National MHSPF Mental Health Service Planning Framework

Service Element and Activity Descriptions

July 2022 - V4.1

Population Based Planning for Mental Health

Acknowledgment

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Contents

Background

The National Mental Health Service Planning Framework (NMHSPF) describes the range of services required within a comprehensive mental health system, using an agreed national taxonomy of mental health services across the spectrum of service delivery. Given that each state and territory structures mental health services differently, the taxonomy provides a common language and clear definitions of core mental health service components and functions. The taxonomy consists of six key streams:

(1) Mental health promotion;
(2) Mental illness prevention;
(3) Primary and specialised clinical ambulatory mental health services;
(4) Specialised bed-based services;
(5) Specialised mental health community support services; and
(6) Medications and procedures.

Each stream is further subdivided into service categories (groups of service elements and related activities), service elements (the building blocks of care profiles – each service element relates to a specific aspect of mental health care) and activities (specific activities that are provided within service elements).

This document provides detail of these core components that make up the taxonomy. The descriptions are both quantitative and qualitative in nature to allow users to understand the context of each element and activity and the resources estimated for those functions. Service element descriptions include: activities that may be provided, workforce types that may deliver the service and operational parameters (e.g. hours of operation, average length of stay and annual readmission rates). The development of these service element descriptions included: reviews of published documents, metadata, jurisdictional service models, and other documentation in addition to extensive expert consultation.

NMHSPF Taxonomy

- **Mental Health Services**
  - **Population-based Universal Services**
    - **Mental Health Promotion**
      - **Promoting Help Seeking Behaviours**
        - Mass Promotion – Behaviours
      - **Promoting Help Seeking Attitudes**
        - Mass Promotion – Attitudes
        - Structured Psycho Education
          - *Structured Psycho Education – In person*
          - *Structured Psycho Education – Online*
      - **Enhancing Community Attitudes and Stigma Reduction**
        - Contact with People with Mental Illness
        - Intensive Educational Interventions
        - Mass Promotion/Advertising Campaigns
        - Enhancing First Aid Behaviours
      - **Promoting Mental Wellbeing**
        - Social and Emotional Learning
        - Positive Psychology
      - **Reduction of Bullying and Cyber Bullying**
        - Whole of School Approach
    - **Mental Illness Prevention**
      - **Prevention of Suicide, Suicide Ideation and Behaviour**
        - Restriction to Means
        - Gate Keeper Training (Professional)
          - *Gatekeeper Training (Non-medical professionals*
        - Responsible Reporting in Media
          - *Responsible Reporting in the Media about Suicide – Effect on Media Reporting*
          - *Responsible Reporting in the Media about Suicide – Effect on Imitative Suicide Rates*
        - Web Based Programs for Preventing Suicide Ideation
          - *Cognitive Behavioural Therapy – All ages*
        - Crisis Intervention (Telephone and Internet Helplines)
          - *Community Crisis Intervention Telephone Helplines*
      - **Prevention of Depression and Anxiety**
        - Indicated Prevention (Screening and Intervention)
          - *School-based-Anxiety (7-17 years)*
          - *School-based Depression (5-18 years)*
          - *Parent Training and Family Strengthening (pre-school)*
          - *General Adults – Cognitive Behavioural Therapy (Group, individual) - Depression*
          - *General Adults – Cognitive Behavioural Therapy (web-based) - Depression*
        - Universal Prevention
          - *School-based Cognitive Behavioural Therapy Anxiety (7-13 years)*
          - *School-based Cognitive Behavioural Therapy Depression (5-19 years)*
          - *School-based Cognitive Behavioural Therapy Anxiety (12-17 years)*
          - *School-based Cognitive Behavioural Therapy Depression (5-19 years)*
          - *School-based Cognitive Behavioural Therapy Anxiety (12-17 years)*
      - **Prevention of Externalising Problems**
        - Multi-level Behavioural Parent Training
          - *Parent Management Training*
          - *Multidimensional Treatment Foster Care*
        - School-based Intervention Programs (Universal)
        - School-based Intervention Programs (Indicated)
      - **Prevention of Eating Disorders and Body Image Problems**
        - School-based Programs
        - University-based Programs
        - Community-based Programs
      - **Prevention of PTSD**
        - Prevention of post-event pathology from post-event intervention for those who demonstrate vulnerability
  - **Services Tailored to Individual Needs**
    - **Primary and Specialised Clinical Ambulatory Mental Health Care Services**
      - **Assessment**
        - Brief Mental Health Assessment
        - Comprehensive Mental Health Assessment
        - Brief Physical Health Assessment
        - Comprehensive Physical Health Assessment
      - **Acute Care Services**
        - Acute Care Team
      - **Consultation Liaison**
        - Consultation Liaison - General (Hospital)
        - Consultation Liaison - Emergency Department (Hospital)
        - Consultation Liaison – Rural Hospital and Emergency Department
        - Consultation Liaison – Specialist Rural Outreach
          - *Consultation Liaison – Specialist Rural Outreach – Child and Youth (0-24 years)*
          - *Consultation Liaison – Specialist Rural Outreach – Adult (25-64 years)*
          - *Consultation Liaison – Specialist Rural Outreach – Older Adult (65+ years)*
        - Indigenous Cultural Consultation
      - **Clinical Community Treatment Team**
        - Clinical Community Treatment Team – Child (0-11 years)
        - Clinical Community Treatment Team – Youth (12-24 years)
        - Clinical Community Treatment Team – Adult (25-64 years)
        - Clinical Community Treatment Team – Older Adult (65+ years)
        - Clinical Community Treatment Team - Rural
        - Clinical Community Treatment Team - Indigenous
      - **Primary Care Team**
        - Primary Care Team - Indigenous
      - **Day Program**
        - Day Program Team – Child and Youth (0-24 years)
        - Day Program Team – Adult (25-64 years)
      - **Review +/- Ongoing Management**
        - Centre Based Review +/- Ongoing Management
        - Home Based Review +/- Ongoing Management
        - General Physical Health Review +/- Ongoing Management
      - **Care Coordination and Liaison Services**
        - Care Coordination and Liaison
          - *Rural Therapy Liaison*
        - Medico Legal Coordination and Liaison
      - **Structured Psychological Therapies (SPT)**
        - SPT – Brief Intervention
        - SPT Low Intensity Intervention
        - SPT – Individual
        - SPT – Family
        - SPT – Group
        - Clinician Moderated Web-based Psychological Interventions
      - **Other Structured Interventions**
        - Lifestyle Interventions – Individual
        - Lifestyle Interventions - Group
        - Other Evidence-based Physical Therapies
      - **Pharmacotherapy**
        - Pharmacotherapy Prescription
        - Pharmacotherapy Review
    - **Specialised Mental Health Community Support Services**
      - **Group Support and Rehabilitation Services**
        - Group Support and Rehabilitation
          - *Group Support and Rehab linked to accessing and maintaining safe and secure housing*
          - *Group Support and Rehab linked to early childhood, education and/or employment*
          - *Group Support and Rehab linked to enhanced relationships and social participation*
          - *Group Support and Rehab linked to navigating the primary and mental health care systems*
          - *Group Support and Rehab linked to community aged care*
        - Group Based Peer Work
          - *Group Based Consumer Peer Support*
          - *Group Based Carer Peer Support*
      - **Individual Support and Rehabilitation Services**
        - Individual Support and Rehabilitation
          - *Individual Support and Rehab linked to accessing and maintaining safe and secure housing*
          - *Individual Support and Rehab linked to early childhood, education and/or employment*
          - *Individual Support and Rehab linked to enhanced relationships and social participation*
          - *Individual Support and Rehab linked to navigating the primary and mental health care systems*
          - *Individual Support and Rehab linked to youth development*
          - *Flexible Funding Pool – Consumer*
        - Individual Peer Work
          - *Individual Peer Support*
          - *Individual Carer Peer Support*
      - **Other Residential Services**
        - Residential Crisis and Respite Services
      - **Family and Carer Support**
        - Flexible Respite
        - Day Respite
        - Family Support Services
        - Group Carer Support Services
          - *Group Carer Support linked to accessing and maintaining safe and secure housing*
          - *Group Carer Support linked to education and/or employment*
          - *Group Carer Support linked to enhanced relationships and social participation*
          - *Group Carer Support linked to navigating the primary and mental health care systems*
        - Individual Carer Support Services
          - *Individual Carer Support linked to accessing and maintaining safe and secure housing*
          - *Individual Carer Support linked to education and employment*
          - *Individual Carer Support linked to enhanced relationships and social participation*
          - *Individual Carer Support linked to navigating the primary health care systems (health management)*
          - *Flexible Funding Pool - Carer*
    - ***Specialised Bed-Based Mental Health Care Services***
      - **Acute Inpatient Services (Hospital)**
        - Acute – Perinatal and Infant Mental Health (Hospital)
        - Acute – Child (0-11 years) (Hospital)
        - Acute – Youth (12-24 years) (Hospital)
        - Acute – Adult (25-64 years) (Hospital)
        - Acute – Older Adult (65+ years BPSD) (Hospital)
        - Acute – Older Adult (65+ years) (Hospital)
        - Acute – Intensive Care Service (Hospital)
        - Acute – Eating Disorders - Adult (18-64 years) (Hospital)
        - Acute – Rural (Hospital)
      - **Sub-Acute Services (Residential, Hospital or Nursing Home)**
        - Step Up/Step Down – Youth (12-24 years) (Residential)
        - Step Up/Step Down – Adult and Older Adult (25+ years) (Residential)
        - Sub-Acute Rehabilitation – Youth (18-24 years) (Residential)
        - Sub-Acute Rehabilitation – Adult and Older Adult (25+ years) (Residential)
        - Sub-Acute Rehabilitation – Rural (Residential or Hospital)
        - Sub-Acute – Intensive Care Service (Hospital)
        - Sub-Acute – Older Adult (65+ years) (Hospital)
      - **Non-Acute Extended Treatment Services (Residential, Hospital or Nursing Home)**
        - Non-Acute – Youth (18-24 years) (Residential)
        - Non-Acute – Adult and Older Adult (25+ years) (Residential)
        - Non-Acute – Older Adult (65+ years) (Hospital/Nursing Home Based)
        - Non-Acute – Intensive Care Service (Hospital)
        - Non-Acute – Intensive Care - Older Adult (65+ years) (Hospital)
      - **Specialised Bed Based Non-Mental Health Care Services**
        - Acute – Medical/Surgical Bed (Hospital, non-MH)
        - Acute – Paediatric Bed (Hospital, non-MH)
        - Non-Acute – Adult (<24 hour support) (Residential, non-MH)
      - **Hospital Add-ons**
        - Indigenous Hospital Add-on
    - **Medications and Procedures**
      - **Medications**
        - Antidepressants
        - Anxiolytics
        - Sedatives
        - ADHD medications
        - Antipsychotics
      - **Procedures**
        - Electroconvulsive Therapy
        - Transcranial Magnetic Stimulation

Glossary

General information	
Services Delivered	
Services provided	Describes the purpose of the service and lists key activities provided.
Key distinguishing features	Includes information such as how a service may operate as part of an integrated model or the focus of the service.
Hours of operation	Provides an overview of the hours that staff are working within the service. Business hours refers to day shifts occurring Monday-Friday. Extended hours refers to day and evening shifts occurring Monday-Friday and also weekend shifts.
Indicative unit size	Helps users to understand the type of unit being described but is not used in the modelling within the NMHSPF in anyway. Only applicable for inpatient services.
Example services	Provides web-links to similar 'real world' services to help users understand the type of service.
Target group	
Target age	Notes the age group that may receive this type of service within the NMHSPF modelling.
Population profile	Describes the characteristics e.g. disorders, risk profile, complexities that individuals appropriate for this type of service may exhibit.
Modelling Attributes	**See service element and activity modelling parameters document**

Services tailored to individual needs

1. Service Stream – Primary and Specialised Clinical Ambulatory Mental Health Care Services

These services represent primary and ambulatory care by a specialist clinical professional to an individual with a diagnosis of mental illness or other mental health problem. Primary mental health care services are general access and often involve presentations to general practitioners. Specialised clinical ambulatory services are generally a secondary service that requires a referral from another professional.

1.1 Service Category – Assessment

Mental health assessments are conducted to determine a person's mental health status and need for mental health services. Assessments are also conducted to determine the physical health status of an individual with mental illness.

1.1.1 Service Element – Brief Mental Health Assessment

1.1.2 Service Element – Comprehensive Mental Health Assessment

General information	
Services Delivered	

Services provided	• Aims to determine a person's mental health status and need for mental health services.
	• Comprises the collection and evaluation of data (obtained through interview and observation) detailing a person's mental health history and presenting problem(s).
	• The assessment will be tailored and developmentally appropriate to the age of the person.
	• The assessment may include the following components:
	  ○ Past history and current mental health status assessment
	  ○ Triage and emergency assessments
	  ○ Risk assessment
	  ○ Medication assessment
	  ○ Social and environmental assessments
	  ○ Assessment summary and clinical formulation
	  ○ Development or review of a Care Plan
	  ○ Functional assessment
	  ○ Cognitive assessment
	  ○ Psychological assessment
	  ○ Rehabilitation assessment
	  ○ Administration of an outcome measurement tool
	  ○ Development or review of a Recovery Plan
	• For Aboriginal and Torres Strait Islander People, assessment should be appropriate to, and consistent with, the cultural and spiritual beliefs and practices of Aboriginal and Torres Strait Islander People. This includes time for rapport building, engagement and communication between service providers, clients and their families and communities[1].

