National Outcomes and Casemix Collection (NOCC): Domain Framework

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National Outcomes and Casemix Collection (NOCC): Domain Framework

A report produced by the National Mental Health Information Development Expert Advisory Panel (NMHIDEAP).

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Contents

Introduction

A person's health status is multi-dimensional and can be described by multiple elements or *domains*. Although referring more generally to health, Chatterji (Chatterji, et al., 2002) notes the following, which can be equally ascribed to mental health status:

> *In order to measure and report on the health of individuals it is important to develop a valid, reliable and comparable way to measure health status. This includes:*
>
> - *the specification of a set of domains necessary to describe health status for measurement purposes;*
> - *the description of what is being measured in each domain.*

Establishing a framework for the domains that underpin what should be measured for individual consumers receiving mental health services will inform future developments in mental health outcome measurement in Australia.

Background

The National Mental Health Strategy, first agreed by Australian Health Ministers in 1992, identified the regular assessment of consumer outcomes as a priority action. The National Mental Health Policy (Australian Health Ministers' Conference, 1992) then included as one of its original objectives: "To institute regular review of client outcomes of services provided to persons with serious mental health problems and mental disorders as a central component of mental health service delivery."

A research and development program was initiated that sought to identify measures of outcome that were feasible for use in routine clinical practice with adult consumers. This included identification of domains for measurement. A small set of standard measures was identified and put to trial (Andrews, Peters, & Teesson, 1994) (Stedman, Yellowlees, Mellsop, Clarke, & Drake, 1997). Similar work was undertaken in relation to domains and outcome measures for use in child and adolescent mental health (Bickman, et al., 1998).

Although the initial work did identify the domains appropriate for measurement, this was not then formalised into a framework that could be nationally agreed as providing the foundation for the National Outcomes and Casemix Collection (NOCC).

This gap was recognised during work on the *NOCC Strategic Directions 2014- 2024* project and its Final Report (National Mental Health Information Development Expert Advisory Panel, 2013) included the following recommendation:

> *Recommendation 4*
>
> *Work should be commissioned to identify priority domains to be measured for individual consumers receiving mental health services. This will guide the future development of standardised routine outcome measures.*

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

The focus of the recommendation is on the measures that make up the NOCC. This *NOCC Domain Framework* therefore aims to identify those priority domains to support the development of future standardised routine outcome measures. One of the hallmarks of the NOCC is its ability to provide an understanding of individual change and the complexity of the consumer's health status. This individual understanding is not possible with anonymous consumer or carer experience information. As a result, experience measurement does not form part of this framework.

It is the work of the National Mental Health Information Development Expert Advisory Panel (NMHIDEAP), which is auspiced by the Mental Health Information Strategy Standing Committee (MHISSC).

Criteria for domain selection

Several criteria underpin the development of the domains:

1. Be meaningful and understood by consumers, carers, clinicians and service managers.
2. Be worth measuring: the domain represents an important and salient aspect of the consumer's health that can be used to:
    i. inform decision making by the consumer and the clinician about care and treatment;
    ii. provide information that may support service comparisons through benchmarking;
    iii. assist in monitoring the outcomes of care at a broader population level;
    iv. engender a culture of research and service evaluation within mental health services that supports reflection on practice and future development.
3. Be relevant and measurable for diverse populations and age groups.

NOCC Domain Framework

The *NOCC Domain Framework* has been developed by the National Mental Health Information Development Expert Advisory Panel (NMHIDEAP) and is focussed on describing measurable outcome domains for the individual consumer, that will align to the goals of the National Outcomes and Casemix Collection through the coming years, and which can be described in a simple framework.

For some, health is not just physical wellbeing but refers to the social, emotional and cultural wellbeing of the whole community. These ideas are particularly central to the thinking of Aboriginal and Torres Strait Islanders. A culturally valid understanding of the person must guide assessment, practice, care, management and shape service provision. Mental health services must be responsive to culture, spirituality and other diversity. The *NOCC Domain Framework* does not aim to measure culture or its change but recognises that Aboriginal and Torres Strait Islander health is viewed in a holistic context that encompasses mental health, physical, cultural and spiritual health (Commonwealth of Australia, 2017). These attributes are reflected within the *Domain Framework*.

