D** stress; **E** dissociative; **F** somatoform; **G** eating; **H** sleep; **I** sexual; **J** other, specify.*
	0 No evidence of any of these problems during period rated.
	1 Minor non-clinical problems.
	2 A problem is clinically present, but at a mild level, for example the problem is intermittent, the patient maintains a degree of control or is not unduly distressed.
	3 Moderately severe clinical problem, for example, more frequent, more distressing or more marked symptoms.
	4 Severe persistent problems which dominates or seriously affects most activities.
9	**Problems with relationships**
	Problems associated with social relationships, identified by the patient or apparent to carers or others. Rate the patient's most severe problem associated with active or passive withdrawal from,

Item	Description and rating levels
	or tendency to dominate, social relationships or non-supportive, destructive or self-damaging relationships.
	0 No significant problems during the period.
	1 Minor non-clinical problems.
	2 Definite problems in making, sustaining or adapting to supportive relationships (e.g., because of controlling manner, or arising out of difficult, exploitative or abusive relationships), definite but mild difficulties reported by patient or evident to carers or others.
	3 Persisting significant problems with relationships; moderately severe conflicts or problems identified within the relationship by the patient or evident to carers or others.
	4 Severe difficulties associated with social relationships (e.g., isolation, withdrawal, conflict, abuse); major tensions and stresses (e.g., threatening breaking down of relationship).
10	**Problems with activities of daily living**
	Rate the overall level of functioning in activities of daily living (ADL): e.g., problems with basic activities of self-care such as eating, washing, dressing, toilet; also complex skills such as budgeting, recreation and use of transport, etc.
	Include any lack of motivation for using self-help opportunities, since this contributes to a lower overall level of functioning.
	Do not include lack of opportunities for exercising intact abilities and skills, rated at Scales 11 and Scale 12.
	0 No problems during period rated; good ability to function effectively in all basic activities (e.g., continent – or able to manage incontinence appropriately, able to feed self and dress) and complex skills (e.g., driving or able to make use of transport facilities, able to handle financial affairs appropriately).
	1 Minor problems only without significantly adverse consequences, for example, untidy, mildly disorganised, some evidence to suggest minor difficulty with complex skills but still able to cope effectively.
	2 Self-care and basic activities adequate (though some prompting may be required), but difficulty with more complex skills (e.g., problem organising and making a drink or meal, deterioration in personal interest especially outside the home situation, problems with driving, transport or financial judgements).
	3 Problems evident in one or more areas of self-care activities (e.g., needs some supervision with dressing and eating, occasional urinary incontinence or continent only if toileted) as well as inability to perform several complex skills.
	4 Severe disability or incapacity in all or nearly all areas of basic and complex skills (e.g., full supervision required with dressing and eating, frequent urinary or faecal incontinence).
11	**Problems with living conditions**
	Rate the overall severity of problems with the quality of living conditions, accommodation and daily domestic routine, taking into account the patient's preferences and degree of satisfaction with circumstances.
	Are the basic necessities met (heat, light, hygiene)? If so, does the physical environment contribute to maximising independence and minimising risk, and provide a choice of opportunities to facilitate the use of existing skills and develop new ones?
	Do not rate the level of functional disability itself, rated at Scale 10.

Item	Description and rating levels
	NB: *Rate patient's usual accommodation. If in acute ward, rate the home accommodation. If information not obtainable, rate 9.*
	0 Accommodation and living conditions are acceptable; helpful in keeping any disability rated at Scale 10 to the lowest level possible and minimising any risk, and supportive of self-help; the patient is satisfied with their accommodation.
	1 Accommodation is reasonably acceptable with only minor or transient problems related primarily to the patient's preferences rather than any significant problems or risks associated with their environment (e.g., not ideal location, not preferred option, doesn't like food).
	2 Basics are met but significant problems with one or more aspects of the accommodation or regime (e.g., lack of proper adaptation to optimise function relating for instance to stairs, lifts or other problems of access); may be associated with risk to patient (e.g., injury) which would otherwise be reduced.
	3 Distressing multiple problems with accommodation; e.g., some basic necessities are absent (unsatisfactory or unreliable heating, lack of proper cooking facilities, inadequate sanitation); clear elements of risk to the patient resulting from aspects of the physical environment.
	4 Accommodation is unacceptable: e.g., lack of basic necessities, insecure, or living conditions are otherwise intolerable, contributing adversely to the patient's condition or placing them at high risk of injury or other adverse consequences.
12	**Problems with occupation and activities**
	Rate the overall level of problems with quality of day-time environment. Is there help to cope with disabilities, and opportunities for maintaining or improving occupational and recreational skills and activities? Consider factors such as stigma, lack of qualified staff, lack of access to supportive facilities, e.g., staffing and equipment of day centres, social clubs, etc.
	Do not rate the level of functional disability itself, rated at Scale 10.
	NB: *Rate the patient's usual situation. If in acute ward, rate activities during period before admission. If information not available, rate 9.*
	0 Patient's day–time environment is acceptable; helpful in keeping any disability rated at Scale 10 to the lowest level possible, and maximising autonomy.
	1 Minor or temporary problems, e.g., good facilities available but not always at appropriate times for the patient.
	2 Limited choice of activities; e.g., insufficient carer or professional support, useful day setting available but for very limited hours.
	3 Marked deficiency in skilled services and support available to help optimise activity level and autonomy, little opportunity to use skills or to develop new ones; unskilled care difficult to access.
	4 Lack of any effective opportunity for daytime activities makes the patient's problems worse or patient refuses services offered which might improve their situation.

HoNOS65+ sample rating sheet

Enter the severity rating for each item in the corresponding item box to the right of the item.[14] Rate 9 if Not Known or Not Applicable.

Item	Description	Rating levels					
1	Behavioural disturbance	0	1	2	3	4	*9*
2	Non-accidental self-injury	0	1	2	3	4	*9*
3	Problem drinking or drug-taking	0	1	2	3	4	*9*
4	Cognitive problems	0	1	2	3	4	*9*
5	Physical illness or disability problems	0	1	2	3	4	*9*
6	Problems with hallucinations and delusions	0	1	2	3	4	*9*
7	Problems with depressive symptoms	0	1	2	3	4	*9*
8	Other mental and behavioural problems	0	1	2	3	4	*9*
	(specify disorder A, B, C, D, E, F, G, H, I, or J)						
9	Problems with relationships	0	1	2	3	4	*9*
10	Problems with activities of daily living	0	1	2	3	4	*9*
11	Problems with living conditions	0	1	2	3	4	*9*
12	Problems with occupation and activities	0	1	2	3	4	*9*

Rating levels: 0, No problem; 1, Minor problem requiring no formal action; 2, Mild problem; 3, Moderately severe problem; 4, Severe to very severe problem; 9, Not known or not applicable.

Key for Item 8

A Phobias – including fear of leaving home, crowds, public places, travelling, social phobias and specific phobias.

B Anxiety and panics.

C Obsessional and compulsive problems.

D Reactions to severely stressful events and traumas.

E Dissociative ('conversion') problems.

F Somatisation – persisting physical complaints in spite of full investigation and reassurance that no disease is present.

G Problems with appetite, over- or under-eating.

H Sleep problems.

I Sexual problems.

J Problems not specified elsewhere including expansive or elated mood.

[14] For the purposes of this document, the areas where responses would be recorded have been replaced by the item coding values.

Scoring the HoNOS65+

All 12 HoNOS65+ items are rated on an item-specific anchored five-point scale with higher scores indicating more problems.

The 12 HoNOS65+ items can be aggregated into four subscales as a total as shown below.

Subscale and brief item description			Item scores (range)	Subscale scores (range)
A	Behavioural problems			0–12
	1	Behavioural disturbance	0–4	
	2	Self-harm	0–4	
	3	Substance use	0–4	
B	Impairment			0–8
	4	Cognitive dysfunction	0–4	
	5	Physical disability	0–4	
C	Symptomatic problems			0–12
	6	Hallucinations and delusions	0–4	
	7	Depression	0–4	
	8	Other symptoms	0–4	
D	Social problems			0–16
	9	Personal relationships	0–4	
	10	Overall functioning	0–4	
	11	Residential problems	0–4	
	12	Occupational problems	0–4	
E	Total score (items 1–12)		0–48	

A subscale score can be calculated if all of its items are rated in the range 0 to 4. Ratings of 9 are excluded from the calculation of subscale scores. The subscale score is then the simple sum of its item scores.

A total score can be calculated if at least 10 of the 12 items are rated in the range 0 to 4. Ratings of 9 are excluded from the calculation of the total score. The total score is then the simple sum of its item scores.

Variants of the HoNOS65+

The glossary for the HoNOS65+ was reviewed and updated in 2018 by the Royal College of Psychiatrists in the United Kingdom.[15] The updated version is called the HoNOS OA (older adults); it is not used in the NOCC.

[15] James M, Buckingham B, Cheung G, McKay R, Painter J, Stewart MW (2018). Review and update of the Health of the Nation Outcome Scales for Elderly People (HoNOS65+). *British Journal of Psychiatry Bulletin*, 42(6), 248-252. doi:10.1192/bjb.2018.68

APPENDIX 3: Abbreviated Life Skills Profile (LSP-16)

Content of the LSP-16 and instructions for completion

Assess the patient's general functioning over the past three months, taking into account their age, social and cultural context. Do not assess functioning during crises when the patient was ill or becoming ill. Answer all 16 items by circling the appropriate response.

					LSP-16
		0	**1**	**2**	**3**
1	Does this person generally have any difficulty with initiating and responding to conversation?	No difficulty	Slight difficulty	Moderate difficulty	Extreme difficulty
2	Does this person generally withdraw from social contact?	Does not withdraw at all	Withdraws slightly	Withdraws moderately	Withdraws totally or near totally
3	Does this person generally show warmth to others?	Considerable warmth	Moderate warmth	Slight warmth	No warmth at all
4	Is this person generally well groomed (e.g., neatly dressed, hair combed)?	Well groomed	Moderately well groomed	Poorly groomed	Extremely poorly groomed
5	Does this person wear clean clothes generally, or ensure that they are cleaned if dirty?	Maintains cleanliness of clothes	Moderate cleanliness of clothes	Poor cleanliness of clothes	Very poor cleanliness of clothes
6	Does this person generally neglect her or his physical health?	No neglect	Slight neglect of physical problems	Moderate neglect of physical problems	Extreme neglect of physical problems
7	Is this person violent to others?	Not at all	Rarely	Occasionally	Often
8	Does this person generally make and/or keep up friendships?	Friendships made or kept up well	Friendships made or kept up with slight difficulty	Friendships made or kept up with considerable difficulty	No friendships made or none kept
9	Does this person generally maintain an adequate diet?	No problem	Slight problem	Moderate problem	Extreme problem
10	Does this person generally look after and take her or his own prescribed medication (or attend for prescribed injections on time) without reminding?	Reliable with medication	Slightly unreliable	Moderately unreliable	Extremely unreliable
11	Is this person willing to take psychiatric medication when prescribed by a doctor?	Always	Usually	Rarely	Never
12	Does this person co-operate with health services (e.g., doctors and/or other health workers)?	Always	Usually	Rarely	Never

					LSP-16
		0	**1**	**2**	**3**
13	Does this person generally have problems (e.g., friction, avoidance) living with others in the household?	No obvious problem	Slight problems	Moderate problems	Extreme problems
14	Does this person behave offensively (includes sexual behaviour)?	Not at all	Rarely	Occasionally	Often
15	Does this person behave irresponsibly?	Not at all	Rarely	Occasionally	Often
16	What sort of work is this person generally capable of (even if unemployed, retired or doing unpaid domestic duties)?	Capable of full time work	Capable of part time work	Capable only of sheltered work	Totally incapable of work

LSP-16 item elaboration and clarification

The following item clarifications were developed as part of the training materials for the *Victorian Mental Health Outcomes Strategy* and are offered as a useful adjunct to the basic LSP-16.