[1] Government of Western Australia. (2014). Western Australian Mental Health Act 2014. Available at https://www.mhc.wa.gov.au/about-us/acts-and-legislative-changes/mental-health-act-2014/

Key distinguishing features	• A brief mental health assessment is typically shorter in duration and comprises of at least two assessment components • A comprehensive mental health assessment is typically of longer duration and comprises of at least four assessment components • Assessments for Aboriginal and Torres Strait Islander People are generally longer in duration and more frequent than for non-indigenous populations.
Hours of operation	N/A
Indicative unit size	N/A
Example services	
Target group	
Target age	All ages
Population profile	N/A
Modelling Attributes	**See service element and activity modelling parameters document**

1.1.3 Service Element – Brief Physical Health Assessment

1.1.4 Service Element – Comprehensive Physical Health Assessment

General information	
Services Delivered	

Services provided	• Aims to determine the physical health status of a person with a mental health condition.
	• A physical assessment is usually conducted as part of the general mental health assessment to determine appropriate interventions, especially those involving medications.
	• The assessment will be tailored and developmentally appropriate to the age of the person.
	• The assessment may include initiating interventions and referrals as clinically indicated and/or providing advice and information about lifestyle modification programs.
	• The assessment may include the following components:
	  ○ Monitoring of medication side effects
	  ○ Preventative health review
	  ○ Monitoring metabolic syndrome risk factors
	  ○ Monitoring abnormal involuntary movements
	  ○ Monitoring basic physical observations (HR, BP, temperature)
	  ○ Physical examinations (e.g. cardiovascular, respiratory, gastrointestinal, neurological)
	• For Aboriginal and Torres Strait Islander People, assessment should be appropriate to, and consistent with, the cultural and spiritual beliefs and practices of Aboriginal and Torres Strait Islander People. This includes time for rapport building, engagement and communication between service providers, clients and their families and communities[2].

Key distinguishing features	• A brief physical assessment is typically shorter in duration and comprises of at least two assessment components • A comprehensive physical assessment is typically of longer duration and comprises of at least four assessment components • Assessments for Aboriginal and Torres Strait Islander People are generally longer in duration and more frequent than for non-indigenous populations.
Hours of operation	N/A
Indicative unit size	N/A
Example services	N/A
Target group	
Target age	All ages
Population profile	N/A

[2] Government of Western Australia. (2014). Western Australian Mental Health Act 2014. Available at https://www.mhc.wa.gov.au/about-us/acts-and-legislative-changes/mental-health-act-2014/

Modelling Attributes	See service element and activity modelling parameters document

1.2 Service Category – Acute Care Services

1.2.1 Service Element – Acute Care Team

General information			
Services Delivered			

Services provided	• Aims to provide a mental health service to all persons with acute care needs in a community setting (e.g. a person's home).
	• The service is aimed at persons aged 18-64 but also provides after-hours crisis response to all age groups.
	• The key functions of the Acute Care Service (ACS) are to:
	  ○ Provide a centralised, co-ordinated mental health triage 24/7.
	  ○ Ensure timely responses to mental health crises in the community.
	  ○ Ensure a timely assessment and provide short-term mental health care for people in the acute phase of a mental illness as an alternative to an admission to an inpatient or bed-based service.
	  ○ Facilitate onward referral to the most appropriate services.
	• ACS for persons aged 0-17 and 65+ are:
	  ○ Usually provided as access components of age-specific community mental health teams
	  ○ Delivered by multidisciplinary teams that provide specialist expertise in the initial intake, specialist clinical assessment and treatment, social and functional assessment, forward referral and assessment of family, friends, support people and carers, ensuring timely access to specialist mental health services.		

Key distinguishing features	• Facilitate community access 24/7 to mental health triage, crisis assessment and intervention across all age groups. • ACS are integrated with local mental health services, emergency departments and primary care supports. • Services are provided by multidisciplinary teams with defined clinical governance structures and clear pathways of care.		
Hours of operation	0-17 years	18-64 years	65+ years
	Business hours	24 hours/7 days	Business hours
Indicative unit size	N/A		
Example services	• Acute Care Team (ACT) • Crisis Assessment and Treatment Team (CATT)		
Target group			
Target age	0-17 years	18-64 years	65+ years
Population profile	Infants, children and adolescents up to the age of 18 years predominantly, will have diagnoses such as depression, anxiety	All persons with serious mental illness or mental illness who have associated significant levels of disturbance and psychosocial disability due to	Individuals who have complex presentations including: serious mental illness or mental illness who have associated significant levels of disturbance and psychosocial disability due to

	illnesses, adjustment illnesses, attachment illnesses, developmental illnesses and behavioural illnesses including complex attention deficit hyperactivity illness and conduct illness. Many people will also present with peer and family problems, which can exacerbate mental health problems and illnesses.	their illness. This includes some people diagnosed with conditions such as severe personality illness, severe anxiety illness, or those who present in situational crisis that may lead to self-harm or inappropriate behaviour towards others, the distinguishing factor being the level of severity of the disturbance and problem.	their illness and/or exacerbation of underlying personality traits, drug and alcohol problems and physical health care needs; serious mental illness complicated by functional difficulties associated with ageing; or severe mental illness as a complication of the behavioural and psychological symptoms associated with dementia (BPSD) or other age-related illnesses.
Modelling Attributes	**See service element and activity modelling parameters document**		

1.3 Service Category – Consultation Liaison

1.3.1 Service Element – Consultation Liaison – General (Hospital)

General information	
Services Delivered	
Services provided	• Aims to provide specialist mental health services to patients within the general hospital setting. • Conducts mental health assessments and provides advice on clinical management and early recognition of symptoms relating to mental health to the general health treating team. • Facilitate linkages between the general hospital, primary care and other health services for patients whose physical health care is complicated by their mental health problems. • Also provides teaching, training and mental health promotion support for general hospital staff.
Key distinguishing features	• Consultation liaison (CL) teams are multidisciplinary and while operating as part of the local area or district mental health service are embedded in the work of the general hospital. • As well as local services CL teams may use telemedicine services to support smaller 'satellite' hospitals. • CL teams have an important role in maintaining continuity of care between general hospital and mental health services and are actively involved in teaching and research programs within the hospital. • 50% Consultation role – 50% Liaison role • Delivered in non-mental health general hospital beds
Hours of operation	Extended hours
Indicative unit size	Based on a 600 bed general hospital
Example services	
Target group	
Target age	All ages
Population profile	Patients of the general hospital (including obstetric units) who may have significant mental health problems or have clinically significant distress associated with their medical illness.
Modelling Attributes	**See service element and activity modelling parameters document**

1.3.2 Service Element – Consultation Liaison – Emergency Department (Hospital)

General information	
Services Delivered	
Services provided	• Aims to provide specialist mental health services to patients in the emergency department within the hospital setting. • Specialist mental health intake, assessment, treatment (if indicated) to enable prompt referral and access to appropriate mental health care and/or support 24/7. • Linkage to appropriate services for follow-up and/or facilitation of transfers to inpatient units if indicated. • Advice on clinical management and early recognition of symptoms relating to mental health to the emergency department treating team. • Linkages between the emergency department, emergency response services, primary care and other health services. Specialist mental health staff may also be collocated with emergency response services (e.g. Police, Ambulance and Clinical Early Response). • Teaching, training in mental health specialty for emergency department staff. • CL-ED teams have an important role in maintaining continuity of care between emergency department and mental health services and are actively involved in teaching and research programs with emergency department staff.
Key distinguishing features	• Operate in an emergency department setting. • Consultation liaison teams are multidisciplinary and while operating as part of the local area or district mental health service, are embedded in the work of the emergency department and located in the emergency department. • Delivered in non-mental health general hospital beds.
Hours of operation	24 hours/7 days
Indicative unit size	Based on a 600 bed general hospital
Example services	
Target group	
Target age	All ages
Population profile	All persons in Emergency Departments requiring a mental health response.
Modelling Attributes	**See service element and activity modelling parameters document**

1.3.3 Service Element – Consultation Liaison – Rural Hospital and Emergency Department

General information	
Services Delivered	
Services provided	• Aims to provide specialised assessment and planning to support the safe and effective treatment of consumers in rural general hospital beds and emergency departments for individuals whose primary problem relates to their mental health or whose physical health care is complicated by their mental health problems. • This team operates within the rural area to deliver services to patients in rural general hospitals and/or emergency departments. Services are delivered by local mental health teams, who are supported by specialist staff as part of the specialist rural outreach service located within the hub. This specialist support is provided via telephone, telehealth or other digital technology. The outreach service supports mental health assessment and provides advice on clinical management and early recognition of symptoms. • Facilitates linkages between the rural hospital, primary care, rural community mental health team and other health or community support services for patients who require continuing support in the community. • This team works in collaboration with the rural general hospital treating team to assist in assessing risk and facilitating transfer to specialist acute inpatient care where assessment or treatment cannot reasonably be provided in the rural general hospital or community setting. • Works in collaboration with the specialist rural outreach service located in the hub to ensure capacity for the provision of emergency mental health assessments and associated brief treatment and support 24/7. • Provide teaching, training and mental health promotion support for rural hospital staff to assist in building skills and confidence in management of people with mental health problems.
Key distinguishing features	• May operate as a dedicated hospital-based service or in smaller services as a part-time service provided by the local community mental health team. • Specialist multidisciplinary and age related specialist support is provided from the local mental health team or specialist rural outreach service. The role of the Nurse Practitioner is particularly significant. • Modelled as an extended hours service but may, in smaller areas, operate as a business hours service with or without on call coverage with consequential varying levels of support from the specialist rural outreach service. • This team receives clinical support as well as supervision, clinical governance, leadership and professional development through the specialist rural outreach service in the hub.
Hours of operation	24 hours/7 days
Indicative unit size	Based on a 100 bed general hospital
Example services	
Target group	
Target age	All ages
Population profile	<u>Emergency Department</u> Includes all people presenting who require a mental health response. These may include people with psychosis, depression and other mood illnesses, anxiety conditions, and

	those who may have attempted suicide and other acts of deliberate self-harm and those with behavioural disturbances that may be associated with substance use, and reactions to personal crises. Rural Hospitals Includes those people who are admitted to hospital (including maternity units) for assessment and/or treatment of a mental health problem and those who may have been admitted for a physical health problem who require assessment and/or treatment of a secondary mental health problem.
Modelling Attributes	**See service element and activity modelling parameters document**

1.3.4 Service Element – Consultation Liaison – Specialist Rural Outreach

General information	
Services Delivered	
Services provided	• Aims to provide a broad range of clinical and professional support to rural clinicians and direct care to people in rural areas by telehealth or in rural clinics. This service is designed to respond to the unique challenges associated with delivering sustainable services to populations in rural settings and is a centralised specialist rural and remote outreach service, which operates out of the hub. • This team provides 24/7 psychiatric consultation liaison services to rural consultation liaison services in order to support the safe and effective treatment of patients in rural hospital beds and emergency departments whose primary problem relates to their mental health or whose physical health care is complicated by their mental health problems. • Supports local rural mental health community and inpatient teams to provide intensive, developmentally appropriate, specialist mental health assessments and interventions for individuals who require treatment, rehabilitation and support to recover from mental illness. • Works in collaboration with rural general hospital treating teams to assist in assessing risk and facilitating transfers to specialist acute inpatient care where assessment or treatment cannot reasonably be provided within the rural hospital or community setting. • Provides access to face-to-face, telehealth and internet based specialist psychiatric clinical services to enable people in rural areas to access a broad range of medical treatments and assessments. • Ensures engagement with primary care and other specialist service providers to enable access to early intervention and timely treatment. • Supports local rural mental health clinicians by providing leadership, professional supervision and clinical governance. • Supports the ongoing stability and continuing development of rural services by supporting innovative recruitment and retention initiatives and access to relevant teaching and training opportunities. • Works with primary care, the community support sector and the community to ensure that plans are in place and actioned to integrate services and promote mental health to minimise the impact of mental illness on people affected, their family, friends, support people and carers.
Key distinguishing features	• Primarily a service aimed at ensuring access to specialist medical staff where local specialist services are limited or absent. • This service provides clinical support, a framework for discipline specific and generic supervision, clinical governance, leadership, professional development and research to support the operation of local rural services. This service element assumes medical staffing for children, adolescents and older adults are part of community teams (operating within the hub catchment). Medical staffing for adults assumes no local access to consultation liaison, emergency department or community-based mental health specialist medical staff. Modelling is based for a rural population of 450,000. There are three different Service Activities associated with this Service Element, as the modelling parameters vary according to age group.