Similarly, the lived experiences of people with a mental illness – their interaction with mental health services and with the community – underpin the structure of this *NOCC Domain Framework*. Therefore the concept of recovery is central and provides an overarching frame of reference. Recent

national policy initiatives, notably *A national framework for recovery-oriented mental health services* (Australian Health Ministers' Advisory Council, 2013), provide direction and guidance to the specialist mental health sector on the provision of services that are recovery focussed. The *NOCC Domain Framework* describes those attributes of the consumer that could be measured as part of the National Outcomes and Casemix Collection during routine clinical practice.

The NMHIDEAP determined that there are three key domains with associated sub domains (important areas that should be measured when considering consumer outcomes) that underpin the National Outcomes and Casemix Collection and its future development. The *NOCC Domain Framework* shows the three domains of Personal Recovery, Social Recovery, and Clinical Recovery, along with their sub domains.

- Personal Recovery
    - connectedness
    - hope and optimism
    - identity
    - meaning in life
    - empowerment
    - safety

- Clinical Recovery
    - symptoms and behaviour
    - individual function
    - health maintenance
    - physical health status

- Social Recovery
    - relationships
    - acceptance in society
    - active citizenship
    - vocational, educational and recreational participation
    - housing
    - interaction with services

In order to describe health status and measure recovery outcomes, it is necessary to take a holistic approach across the entire *NOCC Domain Framework*. Although the domains are presented as separate in this *NOCC Domain Framework* document, they are in fact interrelated in complex ways. Therefore, to adequately measure mental health outcomes, it would be necessary to collect information from each domain of the *NOCC Domain Framework*, enabling a better understanding of the overall outcomes of care.

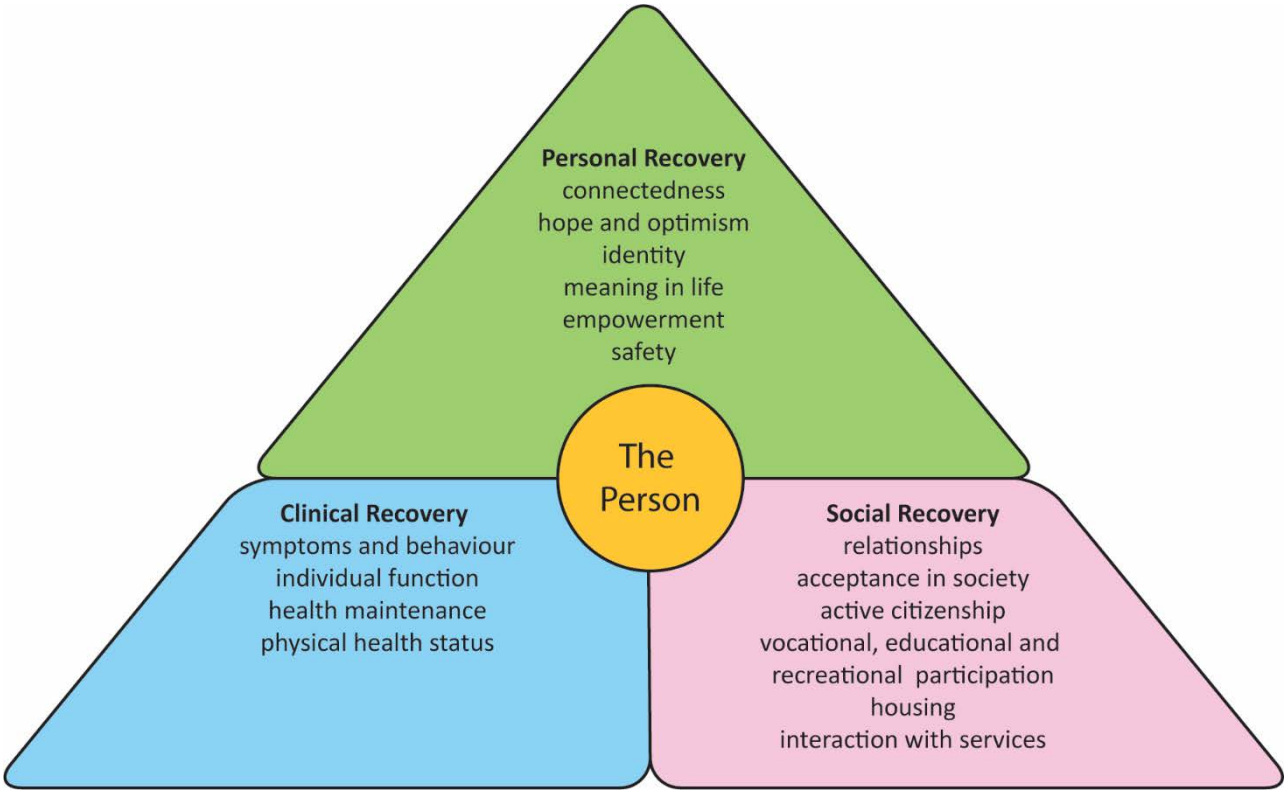
Van Eck et al found a small to medium negative correlation between symptoms and personal recovery. This indicates that as symptoms increase personal recovery decreases, highlighting the importance of considering both in treatment and the monitoring of outcomes. (Van Eck, Burger, Vellinga, F, & de Haan, 2018). In contrast, Chan et al found that regardless of the chronicity or severity of their symptomatology, people could embark on the process of personal recovery and