	LSP-16 item elaboration and clarification
1	**Does the person generally have difficulty with initiating and responding to conversation**? Measures the ability to begin and maintain social interaction, ensuring the flow of conversation; taking turns in conversation, silence as appropriate.
2	**Does the person generally withdraw from social contact**? Does the person isolate themselves when part of a group? Does the person participate in leisure activities with others? Spend long hours alone watching TV or videos?
3	**Does the person generally show warmth to others?** Does the individual demonstrate affection, concern or understanding of situation of others?
4	**Is this person generally well groomed (e.g., neatly dressed, hair combed)?** Does the person use soap when washing, shave as appropriate/ use make-up appropriately, use shampoo?
5	**Does this person wear clean clothes generally, or ensure that they are cleaned if dirty?** Does the person recognise the need to change clothes on a regular basis? Are clothes grimy, are collars and cuffs marked, are there food stains?
6	**Does this person generally neglect her or his physical health?** Does the person have a medical condition for which they are not receiving appropriate treatment? Does the person lead a generally healthy lifestyle? Does the person neglect their dental health?
7	**Is this person violent to others?** Does the person display verbal and physical aggression to others?
8	**Does this person generally make or keep friendships?** Does the person identify individuals as friends? Do others identify the person as a friend? Does the person express a desire to continue to interact with others?
9	**Does this person generally maintain an adequate diet?** Does the person eat a variety of nutritious foods regularly? Do they watch their fat and fibre intake?
10	**Does this person generally look after and take her or his own prescribed medication (or attend for prescribed injections on time) without reminding?** Does the person adhere to their medication regimen as prescribed? The right amount at the right time on a regular basis? Does the person need prompting or reinforcement to adhere to their medication regimen?

	LSP-16 item elaboration and clarification
11	**Is this person willing to take prescribed medication when prescribed by a doctor?** Does the person express an unwillingness to take medication as prescribed, bargain or inappropriately question the need for continuing medication?
12	**Does this person cooperate with health services (e.g., doctors and/or other health workers)?** Is the person deliberately obstructive in relation to treatment plans? Do they attend appointments, undertake therapeutic homework activities?
13	**Does this person generally have problems (e.g., friction, avoidance) living with others in the household?** Is the person identified as 'difficult to live with'? Do they have difficulty establishing or keeping to "house rules" or are they always having arguments about domestic duties?
14	**Does this person behave offensively (includes sexual behaviour)?** Does the person behave in a socially inept or unacceptable way demonstrating inappropriate social or sexual behaviours or communication?
15	**Does this person behave irresponsibly?** Does the person act deliberately in ways that are likely to inconvenience, irritate or hurt others? Does the person neglect basic social obligations?
16	**What sort of work is this person generally capable of (even if unemployed, retired or doing unpaid domestic duties)?** What level of assistance/guidance does the individual require to undertake occupational activities?

Scoring the LSP-16

All items are rated on an anchored four-point scale (0 through 3), with higher scores indicating a greater degree of disability. A score of 3 represents greater dysfunction and a score of 0 represents good functioning. Specific anchor points are provided for each item. For example, in relation to the medication compliance item, the specific anchor points are (0) "reliable with medication", (1) "slightly unreliable", (2) "moderately unreliable" and (3) "extremely unreliable".

The 16 LSP items can be grouped into four subscales and a total as shown below.

Subscale and brief item description			**Item scores (range)**	**Subscale scores (range)**
A	Withdrawal			0–12
	1	Difficulty in conversation	0–3	
	2	Withdraw from social contact	0–3	
	3	Shows warmth	0–3	
	8	Maintain friendships	0–3	
B	Self-care			0–15
	4	Well groomed	0–3	
	5	Clean clothes	0–3	
	6	Neglect health	0–3	
	9	Adequate diet	0–3	
	16	Work capability	0–3	
C	Compliance			0–9
	10	Look after own prescribed medication	0–3	

Subscale and brief item description			Item scores (range)	Subscale scores (range)
	11	Willing to take prescribed medication	0–3	
	12	Co-operate with health services	0–3	
D	Anti-social			0–12
	7	Violent	0–3	
	13	Problems with others	0–3	
	14	Offensive behaviour	0–3	
	15	Irresponsible behaviour	0–3	
E	Total score (items 1–16)		0–48	

A subscale score can be calculated if all of its items are rated in the range 0 to 3. The subscale score is then the simple sum of its item scores.

A total score can be calculated if at least 14 of the 16 items are rated in the range 0 to 3. The total score is then the simple sum of its item scores.

Variants of the LSP-16

As described in section 5.1.2.1, the LSP-16 was developed from the LSP-39 and there is also a LSP-20 (which comprises the LSP-16 supplemented with four items from the original LSP-39 concerned primarily with difficulties associated with psychosis). While these expanded versions are not a requirement of the NOCC, where States and Territories choose to implement the LSP-20 or LSP-39, it is important to note that these measures incorporate the core LSP-16 items required for reporting.

APPENDIX 4: Resource Utilisation Groups – Activities of Daily Living Scale (RUG-ADL)

Content of the RUG-ADL and instructions for completion

Rating guidelines

- Record what the person actually does, not what they are capable of doing. That is, record their poorest performance during the period rated.
- Do not omit any ratings.
- It is essential that the rater knows what behaviours and tasks are contained within each scale and has a "working knowledge" of the scale.

RUG-ADL glossary

	RUG-ADL glossary
Item	**Description and rating levels**
1	**Bed mobility**
	Ability to move in bed after the transfer into bed has been completed.
	1 Independent/supervision: Is able to readjust position in bed, and perform own pressure area relief, through spontaneous movement around bed or with prompting from carer. No hands-on assistance is required. May be independent with the use of a device.
	3 Limited assistance: Is able to readjust position in bed, and perform own pressure area relief, with the assistance of one person.
	4 Other than two-person: Requires use of a hoist or other assisting device to readjust position in bed and physical assist pressure relief. Still requires the assistance of only one person for task.
	5 Two-person physical assist: Requires two assistants to readjust position and perform own pressure area relief.
	(note: a rating of 2 is not included in the domain of valid ratings)
2	**Toileting**
	Includes mobilising to the toilet, adjustment of clothing before and after toileting and maintaining perineal hygiene without the incidence of incontinence or soiling of clothes.
	If the person cares for the catheter or other device independently and is independent on all other tasks, rate 1.
	1 Independent/supervision: Is able to mobilise to the toilet, adjust clothing, cleans self, has no incontinence or soiling of clothing. All tasks performed independently or with prompting from carer. No hands-on assistance required. May be independent with the use of device.
	3 Limited assistance: Requires hands-on assistance of one person for one or more of the tasks.

	RUG-ADL glossary
Item	**Description and rating levels**
	4 Other than two-person: Requires the use of a catheter, uridome or urinal, or a colostomy, bedpan or commode chair, or insertion of enema or suppository. Requires the assistance of one person for the management of the device.
	5 Two-person physical assist: Requires two assistants to perform any step of the task.
	(note: a rating of 2 is not included in the domain of valid ratings)
3	**Transfer**
	Includes the transfer in and out of bed, bed to chair, in and out of shower or tub.
	1 Independent/supervision: Is able to perform all transfers independently or with prompting from carer. No hands-on assistance required. May be independent with the use of a device.
	3 Limited assistance: Requires hands-on assistance of one person to perform any transfer of the day or night.
	4 Other than two-person: Requires the use of a device for any of the transfers performed in the day or night.
	5 Two-person physical assist: Requires two person to perform any transfer of the day or night.
	(note: a rating of 2 is not included in the domain of valid ratings)
4	**Eating**
	Includes the tasks of cutting food, bringing food to the mouth and the chewing and swallowing of food. Does not include preparation of the meal.
	1 Independent/supervision: Is able to cut, chew and swallow food, independently or with supervision, once meal has been presented in the customary fashion. No hands-on assistance required. If individual relies on parenteral or gastrostomy feeding which he or she administers him or herself then rate 1.
	2 Limited assistance: Requires hands on assistance of one person to set–up or assist in bringing food to mouth, or requires food to be modified (soft or staged diet).
	3 Extensive assistance/total dependence/tube fed: Person needs to fed meal by assistant, or if the individual does not eat or drink full meals by mouth but relies on parenteral or gastrostomy feeding and does not administer feeds by him or herself.

Scoring the RUG-ADL

A total score can be calculated if all 3 of the first 3 items are rated in the range 1 to 5 and the 4th item is rated in the range 1 to 3. The total score is then the simple sum of its item scores.

Item	Item description	Item score (range)	Total score (range)
RUGADL item 1	Bed mobility	1–5	
RUGADL item 2	Toileting	1–5	
RUGADL item 3	Transfer	1–5	
RUGADL item 4	Eating	1–3	
RUGADL total score (items 1-4)			4–18

APPENDIX 5: Phase of Care

Content of Phase of Care and instructions for completion

Rating guidelines

Clinicians are asked to identify which of one of five types of care best describes the primary goal of care provided to a consumer. Because the Phase of Care can change, clinicians should choose the main Phase of Care on the basis of the goal that is expected to consume the most treatment effort during the period being rated. The five phases of care are:

- 1 - Acute
- 2 - Functional gain
- 3 - Intensive extended
- 4 - Consolidating gain
- 5 - Assessment only

In addition, there is provision for missing data on Phase of Care to be recorded:

- 9 - Not stated/inadequately described

Phase of Care item clarifications and elaborations

The following table provides guidelines to assist clinical judgement and consideration of meaningful consumer engagement, in making Phase of Care ratings.[16] Note that these guidelines are as at November 2020; guidelines may change over time.

Phase of Care guidelines

					Phase of Care
Phase of Care	**Goal of Care**	**Consumer's Unique Characteristics**	**Clinician Activity or Expectation**	**Indicators of Phase Start**	**Indicators of Phase End**
Acute	Reduce intensity of symptoms and manage risk associated with mental illness.	Consumer has complex symptoms and/or high levels of behavioural disturbance.	Consumer may require an increase in intensity of visual observations or increased monitoring by clinician to maintain safety.	Increasing impact on behaviour, distress associated with psychiatric symptoms.	Reduction in symptoms and/or risk, requiring less intensive observation or intervention.