	1.3.4.1 Service Activity – Consultation Liaison – Specialist Rural Outreach – Child and Youth (0-24 years) *1.3.4.2 Service Activity – Consultation Liaison – Specialist Rural Outreach – Adult (25-64 years)* *1.3.4.3 Service Activity – Consultation Liaison – Specialist Rural Outreach – Older Adult (65+ years)*
Hours of operation	24 hours/7 days
Indicative unit size	N/A
Example services	
Target group	
Target age	All ages
Population profile	All individuals accessing a mental health services through a rural community, including inpatient services, emergency department and hospital consultation liaison services and rural community teams.
Modelling Attributes	**See service element and activity modelling parameters document**

1.3.5 Service Element – Indigenous Cultural Consultation

General information	
Services Delivered	
Services provided	The role of an Aboriginal or Torres Strait Islander cultural consultant varies and is determined by the specific needs of the client. The focus of this service is managing the symptoms of illness that are culturally, rather than medically, driven. Engaging a cultural consultant should be considered complementary to care and should be integrated with other treatment. Cultural consultants may be Elders, Traditional Healers or someone with equivalent cultural knowledge who has been recognised and endorsed by their community as being able to deliver culturally informed services.
Key distinguishing features	• Aboriginal or Torres Strait Islander cultural consultants should be engaged on request and as needed, when it has been determined by patients, their families, cultural navigators/liaison officer, or clinicians that they may be beneficial as an additional component of care. • This service can be administered in hospitals, the client's homes or at a mutually agreed location. An additional interpreter or health worker may be required to facilitate sessions. • The local health service may be required to facilitate the interactions and payment for these services. They may also be required to assist families in finding a Traditional Healer who will be appropriate for the needs of the client. In some locations, such as South Australia, there are registries of endorsed Traditional Healers. Where possible, clients may prefer being able to see a cultural consultant from their own area or group. • This service element is modelled as a top-up across all severity levels and age groups.
Hours of operation	Flexible, usually during business hours
Indicative unit size	
Example services	
Target group	
Target age	Aboriginal and Torres Strait Islander peoples of all ages
Population profile	Clients across all severity levels, on request and as needed when it has been determined that they may be beneficial by patients, their families, cultural navigators or clinicians.
Modelling Attributes	**See service element and activity modelling parameters document**

1.4 Service Category – Clinical Community Treatment Team

1.4.1 Service Element – Clinical Community Treatment Team – Child – 0-11 years

1.4.2 Service Element – Clinical Community Treatment Team – Youth – 12-24 years

General information	
Services Delivered	
Services provided	• Aims to provide ongoing developmentally and culturally appropriate assessment and assertive treatment and care, to improve the quality of life for persons with complex mental health needs requiring intensive intervention in a community or residential setting. • Intensive, specialist mental health interventions and ongoing assessment are provided for those persons who require the higher intensity (in terms of the level of contact and/or range of interventions/services) treatment and support to recover from mental illness. • Care provided is holistic and encompasses support for physical and sexual health, alcohol and other drug services, and vocational and social engagement. • There is a strong emphasis on psycho education, vocational engagement, and consultation, collaboration and coordination with other key agencies (such as education) and other health care providers. • Work with the young person and their network to develop their sense of self efficacy, personal support systems and learn skills to enable independent living and full participation in their community. • Services are provided in a manner that promotes flexibility of service offerings to meet consumer preferences. • May also include provision of parenting support to young parents. • Teams should also encompass resourcing to provide an outreach function within the community to provide community awareness, develop interagency partnerships and engage with community stakeholders. This may include activities such as training in mental health literacy for staff in non-specialist mental health agencies (e.g. schools, youth services); delivery of suicide postvention; community engagement focused on initiating/maintaining collaboration and improving pathways to care; and consultation services, such as group secondary consultation to teams or individual practitioners contacting the service for advice.
Key distinguishing features	• All services provide treatment with a focus on early intervention and prevention to assist young people to manage crisis situations and reduce the need for inpatient care or the length of an inpatient stay. • Teams engage with primary care and other specialist service providers to enable access to early intervention and timely treatment. • Facilitates access to a broad range of clinical and non-clinical services to support young people to live a meaningful life. • It is especially important to engage with and support families and carers.
Hours of operation	Extended hours
Indicative unit size	N/A
Example services	CYMHS Specialist Child Team – Eastern Health (Vic) YouthLink – North Metropolitan Health Service (WA) Early Psychosis Community Services (NSW)
Target group	

Target age	0-11 years	12-24 years
Population profile	Infants and children up to the age of 12 years (who are experiencing a mental illness) and their family, friends, support people and carers. They may present with a range of mental health problems and/or illnesses that have a significant impact on their day to day life.	Adolescents and young adults up to the age of 25 years (who are experiencing a mental illness) and their family, friends, support people and carers. They may present with a range of mental health problems and/or illnesses that have a significant impact on their day to day life.
Modelling Attributes	**See service element and activity modelling parameters document**	

1.4.3 Service Element – Clinical Community Treatment Team – Adult – 25-64 years

1.4.4 Service Element – Clinical Community Treatment Team – Older Adult – 65+ years

General information		
Services Delivered		
Services provided	• Aims to provide ongoing recovery-oriented assessment and assertive treatment and care, aimed at improving the quality of life for persons with complex mental health needs requiring intensive intervention in a community or residential setting. • Provide intensive, developmentally appropriate, specialist mental health interventions and ongoing assessment for those persons who require the higher intensity (level of contact, range of interventions/services) treatment, rehabilitation and support to recover from mental illness. • There is a strong emphasis on psycho education, vocational rehabilitation, and consultation, collaboration and co-ordination with other key services and health care providers. • Work with the person and their network to develop their sense of self efficacy, personal support systems and live independently to participate fully in their community.	
Key distinguishing features	• All services have an early intervention and prevention focus to assist people to manage crisis situations and reduce the need for inpatient care or the length of an inpatient stay. • Ensure engagement with primary care and other specialist service providers to enable access to early intervention and timely treatment. • Facilitate access to a broad range of clinical and non-clinical services to enable people to establish, re-establish or reclaim a meaningful life.	
Hours of operation	25-64 years	65+ years
	Business hours	Business hours
Indicative unit size	N/A	
Example services	N/A	
Target group		
Target age	25-64 years	65+ years
Population profile	Adults with serious and/or persistent mental illness or personality disorders that have significant impact on their functioning. Individuals engaged with CCT services may have diagnoses such as schizophrenia, psychosis, severe personality disorder and affective disorders complicated by comorbidities including substance misuse.	Individuals who have severe impairment and/or distress related to serious mental illness, most commonly initial or recurrent affective or psychotic illness. Older people accessing CCT services may commonly present with associated significant levels of disturbance and psychosocial disability due to their illness and/or exacerbated of underlying personality traits, drug and alcohol problems and physical health care needs; or serious mental illness complicated by functional problems associated with ageing; or severe mental illness and complications of behavioural and psychological symptoms associated with dementia (BPSD) or other age-related illnesses.

Modelling Attributes	See service element and activity modelling parameters document

1.4.5 Service Element – Clinical Community Treatment Team – Rural

General information	
Services Delivered	
Services provided	• Aims to provide recovery oriented assessment and assertive treatment to people living in rural areas. • Teams are supported by specialist staff via a specialist rural outreach service located in the hub. This service supports mental health assessment and provides advice on clinical management. Specialist support is provided via telephone, telehealth or other digital technology. • Provides intensive, developmentally appropriate, specialist mental health assessments and interventions for those persons who require treatment, rehabilitation and support to recover from mental illness. Services are mobile and delivered by multidisciplinary teams in home and/or community settings. The team treatment approach has an emphasis on recovery, rehabilitation and community integration and may be provided over months and/or years. • Works with the specialist rural outreach service and the rural consultation liaison service to ensure capacity for the provision of emergency mental health assessments and associated brief treatment and support 24/7. • The team also facilitates access to face to face, telehealth and internet based clinical services to enable people in rural areas to access a broad range of structured psychological treatments and assessments. • Works with the person and their network to develop personal support systems to enable independent living and active participation in their community. • Works with other key services to facilitate joint care planning and case management with general practitioners and other service providers. • Works in collaboration with the rural consultation liaison service to facilitate transfer to specialist acute inpatient care where assessment or treatment cannot reasonably be provided in the rural hospital or community setting. • Engages with the community to promote mental health and minimise the impact of mental illness on people affected, their family, friends, support people and carers.
Key distinguishing features	• This team operates primarily as an all ages generalist mental health service. Age specific services are provided as visiting services or by telehealth through the specialist rural outreach service or by specialised service providers. While modelled as all ages generic services, recruitment and development of age related sub-specialisation is supported. • To manage rural case complexity and travel demands caseloads should not exceed 20 active cases.
Hours of operation	Business hours (after hours services are available through the emergency department and rural outreach service)
Indicative unit size	N/A

Example services			
Target group			
Target age	0-17 years	18-64 years	65+ years
Population profile	Infants, children and adolescents up to the age of 18 years (who are experiencing psychological distress and/or a mental illness) and their family, friends, support people and carers. They may present with a range of mental health problems and/or illnesses, but predominantly, will have diagnoses such as depression, anxiety, adjustment, attachment, developmental and/or behavioural diagnoses including complex ADHD and conduct disorder.	Adults with serious and/or persistent mental illness or personality disorders that have significant impact on their functioning. Individuals engaged with CCT services may have diagnoses such as schizophrenia, psychosis, severe personality disorder and affective disorders complicated by co morbidities including substance misuse.	Individuals who have severe impairment and/or distress related to serious mental illness, most commonly initial or recurrent affective or psychotic illness. Older people accessing CCT services may commonly present with associated significant levels of disturbance and psychosocial disability due to their illness and/or exacerbated of underlying personality traits, drug and alcohol problems and physical health care needs; or serious mental illness complicated by functional problems associated with ageing; or severe mental illness and complications of behavioural and psychological symptoms associated with dementia (BPSD) or other age-related illnesses.
Modelling Attributes	**See service element and activity modelling parameters document**		

1.4.6 Service Element – Clinical Community Treatment Team – Indigenous

General information	
Services Delivered	
Services provided	• Provides culturally appropriate care (in particular, assessment) for Aboriginal and Torres Strait Islander individuals who are being supported by a clinical community treatment team. • This assessment should be appropriate to, and consistent with, the cultural and spiritual beliefs and practices of Aboriginal and Torres Strait Islander People. This includes time for rapport building, engagement and communication between service providers, clients and their families and communities.
Key distinguishing features	• This team is an enhancement to existing clinical community treatment teams to provide specialised care for Aboriginal and Torres Strait Islander individuals. • This team may exist within or alongside an existing clinical community treatment team. • This team predominantly consists of Aboriginal and/or Torres Strait Islander specified staff.
Hours of operation	Extended hours
Indicative unit size	N/A
Example services	N/A
Target group	
Target age	All ages
Population profile	Aboriginal and/or Torres Strait Islander individuals who are being supported by a clinical community treatment team.
Modelling Attributes	**See service element and activity modelling parameters document**

1.5 Service Category – Primary Care Team

1.5.1 Service Element – Primary Care Team – Indigenous

General information	
Services Delivered	
Services provided	• Provides culturally appropriate primary health care for Aboriginal and Torres Strait Islander individuals in the community. • Multidisciplinary interventions and more pro-active engagement of health workers with the local community. This approach includes encouraging participation in health checks and screening services; providing early advice on health issues and treatment options; and identifying and facilitating access to care for those with mental health problems. • This team may play a key role in assessment, treatment and monitoring of people with mental health problems, or in the broader cultural assessment that occurs as part of assessments by non-Indigenous staff.
Key distinguishing features	• This team is based on an Aboriginal Community Controlled Health Service model. • Flexible workforce and funding arrangements provide capacity to deliver a holistic, comprehensive primary care approach. • This team predominantly consists of Aboriginal and/or Torres Strait Islander specified staff.
Hours of operation	Extended hours
Indicative unit size	N/A
Example services	N/A
Target group	
Target age	All ages
Population profile	N/A
Modelling Attributes	**See service element and activity modelling parameters document**

1.6 Service Category – Day Program

1.6.1 Service Element – Day Program Team – Child and Youth – 0-24 years

1.6.2 Service Element – Day Program Team – Adult – 25-64 years

General information		
Services Delivered		
Services provided	• Aims to reduce the severity of mental health symptoms, promote effective participation in areas such as schooling, social functioning, symptom management and other life skills, and support the person to achieve their recovery goals utilising a flexible approach that enables work with family, friends, support people, carers and other agencies. • Provides multidisciplinary and collaborative consultation, diagnostic assessment, treatment and a range of evidence based interventions including recovery and discharge planning • Day Programs provide a flexible range of intensive therapy, treatment and rehabilitation options to maximise recovery within a therapeutic milieu. • Usually time limited and targeted to treat specific age groups, illnesses, symptoms or address developmental difficulties, or needs. • Mental Health Day Programs may be used as part of an overall treatment strategy and/or an alternative to inpatient care. • Usually integrated with both Mental Health Inpatient Units and Community Mental Health Services to enhance continuity in service provision.	
Key distinguishing features	• Provides alternatives to an hospital admission for people with severe and complex mental health issues who need additional support or intensive outreach due to difficulties engaging in mainstream services • Day Programs arrange, coordinate and support access to a range of integrated services to ensure seamless service provision	
Hours of operation	Business hours	
Indicative unit size	N/A	
Example services		
Target group		
Target age	0-24 years	25-64 years
Population profile	Children, adolescents and young adults with complex needs and/or developmental disorders. E.g. autism with speech and language, disruptive behavioural disorder, eating disorders. The aetiology of their symptoms may be rooted in sexual abuse, physical abuse, neglect, parental separation, chaotic family environments, inappropriate discipline and/or a genetic predisposition. They may also have a history of criminal activity, periods in “care”, learning difficulties, emotional and behavioural difficulties, abuse, chronic physical illness or disability; sensory problems; parental mental illness or substance abuse; trauma	Adults with severe and complex mental health issues such as emerging personality disorders, eating disorders, chronic depression and extreme anxiety. Individuals with serious and/or persistent mental illness who may have diagnoses such as schizophrenia, psychosis, severe personality disorders and affective disorders complicated by co morbidities who experience social isolation and severe functional problems.

	or refugee status. Day programs aim to provide intensive treatment interventions with whole families aimed at improving parenting skills, promoting healthy child development, preventing displacement and facilitating family stability.	
Modelling Attributes	**See service element and activity modelling parameters document**	

1.7 Service Category – Review +/- Ongoing Management

1.7.1 Service Element – Centre Based Review +/- Ongoing Management

1.7.2 Service Element – Home Based Review +/- Ongoing Management

General information	
Services Delivered	
Services provided	• Aims to provide ongoing management of a person's health status and/or ongoing need for specialist mental health services. • Includes consultation with the person's family, formulation of problems/issues, a preliminary diagnosis or diagnoses, and an updated treatment plan supported by assessment and interview data. • Involves the ongoing systematic collection, analysis, interpretation of information and may include: o Mental health status monitoring; o Risk assessment; o Risk management plan; o Physical health review; o Family, friends, support people and carers needs assessment; o Social and environmental assessment; and o Individualised Care Plan and Review.
Key distinguishing features	• The nature of the centre-based support will depend on the person's needs. • Centre Based Review +/- Ongoing Management is provided within a health care setting (e.g. GP clinic). • Home Based Review +/- Ongoing Management is an outreach service provided within the individual's home.
Hours of operation	N/A
Indicative unit size	N/A
Example services	N/A
Target group	
Target age	All ages
Population profile	Individuals with a mental illness
Modelling Attributes	**See service element and activity modelling parameters document**

1.7.3 Service Element – General Physical Health Review +/- Ongoing Management

General information	
Services Delivered	

Services provided	• Aims to provide ongoing screening and management of the physical health of an individual with mental illness.
	• Includes consultation with the person's family, formulation of problems/issues, a preliminary diagnosis or diagnoses, and an updated treatment plan supported by assessment and interview data.
	• Services may include:
	  ○ Metabolic screening (Body Mass Index, waist circumference, weight, blood pressure, blood tests etc.)
	  ○ Screening to comply with treatment guidelines (e.g. mandatory criteria – clozapine)
	• The assessment will be tailored and developmentally appropriate to the age of the person.