"…develop a self-directed life, which contributes to better well-being" (Chan, Mak, Chio, & Tong, 2018).

It is important to note that the process of recovery is an ongoing process of reclaiming autonomy, developing a positive sense of self and identifying purpose in life beyond the limitations imposed by a person's mental illness. In this way, the domains can be seen as mutually exclusive. A holistic therapeutic approach to severe mental illness requires an integration of the domains of clinical treatment, psychosocial rehabilitation combined with the personal efforts of individuals (Rosen & O'Halloran, 2014).

The *NOCC Domain Framework*, as conceptually illustrated below, shows the three domains of Personal Recovery, Social Recovery, and Clinical Recovery, along with their sub domains.

NOCC Domain Framework



Definition of domains, sub domains and measurement perspectives

To ensure that there is clarity about the concepts being measured, the following tables provide definitions and an indication of the measurement perspective i.e. who could provide the relevant information about that domain or sub domain. These definitions are not intended to be prescriptive and are simply to provide overall guidance about what each concept might cover.

Personal Recovery

Domain	Definition	Potential measurement perspectives
Personal recovery	**Personal recovery is being able to create and live a meaningful and contributing life in a community of choice or within a family, with or without the presence of mental health issues (Australian Health Ministers' Advisory Council, 2013).**	**Consumer**
Sub domain	**Definition**	
Hope and optimism	Includes belief in the possibility of recovery, the motivation to change, hope inspiring relationships, positive thinking and valuing success, and having dreams and aspirations (Leamy, Bird, Le Boutillier, Williams, & Slade, 2011).	Consumer
Identity	Includes the dimensions of identity, rebuilding or redefining a positive sense of identity and overcoming stigma (Leamy, Bird, Le Boutillier, Williams, & Slade, 2011).	Consumer
Empowerment	Includes personal responsibility, control over life and focusing upon strengths (Leamy, Bird, Le Boutillier, Williams, & Slade, 2011).	Consumer
Connectedness	Includes peer support and support groups, relationships, support from others, cultural connectedness, being part of the community (Leamy, Bird, Le Boutillier, Williams, & Slade, 2011).	Consumer, Carer
Meaning in life	Includes meaning of mental illness experiences, spirituality, quality of life (Leamy, Bird, Le Boutillier, Williams, & Slade, 2011) and cultural experience (Commonwealth of Australia, 2017).	Consumer
Safety	Includes reduction of harmful risks and an increase in opportunities for positive risk–taking and positive learning allowing individuals to make the most of new opportunities (Australian Health Ministers' Advisory Council, 2013).	Consumer, Carer

The domain of Personal Recovery includes the five key areas noted by Leamy and others (Leamy, Bird, Le Boutillier, Williams, & Slade, 2011) (Wiliams, et al., 2012) in their work on the development of an empirically based conceptual framework of recovery.