[16] Independent Hospital Pricing Authority (2016). *Australian Mental Health Care Classification: Mental health phase of care guide Version 1.2*. [Available from: https://www.ihpa.gov.au/publications/mental-health-phase-care-guide accessed 25/1/2020]

					Phase of Care
Phase of Care	**Goal of Care**	**Consumer's Unique Characteristics**	**Clinician Activity or Expectation**	**Indicators of Phase Start**	**Indicators of Phase End**
			Need for urgent risk assessment and management. Consumer may require a low stimulus environment. The consumer's family or support network may require additional assistance. Activities undertaken in an acute phase of care are designed to reduce the intensity of symptoms. Recovery/Treatment/ Care or Management plan is highly dynamic. Phase expected to last days to weeks.	Increased risk of harm to self or others. Change in intensity requiring greater observation and contact with the clinician. Care plan focuses on interventions associated with symptom reduction and/or risk management as well as comprehensive documentation and recovery focused care.	Focus moves from symptoms to functional improvement.
Functional gain	Improvement in functioning by gaining confidence and mastery in self-management, psychosocial adaptation and vocational performance through structured training and therapy.	Consumer is less distressed by symptoms and is further seeking or would benefit from greater psychosocial activity.	Assessment is concentrated on psychosocial functioning. Recovery/Treatment/ Care or Management plan is focused on development of the consumer's living and/or interpersonal skills. Phase expected to last weeks to months.	Focus is less on symptom reduction and management, but more directed towards improvement in consumer functioning. Care planning includes group or individual work that focuses on individual, occupational or social functioning.	Increasing need for interventions associated with symptoms or increasing distress Functional improvement that requires longer term intervention. Symptom mitigation requiring greater clinical input. Primary goal of care shifts to self-managing psychosocial

					Phase of Care
Phase of Care	**Goal of Care**	**Consumer's Unique Characteristics**	**Clinician Activity or Expectation**	**Indicators of Phase Start**	**Indicators of Phase End**
					engagement in the absence of regular clinical input.
Intensive extended	Symptom mitigation /Functional Improvement / relapse prevention strategy development.	Prevention/minimisation of further deterioration or risk of harm in circumstances where there are frequent relapses, a severe inability to function independently and/or minimal personal understanding and acceptance.	Recovery/Treatment/ Care or Management plan is focused on reducing symptoms and improving psychosocial functioning. Phase expected to last months to years.	Focus of clinical input includes management of symptoms and functioning. Both symptoms and function require longer term clinical input. Care plan focuses on supporting improvement or preventing deterioration. Significant symptoms and poor psychosocial functioning are an ongoing issue requiring intensive clinical input.	Management of symptomology and distress levels, become the primary focus of clinical concern. Increasing risk of harm requires risk mitigation and management. Improvement of symptomology and psychosocial functioning.
Consolidating gain	Plateau of symptoms and maintenance of functioning.	Psychiatric symptoms continue but are not distressing nor pose significant risk to consumer or carer.	Monitoring of symptoms and functioning occurs on a regular basis. Optimise level of functioning and promote recovery to assist community integration and independence. Phase expected to last months to years.	Symptoms and functioning are stable but ongoing inputs from services are still required.	Symptoms and consumer distress are the focus of clinical concern. Increasing risk of harm, requiring additional risk mitigation. Reduction in symptomology and improved ability to self-manage

Phase of Care					
Phase of Care	**Goal of Care**	**Consumer's Unique Characteristics**	**Clinician Activity or Expectation**	**Indicators of Phase Start**	**Indicators of Phase End**
					psychosocial engagement in the absence of regular clinical input.
Assessment only	Information gathering to enable assessment of an consumer Or potential referral for treatment services if required.	Consumer presents seeking assessment or has been referred from another agency.	Completion of a mental health assessment to determine if referral for treatment is required. Collection of collateral information. Initial management planning focused on the identification and referral to alternative services. Phase expected to last hours. This phase is not intended to capture regular review as part of a standard clinical workflow routine. This phase was developed to capture the significant amount of work that occurs for people who do not necessarily go on to formal episodes of care.	Symptoms or distress experienced by the consumer or family member or friend result in help seeking behaviour. Phase occurs on first contact with a service where a mental health assessment is needed, to determine if any further intervention is required.	Information collection, interview, observation, collateral history gathering, formulation, initial management plan and referral have been completed. Further care needs have been identified.

Scoring Phase of Care

The measure provides a single categorical rating only.

Variants of Phase of Care

Nil.

APPENDIX 6: Kessler–10 (K10) & Kessler-10 Plus (K10+)

Content of the K10/K10+ and instructions for completion[17]

K10 versions in the NOCC

The version referred to in the NOCC Technical Specifications as K10+LM, is also referred to as the K10+ because it contains four additional items (items 11-14) that assess variables relevant to distress. The label "LM" stands for Last Month, because the rating period is the past four weeks.

The version referred to as 'K10L3D' contains only the ten psychological distress items without the additional items of the K10+ and has the label 'L3D' because consumers are instructed to base their ratings on the past three days. This version is only for use at discharge from brief episodes of care where the 'standard' 4-week rating period would overlap with the ratings made at the beginning of the episode.

1. K10+LM

						K10+LM
The following ten questions ask about how you have been feeling in the **past four weeks**. For each question, mark the circle under the option that best describes the amount of time you felt that way.[18]						
		None of the time	**A little of the time**	**Some of the time**	**Most of the time**	**All of the time**
1.	In the past four weeks, about how often did you feel tired out for no good reason?	1	2	3	4	5
2.	In the past four weeks, about how often did you feel nervous?	1	2	3	4	5
3.	In the past four weeks, about how often did you feel so nervous that nothing could calm you down?	1	2	3	4	5
4.	In the past four weeks, about how often did you feel hopeless?	1	2	3	4	5
5.	In the past four weeks, about how often did you feel restless or fidgety?	1	2	3	4	5
6.	In the past four weeks, about how often did you feel so restless you could not sit still?	1	2	3	4	5

[17] In the NOCC, K10/K10+ 'questions' are referred to as K10/K10+ items.

[18] For the purposes of this document, the areas where responses would be recorded have been replaced by the item coding values.

						K10+LM
		None of the time	**A little of the time**	**Some of the time**	**Most of the time**	**All of the time**
7.	In the past four weeks, about how often did you feel depressed?	1	2	3	4	5
8.	In the past four weeks, about how often did you feel that everything was an effort?	1	2	3	4	5
9.	In the past four weeks, about how often did you feel so sad that nothing could cheer you up?	1	2	3	4	5
10.	In the past four weeks, about how often did you feel worthless?	1	2	3	4	5
The next few questions are about how these feelings may have affected you in the **past four weeks.** You need not answer these questions if you answered 'None of the time' to all of the ten questions about your feelings						
11.	In the past four weeks, how many days were you TOTALLY UNABLE to work, study or manage your day to day activities because of these feelings?			_____ (Number of days)		
12.	[Aside from those days], in the past 4 weeks, HOW MANY DAYS were you able to work or study or manage your day to day activities, but had to CUT DOWN on what you did because of these feelings?			_____ (Number of days)		
13.	In the past 4 weeks, how many times have you seen a doctor or any other health professional about these feelings?			_____ (Number of consultations)		
		None of the time	**A little of the time**	**Some of the time**	**Most of the time**	**All of the time**
14.	In the past 4 weeks, how often have physical health problems been the main cause of these feelings?	1	2	3	4	5

2. K10-L3D

						K10-L3D
The following ten questions ask about how you have been feeling in the **past three days**. For each question, mark the circle under the option that best describes the amount of time you felt that way.[19]						
		None of the time	**A little of the time**	**Some of the time**	**Most of the time**	**All of the time**
1.	In the past three days, about how often did you feel tired out for no good	1	2	3	4	5

[19] For the purposes of this document, the areas where responses would be recorded have been replaced by the item coding values.

						K10-L3D
		None of the time	**A little of the time**	**Some of the time**	**Most of the time**	**All of the time**
2.	In the past three days, about how often did you feel nervous?	1	2	3	4	5
3.	In the past three days, about how often did you feel so nervous that nothing could calm you down?	1	2	3	4	5
4.	In the past three days, about how often did you feel hopeless?	1	2	3	4	5
5.	In the past three days, about how often did you feel restless or fidgety?	1	2	3	4	5
6.	In the past three days, about how often did you feel so restless you could not sit still?	1	2	3	4	5
7.	In the past three days, about how often did you feel depressed?	1	2	3	4	5
8.	In the past three days, about how often did you feel that everything was an effort?	1	2	3	4	5
9.	In the past three days, about how often did you feel so sad that nothing could cheer you up?	1	2	3	4	5
10.	In the past three days, about how often did you feel worthless?	1	2	3	4	5

Scoring the K10

A total score for the K10 can be calculated if at least 9 of the 10 items (excluding the last 4 “Plus” items) are rated in the range 1 to 5. The first 10 items of the K10 and the K10+ are identical.

There is no summary score for the four “Plus” items of the K10+.

The K10 total score is based on the sum of K10 item 01 through 10 (range: 10-50). Items 11 through 14 are excluded from the total because they are separate measures of disability associated with the problems referred to in the preceding ten items.

The K10 total score is computed using the equation shown below, with the result being rounded to the nearest whole number. If any item has not been completed (that is, has not been coded 1, 2, 3, 4, 5), it is excluded from the calculation.

$$Total\ score = \left(\frac{Sum\ of\ (Item\ scores)}{N\ of\ valid\ (completed)\ Items} \right) \times Number\ of\ Items$$

Interpreting scores

K10 results are commonly grouped for interpretation. The cut offs shown below were used in Western Australia's 2000 Health and Wellbeing Survey and the 2001 National Health Survey to estimate the prevalence of levels of psychological distress.[20,21] These cut-offs were recalibrated by the Australian Bureau of Statistics from Andrews and Slade (2001)[22] and are consistent with work by Slade, Grove, and Burgess, 2011.[23]

Cut-offs are provided for four levels of psychological distress. These cut offs are now well established by the Australian Bureau of Statistics and used to present results from use of the K10 in all its surveys - most recently, the 2017-18 National Health Survey.[24]

K10 cut-offs

K10 score	Level of psychological distress
10 - 15	Low
16 - 21	Moderate
22 - 29	High
30 - 50	Very high

[20] Australian Bureau of Statistics (2012). *4817.0.55.001 - Information Paper: Use of the Kessler Psychological Distress Scale in ABS Health Surveys, Australia, 2007-08*. [Available from https://www.abs.gov.au/ausstats/abs@.nsf/mf/4817.0.55.001 accessed 25/1/2020].

[21] Australian Bureau of Statistics (ABS) (2003). *4817.0.55.001 - Information Paper: Use of the Kessler Psychological Distress Scale in ABS Health Surveys, Australia, 2001*. [Available from: https://www.abs.gov.au/ausstats/abs@.nsf/ProductsbyReleaseDate/4D5BD324FE8B415FCA2579D500161D57 accessed 25/1/2020]. *See section 3. Scoring the K10, for the history of K10 interpretations used in Australia*.

[22] Andrews G, Slade T (2001). Interpreting scores on the Kessler Psychological Distress Scale (K10). *Australian and New Zealand Journal of Public Health*, 25(6), 494-497. doi:10.1111/j.1467-842x.2001.tb00310.x

[23] Slade T, Grove R, Burgess P (2011). Kessler Psychological Distress Scale: normative data from the 2007 Australian National Survey of Mental Health and Wellbeing. *Australian New Zealand Journal Psychiatry*, 45(4), 308-316. doi:10.3109/00048674.2010.543653

[24] Australian Bureau of Statistics (ABS) (2018). *4364.0.55.001 - National Health Survey: First Results, 2017-18*. [Available from: https://www.abs.gov.au/ausstats/abs@.nsf/mf/4364.0.55.001 accessed 25/1/2020].