Key distinguishing features	• Focused on the physical health care needs of an individual with mental illness
Hours of operation	N/A
Indicative unit size	N/A
Example services	N/A
Target group	
Target age	All ages
Population profile	Individuals with a mental illness
Modelling Attributes	**See service element and activity modelling parameters document**

1.8 Service Category – Care Coordination and Liaison Services

1.8.1 Service Element – Care Coordination and Liaison

General information	
Services Delivered	

Services provided	• Aims to provide coordination of care and/or mental health services and liaison with stakeholders outside of the mental health system.
	• Includes working in partnership with primary care providers, acute health and emergency services, rehabilitation and support services, family, friends, support people and carers and other agencies that occur outside of the clinical encounter.
	• Includes:
	  ○ Person centred interagency planning meetings (case conferences)
	  ○ Liaison and/or consultation with family, friends, support people and carers
	  ○ Liaison with other services/agencies including schools – verbal and written
	  ○ Transition Planning/Handover/Referral/Discharge Planning
	  ○ Multi-Disciplinary Team Reviews
	  ○ Medical records if outside of the clinical encounter
	• Effective care coordination is a key component of care for Aboriginal and Torres Strait Islander People and considered to be frequently inadequate in current service delivery. Providing mental health services to Aboriginal and Torres Strait Islander People requires a person-centred approach which sees the individual within the context of family and community as an essential component in providing culturally appropriate care. Aboriginal and Torres Strait Islander peoples currently have higher rates of physical illness, chronic disease, injury and substance use; higher rates of disability than the Australian average; and higher rates of social disadvantage and engagement with agencies such child protection or the justice system3. Ensuring linkages across the multiple agencies involved in caring for an individual or family is critical. To meet these higher levels of involvement and engagement with others, the modified framework provides increased levels of resourcing of care coordination and liaison for Aboriginal and Torres Strait Islander populations than is included in the standard national model.

Key distinguishing features	• Care coordination and liaison work undertaken as core business to effectively manage planning and service delivery is measured as part of the core hours assigned to particular clinical and non-clinical service providers and teams. • Additional hours for care coordination and liaison are only identified where it is believed that the level of complexity is such that additional effort is required to supplement the coordination and liaison effort which would ordinarily be able to be provided as part of standard practice. • Linked to the following Service Activity: *1.8.1.1 Service Activity – Rural Therapy Liaison* • This activity relates to the provision of care coordination and liaison for the purposes of promoting and facilitating access to structured psychological therapies (including e-mental health) for individuals living in rural areas.
Hours of operation	N/A
Indicative unit size	N/A

[3] Australian Institute of Health and Welfare. (2015). *The health and welfare of Australia's Aboriginal and Torres Strait Islander peoples 2015*.

Example services	
Target group	
Target age	All ages
Population profile	Individuals with a mental illness
Modelling Attributes	**See service element and activity modelling parameters document**

1.8.2 Service Element – Medico Legal Coordination and Liaison

General information	
Services Delivered	

Services provided	• Aims to provide coordination of care and/or mental health services and liaison with stakeholders outside of the mental health system.
	• May include:
	  ○ Applications form the person with mental illness
	  ○ Applications from third parties (e.g. solicitors, teachers, family members)
	  ○ Court related requests (e.g. subpoenas, summons)
	  ○ Police Service requests (e.g. statements, search warrants, coronial investigations)
	  ○ Child Safety requests for reports and documents
	  ○ Other third parties (e.g. insurance companies, non-party to the proceedings)
	  ○ Other health professionals (e.g. GPs, private agencies or professionals, and requests that are not required for the ongoing care or treatment of the person)

Key distinguishing features	• Medico-Legal Activity related to the Mental Health Act refers to all activities related to the administration of the Mental Health Act (specific to each state) including the enactment or enforcement of the Act, or any other activity associated with the Act. All Mental Health Act related activities are recorded under this element. • Other Medico-Legal Activity not related to the Mental Health Act refers to any activity associated with a legal act pertaining to a person, the including the enactment or enforcement of the act.
Hours of operation	N/A
Indicative unit size	N/A
Example services	N/A
Target group	
Target age	All ages
Population profile	Individuals with a mental illness
Modelling Attributes	**See service element and activity modelling parameters document**

1.9 Service Category – Structured Psychological Therapies

Structured Psychological Therapies (SPT) are interventions which include a structured interaction between a participant and a qualified mental health professional(s) using a recognised, psychological method such as, cognitive behavioural techniques, family therapy or psycho education counselling. These are recognised, structured or published techniques for the treatment of mental and emotional illnesses. Structured psychological interventions are designed to alleviate psychological distress or emotional disturbance, change maladaptive behaviour and foster mental health. The interventions embrace the following three approaches: Psychosocial therapy, Education and/or Counselling. Structured psychological therapies can be delivered on either an individual or group basis, typically in an office or community setting.

Structured Psychological Therapies include but are not limited to:

- Cognitive Behaviour Therapy (CBT)
- Dialectical Behaviour therapy (DBT)
- Acceptance and Commitment Therapy (ACT)
- Internal Family Systems (IFS)
- Insight-oriented therapy
- Psycho-education
- Cognitive Skills Training/Remediation
- Couple therapy
- Supportive psychotherapy
- Play therapy
- Interpersonal psychotherapy
- Narrative therapy
- Family, friends, support people and carers – focussed therapy and interventions

Techniques often used within cognitive and/or behavioural therapies include:

- Cognitive restructuring
- Cognitive remediation
- Desensitisation (graded exposure or exposure therapy)
- Relapse-prevention
- Relaxation
- Response-prevention
- Rational emotive therapy
- Role play/rehearsal
- Structured problem solving
- Treatment adherence

1.9.1 Service Element – SPT – Brief Intervention

General information	
Services Delivered	
Services provided	• Aims to support a young person experiencing situational distress, a particular problem or requiring brief psychosocial support in order to 'get back on track' through the provision of a limited number of occasions of SPT.
Key distinguishing features	• Limited in the number of sessions provided. • Delivered by a mental health worker or youth worker.
Hours of operation	N/A
Indicative unit size	N/A
Example services	
Target group	
Target age	18-24 years
Population profile	Individuals with symptoms of mental illness or a diagnosed mental illness and associated functional impairment who require brief support to help regain their functioning.
Modelling Attributes	**See service element and activity modelling parameters document**

1.9.2 Service Element – SPT – Low Intensity Intervention

General information	
Services Delivered	
Services provided	• Aims to alleviate psychological distress or emotional disturbance, change maladaptive behaviour and foster improved mental wellbeing. • Structured brief intervention between the individual and a vocationally qualified worker. The intervention is easy-to-use and delivered in accessible and non-stigmatising ways. • Includes an assessment; evidence based cognitive behavioural therapy (CBT); measurement of clinical outcomes at each session; and a clinical risk management system that enables people requiring higher intensity services to be promptly identified and stepped up to appropriate services. • May be delivered face to face or via telephone, video conferencing and/or Skype.
Key distinguishing features	• Low intensity interventions include a range of approaches to delivering time-limited, structured psychological therapies as a less costly alternative to 'standard' psychological therapy. • These low intensity interventions utilise nil or relatively little qualified mental health professional time per client, and are targeted at people with, or at risk of, mild mental illness. • Providers delivering these services have undergone a specific training program to become a low intensity worker and receive frequent supervision from a tertiary qualified professional with a mental health background (e.g. mental health nurse, psychologist, social worker). • Psychological interventions are designed to alleviate psychological distress or emotional disturbance, change maladaptive behaviour and foster mental wellbeing.
Hours of operation	N/A
Indicative unit size	N/A
Example services	NewAccess
Target group	
Target age	All ages
Population profile	Individuals with a mental illness
Modelling Attributes	**See service element and activity modelling parameters document**

1.9.3 Service Element – SPT – Individual

General information	
Services Delivered	
Services provided	• Aims to alleviate psychological distress or emotional disturbance, change maladaptive behaviour and foster mental wellbeing. • Structured interaction between the individual and a qualified mental health professional using a recognised, psychological method - e.g. CBT, family therapy or psycho-education counselling. • May be delivered face to face or via telephone, video conferencing and/or Skype.
Key distinguishing features	
Hours of operation	N/A
Indicative unit size	N/A
Example services	
Target group	
Target age	All ages
Population profile	Individuals with a mental illness
Modelling Attributes	**See service element and activity modelling parameters document**

1.9.4 Service Element – SPT – Family

General information	
Services Delivered	
Services provided	• Aims to alleviate psychological distress or emotional disturbance, change maladaptive behaviour and foster mental wellbeing. • Structured interaction between the person's family and a qualified mental health professional using a recognised, psychological method - e.g. CBT, family therapy or psycho-education counselling. Includes provision of parenting support. • May be delivered face to face or via telephone, video conferencing and/or Skype.
Key distinguishing features	• Family interventions focus on building personal capacity, resilience, coping skills and mutual support for family, friends, support people and carers. Includes services such as access to education and information, individual advocacy, intensive support to assist in navigating the mental wellbeing and community care systems. • The scope of intervention is limited to family, friends, support people and carers. It should be noted that in this context, family, friends, support people and carers includes people who have a significant emotional connection to the person as well as those who have a formal role as the person's carer.
Hours of operation	N/A
Indicative unit size	N/A
Example services	
Target group	
Target age	All ages
Population profile	The family, friends, support people and carers of an individual with a mental illness
Modelling Attributes	**See service element and activity modelling parameters document**

1.9.5 Service Element – SPT – Group

General information	
Services Delivered	
Services provided	• Aims to alleviate psychological distress or emotional disturbance, change maladaptive behaviour and foster mental wellbeing. • Structured interaction between people (on average 8) in a group setting (other than of a multiple-family group) facilitated by mental health clinicians (2) using a recognised, psychological method - e.g. CBT or psycho-education.
Key distinguishing features	
Hours of operation	N/A
Indicative unit size	N/A
Example services	
Target group	
Target age	All ages
Population profile	Individuals with a mental illness
Modelling Attributes	**See service element and activity modelling parameters document**

1.9.6 Service Element – Clinician Moderated Web-based Psychological Interventions

General information	
Services Delivered	
Services provided	• This service element is specifically focused on one aspect of e-mental health: clinician-moderated web-based psychological interventions • Aims to alleviate psychological distress or emotional disturbance, change maladaptive behaviour and foster mental wellbeing. • Refers to structured psychological therapies that are delivered through a web-based platform. Tertiary qualified professionals monitor progress and communicate to consumers as necessary via email, web-based audio, video link or by telephone. A current model involves these staff spending around 2 hours on direct client support over a 10-week program. • Clinician moderated web-based psychological interventions may be offered as an alternative to face-to-face care, or as a component of face-to-face care, in order to: ○ Enhance fidelity to evidence-based care (e.g. by therapist-assisted use of e-resources within sessions); ○ Increase the efficiency of face-to-face care, by offering adjunctive learning and skill acquisition via the use of e-resources at home; and ○ Provide additional support as needed between sessions (e.g. cueing the use of coping strategies, or helping with problem solution using web programs, apps, or online or phone-based support from a therapist or peers).
Key distinguishing features	• This service element has only been specifically identified in care profiles where it is an alternative or add-on to face-to-face care, with a lower intensity of contact from the clinician. • E-mental health or digital mental health interventions use new technologies to provide services to people with mental health needs. This sector includes a range of services, such as websites providing information; online unmoderated therapies for mental health problems; web-based counselling and support; and telephone crisis help lines.
Hours of operation	N/A
Indicative unit size	N/A
Example services	MindSpot
Target group	
Target age	12+ years (Adolescents, Young adults, Adults, Older adults)
Population profile	Individuals with a mental illness
Modelling Attributes	**See service element and activity modelling parameters document**

1.10 Service Category – Other Structured Interventions

1.10.1 Service Element – Lifestyle Interventions – Individual

General information	
Services Delivered	
Services provided	• Aims to improve the mental and physical health of young adults and manage high-risk chronic physical conditions. • Multidisciplinary intervention provides individuals with education and support to help develop and maintain a healthy lifestyle. • Dietetic consultations including education on topics such as weight management, nutrition labels and food insecurity delivered by dieticians. • Group exercise programs aiming to increase physical activity participation delivered by exercise physiologists. • Health coaching to provide a motivational framework to assist with adherence delivered by clinical nurse consultants.
Key distinguishing features	• Aims to prevent the development of physical health comorbidities and considers the intersection of mental health with other health risk behaviours such as tobacco cessation, alcohol use, sleep hygiene and sexual health screening. • Peer workers are key leaders of and integral to the success of these services. They participate in cooking classes and exercise sessions, act as positive role models and provide motivation and encouragement for participants to maintain engaged. • Workforce should be integrated with community mental health teams and have additional mental health training.
Hours of operation	Business hours
Indicative unit size	N/A
Example services	Keeping the Body in Mind – South Eastern Sydney LHD (NSW)
Target group	
Target age	12-24 years (Adolescents, Young adults)
Population profile	Individuals with a mental illness
Modelling Attributes	**See service element and activity modelling parameters document**