These five concepts have also been used to describe Personal Recovery in a 2015 discussion paper of the Mental Health Information Strategy Standing Committee (MHISSC) on the measurement of recovery across the specialist mental health sector – at a health system performance level, at a recovery oriented service level, and at a personal level (Mental Health Information Strategy Standing Committee, 2015). Safety has also been added as a sixth sub domain of Personal Recovery,

recognising that creating a safe environment and increasing opportunities for positive risk taking are part of attaining self-determination, personal responsibility and self-management. These six key areas therefore comprise the sub domains of Personal Recovery.

Questions are sometimes raised about the concept of personal recovery and its relevance to children and young people. A recent discussion paper from the Mental Health Coordinating Council highlights that "…personal recovery could be seen to influence and be influenced by normal developmental processes". The discussion paper further notes that the sub domains of personal recovery may have differing expectations and implementation for children and young people than for adults and older people; however they can be seen to "mirror normal developmental processes…Recovery principles are also consistent with the principles of strengths-based care and resilience approaches to working with children and young people". (Mental Health Coordinating Council, 2014). The *National Framework for Recovery Oriented Mental Health Services* also highlights how service delivery for infants, children and adolescents focuses on key areas such as developmental trajectories, resilience, wellbeing and family systems. (Australian Health Ministers' Advisory Council, 2013).

Clinical Recovery

Domain	Definition	Potential measurement perspectives
Clinical recovery	**Clinical recovery is primarily defined by mental health professionals and pertains to a reduction or cessation of symptoms and 'restoring social functioning' (Australian Health Ministers' Advisory Council, 2013).**	**Clinician, Consumer, Carer**
Sub domain	**Definition**	
Symptoms and behaviour	A mental, physical, social and emotional feature or behaviour which is regarded as indicating a condition of disease/illness, particularly such a feature that is apparent, but not limited, to the consumer.	Clinician, Consumer, Carer
Individual Function (Including ADLs and IADLs)	A person's ability to move and care for themselves. Activities of Daily living (ADLs) are everyday personal care activities that are fundamental to caring for oneself and maintaining independence. Instrumental Activities of Daily Living (IADLs) are activities related to supporting independent living e.g. shopping cooking, using the phone, driving or using public transport. The degree to which a person can undertake daily living activities necessary for normal self-care e.g., including feeding, bathing, dressing, grooming Instrumental ADLs.	Clinician, Consumer, Carer
Health maintenance	The degree to which a person is an active participant in their own physical health care, making their own judgements regarding the need for intervention or treatment for a physical health condition to determine their own health outcomes.	Clinician, Consumer, Carer
Physical health status	Identification of the overall physical health status of a person.	Clinician, Consumer, Carer

The domain of Clinical Recovery comprises four sub domains identified by the NMHIDEAP as important to measure when considering the outcomes of care from a mainly clinical perspective and relate to outcomes in regard to symptomatology and functioning.

The factors that have been associated with clinical recovery include changes in the severity of symptoms, such as depression and psychosis, along with psychosocial functioning, including interpersonal relationships. Additional factors include substance abuse, emotional lability, and self-harm (Rossi, et al., 2018) (Mak, et al., 2017).

Clinical recovery can therefore be viewed as a deficit perspective where mental state is improved or stabilised using therapeutic. Clinical recovery is therefore the remission of symptoms, the gaining of insight, the absence of relapse and the mastery of daily living skills. Here the focus is on the

professional as an expert undertaking clinical tasks and working with the consumer in an established health infrastructure (Le Boutillier, et al., 2015).

In another large study, consumers, carers, mental health professionals and advocates identified components of care considered important to recovery. They found that, among other things, therapeutic interventions, physical health care, self-management and autonomy were essential (Turton, Wright, White, Killaspy, & Group, 2010). For older people, self-management has been shown to be a meaningful component of recovery (Daley, Newton, Slade, Murray, & Banerjee, 2013).