Variants of the K10

The Kessler-6 (K6)

The Kessler-6 (K6) is an abbreviated form of the K10 in which four items are deleted (items 1, 3, 6 and 7). A K6 score can be calculated when the K10 is used.[25]

There is also a K6+ which supplements the K6 with additional items designed to learn about functioning and related factors. These additional items are not required to score the K6 or K10. The official K6/K6+ is a US version, which asks items about the past 30 days.

For further information:

Stephens T, Dulberg C, Joubert N (1999). Mental Health of the Canadian Population: A Comprehensive Analysis. *Chronic Diseases in Canada*, 20(3), 118-126.

Wade T, Cairney J (1997). Age and depression in a nationally representative sample of Canadians: a preliminary look at the National Population Health Survey. *Canadian Journal of Public Health,* 88, 297–302.

The Kessler-5 (K5)

The Kessler-5 (K5) was developed as a means to measure psychological distress among Indigenous Australians. It includes five items derived from the K6 (and, therefore, K10). The original item about the amount of time a person felt 'worthless' was removed, due to concerns about the cultural appropriateness of the item's wording. In addition, slight wording changes were made to two of the original items to enhance understanding in an Indigenous context – namely, in the item which refers to feeling 'hopeless' the term was changed to 'without hope', and in the item that refers to feeling 'restless or fidgety' the term was changed to 'restless or jumpy'.[26]

The K5 has been used in the 2012-13 and 2018-19 National Aboriginal and Torres Strait Islander Health Surveys (NATSIHS) and the 2014–15 National Aboriginal and Torres Strait Islander Social Survey

---

[25] Harvard Medical School (2005). *National Comorbidity Survey* [Available from: https://www.hcp.med.harvard.edu/ncs/k6_scales.php accessed 25/1/2020].

[26] Australian Institute of Health and Welfare (2009). *Measuring the social and emotional wellbeing of Aboriginal and Torres Strait Islander peoples. Cat. no. IHW 24*. [Available from: https://www.aihw.gov.au/getmedia/5b75be10-49ee-4d9c-baf0-5092936c585e/msewatsip.pdf.aspx?inline=true accessed 1/2/2020].

(NATSISS).[27] The K5 is specified in the Primary Mental Health Care Minimum Data Set as an alternative to the K10 for use with Aboriginal and Torres Strait Islander clients.[28,29]

[27] Australian Bureau of Statistics (2013). *4715.0 - National Aboriginal and Torres Strait Islander Health Survey, 2018-19.* [Available from: https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/4715.02018-19?OpenDocument accessed 25/1/2020]

[28] Department of Health (2018). *Primary Mental Health Care Minimum Data Set. Scoring the Kessler-5*. [Available from: https://pmhc-mds.com/resources/ accessed 25/1/2020]

[29] Department of Health (2019). *PMHC-MDS Data Specification Version 2.0.0. 12 November, 2019.* Australian Government, Canberra. [Available from: https://docs.pmhc-mds.com/projects/user-documentation/en/latest/faqs/concepts-processes/outcome-measures.html accessed 25/1/2020]

APPENDIX 7: Behaviour and Symptom Identification Scale (BASIS-32)

For information about the BASIS-32, go to the McLean Hospital website at https://www.ebasis.org/service-levels.

APPENDIX 8: Mental Health Inventory (MHI-38)

Content of the MHI-38 and instructions for completion[30]

							MHI-38
Please read each question and tick the box by the ONE statement that best describes how things have been FOR YOU during the past month.[31] There are no right or wrong answers.							
		1	**2**	**3**	**4**	**5**	**6**
1	How happy, satisfied, or pleased have you been with your personal life during the past month? ***(Tick one)***	Extremely happy, could not have been more satisfied or pleased	Very happy most of the time	Generally, satisfied, pleased	Sometimes fairly satisfied, sometimes fairly unhappy	Generally dissatisfied, unhappy	Very dissatisfied, unhappy most of the time
2	How much of the time have you felt lonely during the past month? ***(Tick one)***	All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
3	How often did you become nervous or jumpy when faced with excitement or unexpected situations during the past month? ***(Tick one)***	Always	Very often	Fairly often	Sometimes	Almost never	Never
4	During the past month, how much of the time have you felt that the future looks hopeful and promising? ***(Tick one)***	All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
5	How much of the time, during the past month, has your daily life been full of things that were interesting to you? ***(Tick one)***	All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
6	How much of the time, during the past month, did you feel relaxed and free from tension? ***(Tick one)***	All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time

[30] In the NOCC, MHI-38 'questions' are referred to as MHI-38 items.

[31] For the purposes of this document, the areas where responses would be recorded have been replaced by the labels corresponding to each point on the 5-point scale.

							MHI-38
		1	**2**	**3**	**4**	**5**	**6**
7	During the past month, how much of the time have you generally enjoyed the things you do? ***(Tick one)***	All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
8	During the past month, have you had any reason to wonder if you were losing your mind, or losing control over the way you act, talk, think, feel, or of your memory? ***(Tick one)***	No, not at all	Maybe a little	Yes, but not enough to be concerned or worried about	Yes, and I have been a little concerned	Yes, and I am quite concerned	Yes, I am very much concerned about it
9	Did you feel depressed during the past month? ***(Tick one)***	Yes, to the point that I did not care about anything for days at a time	Yes, very depressed almost every day	Yes, quite depressed several times	Yes, a little depressed now and then	No, never felt depressed at all	
10	During the past month, how much of the time have you felt loved and wanted? ***(Tick one)***	All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
11	How much of the time, during the past month, have you been a very nervous person? ***(Tick one)***	All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
12	When you have got up in the morning, this past month, about how often did you expect to have an interesting day? ***(Tick one)***	Always	Very often	Fairly often	Sometimes	Almost never	Never
13	During the past month, how much of the time have you felt tense or "high-strung"? ***(Tick one)***	All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time

MHI-38

		1	2	3	4	5	6
14	During the past month, have you been in firm control of your behaviour, thoughts, emotions or feelings? ***(Tick one)***	Yes, very definitely	Yes, for the most part	Yes, I guess so	No, not too well	No, and I am somewhat disturbed	No, and I am very disturbed
15	During the past month, how often did your hands shake when you tried to do something? ***(Tick one)***	Always	Very often	Fairly often	Sometimes	Almost never	Never
16	During the past month, how often did you feel that you had nothing to look forward to? ***(Tick one)***	Always	Very often	Fairly often	Sometimes	Almost never	Never
17	How much of the time, during the past month, have you felt calm and peaceful? ***(Tick one)***	All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
18	How much of the time, during the past month, have you felt emotionally stable? ***(Tick one)***	All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
19	How much of the time, during the past month, have you felt downhearted and blue? ***(Tick one)***	All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
20	How often have you felt like crying, during the past month? ***(Tick one)***	Always	Very often	Fairly often	Sometimes	Almost never	Never
21	During the past month, how often have you felt that others would be better off if you were dead? ***(Tick one)***	Always	Very often	Fairly often	Sometimes	Almost never	Never
22	How much of the time, during the past month, were you able to relax without difficulty? ***(Tick one)***	All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time

							MHI-38
		1	**2**	**3**	**4**	**5**	**6**
23	How much of the time, during the past month, did you feel that your love relationships, loving and being loved, were full and complete? ***(Tick one)***	All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
24	How often, during the past month, did you feel that nothing turned out for you the way you wanted it to? ***(Tick one)***	Always	Very often	Fairly often	Sometimes	Almost never	Never
25	How much have you been bothered by nervousness, or your "nerves", during the past month? ***(Tick one)***	Extremely so, to the point where I could not take care of things	Very much bothered	Bothered quite a bit by nerves	Bothered some, enough to notice	Bothered just a little by nerves	Not bothered at all by this
26	During the past month, how much of the time has living been a wonderful adventure for you? ***(Tick one)***	All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
27	How often, during the past month, have you felt so down in the dumps that nothing could cheer you up? ***(Tick one)***	Always	Very often	Fairly often	Sometimes	Almost never	Never
28	During the past month, did you think about taking your own life? ***(Tick one)***	Yes, very often	Yes, fairly often	Yes, a couple of times	Yes, at one time	No, never	
29	During the past month, how much of the time have you felt restless, fidgety, or impatient? ***(Tick one)***	All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
30	During the past month, how much of the time have you been moody or brooded about things? ***(Tick one)***	All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time

							MHI-38
		1	**2**	**3**	**4**	**5**	**6**
31	How much of the time, during the past month, have you felt cheerful, lighthearted? ***(Tick one)***	All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
32	During the past month, how often did you get rattled, upset or flustered? ***(Tick one)***	Always	Very often	Fairly often	Sometimes	Almost never	Never
33	During the past month, have you been anxious or worried? ***(Tick one)***	Yes, extremely to the point of being sick or almost sick	Yes, very much so	Yes, quite a bit	Yes, some, enough to bother me	Yes, a little bit	No, not at all
34	During the past month, how much of the time were you a happy person? ***(Tick one)***	All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
35	How often during the past month did you find yourself trying to calm down? ***(Tick one)***	Always	Very often	Fairly often	Sometimes	Almost never	Never
36	During the past month, how much of the time have you been in low or very low spirits? ***(Tick one)***	All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
37	How often, during the past month, have you been waking up feeling fresh and rested? ***(Tick one)***	Always, every day	Almost every day	Most days	Some days, but usually not	Hardly ever	Never wake up feeling rested
38	During the past month, have you been under or felt you were under any strain, stress or pressure? ***(Tick one)***	Yes, almost more than I could stand or bear	Yes, quite a bit of pressure	Yes, some more than usual	Yes, some, but about normal	Yes, a little bit	No, not at all

Scoring the MHI-38

All of the 38 MHI-38 items, except two, are rated on a six-point scale (range 1-6). Items 9 and 28 are the exception, each scored on a five-point scale (range 1-5). The pre-coded values of each item are shown on the copy of the measure on the preceding pages.

The 38 MHI-38 items can be grouped into six subscales, two global scales and a global Mental Health Index as shown below.

Scoring the subscales, global scales and the Mental Health Index is relatively complicated as items can be "reversed" scored. Details of subscale, global scale and Mental Health Index scoring are provided below and are based on the manual by Davies and colleagues.[32]

Scoring the subscales

A subscale score can be calculated if all of its items are rated in the range 1 to 6 other than items 9 and 28 that are rated in the range 1 to 5.

The subscales are scored in two steps: (1) item scoring; and (2) the subscales themselves. Of the 38 items, 35 are used to score the six mental health subscales (items 2, 22 and 38 are omitted from the subscales). Each item appears in only one subscale. The mapping of items to the various subscales is shown below.