1.10.2 Service Element – Lifestyle Interventions – Group

General information	
Services Delivered	
Services provided	• Aims to improve the mental and physical health of young adults and manage high-risk chronic physical conditions. • Multidisciplinary intervention provides individuals with education and support to help develop and maintain a healthy lifestyle. • Dietetic consultations including education on topics such as weight management, nutrition labels and food insecurity delivered by dieticians. • Group exercise programs aiming to increase physical activity participation delivered by exercise physiologists. • Health coaching to provide a motivational framework to assist with adherence delivered by clinical nurse consultants.
Key distinguishing features	• Aims to prevent the development of physical health comorbidities and considers the intersection of mental health with other health risk behaviours such as tobacco cessation, alcohol use, sleep hygiene and sexual health screening. • Peer workers are key leaders of and integral to the success of these services. They participate in cooking classes and exercise sessions, act as positive role models and provide motivation and encouragement for participants to maintain engaged. • Workforce should be integrated in community mental health teams and have additional mental health training. • The group setting facilitates social connectedness and helps to reduce social isolation.
Hours of operation	Business hours
Indicative unit size	N/A
Example services	Keeping the Body in Mind – South Eastern Sydney LHD (NSW)
Target group	
Target age	12-24 years (Adolescents, Young adults)
Population profile	Individuals with a mental illness
Modelling Attributes	**See service element and activity modelling parameters document**

1.10.3 Service Element – Other Evidence Based Physical Therapies

General information	
Services Delivered	

Services provided	• May include:
	  ○ Exercise for Older Adults
	  ○ Light Therapy as a treatment for Seasonal Affective Disorder
	  ○ Sensory Modulation

Key distinguishing features	• Does not include ECT
Hours of operation	N/A
Indicative unit size	N/A
Example services	
Target group	
Target age	All ages
Population profile	Individuals with a mental illness
Modelling Attributes	**See service element and activity modelling parameters document**

1.11 Service Category – Pharmacotherapy

1.11.1 Service Element – Pharmacotherapy Prescription

General information	
Services Delivered	
Services provided	• Aims to provide prescription of pharmacotherapy. • Encompasses the clinical assessment and subsequent judgement that pharmacotherapy is appropriate and indicated for the person. • Typically involves the prescribing of an appropriate pharmacological agent and may include the preparation and administration of oral or depot intramuscular injection (IMI). • As well as details of the medication prescribed, the administration route and whether the prescription is new or a repeat, is collected.
Key distinguishing features	• Refers to the initial assessment for suitability and subsequent prescription of pharmacotherapy
Hours of operation	N/A
Indicative unit size	N/A
Example services	
Target group	
Target age	All ages
Population profile	Individuals with a mental illness
Modelling Attributes	**See service element and activity modelling parameters document**

1.11.2 Service Element – Pharmacotherapy Review

General information	
Services Delivered	

Services provided	• Aims to review an individual's medication regime.
	• Includes a review of a person's current medication regime to determine appropriateness of the regime and an assessment of the person's ability to manage medication safely.
	• May include:
	  ○ Pharmacotherapy Review A – No additional monitoring/imaging
	  ○ Pharmacotherapy Review B – Medium Monitoring
	  ○ Pharmacotherapy Review C – High Monitoring

Key distinguishing features	• Refers to the ongoing review of an individual's pharmacotherapy regime
Hours of operation	N/A
Indicative unit size	N/A
Example services	
Target group	
Target age	All ages
Population profile	Individuals with a mental illness
Modelling Attributes	**See service element and activity modelling parameters document**

2. Service Stream – Specialised Mental Health Community Support Services

These services are predominantly non-clinical in nature, and are largely centred on community based outreach services, with some group support and crisis respite residential services.

2.1 Service Category – Group Support and Rehabilitation Services

Group support and rehabilitation services aim to improve the quality of life and psychosocial functioning of people using mental health services, through the provision of group-based social, recreational or prevocational activities. With the exception of peer support services, group support activities are led by a member of the community managed organisation. This category does not include self-help or mutual support activities delivered on a group basis.

2.1.1 Service Element – Group Support and Rehabilitation

General information	
Services Delivered	

Services provided	• Aims to improve the quality of life and psychosocial functioning of people using mental health services.
	• These groups may be run by peer workers, but excludes groups that are specifically delivered by peer workers (as this is covered under Group Based Peer Work).
	• Services may require a specific facility but could be hosted in a number of environments.
	• Groups may be centre based (e.g. day program) or sessional (e.g. 2hrs per week) and may or may not be structured, time limited or ongoing.
	• Includes:
	  ○ Psychosocial group programs and recovery oriented groups
	  ○ Group-based assessment of psychosocial needs and functional assessment
	  ○ Development of a person centred recovery plan that identifies specific goals, referral pathways, service providers, resource options and advocates as appropriate and associated skill development and action required.

Key distinguishing features	May be linked to the following Service Activities: *2.1.1.1 Service Activity – Accessing and maintaining safe and secure housing* • Provided specifically toward an individual's personal goals of the establishment and maintenance of safe and secure housing and living well. • May be provided for individuals stepping down from residential care or for the purpose of assisting an individual to maintain or change their housing circumstances. *2.1.1.2 Service Activity – Early childhood, education and/or employment* • Provided specifically towards an individual's personal goals towards education and/or employment. • Target the functions of accessing and supporting education and employment opportunities (rather than providing the education and employment services themselves). • Includes provision of information that identifies different education/employment options and outlines access issues. *2.1.1.3 Service Activity – Enhanced relationships and social participation* • Work with the individual to identify and develop interests, access activities within the community, identify relationships, which are important to them, and work on developing, maintaining and growing those relationships.

	• Includes identifying support people who may be available to assist with accessing and participating in community activities. *2.1.1.4 Service Activity – Navigating the primary and mental health care systems* • Assist the individual to improve or maintain their health or wellness by actively seeking or establish strategies and activities that promote health/wellbeing. • Includes developing a plan for health management and identifying enablers and barriers for good health. *2.1.1.5 Service Activity – Community aged care* • Provided to aged individuals regardless of where they are living
Hours of operation	Extended hours (day, evening, Saturday, Sunday)
Indicative unit size	N/A
Example services	
Target group	
Target age	18+ years (Young adults, Adults, Older adults)
Population profile	Individuals with a diagnosed mental illness and who experience moderate to severe levels of psychosocial disability.
Modelling Attributes	**See service element and activity modelling parameters document**

2.1.2 Service Element – Group Based Peer Work

General information	
Services Delivered	
Services provided	• Aims to empower and support the family/friends/support person of someone with mental illness by working through group processes and sharing life experiences with people who have similar experiences and to help develop support networks for crisis situations. • Services are led and self-managed by peer workers. • Groups are facilitated by peer workers. • The services may or may not require a specific facility but could be hosted in a number of environments and would generally be of short duration (e.g. Group program of 2 hours). • The group programs may or may not be structured (e.g. two-hour session for 6 weeks) and might be time limited or ongoing.
Key distinguishing features	*2.1.2.1 Service Activity – Group Based Consumer Peer Support* • Service is to support the individual with mental illness • Groups may be held during business hours or after hours depending on the severity of mental illness and nature of groups. *2.1.2.2 Service Activity – Group Based Carer Peer Support* • Specifically for the family, friends or carers of individuals with mental illness • Groups may be held during business hours or after hours depending on the severity of mental illness and nature of groups.
Hours of operation	Extended hours
Indicative unit size	N/A
Example services	• Voice Hearing Group • Symptom Management Group • Arts based/recreation based programs • Grow
Target group	
Target age	16+ years
Population profile	Individuals with a diagnosed mental illness and who experience moderate to severe levels of psychosocial disability. Family/friends/support people or carers may need social emotional support coupled with education, knowledge and friendships due to the ongoing demands placed on their own health and wellbeing.
Modelling Attributes	**See service element and activity modelling parameters document**

2.2 Service Category – Individual Support and Rehabilitation Services

Individual support and rehabilitation services aim to improve the quality of life and psychosocial functioning of people using mental health services, through the provision of personalised individual social, recreational or prevocational activities. The service occurs in the context of outreach to the appropriate setting and may be linked to an individual's accommodation. This is a non-clinical service.

2.2.1 Service Element – Individual Support and Rehabilitation

General information	
Services Delivered	

Services provided	• Aims to improve the quality of life and psychosocial functioning of people using mental health services.
	• Includes individual support services provided to the person wherever they are living, which can include individuals who are homeless.
	• Rehabilitation refers to assisting a person to build (or rebuild) skills that enable them to engage in their lives more independently. Note that it is goal focussed and often time limited.
	• Services may be delivered in partnership between clinical and non-clinical staff.
	• Services may occur in a wide variety of settings (e.g. in the person's home, in the community, in residential facilities or in inpatient facilities).
	• Services are provided on a one-on-one basis.
	• Includes:
	  ○ Psychosocial needs assessment and functional assessments.
	  ○ Development of a person centred recovery plan that identifies specific goals, referral pathways, service providers, resource options and advocates as appropriate and associated skill development and action required.

Key distinguishing features	May be linked to the following Service Activities: *2.2.1.1 Service Activity – Accessing and maintaining safe and secure housing* • Provided specifically toward an individual's personal goals of the establishment and maintenance of safe, affordable and secure housing. • May be provided for individuals stepping down from residential care or for the purpose of assisting an individual to maintain or change their housing circumstances. *2.2.1.2 Service Activity – Early childhood, education and/or employment* • Provided specifically towards an individual's personal goals towards education and/or employment. • Target the functions of accessing and supporting education and employment opportunities (rather than providing the education and employment services themselves). • Includes provision of information that identifies different education/employment options and outlines access issues. *2.2.1.3 Service Activity – Enhanced relationships and social participation* • Work with the individual to identify and develop interests, access activities within the community, identify relationships, which are important to them, and work on developing, maintaining and growing those relationships. • Includes identifying support people who may be available to assist with accessing and participating in community activities.

	2.2.1.4 Service Activity – Navigating the primary and mental health care systems • Assist the individual to improve or maintain their health or wellness by actively seeking or establish strategies and activities that promote health/wellbeing. • Includes developing a plan for health management and identifying enablers and barriers for good health. *2.2.1.5 Service Activity – Youth development* This activity is for the purposes of working with a young person to support normative development during their episode of mental illness. A key purpose is also to support the learning of new skills during the transition to adulthood, such as cooking, cleaning, developing and managing a budget and accessing public transport. *2.2.1.6 Service Activity – Flexible Funding Pool – Consumer* • Includes goods and/or services which are procured on behalf of the individual in order to purchase additional assistance that is not within the practice of the mental health sector. • Goods and/or services are provided as a part of the individual support plan and are related to a goal within the individual support plan. • Examples could include purchasing cleaning equipment, replacing a refrigerator, or purchasing a gym membership.
Hours of operation	Extended hours (day, evening, Saturday, Sunday)
Indicative unit size	N/A
Example services	
Target group	
Target age	12+ years (Adolescents, Young adults, Adults, Older adults)
Population profile	Individuals with a diagnosed mental illness and who experience some level of psychosocial disability.
Modelling Attributes	**See service element and activity modelling parameters document**

2.2.2 Service Element – Individual Peer Work

General information	
Services Delivered	

Services provided	• Aims to empower and support individuals/family/friends support people and carers by sharing life experiences with people who have similar experiences and to help develop support networks for crisis situations.
	• Individually oriented services that are led and self-managed by peer workers.
	• Services are provided for the individuals with mental illness and/or their families/carers.
	• Includes:
	  ○ Individual self-help or individualised peer support services.
	  ○ Psychosocial and functional needs assessment to identify opportunities for peer support and supporting (mentoring).
	  ○ Provision of resources, skill development, education, and strategies for coping.

Key distinguishing features	• The service must be delivered by a peer worker (note that the organisation providing the service may or may not be a peer-operated entity). • Activities include: *2.2.2.1 Service Activity – Individual Peer Support* • Provision of information and facilitation of access to individual consumer peer support services where appropriate. *2.2.2.2 Service Activity – Individual Carer Peer Support* • Provision of information and facilitation of access to carer peer support services where appropriate. • Provides and explores coping strategies for individual carer situations and provides referral information about carer support services for longer term or ongoing support (including financial assistance). • For youth services, this is important and should be offered to all families/carers.
Hours of operation	N/A
Indicative unit size	N/A
Example services	
Target group	
Target age	12+ years (Adolescents, Young adults, Adults, Older adults)
Population profile	Individuals with a diagnosed mental illness who experience some level of psychosocial disability. Carers (of all ages) may need social emotional support coupled with education, knowledge and friendships due to the ongoing demands placed on their own health and wellbeing.
Modelling Attributes	**See service element and activity modelling parameters document**

2.3 Service Category – Other Residential Services

This category refers to residential mental health services in community settings that provide specialised treatment, rehabilitation or care for people affected by a mental illness or psychosocial disability. These services employ a workforce to provide rehabilitation, treatment or extended care onsite. This category does not include services occupied by admitted patients located on hospital grounds or clinical residential services.