Social Recovery

Domain	Definition	Potential measurement perspectives
Social recovery	**Social recovery involves regaining social recognition and acceptance and the reformation of a social identity and presence. It includes shared decision making, co-production and active citizenship, employment, education and economic recovery (Ramon, 2018).**	**Consumer, Carer, Clinician**
Sub domain	**Definition**	
Relationships	The degree to which a person maintains or establishes close or supportive relationships with family, friends or extended kinship.	Consumer, Carer, Clinician
Acceptance in society	The degree to which a person feels accepted by and able to express their views to family, friends, neighbours and the community.	Consumer, Carer, Clinician
Active citizenship	The degree to which a person connects to their rights, responsibilities, roles and risks that society offers. It is an opportunity to explore options to contribute to the wider community and advocate for change.	Consumer, Carer, Clinician
Vocational, educational and recreational participation	The degree to which a person participates in employment, training, educational or recreational / leisure activities.	Consumer, Carer, Clinician
Housing	The degree to which a person has safe, secure and affordable accommodation.	Consumer, Carer, Clinician
Interaction with services	The degree to which a person interacts with therapeutic, treatment oriented, rehabilitation, psychosocial or other community services.	Consumer, Carer, Clinician

The domain of Social Recovery comprises six sub domains identified by the NMHIDEAP as important for measurement. Since people with mental illness often face problems associated with social and economic marginalization, monitoring the extent to which a consumer has positive outcomes in the Social Recovery sub domains would provide important information about a consumer's overall recovery.

Within the domain of Social Recovery, the first of the five sub domains is *Relationships*. This is an important sub domain to measure as it has been shown that both the quality and quantity of social relationships "affect mental health, health behavior, physical health, and mortality risk" (Umberson & Montez, 2010). Parental warmth and recovery supports were found to be directly associated with psychological and social quality of life domains (Brown, Victor, Hicks, & Tracy, 2017). Various studies have demonstrated the importance of social relationships on health status (Umberson, Williams,

Thomas, Liu, & Thomeer, 2014) (Frick, Irving, & Rehm, 2012) (Cohen, 2004), including a recommendation that they should be included in health state measures (Frick, Irving, & Rehm, 2012).

Other studies have shown the importance of social context in shaping adolescent mental health. For example, a study in adolescent youth has shown that *social acceptance* influences the daily psychological well-being in a study of 557 Latino high school youth (Potochnick, Perreira, & Fuligni, 2012). A recent study by Ciucci and colleagues states that "the ability to understand and manage emotional experience is critical to children's health" (Ciucci, Baroncelli, Grazzani, Ornaghi, & Caprin, 2016). These authors recognised the importance of measuring emotional self-efficacy and social desirability by validating the *How I Feel* questionnaire and found that positive emotion was associated with social acceptance and visibility. These studies show that the domain of social acceptance is important as a measure for social recovery.

Within the domain of social recovery, The Canadian Centre for Applied Research in Mental Health and Addiction, at Simon Fraser University, found through an extensive literature review of over 600 articles from the academic and grey literature that "housing with supports *in any form* is an effective intervention" for individuals with severe addictions and/or mental illness (Patterson, Somers, McIntosh, Shiell, & Frankish, 2007).

Participation is recognised as an important goal and outcome indicator for people with serious mental illness and incorporates three distinct domains: productive activities, social participation and community activities (Chang, et al., 2016). Research has shown that vocational, educational and recreational participation have been shown to be important for social recovery. With regards to vocational participation, a recent study compared two psychotherapy interventions in employees on sick leave due to common mental disorders such as depression, anxiety or adjustment disorder. This study compared cognitive-behavioural therapy (CBT) versus work-focussed cognitive behavioural therapy (W-CBT) with one outcome measure as duration until return to work. Significant effects were found in favour of the W-CBT group, with full return to work occurring 65 days earlier. This showed that by integrating work-related aspects into CBT, the pace of functional recovery for people with common mental disorders (Lagerveld, Blonk, Brenninkmeijer, Wijngaards-de Meij, & Schaufeli, 2012) increased.

Similarly, educational participation has been shown to be important in social recovery. Cook et al conducted a randomised controlled trial testing the efficacy of peer-led mental illness education with individuals with serious mental illness (Cook, et al., 2012). Through participation in peer-led mental illness education, even when controlling for severity of depressive symptoms, there was a significant improvement in recovery assessment scores and in hopefulness. This shows that even in cases of severe mental illness, participation in educational activities is important for improved mental health outcomes.