Item composition of the six MHI subscales included in MHI-38:

Subscale	**Component items**	**Subscale directionality**	**Subscale raw score range**
Anxiety	Items 3, 11, 13, 15, 25, 29, 32, 33 and 35	Higher scores = greater Anxiety	9-54
Depression	Items 9, 19, 30 and 36	Higher scores = greater Depression	4-23
Loss of Behavioural / Emotional Control	Items 8, 14, 16, 18, 20, 21, 24, 27 and 28	Higher scores = greater Loss of Behavioural / Emotional Control	9-53
General Positive Affect	Items 4, 5, 6, 7, 12, 17, 26, 31, 34 and 37	Higher scores = greater Positive Affect	10-60
Emotional Ties	Items 10 and 23	Higher scores = stronger Emotional Ties	2-12
Life Satisfaction	Item 1	Higher scores = greater Life Satisfaction	1-6

Note: Three items (2, 22, 38) are not used to score the subscales

When deriving subscale scores, individual item scoring depends on:

1. whether higher scores on the coded values of the item responses indicate more frequent or intense occurrence of *favourable* or *unfavourable* mental health symptoms; and
2. whether the item belongs to a *positively* or *negatively* scored mental health subscale.

[32] Davies AR, Sherbourne CD, Peterson JR and Ware JE (1998). *Scoring manual: Adult health status and patient satisfaction measures used in RAND's Health Insurance Experiment.* Santa Monica: RAND Corporation. [Available from: https://www.rand.org/pubs/notes/N2190.html accessed 25/1/2020].

All subscales are scored so higher scores indicate more of the construct named by the subscale label. Thus, higher scores on three subscales indicate positive states of mental health (General Positive Affect, Emotional Ties, Life Satisfaction); higher scores on the other three subscales indicate negative states of mental health (Anxiety, Depression, Loss of Behavioural/Emotional Control). The aim of item scoring is to ensure that higher scores on each item reflect more of the construct named by the subscale to which it belongs.

To illustrate this aspect of the MHI-38, consider a consumer who responds to Item 4 with the value '6':

		1	2	3	4	5	6
4	During the past month, how much of the time have you felt that the future looks hopeful and promising? ***(Tick one)***	All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time

The consumer's response indicates that this favourable experience occurred very infrequently during the past month. Item 4 forms a component of the subscale General Positive Affect, a *positively scored subscale* (i.e., higher scores indicate better mental health). Therefore, for the purpose of deriving the General Positive Affect subscale score, the original response must be reversed so higher scores will indicate more frequent occurrence of a favourable aspect of mental health.

Details of item coding rules for calculating raw subscale scores are shown below. After scoring items as indicated, items belonging to each subscale are summed to give subscale scores.

Coding rules for MHI-38 items used to score subscales

The coded Item Responses have to be mapped to their Item Scores before adding up:

Items 1, 3, 4, 5, 6, 7, 10, 11, 12, 13, 15, 16, 17, 19, 20, 21, 23, 24, 25, 26 27, 29, 30, 31, 32, 33, 34, 35, 36 and 37 are 'reverse scored', that is, the standard values for coding individual Item Response value are mapped (➔) to Item scores as follows: 1➔6, 2➔5, 3➔4, 4➔3, 5➔2, 6➔1.

The coded Item Responses for Items 8, 14 and 18 are mapped 1➔1, 2➔2, 3➔3, 4➔4, 5➔5, 6➔6.

The coded Item Responses for Items 9 and 28 are 'reverse scored' as follows: 1➔5, 2➔4, 3➔3, 4➔2, 5➔1.

Scoring the global scales - Psychological Distress and Psychological Well-being

A global scale score can be calculated <u>if all of its items</u> are rated in the range 1 to 6 other than items 9 and 28 that are rated in the range 1 to 5.

The Psychological Distress and Psychological Well-being global scales represent complementary summary scales with Psychological Distress indicating negative states of mental health and Psychological Well-being indicating positive states. Together, they use all 38 items to derive the scores (24 items for Distress, 14 items for Well-being) with no item overlap. The mapping of items to the two global scales is shown below.

Item composition of the MHI-38 global scales:

Global scale	Component items	Global scale directionality	Scale raw score range
Psychological Distress	Items 2, 3, 8, 9, 11, 13, 14, 15, 16, 18, 19, 20, 21, 24, 25, 27, 28, 29, 30, 32, 33, 35, 36 and 38.	Higher scores = greater Psychological Distress	24-142
Psychological Well-being	Items 1, 4, 5, 6, 7, 10, 12, 17, 22, 23, 26, 31, 34 and 37	Higher scores = greater Psychological Well-being	14-84

Like the scoring of the subscales, calculation of the Psychological Distress and Psychological Well-being global scales occurs in two steps: (1) item scoring; and (2) the global scales themselves. Item scoring depends on:

1. whether higher scores on the coded values of the item responses indicate more intense or frequent occurrence of *favourable* or *unfavourable* symptoms of one's mental health; and

2. whether the item belongs to a *positively* or *negatively* scored global scale.

Both global scales are scored so higher scores indicate more of the construct named by the scale's label. Thus, higher scores on Psychological Distress indicate negative states of mental health, while higher scores on Psychological Well-being indicate positive states. Rules for scoring the items used to construct the two global scales are shown below. After scoring items as indicated, items belonging to each global scale are summed to give scale scores.

Coding rules for MHI-38 items used to score the global scales

The coded Item Responses have to be mapped to their Item Scores before adding up.

Rules used to score Psychological Distress

Items 2, 3, 11, 13, 15, 16, 19, 20, 21, 24, 25, 27, 29, 30, 32, 33, 35, 36 and 38 are 'reverse scored', that is, the standard values for coding individual Item Response value are mapped (➔) to Item scores as follows: 1➔6, 2➔5, 3➔4, 4➔3, 5➔2, 6➔1.

The coded Item Responses for Items 8, 14 and 18 are mapped 1➔1, 2➔2, 3➔3, 4➔4, 5➔5, 6➔6.

The coded Item Responses for Items 9 and 28 are 'reverse scored' as follows: 1➔5, 2➔4, 3➔3, 4➔2, 5➔1.

Rules used to score Psychological Well-being

Items 1, 4, 5, 6, 7, 10, 12, 17, 22, 23, 26, 31, 34 and 37 are 'reverse scored' as follows: 1➔6, 2➔5, 3➔4, 4➔3, 5➔2, 6➔1.

Scoring the Mental Health Index

A Mental Health Index score can be calculated <u>if at least 30 of the 38 items</u> are rated in the range 1 to 6 other than items 9 and 28 that are rated in the range 1 to 5.

The Mental Health Index is a single score based on all 38 items designed as high level summary index of the person's mental health status. High scores on the Mental Health Index indicate greater psychological well-being and relatively less psychological distress. The raw score range is 38-226.

The Mental Health Index is calculated in two steps: (1) item scoring; and (2) the Index itself. The objective of item scoring for the Index is to ensure that higher scores on each item reflect more frequent occurrence of favourable mental health symptoms or less frequent occurrence of negative mental health symptoms. Item recoding rules are shown below. After scoring the 38 items as indicated, item scores are simply summed to calculate the Index score.

Coding rules for MHI-38 items used to score the Mental Health Index

The coded Item Responses have to be mapped to their Item Scores before adding up. Items 1, 4, 5, 6, 7, 8, 10, 12, 14, 17, 18, 22, 23, 26, 31, 34 and 37 are 'reverse scored', that is, the standard values for coding individual Item Response value are mapped (➔) to Item scores as follows: 1➔6, 2➔5, 3➔4, 4➔3, 5➔2, 6➔1.

The coded Item Responses for Items 2, 3, 11, 13, 15, 16, 19, 20, 21, 24, 25, 27, 29, 30, 32, 33, 35, 36 and 38 are mapped 1➔1, 2➔2, 3➔3, 4➔4, 5➔5, 6➔6.

The coded Item Responses for Items 9 and 28 are mapped 1➔1, 2➔2, 3➔3, 4➔4, 5➔5.

Summary of item subscale and global scale membership and recoding

The table below summarises the mapping of each MHI-38 item to the 6 subscales, two global scales and the overall Mental Health Index as well as indicating whether the item is reverse scored for the purposes of constructing the specific summary measure. Note that if an item is reverse scored for calculating its 'parent' subscale score, it is similarly handled for the calculation of the Psychological Distress and Psychological Well-being global scores. However, the majority of items are handled differently in the construction of the Mental Health Index.

Summary of MHI-38 items: Membership and scoring rules for subscales, Global scales and the Mental Health Index:

ITEM	SCORE RANGE	SUBSCALES		PSYCHOLOGICAL DISTRESS		PSYCHOLOGICAL WELL-BEING		MENTAL HEALTH INDEX	
		Subscale membership	Reverse scored	Included?	Reverse scored	Included?	Reverse scored	Reverse scored	Flag
1	1-6	Life Satisfaction	Yes			✓	Yes	Yes	
2	1-6			✓	Yes			No	*
3	1-6	Anxiety	Yes	✓	Yes			No	*
4	1-6	General Positive Affect	Yes			✓	Yes	Yes	
5	1-6	General Positive Affect	Yes			✓	Yes	Yes	
6	1-6	General Positive Affect	Yes			✓	Yes	Yes	
7	1-6	General Positive Affect	Yes			✓	Yes	Yes	
8	1-6	Loss of Behav/Emot Control	No	✓	No			Yes	*

ITEM	SCORE RANGE	SUBSCALES		PSYCHOLOGICAL DISTRESS		PSYCHOLOGICAL WELL-BEING		MENTAL HEALTH INDEX	
		Subscale membership	Reverse scored	Included?	Reverse scored	Included?	Reverse scored	Reverse scored	Flag
9	1-5	Depression	Yes	✓	Yes			No	*
10	1-6	Emotional Ties	Yes			✓	Yes	Yes	
11	1-6	Anxiety	Yes	✓	Yes			No	*
12	1-6	General Positive Affect	Yes			✓	Yes	Yes	
13	1-6	Anxiety	Yes	✓	Yes			No	*
14	1-6	Loss of Behav/Emot Control	No	✓	No			Yes	*
15	1-6	Anxiety	Yes	✓	Yes			No	*
16	1-6	Loss of Behav/Emot Control	Yes	✓	Yes			No	*
17	1-6	General Positive Affect	Yes			✓	Yes	Yes	
18	1-6	Loss of Behav/Emot Control	No	✓	No			Yes	*
19	1-6	Depression	Yes	✓	Yes			No	*
20	1-6	Loss of Behav/Emot Control	Yes	✓	Yes			No	*
21	1-6	Loss of Behav/Emot Control	Yes	✓	Yes			No	*
22	1-6					✓	Yes	Yes	
23	1-6	Emotional Ties	Yes			✓	Yes	Yes	
24	1-6	Loss of Behav/Emot Control	Yes	✓	Yes			No	*
25	1-6	Anxiety	Yes	Y	Yes			No	*
26	1-6	General Positive Affect	Yes			✓	Yes	Yes	
27	1-6	Loss of Behav/Emot Control	Yes	✓	Yes			No	*
28	1-5	Loss of Behav/Emot Control	Yes	✓	Yes			No	*
29	1-6	Anxiety	Yes	✓	Yes			No	*
30	1-6	Depression	Yes	✓	Yes			No	*
31	1-6	General Positive Affect	Yes			✓	Yes	Yes	
32	1-6	Anxiety	Yes	✓	Yes			No	*
33	1-6	Anxiety	Yes	✓	Yes			No	*
34	1-6	General Positive Affect	Yes			✓	Yes	Yes	
35	1-6	Anxiety	Yes	✓	Yes			No	*
36	1-6	Depression	Yes	✓	Yes			No	*
37	1-6	General Positive Affect	Yes			✓	Yes	Yes	
38	1-6			✓	Yes			No	*

** Flag indicates the direction of scoring for calculating the Mental Health Index differs from that used to construct the subscale and global scale scores.*

Variants of the MHI-38

The MHI-5

The MHI-5 is a brief measure of mental health comprising 5 items drawn from the MHI-38. An MHI-5 score can be derived from the MHI-38 information already gathered as part of the NOCC. The following information[33] about the MHI-5 is provided because it is otherwise relatively inaccessible.