2.3.1 Service Element – Residential Crisis and Respite Services

General information	
Services Delivered	

Services provided	• Aims to provide short-term accommodation where people in crisis can go to stabilise their illness or for the purposes of providing respite to the family/friend/support people or carers.
	• Skill Development services include:
	  ○ Education (information about illness, recovery/looking after yourself).
	  ○ Household management help (shopping, cooking, budgeting, cleaning, personal hygiene).
	  ○ Vocational advice (looking for work, resumé preparation, interview techniques).
	  ○ A focus on Indigenous and culturally and linguistically diverse needs.
	  ○ Flexibility (such as utilising the whole of-family and/or kinship models).
	  ○ A focus on family/friend/support people or carers (personal wellbeing, relaxation techniques and local services available).

Key distinguishing features	• Services are generally non-clinical in nature but may support some clinical services depending on the need of the individual. • Services can include crisis residential services where stays are limited to up to 48 hours through to planned respite of up to 14 days. • Services may be planned or in response to a sudden need experienced by the person and their family or carers.
Hours of operation	24 hours/7 days
Indicative unit size	5-10 beds
Example services	
Target group	
Target age	All ages
Population profile	Individuals with severe and persistent mental illness
Modelling Attributes	**See service element and activity modelling parameters document**

2.4 Service Category – Family and Carer Support

This category refers to services that provide support, information, education and skill development to families, friends, support people and carers of people living with a mental illness. The services are explicitly targeted at family, friends, support people and carers. Residential respite services are not included in this category.

Given the extensive kinship networks recognised within Aboriginal and Torres Strait Islander communities and the importance placed on these relationships and associated obligations, Aboriginal and Torres Strait Islander carers may frequently be supporting multiple family members and others with significant mental health needs. In addition, the lower numbers of older people within these communities means this role may fall on younger family members. Respite is a critical component of care for Aboriginal and Torres Strait Islander populations.

2.4.1 Service Element – Flexible Respite

General information	
Services Delivered	
Services provided	• Aims to provide a respite function to the families/carers of individuals with a mental illness. • Service specifically engaged to provide a respite function in the person's home or by taking the person receiving care out to another activity. • Includes crisis respite, short-term or regular respite services, young carers' respite, and working carers' respite.
Key distinguishing features	• Does not include community-based day respite.
Hours of operation	Extended hours
Indicative unit size	N/A
Example services	
Target group	
Target age	18+ years (Young adults, Adults, Older adults)
Population profile	Individuals with severe and persistent mental illness.
Modelling Attributes	**See service element and activity modelling parameters document**

2.4.2 Service Element – Day Respite

General information	
Services Delivered	
Services provided	• Aims to provide a respite function in a centre-based environment.
Key distinguishing features	• Does not involve any overnight care.
Hours of operation	Business hours
Indicative unit size	N/A
Example services	
Target group	
Target age	18+ years (Young adults, Adults, Older adults)
Population profile	Individuals with severe and persistent mental illness.
Modelling Attributes	**See service element and activity modelling parameters document**

2.4.3 Service Element – Family Support Services

General information	
Services Delivered	
Services provided	• Aims to reduce the impact of mental illness on all family members. • Includes provision of information, family mediation and re-engagement, Children of Parents with Mental Illness (COPMI), and family oriented counselling. • Services can be directed towards re-engagement of the individual with the family (i.e. family members currently not in a caring role because of disengagement).
Key distinguishing features	• Services may be provided by a peer worker and are specifically focused on the needs of the family (e.g. parents, siblings, other caregivers).
Hours of operation	Business hours
Indicative unit size	N/A
Example services	
Target group	
Target age	All ages
Population profile	Children of Parents with Mental Illness (COPMI), Family members of person with mental illness
Modelling Attributes	**See service element and activity modelling parameters document**

2.4.4 Service Element – Group Carer Support Services

General information	
Services Delivered	
Services provided	• Aims to reduce the impact of mental illness on all family members. • Services may be provided by a peer worker and are specifically focused on the needs of the individual/family/friend/support people or carers (in contrast to personalised support for the person with mental illness). • Services are provided on a group basis. • Includes group based counselling, post suicide support, psychological education and training services, group based peer support, including young carers and children of parents with mental illness.
Key distinguishing features	• Sessions are an average of six participants per staff member. • Activities may include support linked to: *2.4.4.1 Service Activity – Accessing and maintaining safe and secure housing* • Provides assistance for an individual to maintain or change their housing circumstances (including succession planning for the care of the person with mental illness). *2.4.4.2 Service Activity – Education and/or employment* • Provides assistance to target the functions of accessing and supporting education and employment opportunities. *2.4.4.3 Service Activity – Enhanced relationships and social participation* • Provides assistance to access activities within the local and broader community and to identify relationships which are important to them and work on developing, maintaining and growing those relationships. *2.4.4.4 Service Activity – Navigating the primary and mental health care systems* • Provides assistance to individuals in a caring role to improve their own health or wellness.
Hours of operation	Extended hours
Indicative unit size	N/A
Example services	
Target group	
Target age	All ages
Population profile	Carers may need social emotional support coupled with education, knowledge and friendships due to the ongoing demands placed on their own health and wellbeing.
Modelling Attributes	**See service element and activity modelling parameters document**

2.4.5 Service Element – Individual Carer Support Services

General information	
Services Delivered	

Services provided	• Aims to reduce the impact of mental illness on all family members.
	• Services may be provided by a peer worker and are specifically focused on the needs of the individual/family/friend/support people or carers (in contrast to personalised support for the person with mental illness).
	• May include addressing the following needs:
	  • Increased community awareness about the signs and symptoms of mental illness to facilitate detection, early intervention and support;
	  • Increased recognition of the experiences and needs of family/friend/support person or carers and provision of information and referral for support;
	  • Increased recognition and assistance to overcome the impact of living with a person with mental illness (relationships, family dynamics, reduced level of intimacy, social and emotional distancing, restricted social relationships);
	  • Assistance with significant financial costs related to caring (accessing treatment, demands of specific aspects of the illness, time from work and ability to continue employment;
	  • Increased access to effective treatment via better knowledge and awareness, availability of information, increased awareness and skills among health professionals and effective early intervention or crisis management.
	  • Better inclusion of family/ friend/ support person or carer's needs and concerns – voice – and more inclusive approaches to treatment and management.

Key distinguishing features	• Activities may include support linked to: *2.4.5.1 Service Activity – Accessing and maintaining safe and secure housing* • Provides assistance to an individual to maintain or change their housing circumstances (including succession planning for the care of the person with mental illness). *2.4.5.2 Service Activity – Education and/or employment* • Provides assistance to target the functions of accessing and supporting education and employment opportunities. *2.4.5.3 Service Activity – Enhanced relationships and social participation* • Provides assistance to access activities within the local and broader community and to identify relationships which are important to them and work on developing, maintaining and growing those relationships. *2.4.5.4 Service Activity – Navigating the primary and mental health care systems* • Provides assistance to individuals in a caring role to improve their own health or wellness. *2.4.5.5 Service Activity – Flexible Funding Pool – Carer* • Includes goods and/or services which are procured on behalf of the family/carer in order to purchase additional assistance that is not within the practice of the mental health sector. • Goods and/or services are provided as a part of the family/carer's support plan and are related to a goal within the individual support plan. • Examples could include purchasing cleaning equipment, replacing a refrigerator, or purchasing a gym membership.

Hours of operation	Extended hours
Indicative unit size	N/A
Example services	
Target group	
Target age	All ages
Population profile	COPMI, Family members of people with mental illness
Modelling Attributes	**See service element and activity modelling parameters document**

3. Service Stream – Specialised Bed-Based Mental Health Care Services

Specialised bed based services include all specialist mental health services that require overnight care in a hospital or community based residential setting with the exception of Residential Crisis and Respite Services (which appears in the Specialised Mental Health Community Support Services Stream). The services are divided into three categories of Acute, Sub-Acute and Non-Acute services and represent a mix of specialist clinical and non-clinical staff in both hospital and community environments. These services are usually used by individuals with severe and persistent mental illness and various levels of associated functional disability. The average length of stay is generally shortest for acute bed based services.

3.1 Service Category – Acute Inpatient Services (Hospital)

3.1.1 Service Element – Acute – Perinatal and Infant Mental Health (Hospital)

General information	
Services Delivered	
Services provided	• Aims to provide specialist mental health care to mothers during the perinatal period in an inpatient setting. • Short- to medium-term inpatient care for mothers and their infants, where the mother exhibits signs and/or symptoms of severe mental illness that have not responded adequately to less intensive interventions in the community and/or the safety and treatment needs of the dyad/family warrant admission.
Key distinguishing features	• Units are located on general hospital campuses and designed and operated to meet the special needs of mothers and infants. • The inpatient unit works as part of an integrated model which includes specialist day centre, consultation liaison and ambulatory care services which may be delivered across a number of area or district services. • Gazetted
Hours of operation	24 hours/7 days
Indicative unit size	6 beds
Example services	Perinatal and Infant Mental Health state-wide service system overview (https://www.childrens.health.qld.gov.au/wp-content/uploads/PDF/qcpimh/PIMH-statewide-service-system-overview.pdf)
Target group	
Target age	Mothers in the third trimester and mothers with infants up to 36 months.
Population profile	Majority of mothers present with a primary diagnosis of major depression but others may have schizophrenia; affective disorders; anxiety disorders, personality and behavioural disorders and substance use disorders.
Modelling Attributes	**See service element and activity modelling parameters document**

3.1.2 Service Element – Acute – Child (0-11 years) (Hospital)

3.1.3 Service Element – Acute – Youth (12-24 years) (Hospital)

General information		
Services Delivered		
Services provided	• Aims to provide culturally and developmentally appropriate, short-to medium-term specialist psychiatric assessment and treatment for young people experiencing acute episodes of mental illness who cannot be adequately treated in a less intensive environment. • Preparation for discharge is delivered through recovery-oriented practices and procedures, in a safe, therapeutic and person friendly environment.	
Key distinguishing features	• The key characteristic of acute services is that the treatment effort is focused on decreasing acuity to a level that can be treated in less intensive environments. • Young people within this age group could be admitted to an adolescent or adult unit, depending on their preferences and clinical appropriateness. • May be delivered as a Hospital in the Home bed. • Gazetted	
Hours of operation	24 hours/7 days	
Indicative unit size	0-11 years	12-24 years
	12 beds	12 beds
Example services	Youth Mental Health Inpatient Unit (NSW)	
Target group		
Target age	Population profile	
0-24 years	Infants, children, adolescents and young adults who are experiencing acute episodes of mental illness and cannot be adequately treated in a less restrictive setting. They may have multimorbidity and/or present a risk to themselves and/or others. They may also have problems such as deliberate self-harm, suicidal attempts or ideation, aggression or uncontrollable behaviour, drug and alcohol issues and persistent school refusal or suspension.	
Modelling Attributes	**See service element and activity modelling parameters document**	

3.1.4 Service Element – Acute – Adult (25-64 years) (Hospital)

3.1.5 Service Element – Acute – Older Adult (65+ years BPSD) (Hospital)

3.1.6 Service Element – Acute – Older Adult (65+ years) (Hospital)

<table>
<tr><td>General information</td><td colspan="3"></td></tr>
<tr><td>Services Delivered</td><td colspan="3"></td></tr>
<tr><td>Services provided</td><td colspan="3">• Aims to provide specialist psychiatric care for people with acute episodes of mental illness.
• Short-to medium-term 24-hour inpatient assessment and treatment services for people experiencing severe episodes of mental illness who cannot be adequately treated in a less restrictive environment.
• The core business is to provide multidisciplinary specialised assessment, best practice, evidence based and collaborative planning, interventions and preparation for discharge delivered through recovery-oriented practices and procedures, in a safe, therapeutic and person friendly environment.</td></tr>
<tr><td>Key distinguishing features</td><td colspan="3">• These episodes of acute mental illness are characterised by recent onset of severe clinical symptoms of mental illness that have potential to result in prolonged difficulty or distress, or risk to self and/or others.
• The key characteristic of acute services is that the treatment effort is focused on decreasing acuity to a level that can be treated in less restrictive environments.
• Acute services may be focused on assisting people who have had no prior contact or previous psychiatric history, or people with a continuing mental illness for whom there has been an acute exacerbation of symptoms
• Gazetted</td></tr>
<tr><td>Hours of operation</td><td colspan="3">24 hours/7 days</td></tr>
<tr><td rowspan="2">Indicative unit size</td><td>25-64 years</td><td>65+ years</td><td>65+ years BPSD</td></tr>
<tr><td>24 beds
(intensive care beds generally represent 10-20% of total beds)</td><td>16 beds
(intensive care beds generally represent 10-20% of total beds)</td><td>16 beds</td></tr>
<tr><td>Example services</td><td colspan="3">Adult Acute Mental Health Inpatient Service (https://www.seslhd.health.nsw.gov.au/adult-acute-mental-health-inpatient-service)</td></tr>
<tr><td>Target group</td><td colspan="3"></td></tr>
<tr><td>Target age</td><td colspan="3">Population profile</td></tr>
<tr><td>25-64 years</td><td colspan="3">Adults with a possible or diagnosed severe mental illness, often accompanied by behavioural disturbance, which could not be adequately assessed, investigated, treated in a less restrictive setting. Primary diagnoses usually include schizophrenia, psychosis or severe mood illness. Co-morbid or concurrent secondary illnesses such as substance abuse are common. People with complicated, severe adjustment illnesses and personality illnesses may also be admitted.</td></tr>
<tr><td>65+ years</td><td colspan="3">Conditions in older adults that may require inpatient care include mood illnesses, psychotic illnesses, complex anxiety and somatoform illnesses and acute stress and adjustment illnesses in the context of personality illness. Other common characteristics</td></tr>
</table>

	of people referred include issues related to polypharmacy and co-morbid acute and chronic complicating physical conditions.
65+ years BPSD	Older adults with severe behavioural and psychological symptoms associated with dementia (BPSD), who are unable to be managed in a less restrictive environment. Some younger people with dementia and severe BPSD may also be admitted.
Modelling Attributes	**See service element and activity modelling parameters document**