The benefits of participating in recreational activities on a person's mental health are well documented. Social participation, in particular being part of a social group, has been shown to be a cost effective approach to treating depression (Cruwys, et al., 2014). For these reasons, it is important to measure recreational participation in the context of social recovery. A study of a social club, that included activities such as swimming and weekly walks, found improvements in mood and self-esteem in a population with a range of mental health problems. This suggests that combining

exercise, outdoor activities and social interaction may play a key role in managing and supporting recovery from mental illness (Barton, Griffin, & Pretty, 2012).

Comparison of NOCC Domain Framework to other suggested frameworks

Outcome measurement frameworks

Both nationally and internationally there have been a variety of different frameworks suggested for routine outcome measurement in mental health including the types of information that should be collected. NOCC already captures some but not all of the information suggested in these existing frameworks.

Andrews et al (Andrews, Peters, & Teesson, 1994) identified five domains that could be measured routinely to determine the outcome of care at the individual level. These were described as:

1. Symptoms
2. Functioning
3. Quality of Life
4. Burden
5. Satisfaction with services

Bickman et al (Bickman, et al., 1998), in a review of outcome measurement for child and adolescent mental health services, identified nine domains, one of which is described as "multidimensional" because some measures actually capture information across multiple domains.

1. Symptoms
2. Functional impairment
3. Functional competence
4. Family functioning
5. Satisfaction
6. Self-esteem
7. Quality of life
8. Goal attainment
9. Multidimensional

Slade (Slade, 2002), following a systematic review of the literature of outcome measurement in mental health, identified seven domains. These were:

1. Wellbeing
2. Cognition emotion
3. Behaviour
4. Physical health
5. Interpersonal
6. Society
7. Services

In the United States, the *Patient-Reported Outcomes Measurement Information System (PROMIS) Roadmap* initiative (www.nihpromis.org), under the auspice of the National Institutes of Health (NIH), is a 5-year cooperative group program of research that is designed to develop, validate, and standardise item banks to measure patient-reported outcomes (PROs). The aim of this activity is to provide a framework that drives medical research into the 21st century and enable research activities to result in tangible benefits for people (Cella, et al., 2007).

This framework identifies domains and subdomains that guide the research agenda and can be found at http://www.nihpromis.org/measures/domainframework1.

Within the PROMIS framework, a specific mental health domain is populated by six subdomains:

1. Depression
2. Anxiety
3. Anger
4. Applied cognition
5. Alcohol use, consequences and expectancies
6. Psychosocial illness impact

The National Institute for Mental Health in the United Kingdom has produced a compendium of outcome measures that can be used in mental health (National Institute for Mental Health in England, Barts and the London School of Medicine, and Department of Health, 2008). Although not specifically organised into domains, they note that mental health is measured by instruments that gauge symptoms as well as quality of life, social functioning, social inclusion and self- reported perceptions of health status and recovery from illness. The identified measures can be generally described as falling in the following domains:

1. Symptoms
2. Social Inclusion
3. Health care and needs assessment
4. Patient perceptions of care
5. Quality of life and social functioning and wellbeing
6. Recovery
7. Social Functioning and functional disabilities

The Royal College of Psychiatrists identified and recommended that, for adults, outcome measures might fall into six domains (Hampson, Killaspy, Mynors-Wallis, & Meier, 2011):

1. Effectiveness outcomes
    a. Patient identified goals
    b. Symptoms and Social functioning (as measured by the Health of the Nation Outcomes Scales)
    c. Condition specific measures
2. Quality of Life
3. Social Outcomes
4. Physical Health Measures
5. Patient safety outcomes
6. Patient and Carer Experience

In contrast, in another piece of work focussed on older persons, the Royal College of Psychiatrists identified and recommended the use of outcome measures that fall into thirteen domains (Royal College of Psychiatrists, Faculty of the Psychiatry of Old Age, 2012):

1. Global measures
2. Cognition
3. Delirium
4. Depression
5. Anxiety
6. Psychological therapies
7. Psychosis
8. Activities of Daily living
9. Quality of Life
10. Carers outcomes
11. Service Satisfaction
12. Recovery and wellbeing
13. Behaviour that challenges

The *NOCC Domain Framework* clearly aligns to the already suggested national and international frameworks. It has the advantage of delivering on national policy initiatives, such as the *Fifth National Mental Health and Suicide Prevention Plan*, that include a focus on recovery oriented service provision, social inclusion and quality of life (Commonwealth of Australia, Department of Health, 2017).