The RAND research group developed the MHI-38 alongside another measure, the 36-Item Short Form Survey (SF-36). In doing so, five items were taken directly from the MHI-38 to make up the mental health subscale of the SF-36 (named 'Emotional Wellbeing' in the original RAND SF-36). These five items are also used as a free-standing scale, known as the MHI-5.

MHI-38 items forming the MHI-5 (mapped to the Australian SF-36)

These items are prefaced by "How much of the time in the last 4 weeks … " in the Australian SF-36, so the undefined "month" of the MHI-38 items is a minor variant.

MHI-38 Item #	SF-36 Item #
#11 "Have you been a very nervous person"	Q9b
#27 "Have you felt so down in the dumps that noting could cheer you up"	Q9c
#17 "Have you felt calm and peaceful"	Q9d
#19 "Have you felt downhearted and blue"	Q9f
#34 "Have you been a happy person"	Q9h

Scoring the MHI-5

For each of the above items, the response scale has six levels. These may be scored in two different ways, depending on the external reference data one wished to use. In the 'SF' scoring the six response options are scored from 0 to 100 by increments of 20; in the "MHI" scoring in which they are scored 1 through 6 by increments of 1. These are outlined below:

1. SF-36 Scoring

The SF-36 weighting of each item-response combination is shown below:

MHI-38 Item #	None of the time	A little of the time	Some of the time	A Good bit of the time	Most of the time	All of the time
#11 "very nervous person"	100	80	60	40	20	0
#27 "so down in the dumps"	100	80	60	40	20	0
#17 "calm and peaceful"	0	20	40	60	80	100

[33] This information was provided by Mr Gavin Stewart (formerly, Manager, Evaluation Program, Centre for Mental Health, NSW Health Department).

#19 “downhearted and blue”	100	80	60	40	20	0
#34 “happy person”	0	20	40	60	80	100

When the items are scored in this way, added up, and averaged, the resulting scale score is known as the ‘Mental Health’ score of the SF-36 in Australia, and the ‘Emotional Wellbeing’ score in the original RAND SF-36 labelling. In the Confidentialised Unit Record File produced by the ABS for the 1995 National Health Survey, this scale score is labelled MENHLTR.

2. MHI-5 ‘Psychological Distress’ Scoring

The “raw score” weights for each item-response combination are shown in the table below:

MHI-38 Item #	None of the time	A little of the time	Some of the time	A Good bit of the time	Most of the time	All of the time
#11 “very nervous person”	1	2	3	4	5	6
#27 “so down in the dumps”	1	2	3	4	5	6
#17 “calm and peaceful”	6	5	4	3	2	1
#19 “downhearted and blue”	1	2	3	4	5	6
#34 “happy person”	6	5	4	3	2	1

This scale does not exist in the MHI-38 scoring scheme, and in fact the five items are scattered over four subscales, and divided between ‘psychological distress’ and ‘wellbeing’ domains.

The relation between scale scores produced as above, and the SF-36 scoring, is a perfect negative correlation coefficient of –1. This is because the response weights (0, 20, 40, 60, 80, 100) and (6, 5, 4, 3, 2, 1) are correlated in that way (one scale is a linear transformation of the other). If we add up the scores and call the result MHI5T (for MHI5 Total), then we can calculate the SF-36 score version (MENHLTR) from MHI5T as below:

- MENHLTR = 100 – [(MHI5T/5 – 1)*20]

and conversely we can calculate MHI5T from MENHLTR as:

- MHI5T = 5 - [MENHLTR/4 – 25]

The cut-off value suggested for ‘distress’ is a MHI5T score of 17 or more. Note that MHI5T is in the reverse direction, so larger scores mean higher distress.

For further information see:

Hays RD, Sherbourne CD, Mazel RM (1993). The RAND 36-Item Health Survey 1.0. *Health Economics*, 2(3), 217–227. doi:10.1002/hec.4730020305

Ostbye T, Steenhuis R, Walton R, Cairney J (2000). Correlates of dysphoria in Canadian seniors: The Canadian Study of Health and Aging. *Canadian Journal of Public Health,* 91(4), 313-317.

APPENDIX 9: Health of the Nation Outcome Scales for Children and Adolescents (HoNOSCA)

Content of the HoNOSCA and instructions for completion[34]

HoNOSCA rating guidelines

- Rate items in order from 1 to 15.
- Use all available information in making your rating.
- Do not include information already rated in an earlier item.
- Rate the most severe problem that occurred in the period rated.
- The rating period is generally the preceding two weeks, except at discharge from inpatient care, when it is the previous three days.
- Each item is rated on one of five levels of severity (0 to 4) as follows:

  0 No problem.

  1 Minor problem requiring no formal action.

  2 Mild problem.

  3 Problem of moderate severity.

  4 Severe to very severe problem.

  9 Not known or not applicable
- As far as possible, the use of rating point 9 should be avoided, because missing data make scores less comparable over time or between settings.
- Specific information on how to rate each point on each item is provided in the glossary.

HoNOSCA glossary

	HoNOSCA glossary
Item	**Description and rating levels**
1	**Problems with disruptive, antisocial or aggressive behaviour**
	Include behaviour associated with any disorder, such as hyperkinetic disorder, depression, autism, drugs or alcohol.
	Include physical or verbal aggression (e.g., pushing, hitting, vandalism, teasing), or physical or sexual abuse of other children.

[34] In the NOCC, HoNOSCA 'scales' are referred to as HoNOSCA items.

	HoNOSCA glossary
Item	**Description and rating levels**
	<u>Include</u> antisocial behaviour (e.g., thieving, lying, cheating) or oppositional behaviour (e.g., defiance, opposition to authority or tantrums).
	<u>Do not</u> include: Over-activity rated at scale 2; Truancy, rated at scale 13; Self-harm rated at Scale 3.
	0 No problems of this kind during the period rated.
	1 Minor quarrelling, demanding behaviour, undue irritability, lying, etc.
	2 Mild but definitely disruptive or antisocial behaviour, lesser damage to property, or aggression, or defiant behaviour.
	3 Moderately severe aggressive behaviour such as fighting, persistently threatening, very oppositional, more serious destruction of property, or moderately delinquent acts.
	4 Disruptive in almost all activities, or at least one serious physical attack on others or animals, or serious destruction of property.
2	**Problems with over-activity, attention or concentration**
	<u>Include</u> overactive behaviour associated with any disorder such as hyperkinetic disorder, mania, or arising from drugs.
	<u>Include</u> problems with restlessness, fidgeting, inattention or concentration due to any cause, including depression.
	0 No problems of this kind during the period rated.
	1 Slight over-activity or minor restlessness, etc.
	2 Mild but definite over-activity or attention problems, but can usually be controlled.
	3 Moderately severe over-activity or attention problems that are sometimes uncontrollable.
	4 Severe over-activity or attention problems that are present in most activities and almost never controllable.
3	**Non-accidental self-injury**
	<u>Include</u> self-harm such as hitting self and self-cutting, suicide attempts, overdoses, hanging, drowning, etc.
	<u>Do not</u> include scratching, picking as a direct result of physical illness rated at Scale 6.
	<u>Do not</u> include accidental self-injury due, e.g., to severe learning or physical disability, rated at scale 6.
	<u>Do not</u> include illness or injury as a direct consequence of drug or alcohol use, rated at scale 6.
	0 No problems of this kind during the period rated.
	1 Occasional thoughts about death, or of self-harm not leading to injury. No self-harm or suicidal thoughts.
	2 Non-hazardous self-harm, such as wrist scratching, whether or not associated with suicidal thoughts.
	3 Moderately severe suicidal intent (including preparatory acts, e.g., collecting tablets) or moderate non-hazardous self-harm (e.g., small overdose).
	4 Serious suicidal attempt (e.g., serious overdose), or serious deliberate self-injury.
4	**Problems with alcohol, substance or solvent misuse**

	HoNOSCA glossary
Item	**Description and rating levels**
	Include problems with alcohol, substance or solvent misuse taking into account current age and societal norms.
	Do not include aggressive or disruptive behaviour due to alcohol or drug use, rated at Scale 1.
	Do not include physical illness or disability due to alcohol or drug use, rated at Scale 6.
	0 No problems of this kind during the period rated.
	1 Minor alcohol or drug use, within age norms.
	2 Mildly excessive alcohol or drug use.
	3 Moderately severe drug or alcohol problems significantly out of keeping with age norms.
	4 Severe drug or alcohol problems leading to dependency or incapacity.
5	**Problems with scholastic or language skills**
	Include problems in reading, spelling, arithmetic, speech or language associated with any disorder or problem, such as specific developmental learning problems, or physical disability such as hearing problems.
	Include reduced scholastic performance associated with emotional or behavioural problems.
	Children with generalised learning disability should not be included unless their functioning is below the expected level.
	Do not include temporary problems resulting purely from inadequate education.
	0 No problems of this kind during the period rated.
	1 Minor impairment within the normal range of variation.
	2 Minor but definite impairment of clinical significance.
	3 Moderately severe problems, below the level expected on the basis of mental age, past performance, or physical disability.
	4 Severe impairment, much below the level expected on the basis of mental age, past performance, or physical disability.
6	**Physical illness or disability problems**
	Include physical illness or disability problems that limit or prevent movement, impair sight or hearing, or otherwise interfere with personal functioning.
	Include movement disorder, side effects from medication, physical effects from drug or alcohol use, or physical complications of psychological disorders such as severe weight loss.
	Include self-injury due to severe learning disability or as of consequence of self-injury such as head banging.
	Do not include somatic complaints with no organic basis, rated at scale 8.
	0 No incapacity as a result of physical health problems during the period rated.
	1 Slight incapacity as a result of a health problem during the period (e.g., cold, non-serious fall, etc).
	2 Physical health problem that imposes mild but definite functional restriction.
	3 Moderate degree of restriction on activity due to physical health problems.
	4 Complete or severe incapacity due to physical health problems.