3.1.7 Service Element – Acute – Intensive Care Service (Hospital)

General information	
Services Delivered	
Services provided	• Aims to provide culturally and developmentally appropriate, short-term specialist mental health care for individuals in a secure inpatient setting. • Intensive Care Units (ICU) provide higher levels of supervision and support to people with severe mental illness or mental disorder who require containment, stabilisation and engagement in a therapeutic relationship. • In general terms people admitted to an ICU have/experience/present with a high level of behavioural disturbance and complex symptoms such that management in a less intensive setting is not suitable. • A specific risk assessment and management plan is developed to respond to the person's distress and any associated behavioural disturbance. The plan usually identifies predictors, triggers and signs and symptoms of increasing agitation/potential aggression. The plan identifies preventative strategies, de-escalation strategies, and if required, the use of prescribed medication.
Key distinguishing features	• This is a time-limited form of high intensity care, offered at the height of behavioural disturbance. • An ICU is a lockable area usually within an acute mental health unit designed to provide short-term, safe, secure low stimulus care for involuntary people experiencing severe/complex behavioural disturbance. • The emphasis is on containment, management and stabilisation of the distress/disturbance with transfer to a less restrictive environment as soon as indicated and appropriate. • When in use the ICU is staffed specifically to meet the high level needs of those requiring this level of care, supervision and support. • Treatment in an ICU should not be confused with seclusion. • Gazetted
Hours of operation	24 hours/7 days
Indicative unit size	5 beds
Example services	Mental Health Intensive Care Unit (https://www.nslhd.health.nsw.gov.au/Services/Directory/Pages/Mental-Health-Intensive-Care-Unit.aspx)
Target group	
Target age	18+ years (Young adults, Adults, Older adults)
Population profile	A person who, as a result of their illness, distress or dysfunction, exhibits levels of clinical risk, including potential risk of harm to themselves or others, to a degree that they cannot be safely treated in a less restrictive area of the acute mental health unit
Modelling Attributes	**See service element and activity modelling parameters document**

3.1.8 Service Element – Acute – Eating Disorders – Adult (18-64 years) (Hospital)

General information	
Services Delivered	
Services provided	• Aims to provide specialist mental health care to individuals with severe eating disorders in an inpatient setting. • Short-to medium-term voluntary and involuntary, inpatient care for adults with an eating disorder that meet defined medical and/or psychological risk factors, who cannot be managed safely or effectively in a community setting. • Clinical treatments include medical monitoring, weight restoration and supportive meal therapies, individual and group therapies and recovery oriented discharge planning. • Note: Although defined for adults, this service element is used in the adolescent eating disorders top-up to reflect need for specialist eating disorder inpatient care. However, adolescents should receive treatment in a youth friendly setting.
Key distinguishing features	• Units are located on general hospital campuses and designed and operated to meet the special needs of people with eating illnesses. • Units usually operate as specialist sub programs collocated with general adult inpatient units. This arrangement reflects the unique challenges of meeting the needs of this group of people. • The inpatient unit works as part of an integrated model which includes specialist day programs and consultation liaison and ambulatory care services. Staffing profiles include dieticians. • Gazetted
Hours of operation	24 hours/7 days
Indicative unit size	5 beds
Example services	Peter Beumont Eating Disorders Service (https://www.slhd.nsw.gov.au/MentalHealth/Services_eating.html)
Target group	
Target age	18-64 years (Young adults, Adults)
Population profile	Individuals with Anorexia Nervosa, Bulimia Nervosa, Eating Disorder Not Otherwise Specified or Binge Eating Disorder who meet defined physical, mental and eating disorder signs and symptoms. Key criteria include, BMI <14, BP < 90/60, level of suicide risk, severity of clinical depression and presence of substance misuse.
Modelling Attributes	**See service element and activity modelling parameters document**

3.1.9 Service Element – Acute – Rural (Hospital)

General information	
Services Delivered	
Services provided	• Aims to provide comprehensive assessment and evidence based treatment to reduce the severity of symptoms and/or distress associated with recent onset or exacerbation of a mental illness in a setting close to home for people from rural communities • Services are delivered by a multidisciplinary team of health care professionals operating as part of a local integrated mental health service system. • Although units may not be secure they are designed and operated to enable care and treatment of individuals admitted involuntarily. • Admissions are dependent on the level of care required. If a risk assessment indicates that the person cannot be safely supported locally, a transfer to a larger regional unit is arranged. • Clinical pathways are clearly articulated to support access to larger regional services to allow escalation where more secure, intensive or extended treatment is required. • Although primarily designed for adults, units may provide treatment for all ages, including mothers and infants, children, young persons and older adults. Where case complexity is significant, patients are referred to specialist services. • Specialist support is provided via telephone, telehealth or other digital technology from a specialist rural outreach service. The outreach service supports mental health assessment and provides advice on clinical management. • Works with the specialist rural outreach service and the rural consultation liaison service to ensure capacity for the provision of emergency mental health assessments and associated brief treatment and support 24/7. • Work with the person and their network to develop personal support systems to enable independent living and active participation in their community. • Work with other key services to facilitate joint care planning and case management with general practitioners and other service providers. • Where appropriate and available, delivering this service as Hospital in the Home may be a preferred model.
Key distinguishing features	• Co-located within a rural general hospital providing services for a population of approximately 45,000 people • Services are supported by a larger regional mental health acute unit and the specialist staff located there and/or within a specialist rural outreach service. • The specialist rural outreach service provides specialist clinical support and a framework of supervision, clinical governance, leadership and professional development. • Average lengths of stay are measured in days or weeks • Gazetted
Hours of operation	24 hours/7 days
Indicative unit size	6 beds
Example services	Integrated Mental Health Inpatient Units (Country Health LHN, SA)

	Mental Health Acute Units (Far West LHD, NSW)
Target group	
Target age	18-64 years (Young adults, Adults)
Population profile	Adults with a possible or diagnosed severe mental illness, often accompanied by behavioural disturbance, which could not be adequately assessed, investigated, treated in a less restrictive setting. Primary diagnoses usually include schizophrenia, psychosis or severe mood illness. Co-morbid or concurrent secondary illnesses such as substance abuse are common. People with complicated, severe adjustment illnesses and personality illnesses may also be admitted.
Modelling Attributes	**See service element and activity modelling parameters document**

3.2 Service Category – Sub-Acute Services (Residential, Hospital or Nursing Home)

There are a range of sub-acute bed-based services included in the NMHSPF. These services may be provided in hospital or residential settings. They are an important component of a comprehensive mental health service system. These services are staffed 24 hours per day by multidisciplinary teams. The workforce mix is dependent upon the acuity of the target population, for example medical and nursing staff make up a greater proportion of the teams in hospital based sub-acute services compared to residential sub-acute services. Individuals requiring sub-acute services have complex care needs that require high levels of support from clinical services that is beyond what could be appropriately provided in the community at the individual's place of residence. Improvements are expected to occur in the short- to medium-term and stays are measured in weeks and months, not years. Example sub-acute services are included in the individual service element descriptions.

3.2.1 Service Element – Step Up/Step Down – Youth (12-24 years) (Residential)

General information	
Services Delivered	
Services provided	• Aims to provide short-term, transitional, developmentally and culturally appropriate care and support to minimise the trauma and impact of a first episode or relapse of a mental illness on a young person. • The service aims to prevent further deterioration of a young person's mental state and associated impairment and so reduce the likelihood of admission to an acute inpatient unit (step up). • The service also aims to enable early discharge from acute care through the provision of an intensive safe and supportive residential community residential program (step-down). • The service takes an integrated approach to clinical recovery and psychosocial interventions with a focus on stabilisation and management of illness, engagement or reengagement in positive and supportive social, family, educational and vocational connections. There is also a focus on the development of living skills to support the transition to adulthood.
Key distinguishing features	• Services are located in the community and delivered in a community residential environment. • They are delivered as partnerships and/or collaborations between clinical services and the community support sector. • There is a strong focus on early and active engagement of family/friend/support person or carer in a young person friendly environment. • Services operate as a component of a district or area integrated mental health system. • Not gazetted, although people may be subject to community treatment orders and forensic orders. Young people aged 12-17 may have extended (sub-acute) stays in acute units which may be gazetted. • Length of stay varies depending on the needs of each individual however usually no more than three weeks.
Hours of operation	24 hours/7 days
Indicative unit size	14 beds
Example services	Youth Step Up Step Down (Qld)
Target group	

Target age	12-24 years (Adolescents, Young adults)
Population profile	People who meet the criteria for admission to an area mental health service inpatient unit but whose level of risk is such that they can be safely supported in a less restrictive environment than an acute inpatient unit.
Modelling Attributes	**See service element and activity modelling parameters document**

3.2.2 Service Element – Step Up/Step Down – Adult and Older Adult (25+ years) (Residential)

General information	
Services Delivered	
Services provided	• Aims to provide short-term transitional recovery oriented care and support to minimise the trauma and impact of a first episode or relapse of a mental illness. • Services are aimed at two groups of people: (1) those who no longer require acute inpatient care but would benefit from short-term intensive treatment and support to build on gains made during the period of hospitalisation (step-down); and (2) people who are living in the community and require short-term residential support and intensive clinical treatment and intervention to prevent risk of further deterioration or relapse which may lead to a hospital (step-up). • Intensive recovery–focussed treatment and support including crisis support planning aimed at improving symptom management and building capacity for maintaining wellbeing and preventing relapse. • Short-term residential care with psychosocial rehabilitation, assistance and support to build, maintain and resume living in the community. • The service takes an integrated approach to promoting clinical, psychosocial and personal recovery with a focus on stabilisation and management of illness, development of living skills, engagement or reengagement in positive and supportive social, family, educational and vocational connections.
Key distinguishing features	• Services are located in the community and delivered in a community residential environment. • They are delivered as partnerships and/or collaborations between clinical services and the community support sector. • These services operate as a component of a district or area integrated mental health system. • Not gazetted although people may be subject to community treatment or forensic orders. • Average length of stay varies depending on the needs of each individual however usually no more than three weeks.
Hours of operation	24 hours/7 days
Indicative unit size	10 beds
Example services	Adult Step Up, Step Down (https://www.wellways.org/our-services/adult-step-step-down)
Target group	
Target age	25+ years (Adults, Older adults)
Population profile	People who meet the criteria for admission to an area mental health service inpatient unit but whose level of risk is such that they can be safely supported in a less restrictive environment than an acute inpatient unit.
Modelling Attributes	**See service element and activity modelling parameters document**

3.2.3 Service Element – Sub-Acute Rehabilitation – Youth (18-24 years) (Residential)

General information	
Services Delivered	
Services provided	• Aims to provide accommodation and developmentally and culturally appropriate treatment for young people whose needs are associated with severe mental illness, the associated clinical symptoms, and emerging psychosocial or functional disability. • Services are provided in a residential setting to support the development of skills to enable transition to independent living. Services are delivered in a collaboration/partnership between clinical and community support services. • Staffing is available on-site 24 hours a day to deliver psychosocial support to achieve agreed outcomes identified in an individualised person centred recovery plan inclusive of support networks and build links within the community to promote and sustain community integration and social connectedness. • Programs have a focus on the development of skills during emerging adulthood to support transition to independent living and development of strategies for managing mental and general health, promoting wellbeing, and meaningful engagement in the social, recreational and vocational activities of choice. • Services also include clinical support and treatment including specialist medical psychiatric review and support of people receiving involuntary community treatment under the provisions of the relevant legislation.
Key distinguishing features	• Residential services are provided as congregate self-contained living arrangements (may be 5 to 20 beds per dwelling) in which people have their own kitchen, dining room or family room and bathroom and bedroom. • In some cases kitchen and dining/family areas may be shared. • Clinical support is provided on site. • This program is often delivered as a collocation with, or sub-program of, the non-acute adult 24-hour community residential program. • Not gazetted • Improvements are expected to occur in the short- to medium-term and stays are typically measured in weeks and months, not years.
Hours of operation	24 hours/7 days
Indicative unit size	20 beds
Example services	Youth Residential Rehabilitation Units (Qld)
Target group	
Target age	18-24 years (a very small proportion of adolescents (16-17 years) may require these services however are not currently modelled in the NMHSF care profiles)
Population profile	Primary diagnoses usually include schizophrenia, psychosis or severe mood illnesses. Also may have complex presentations with exacerbations of underlying personality traits and/or issues with personality illness, drug and alcohol illnesses and significant deficits in psychosocial functioning. People will typically have significant needs affecting their ability to live in the community that can be addressed through skills development, adaptation, and provision of psychosocial support. The person may be referred to address severe unremitting symptoms which may be complicated by lack of support,

	difficulty accessing services, other health issues, deterioration in cognitive and coping skills, difficulties maintaining tenure of accommodation and lack of quality of life.
Modelling Attributes	**See service element and activity modelling parameters document**