Recovery focused frameworks

Within Australia, the Mental Health Information Strategy Standing Committee (MHISSC) produced a status report for the Australian Health Ministers Advisory Council's Mental Health Drug and Alcohol Principal Committee (MHDAPC) in 2015, which outlined what aspects of recovery should be measured (Mental Health Information Strategy Standing Committee, 2015). This report provided a narrative synthesis of recovery measurement issues in specialised mental health clinical and support services.

The report identified that any measurement of the process of recovery in mental health should be person-centred and holistic. The monitoring of the performance of the mental health system should include an understanding of the clinical effectiveness of services. It should also include an understanding of the recovery orientation of services and the way they deliver person centred care that promotes hope, personal autonomy and social inclusion. In addition, understanding the personal journey of recovery and the consumer's experience of hope and optimism, empowerment, connectedness and meaning in life should also be a part of any measurement occurring in the sector.

Taken together, the clinical effectiveness of services, the recovery orientation of services and the personal experience of recovery ultimately support the consumer in leading a contributing life. The measurement of important aspects of a contributing life include: education, employment, health, housing, relationships, civic engagement and life satisfaction. The importance of the collection of this type of information is further reinforced by the Australia Health Ministers' Advisory Council's *National framework for recovery-oriented mental health services: Guide for practitioners and*

providers (Australian Health Ministers' Advisory Council, 2013). These measurement considerations are central to the NOCC Domain Framework.

Consultant Psychiatrists from the UK have developed a position paper on recovery (South London and Maudsley NHS Foundation Trust and South West London and St George's Mental Health NHS Trust, 2010). They highlight three core components of recovery: hope, agency (taking control, self-management, choice and responsibility) and opportunity (links with the idea of social isolation). These are central to the *NOCC Domain Framework*, specifically identified in the subdomains of hope and optimism, empowerment and acceptance in society.

The US Department of Health and Human Services Substance Abuse and Mental Health Services Administration (SAMHSA's) working definition of recovery identified 10 guiding principles of recovery which largely overlap with the *NOCC Domain Framework*. These include hope, peer support, relationships, culture and responsibility (U.S. Substance Abuse and Mental Health Services Administration (SAMHSA), 2014). All of these are reflected in the *NOCC Domain Framework*.

The *NOCC Domain Framework* articulates these principles of recovery through the identification of three independent and inter-related domains: Personal Recovery; Social Recovery; and Clinical Recovery.