	HoNOSCA glossary
Item	**Description and rating levels**
7	**Problems associated with hallucinations, delusions or abnormal perceptions**
	Include hallucinations, delusions or abnormal perceptions irrespective of diagnosis.
	Include odd and bizarre behaviour associated with hallucinations and delusions.
	Include problems with other abnormal perceptions such as illusions or pseudo-hallucinations, or overvalued ideas such as distorted body image, suspicious or paranoid thoughts.
	Do not include disruptive or aggressive behaviour associated with hallucinations or delusions, rated at Scale 1.
	Do not include overactive behaviour associated with hallucinations or delusions, rated at Scale 2.
	0 No evidence of abnormal thoughts or perceptions during the period rated.
	1 Somewhat odd or eccentric beliefs not in keeping with cultural norms.
	2 Abnormal thoughts or perceptions are present (e.g., paranoid ideas, illusions or body image disturbance), but there is little distress or manifestation in bizarre behaviour (i.e., clinically present but mild).
	3 Moderate preoccupation with abnormal thoughts or perceptions or delusions; hallucinations, causing much distress, or manifested in obviously bizarre behaviour.
	4 Mental state and behaviour is seriously and adversely affected by delusions or hallucinations or abnormal perceptions, with severe impact on the person or others.
8	**Problems with non-organic somatic symptoms**
	Include problems with gastrointestinal symptoms such as non-organic vomiting or cardiovascular symptoms or neurological symptoms or non-organic enuresis and encopresis or sleep problems or chronic fatigue.
	Do not include movement disorders such as tics, rated at Scale 6.
	Do not include physical illnesses that complicate non-organic somatic symptoms, rated at Scale 6.
	0 No problems of this kind during the period rated.
	1 Slight problems only, such as occasional enuresis, minor sleep problems, headaches or stomach aches without organic basis.
	2 Mild but definite problem with non-organic somatic symptoms.
	3 Moderately severe, symptoms produce a moderate degree of restriction in some activities.
	4 Very severe problems or symptoms persist into most activities. The child or adolescent is seriously or adversely affected.
9	**Problems with emotional and related symptoms**
	Rate only the most severe clinical problem not considered previously.
	Include depression, anxiety, worries, fears, phobias. Obsessions or compulsions, arising from any clinical condition including eating disorders.
	Do not include aggressive, destructive or over-activity behaviours attributed to fears or phobias, rated at Scale 1.
	Do not include physical complications of psychological disorders, such as severe weight loss, rated at Scale 6.
	0 No evidence of depression, anxiety, fears or phobias during the period rated.

		HoNOSCA glossary
Item	**Description and rating levels**	
	1	Mildly anxious, gloomy, or transient mood changes.
	2	A mild but definite emotional symptom is clinically present, but is not preoccupying.
	3	Moderately severe emotional symptoms, which are preoccupying, intrude into some activities, and are uncontrollable at least sometimes.
	4	Severe emotional symptoms which intrude into all activities and are nearly always uncontrollable.
10	**Problems with peer relationships**	
	Include problems with school mates and social network. Problems associated with active or passive withdrawal from social relationships or problems with over intrusiveness or problems with the ability to form satisfying peer relationships.	
	Include social rejection as a result of aggressive behaviour or bullying.	
	Do not include aggressive behaviour, bullying, rated at Scale 1.	
	Do not include problems with family or siblings rated at Scale 12.	
	0	No significant problems during the period rated.
	1	Either transient or slight problems, occasional social withdrawal.
	2	Mild but definite problems in making or sustaining peer relationships. Problems causing distress due to social withdrawal, over-intrusiveness, rejection or being bullied.
	3	Moderate problems due to active or passive withdrawal from social relationships, over-intrusiveness, or to relationships that provide little or no comfort or support, e.g., as a result of being severely bullied.
	4	Severe social isolation with hardly any friends due to inability to communicate socially or withdrawal from social relationships.
11	**Problems with self-care and independence**	
	Rate the overall level of functioning, e.g., problems with basic activities of self-care such as feeding, washing, dressing, toilet, and also complex skills such as managing money, travelling independently, shopping etc.; taking into account the norm for the child's chronological age.	
	Include poor levels of functioning arising from lack of motivation, mood or any other disorder.	
	Do not include lack of opportunities for exercising intact abilities and skills, as might occur in an over-restrictive family, rated at Scale 12.	
	Do not include enuresis and encopresis, rated at Scale 8.	
	0	No problems of this kind during the period rated; good ability to function in all areas.
	1	Minor problems, e.g., untidy, disorganised.
	2	Self-care adequate, but major inability to perform one or more complex skills (see above).
	3	Major problems in one or more areas of self-care (eating, washing, dressing) or major inability to perform several complex skills.
	4	Severe disability in all or nearly all areas of self-care or complex skills.
12	**Problems with family life and relationships**	
	Include parent-child and sibling relationship problems.	

Item	Description and rating levels
	Include relationships with foster parents, social workers/ teachers in residential placements. Relationships in the home with separated parents and siblings should both be included. Parental personality problems, mental illness, marital difficulties should only be rated here if they have an effect on the child or adolescent.
	Include problems such as poor communication, arguments, verbal or physical hostility, criticism and denigration, parental neglect or rejection, over-restriction, sexual or physical abuse.
	Include sibling jealousy, physical or coercive sexual abuse by sibling.
	Include problems with enmeshment and overprotection.
	Include problems with family bereavement leading to reorganisation.
	Do not include aggressive behaviour by the child or adolescent, rated at Scale 1.
	0 No problems during the period rated.
	1 Slight or transient problems.
	2 Mild but definite problem, e.g., some episodes of neglect or hostility or enmeshment or overprotection.
	3 Moderate problems, e.g., neglect, abuse, hostility. Problems associated with family or carer breakdown or reorganisation.
	4 Serious problems with the child or adolescent feeling or being victimised, abused or seriously neglected by family or carer.
13	**Poor school attendance**
	Include truancy, school refusal, school withdrawal or suspension for any cause.
	Include attendance at type of school at time of rating, e.g., hospital school, home tuition, etc. If school holiday, rate the last two weeks of the previous term.
	0 No problems of this kind during the period rated.
	1 Slight problems, e.g., late for two or more lessons.
	2 Definite but mild problems, e.g., missed several lessons because of truancy or refusal to go to school.
	3 Marked problems, absent several days during the period rated.
	4 Severe problems, absent most or all days. Include school suspension, exclusion or expulsion for any cause during the period rated.
Scales 14 and 15 are concerned with problems for the **child, parent or carer** relating to lack of information or access to services. These are not direct measures of the child's mental health but changes here may result in long-term benefits for the child.	
14	**Problems with knowledge or understanding about the nature of the child or adolescent's difficulties (in the previous two weeks)**
	Include lack of useful information or understanding available to the child or adolescent, parents or carers.
	Include lack of explanation about the diagnosis or the cause of the problem or the prognosis.
	0 No problems during the period rated. Parents and carers have been adequately informed about the child or adolescent's problems
	1 Slight problems only.

Item	Description and rating levels
	2 Mild but definite problems.
	3 Moderately severe problems. Parents and carers have very little or incorrect knowledge about the problem which is causing difficulties such as confusion or self-blame.
	4 Very severe problems. Parents have no understanding about the nature of their child or adolescent's problems.
15	**Problems with lack of information about services or management of the child or adolescent's difficulties**
	Include lack of useful information or understanding available to the child or adolescent, parents or carers or referrers.
	Include lack of information about the most appropriate way of providing services to the child or adolescent, such as care arrangements, educational placements, or respite care.
	0 No problems during the period rated. The need for all necessary services has been recognised.
	1 Slight problems only.
	2 Mild but definite problems.
	3 Moderately severe problems. Parents and carers have been given very little information about appropriate services, or professionals are not sure where a child should be managed.
	4 Very severe problems. Parents have no information about appropriate services or professionals do not know where a child should be managed.

HoNOSCA sample rating sheet

Enter the severity rating for each item in the corresponding item box to the right of the item.[35] Rate 9 if Not Known or Not Applicable.

Item	Description	Rating level					
Section A:							
1	Disruptive, antisocial or aggressive behaviour	0	1	2	3	4	*9*
2	Over-activity, attention or concentration	0	1	2	3	4	*9*
3	Non-accidental self-injury	0	1	2	3	4	*9*
4	Alcohol, substance/solvent misuse	0	1	2	3	4	*9*
5	Scholastic or language skills	0	1	2	3	4	*9*
6	Physical illness or disability problems	0	1	2	3	4	*9*
7	Hallucinations, delusions	0	1	2	3	4	*9*
8	Non-organic somatic symptoms	0	1	2	3	4	*9*
9	Emotional and related symptoms	0	1	2	3	4	*9*

[35] For the purposes of this document, the areas where responses would be recorded have been replaced by the item coding values.

Item	Description	Rating level					
10	Peer relationships	0	1	2	3	4	*9*
11	Self-care and independence	0	1	2	3	4	*9*
12	Family life and relationships	0	1	2	3	4	*9*
13	Poor school attendance	0	1	2	3	4	*9*
Section B: Problems for the child, parent or carer relating to lack of information or access to services.							
14	Lack of knowledge – nature of difficulties	0	1	2	3	4	*9*
15	Lack of information – services/management	0	1	2	3	4	*9*

Rating levels: 0, No problem; 1, Minor problem requiring no formal action; 2, Mild problem; 3, Moderately severe problem; 4, Severe to very severe problem; 9, Not known or not applicable.

Scoring the HoNOSCA

All 15 HoNOSCA items are rated on an item-specific anchored five-point scale with higher scores indicating more problems. Unlike the HoNOS, subscale scores have not been formally defined for the HoNOSCA although the developers note that the items can be logically grouped into similar categories as shown below.[36]

Structure of the 15 HoNOSCA items:

Item	Description	Subscale
1	Disruptive, antisocial or aggressive behaviour	Behaviour
2	Over-activity, attention or concentration	
3	Non-accidental self-injury	
4	Alcohol, substance/solvent misuse	
5	Scholastic or language skills	Impairment
6	Physical illness or disability problems	
7	Hallucinations, delusions	Symptoms
8	Non-organic somatic symptoms	
9	Emotional and related symptoms	
10	Peer relationships	Social
11	Self-care and independence	
12	Family life and relationships	
13	Poor school attendance	
14	Lack of knowledge – nature of difficulties	Information

[36] The HoNOSCA developers use the term 'section' for these categories. For consistency with the HoNOS and HoNOS65+, and to draw a distinction from 'section A' and 'section B' of the HoNOSCA, the term 'subscale' is used in the NOCC.

Item	Description	Subscale
15	Lack of information – services/management	

A subscale score can be calculated if all of its items are rated in the range 0 to 4, with the exception of the Information score where only one of the two items is required. Ratings of 9 are excluded from the calculation of subscale scores. The subscale score is then the simple sum of its item scores.

A total score can be calculated if at least 11 of the first 13 items are rated in the range 0 to 4. Ratings of 9 are excluded from the calculation of the total score. The total score is then the simple sum of the scores for items 1-13.

Variants of the HoNOSCA

Nil.

APPENDIX 10: Children's Global Assessment Scale (CGAS)

Content of the CGAS and instructions for completion

Rating guidelines

Rate the patient's most impaired level of general functioning for the previous two week period by selecting the *lowest* level which describes his/her current functioning on a hypothetical continuum of health-illness. Use intermediary levels (e.g., 35, 58, 62).

Rate actual functioning regardless of treatment or prognosis. The examples of behaviour provided are only illustrative and are not required for a particular rating.

CGAS glossary

	CGAS glossary
100-91	***Superior functioning*** in all areas (at home, at school and with peers); involved in a wide range of activities and has many interests (e.g., has hobbies or participates in extracurricular activities or belongs to an organised group such as Scouts, etc); likeable, confident; 'everyday' worries never get out of hand; doing well in school; no symptoms.
90-81	***Good functioning in all areas***; secure in family, school, and with peers; there may be transient difficulties and 'everyday' worries that occasionally get out of hand (e.g., mild anxiety associated with an important exam, occasional 'blowups' with siblings, parents or peers).
80-71	***No more than slight impairments in functioning*** at home, at school, or with peers; some disturbance of behaviour or emotional distress may be present in response to life stresses (e.g., parental separations, deaths, birth of a sib), but these are brief and interference with functioning is transient; such children are only minimally disturbing to others and are not considered deviant by those who know them.
70-61	***Some difficulty in a single area but generally functioning pretty well*** (e.g., sporadic or isolated antisocial acts, such as occasionally playing hooky or petty theft; consistent minor difficulties with school work; mood changes of brief duration; fears and anxieties which do not lead to gross avoidance behaviour; self-doubts); has some meaningful interpersonal relationships; most people who do not know the child well would not consider him/her deviant but those who do know him/her well might express concern.
60-51	***Variable functioning with sporadic difficulties or symptoms in several but not all social areas;*** disturbance would be apparent to those who encounter the child in a dysfunctional setting or time but not to those who see the child in other settings.
50-41	***Moderate degree of interference in functioning in most social areas or severe impairment of functioning in one area,*** such as might result from, for example, suicidal preoccupations and ruminations, school refusal and other forms of anxiety, obsessive rituals, major conversion symptoms, frequent anxiety attacks, poor to inappropriate social skills, frequent episodes of aggressive or other antisocial behaviour with some preservation of meaningful social relationships.

	CGAS glossary
40-31	***Major impairment of functioning in several areas and unable to function in one of these areas*** (i.e., disturbed at home, at school, with peers, or in society at large, e.g., persistent aggression without clear instigation; markedly withdrawn and isolated behaviour due to either mood or thought disturbance, suicidal attempts with clear lethal intent; such children are likely to require special schooling and/or hospitalisation or withdrawal from school (but this is not a sufficient criterion for inclusion in this category).
30-21	***Unable to function in almost all areas*** e.g., stays at home, in ward, or in bed all day without taking part in social activities *or* severe impairment in reality testing *or* serious impairment in communication (e.g., sometimes incoherent or inappropriate).
20-11	***Needs considerable supervision*** to prevent hurting others or self (e.g., frequently violent, repeated suicide attempts) *or* to maintain personal hygiene *or* gross impairment in all forms of communication, e.g., severe abnormalities in verbal and gestural communication, marked social aloofness, stupor, etc.
10-1	***Needs constant supervision*** (24-hour care) due to severely aggressive or self-destructive behaviour or gross impairment in reality testing, communication, cognition, affect or personal hygiene.

Scoring the CGAS

The measure provides a single global rating only, on a scale of 1–100.

Variants of the CGAS

Nil.

APPENDIX 11: Factors Influencing Health Status (FIHS)

Content of the FIHS and instructions for completion

Rating guidelines

The clinician is required to rate the items retrospectively, at the end of the episode or at 91-day review.

Completing the measure simply requires, for each item, an indication of whether any of the listed factors required special clinical evaluation, therapeutic treatment, diagnostic procedures or increased clinical care and/or monitoring during the course of the episode.

Only record a problem as being present where the problem has required specific intervention or additional treatment resources over the preceding Period of Care.

Where a problem can be coded under more than one FIHS category, it should be recorded once, using the category of 'best fit'.

FIHS item elaboration

		FIHS	
		Yes	**No**
1	**Maltreatment syndromes**	1	2
	Includes: • neglect or abandonment; • physical abuse; • sexual abuse; and • psychological abuse.		
2	**Problems related to negative life events in childhood**	1	2
	Includes: • loss of love relationship in childhood; • removal from home in childhood; • altered pattern of family relationships in childhood; • problems related to alleged sexual abuse of child by person within primary support group; • problems related to alleged sexual abuse of child by person outside primary support group; • problems related to alleged physical abuse of child; • personal frightening experience in childhood; and • other negative life events in childhood.		
3	**Problems related to upbringing**	1	2

			FIHS
		Yes	**No**
	Includes: • inadequate parental supervision and control; • parental overprotection; • institutional upbringing; • hostility towards and scapegoating of child; • emotional neglect of child; • other problems related to neglect in upbringing; • inappropriate parental pressure and other abnormal qualities of upbringing; and • other specified problems related to upbringing.		
4	**Problems related to primary support group, including family circumstances**	1	2
	Includes: • problems in relationship with spouse or partner; • problems in relationship with parents and in-laws; • inadequate family support; • absence of family member; • disappearance and death of family member; • disruption of family by separation and divorce; • dependent relative needing care at home; • other stressful life events affecting family and household; • other specified problems related to primary support group; • problem related to primary support group; and • unspecified.		
5	**Problems related to social environment**	1	2
	Includes: • problems of adjustment to life cycle transitions; • atypical parenting situation; • living alone; • acculturation difficulty; • social exclusion and rejection; and • target of perceived adverse discrimination and persecution.		
6	**Problems related to certain psychosocial circumstances**	1	2
	Includes: • problems related to unwanted pregnancy; • problems related to multiparity; • seeking and accepting physical, nutritional and chemical interventions known to be hazardous and harmful; • seeking and accepting behavioural and psychological interventions known to be hazardous or harmful; and • discord with counsellors.		

			FIHS
		Yes	**No**
7	**Problems related to other psychosocial circumstances**	1	2
	Includes: • conviction in civil and criminal proceedings without imprisonment; • imprisonment and other incarceration; • problems related to release from prison; • problems related to other legal circumstances; • victim of crime and terrorism; • exposure to disaster; and • war and other hostilities.		

Scoring the FIHS

All 7 FIHS items are rated either No or Yes.

A total score can be calculated if at least 6 of the 7 items are rated either No or Yes. The total score is then the simple count of positive (Yes) responses.

The ICD10-AM code descriptors constituting the Factors Influencing Health Status checklist (FIHS)

If any of the FIHS items are checked as being present during an inpatient admission (that is, if they "required specific intervention or additional treatment resources" during the admission) then they qualify as comorbid conditions that should be coded, using ICD10-AM, in the relevant diagnostic fields of the patient record. This will appear in the National Minimum Data Set – Admitted Patient Mental Health Care, and in fact it should be possible to calculate the FIHS score from the routine inpatient record, properly coded. So as to facilitate that coding, the table below maps the FIHS items onto the corresponding ICD10-AM version 3 codes.

ICD10-AM code descriptors constituting the FIHS
T74: Maltreatment syndromes (FIHS Item 1) Includes: Neglect or abandonment (T74.0); Physical abuse (T74.1); Sexual abuse (T74.2); Psychological abuse (T74.3). *Excludes: Other maltreatment syndromes (T74.8); Maltreatment syndrome, unspecified (T74.9)*
Z61: Problems related to negative life events in childhood (FIHS Item 2) Includes: Loss of love relationship in childhood (Z61.0); Removal from home in childhood (Z61.1); Altered pattern of family relationships in childhood (Z61.2); Problems related to alleged sexual abuse of child by person within primary support group (Z61.4); Problems related to alleged sexual abuse of child by person outside primary support group (Z61.5); Problems related to alleged physical abuse of child (Z61.6); Personal frightening experience in childhood (Z61.7); Other negative life events in childhood (Z61.8). *Excludes: Events resulting in loss of self-esteem in childhood (Z61.3); Negative life event in childhood, unspecified (Z61.9)*
Z62: Problems related to upbringing (FIHS Item 3) Includes: Inadequate parental supervision and control (Z62.0); Parental overprotection (Z62.1); Institutional upbringing (Z62.2); Hostility towards and scapegoating of child (Z62.3); Emotional neglect of child (Z62.4); Other problems related to neglect in upbringing (Z62.5); Inappropriate parental pressure and other abnormal qualities of upbringing (Z62.6); Other specified problems related to upbringing (Z62.8). *Excludes: Problem related to upbringing, unspecified (Z62.9)*

ICD10-AM code descriptors constituting the FIHS
Z63: Problems related to primary support group, including family circumstances (FIHS Item 4) Includes: Problems in relationship with spouse or partner (Z63.0); Problems in relationship with parents and in-laws (Z63.1); Inadequate family support (Z63.2); Absence of family member (Z63.3); Disappearance and death of family member (Z63.4); Disruption of family by separation and divorce (Z63.5); Dependant relative needing care at home (Z63.6); Other stressful life events affecting family and household (Z63.7); Other specified problems related to primary support group (Z63.8); problem related to primary support group, unspecified (Z63.9).
Z60: Problems related to social environment (FIHS Item 5) Includes: Problems of adjustment to lifecycle transitions (Z60.0); Atypical parenting situation (Z60.1); Living alone (Z60.2); Acculturation difficulty (Z60.3); Social exclusion and rejection (Z60.4); Target of perceived adverse discrimination and persecution (Z60.5). *Excludes: Other problems related to social environment (Z60.8); Problem related to social environment, unspecified (Z60.9).*
Z64: Problems related to certain psychosocial circumstances (FIHS Item 6) Includes: Problems related to unwanted pregnancy (Z64.0); Problems related to multiparity (Z64.1); Seeking and accepting physical, nutritional and chemical interventions known to be hazardous and harmful (Z64.2); Seeking and accepting behavioural and psychological interventions known to be hazardous and harmful (Z64.3); Discord with counsellors (Z64.4). *Excludes: Substance dependence.*
Z65: Problems related to other psychosocial circumstances (FIHS Item 7) Includes: Conviction in civil and criminal proceedings without imprisonment (Z65.0); Imprisonment and other incarceration (Z65.1); Problems related to release from prison (Z65.2); Problems related to other legal circumstances (Z65.3); Victim of crime and terrorism (Z65.4); Exposure to disaster, war or other hostilities (Z65.5). *Excludes: Other specified problems related to social circumstances (Z65.8); Problem related to unspecified psychosocial circumstance (Z65.9).*

Variants of the FIHS

Nil.

APPENDIX 12: Strengths and Difficulties Questionnaire (SDQ)

For information about the SDQ, go to the Youth in Mind website at https://www.sdqinfo.org

APPENDIX 13: Log of Amendments to Mental Health National Outcomes and Casemix Collection: Overview of clinician-rated and consumer self-report measures, Version 2.1

PAGE	AMENDMENT
Title	Version 1.50 changed to Version 2.0, and subsequently 2.1, to improve alignment with the NOCC Technical Specifications.
3-5	Previous section 'About this document' divided into two separate sections '3. Background' and '4. Purpose and scope of document'.
6-28	Section '5. Overview of the measures' expanded to include details of the NOCC rating period and measurement properties for each measure.
6, 12-14, 20, 24, 51-55	Focus of Care removed as it is no longer included in the NOCC. Added Phase of Care which was introduced into the NOCC as of 1 July 2017.
56-78	Consumer self-report measures for adults reordered to reflect the number of states and territories using each measure (highest to lowest).
56-57	Kessler-10 LM corrected 'last' to 'past' to reflect alignment with National Health Surveys.
57-58	Kessler-10 L3D corrected 'last' to 'past' to reflect alignment with National Health Surveys and corrected error in rating period in each item, i.e. last four weeks amended to past three days.
59	Kessler-10 threshold scores updated.
Appendices	All measures presented in tabular format. Coding values included within the copy of each measure to facilitate understanding of instructsions for scoring.
Appendices	Added NOCC reporting criteria for determining when a measure is 'valid' with respect to the clinical ratings provided.
Appendices	Information about measure variants updated.
Appendices	Addressed inconsistencies in terminology to describe measure components (e.g., questions, items) and clarified terminology used in the NOCC.
Numerous	Throughout the document, links to online reference materials added where available. All web-links checked and access dates documented.