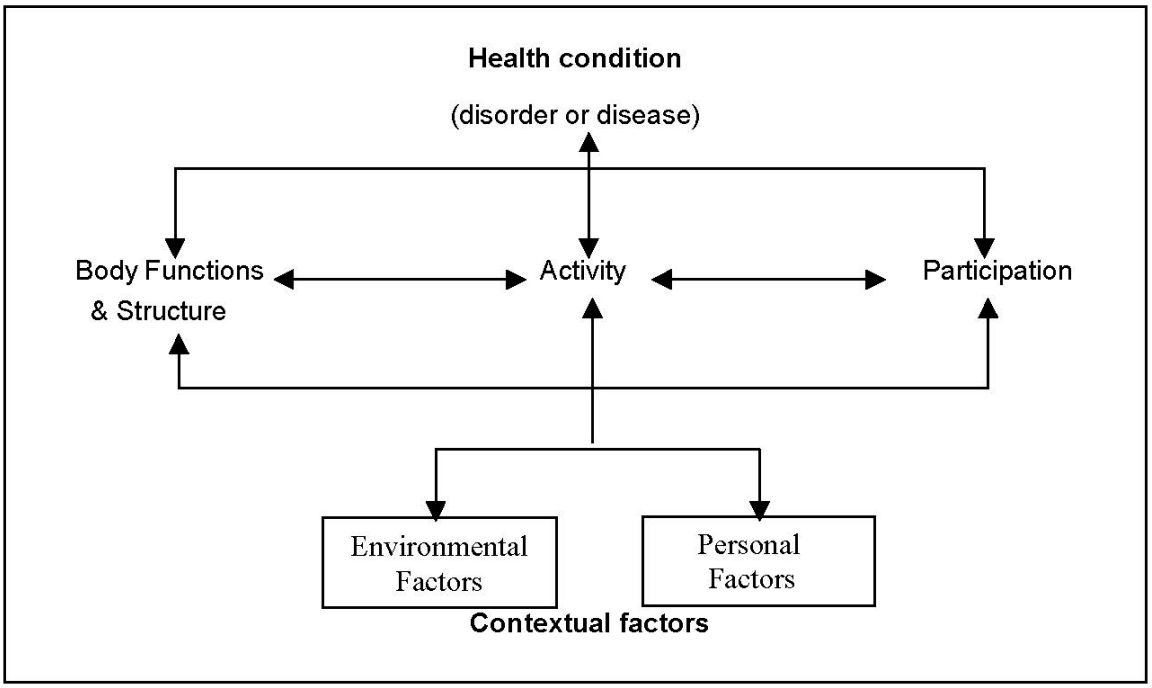
International Classification of Functioning, Disability and Health

As the *International Classification of Functioning, Disability and Health*, more often known as the ICF, is a recognised tool across the broader health sector. The ICF "…provides a standard language and framework for the description of health and health-related states...the ICF is a multipurpose classification intended for a wide range of uses in different sectors. It is a classification of health and health-related domains - domains that help us to describe changes in body function and structure, what a person with a health condition can do in a standard environment (their level of capacity), as well as what they actually do in their usual environment (their level of performance). These domains are classified from body, individual and societal perspectives by means of two lists: a list of body functions and structure, and a list of domains of activity and participation." (World Health Organization, 2002).

The following diagram describes the model of disability that has been used for the basis of the ICF. The key multi-dimensional components of the ICF relate to:

- the body functions and structures of people;
- the activities people do and the life areas in which they participate; and
- contextual factors which include:
    - factors in a person's environment which affect these experiences; and
    - personal factors.

Whilst the ICF recognises the importance of personal factors in its overarching framework, it does not attempt to enumerate or classify them.



From: (World Health Organization, 2002), p.9

Given its use in the broader health sector, the NMHIDEAP decided to map the *NOCC Domain Framework* to the ICF components in order to demonstrate the commonality across the two frameworks. This mapping is demonstrated in the following table.

NOCC Domain Framework	ICF Components
Clinical recovery • Symptoms and behaviour • Individual function (including ADLs and IADLs) • Health maintenance • Physical health status	**Body functions and structures** • Body functions are the physiological functions of body systems (including psychological functions). • Body structures are anatomical parts of the body, such as organs, limbs and their components. • Impairments are problems in body function and structure, such as significant deviation or loss. **Activity** • Activity is the execution of a task or action by an individual. • Activity limitations are difficulties an individual may have in performing activities.
Social recovery • Relationships • Acceptance in society • Active citizenship	**Participation** • Participation is involvement in a life situation. • Participation restrictions are problems an individual may experience in involvement in life situations.

NOCC Domain Framework	ICF Components
• Vocational, educational and recreational participation • Housing • Interaction with services	**Environmental factors** • Environmental factors make up the physical, social and attitudinal environmental
Personal recovery • Hope and optimism • Identity • Empowerment • Connectedness • Meaning in life • Safety	**Personal factors** • Gender • Age • Coping styles • Past and current experience • Overall behaviour pattern

Conclusion

The *NOCC Domain Framework* is one approach to conceptualising the measurement of mental health care and its outcomes. Focusing on the personal, social and clinical aspects of recovery, the framework acknowledges the complex and interrelated nature of the consumer, their personal experience and how they relate to the world. However, the *NOCC Domain Framework* provides an overarching conceptual orientation that will support the ongoing development of the NOCC.

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