3.2.4 Service Element – Sub-Acute Rehabilitation – Adult and Older Adult (25+ years) (Residential)

General information	
Services Delivered	
Services provided	• Aims to provide recovery oriented services in a residential setting to support transition to independent living. • These services are residential in nature and delivered in a collaboration/partnership between clinical and community support services. • They provide accommodation and recovery oriented treatment and rehabilitation for people whose needs are associated with severe mental illness, the associated clinical symptoms, and unresolved psychosocial or functional disability. • Staffing is available on-site 24 hours a day to deliver recovery oriented psychosocial rehabilitation and support to achieve agreed outcomes identified in an individualised person centred recovery plan inclusive of support networks and build links with in the community to promote and sustain community integration and social connectedness. • Programs have a focus on developing skills and strategies for managing mental and general health, promoting wellbeing, sustainable community living and meaningful engagement in the social, recreational and vocational activities of choice. • Services also include clinical support and treatment including specialist medical psychiatric review and support of people receiving involuntary community treatment under the provisions of the relevant legislation.
Key distinguishing features	• Residential services are provided as congregate self-contained living arrangements (may be 5 to 20 beds per dwelling) in which people have their own kitchen, dining room or family room and bathroom and bedroom. • In some cases kitchen and dining/family areas may be shared. • Clinical support is provided on site. • This program is often delivered as a collocation with, or sub-program of, the non-acute adult 24-hour community residential program. • Not gazetted • Average length of stay varies depending on the needs of each individual however usually no more than four months.
Hours of operation	24 hours/7 days
Indicative unit size	20 beds
Example services	Community Care Unit (https://www.health.qld.gov.au/cq/services/mental-health/services/community-care-unit)
Target group	
Target age	25+ years (Adults, Older adults)
Population profile	Primary diagnoses usually include schizophrenia, psychosis or severe mood illnesses. Also may have complex presentations with exacerbations of underlying personality traits and /or issues with personality illness, drug and alcohol illnesses and significant deficits in psychosocial functioning. People will typically have significant needs affecting their ability to live in the community that can be addressed through skills development, adaptation, and provision of psychosocial support. The person may be referred to

	address severe unremitting symptoms which may be complicated by lack of support, difficulty accessing services, other health issues, deterioration in cognitive and coping skills, difficulties maintaining tenure of accommodation and lack of quality of life.
Modelling Attributes	**See service element and activity modelling parameters document**

3.2.5 Service Element – Sub Acute Rehabilitation – Rural (Residential or Hospital)

General information	
Services Delivered	
Services provided	• Aims to provide step up step down recovery-based treatment close to home for people from rural communities. Services are supported by a rural acute inpatient unit and specialist staff located there and/or within a specialist rural outreach service in the hub. • The service provides short-term residential care with psychosocial rehabilitation, assistance and support to build, maintain and resume living in the community. • The services provides an integrated approach to promoting clinical, psychosocial and personal recovery with a focus on stabilisation and management of illness, engagement or reengagement in positive and supportive social, family, educational and vocational connections. • Treatment and support is recovery-focussed and includes crisis support planning aimed at improving symptom management and building capacity for maintaining wellbeing and preventing relapse. • Services are aimed at two groups of people: first, those who no longer require acute inpatient care but would benefit from short-term intensive treatment and support to build on gains made during the period of hospitalisation (step-down) secondly, people who are living in the community and require short-term residential support and intensive clinical treatment and intervention to prevent risk of further deterioration or relapse which may lead to a hospital (step-up). • For young adults aged 18-24 years, treatment in this unit should occur in a designated, youth appropriate area that is separate from the general adult population. • Where appropriate and available, delivering this service as Hospital in the Home may be a preferred model.
Key distinguishing features	• Services are located in the community preferentially but may be located on a rural hospital campus. In some cases, services may be delivered in a community residential environment. • Services are delivered as partnerships and/or collaborations between clinical services and the community support sector. • These services operate as a component of a local rural integrated mental health system which includes local access to acute inpatient, community clinical teams and supported residential services. • Services are delivered by multidisciplinary teams operating on the recovery model. • While modelled as adult services admission of older and younger persons may occur by exception. • Services are supported by a specialist rural outreach service which provides specialist clinical support and a framework of supervision, clinical governance, leadership and professional development services.
Hours of operation	24 hours/7 days
Indicative unit size	10 beds
Example services	Sub-acute Services (Country Health LHN, SA)

	Mental Health Recovery Units (Far West LHD, NSW)
Target group	
Target age	18-64 years (Young adults, Adults)
Population profile	Individuals who meet the criteria for admission to a rural mental health inpatient unit but whose level of risk is such that they can be safely supported in a less restrictive environment than an acute inpatient unit.
Modelling Attributes	**See service element and activity modelling parameters document**

3.2.6 Service Element – Sub Acute Intensive Care Service (Hospital)

General information	
Services Delivered	
Services provided	• Aims to provide support to adults requiring sub-acute care in a hospital setting. • Sub-acute intensive care services provide short-to medium-term treatment and rehabilitation in a safe, structured environment for people with unremitting and severe symptoms of mental illness and an associated significant disturbance in behaviour which precludes their receiving treatment in a less restrictive environment. • Services include, specialist behavioural and symptom management programs, individualised and group rehabilitation programs aimed at maximising individual functioning and minimising the effects of long-term care and recovery oriented pre-discharge and community placement planning to support safe transition to more independent living.
Key distinguishing features	• Sub-acute intensive care services are located on hospital campuses. • Often operates as a hybrid model that includes non-acute intensive care program beds. • Units are designed to provide a reasonably high level of security. Programs have a strong focus on safety, security and risk assessment and management. • They operate as a component of a district or area integrated mental health service system. • Not to be confused with low, medium and high security forensic units. • Average length of stay varies depending on the needs of each individual however usually no more than four months. • Gazetted • Sub-acute inpatient services must ensure capacity to provide culturally safe and appropriate care to Aboriginal and Torres Strait Islander people, including through employment of Aboriginal and Torres Strait Islander workforce. Staffing levels of Aboriginal and Torres Strait Islander specific workforce should be appropriate for the level of service provided to this population. • An appropriate proportion of Vocationally Qualified staff modelled in staffing profiles for Sub-Acute units should be Aboriginal and/or Torres Strait Islander Mental Health Workers. • Where demand is sufficient, operation of a separate unit for Aboriginal and Torres Strait Islander consumers could be considered, particularly for smaller residential units.
Hours of operation	24 hours/7 days
Indicative unit size	8 beds
Example services	Secure Extended Care Unit (https://www2.health.vic.gov.au/mental-health/mental-health-services/services-by-type/subacute-mental-health-services/secure-extended-care-units)
Target group	
Target age	18+ years (Young adults, Adults, Older adults)

Population profile	Primary diagnoses usually include schizophrenia, psychosis or severe mood illnesses. Also may have complex presentations including issues with personality illness or exacerbations of underlying personality traits, drug and alcohol illnesses, complex trauma and clinically significant deficits in psychosocial functioning. Associated issues of behaviour and risk which indicate a need for rehabilitation include severely disorganised behaviour leading to difficulty in managing activities of daily living, impaired impulse control, vulnerability, ongoing risk of aggression, and significant risk of self-harm.
Modelling Attributes	**See service element and activity modelling parameters document**

3.2.7 Service Element – Sub-Acute – Older Adult (65+ years) (Hospital)

General information	
Services Delivered	
Services provided	• Aims to provide support to older adults with a need for sub-acute care in a hospital setting. • Provides assessment, ongoing specialised clinical treatment, rehabilitation and support for people who require sub-acute mental health care in order to regain function lost due to an acute mental illness and to prevent or delay admission to a residential aged care facility. • Services are delivered in close collaboration with the general aged care sector.
Key distinguishing features	• Services may be co-located on a hospital campus with acute older adult services or a geriatric medical ward. • These services operate as a component of a district or area integrated mental health system, with that district or area mental health service having continuing responsibility for clinical governance. • Should not to be confused with staffed residential support services for older adults which may be supported by area ambulatory clinical mental health services but whose primary function is residential rehabilitation for older adults whose primary needs are associated with the need for additional functional support rather than clinical symptoms. • Gazetted
Hours of operation	24 hours/7 days
Indicative unit size	16 beds
Example services	
Target group	
Target age	65+ years (Older adults)
Population profile	Individuals who meet criteria for acute admission and have completed their acute treatment phase but still have a need for continued treatment of symptoms of mental illness that may have responded poorly or only partially to treatment. A person may be experiencing severe unremitting clinical symptoms. The person may also present with a level of risk, functional difficulties or other complicating factors that preclude living in the community or generic aged care setting at the time.
Modelling Attributes	**See service element and activity modelling parameters document**

3.3 Service Category – Non-Acute Extended Treatment Services (Residential, Hospital or Nursing Home)

3.3.1 Service Element – Non-Acute – Youth (18-24 years) (Residential)

General information	
Services Delivered	
Services provided	• Aims to provide accommodation and developmentally and culturally appropriate treatment for young people whose needs are associated with severe mental illness, the associated clinical symptoms, and emerging psychosocial or functional disability. • Staffing is on-site 24 hours a day to deliver psychosocial support to achieve agreed outcomes identified in an individualised person centred recovery plan inclusive of support networks and support to build links with in the community to sustain community integration and social connectedness. • Programs have a focus on the development of skills during emerging adulthood and strategies for managing mental and general health, promoting wellbeing, sustainable community living and meaningful engagement in the social, recreational and vocational activities of choice. • Services also include clinical support and treatment including specialist medical psychiatric review and support of people receiving involuntary community treatment under the provisions of the relevant legislation.
Key distinguishing features	• Residential services are provided as congregate living arrangements (may be 5 to 20 beds per dwelling) in which people may share living spaces such as a kitchen, dining room or family room and may have their own bathrooms and bedrooms. • Services are provided for 24 hours per day. • Clinical support is provided on site generally by a local mental health service. • Differences between non-acute and sub-acute rehabilitation units are based primarily on length of stay; sub-acute unit stays are measured in weeks and months, whereas non-acute stays are typically measured in years. • Not gazetted
Hours of operation	24 hours/7 days
Indicative unit size	20 beds
Example services	Youth Residential Rehabilitation Services (Qld)
Target group	
Target age	18-24 years (a very small proportion of adolescents (16-17 years) may require these services however are not currently modelled in the NMHSF care profiles)
Population profile	Primary diagnoses usually include schizophrenia and related psychosis and mood illnesses. Also may have complex presentations including issues with personality illness, drug and alcohol illnesses and significant deficits in psychosocial functioning. Typically people have significant needs for community-based functional support which make living independently even with high levels of personal support difficult in the context of a severe but relatively stable mental health status. The person will have access to a recovery-based support program. The person may be referred to address severe unremitting symptoms which may be complicated by lack of support, difficulty accessing

	services, other health issues, deterioration in cognitive and coping skills, difficulties maintaining tenure of accommodation and lack of quality of life.
Modelling Attributes	**See service element and activity modelling parameters document**

3.3.2 Service Element – Non-Acute – Adult and Older Adult (25+ years) (Residential)

General information	
Services Delivered	
Services provided	• Aims to provide non-acute care to adults in a residential setting with 24-hour staffing. • These services are residential in nature. They provide accommodation and recovery-oriented treatment and rehabilitation for people whose needs are associated with severe mental illness, the associated clinical symptoms, and unresolved psychosocial or functional disability. • Staffing is on-site 24 hours a day to deliver recovery oriented psychosocial rehabilitation and support to achieve agreed outcomes identified in an individualised person-centred recovery plan inclusive of support networks and support to build links with in the community to sustain community integration and social connectedness. • These services offer ongoing development of skills and strategies for managing mental and general health, promoting wellbeing, sustainable community living and meaningful engagement in the social, recreational and vocational activities of choice. • Services also include clinical support and treatment including specialist medical psychiatric review and support of people receiving involuntary community treatment under the provisions of the relevant legislation.
Key distinguishing features	• Residential services are provided as congregate living arrangements (may be 5 to 20 beds per dwelling) in which people may share living spaces such as a kitchen, dining room or family room and may have their own bathrooms and bedrooms. • Services are provided for 24 hours per day. • Clinical support is provided on site generally by a local mental health service. • Not gazetted
Hours of operation	24 hours/7 days
Indicative unit size	20 beds
Example services	
Target group	
Target age	25+ years (Adults, older adults)
Population profile	Primary diagnoses usually include schizophrenia and related psychosis and mood illnesses. May also have complex presentations including issues with personality illness, drug and alcohol illnesses and significant deficits in psychosocial functioning. Typically people have significant needs for community-based functional support which make living independently even with high levels of personal support difficult in the context of a severe but relatively stable mental health status. The person will have access to a recovery-based support program. The person may be referred to address severe unremitting symptoms which may be complicated by lack of support, difficulty accessing services, other health issues, deterioration in cognitive and coping skills, difficulties maintaining tenure of accommodation and lack of quality of life.
Modelling Attributes	**See service element and activity modelling parameters document**

3.3.3 Service Element – Non-Acute – Older Adult (65+ years) (Hospital/Nursing Home Based)

General information	
Services Delivered	
Services provided	• Aims to provide non-acute care to older adults in a hospital or nursing home setting. • Non-acute units for older adults are specifically designed for people who have severe and persistent symptoms of mental illness that have responded poorly or partially to treatment, and who have risk profiles often with behavioural disturbance that preclude them from living in either community or aged care settings. • These services provide care over an indefinite period for people who have a relatively stable but severe level of need for additional support thus requiring extensive care and support. • They offer assessment, ongoing treatment, rehabilitation and residential support for people who require non-acute mental health care and aged care services.
Key distinguishing features	• These services are provided as partnerships within the generic aged care sector and are collocated with nursing homes and hostels or provided, as standalone units on hospital campuses. • Units are designed to meet the special needs of older adults for longer-term accommodation, ongoing assessment, treatment and rehabilitation in a safe environment. • People may remain in these units for lengthy periods but opportunities are sought where possible to achieve discharge to a less restrictive environment such as a generic nursing home place. • May be gazetted
Hours of operation	24 hours/7 days
Indicative unit size	16 beds
Example services	Older Persons Mental Health Non-Acute Inpatient Service (https://www1.health.nsw.gov.au/pds/ActivePDSDocuments/GL2017_022.pdf)
Target group	
Target age	65+ years (Older adults)
Population profile	Late onset mental illness or, early onset severe mental illness complicated by the need for additional support associated with ageing, or, severe mental illness as a complication of dementia or other age-related illnesses. Common diagnoses include schizophrenia and organic and mood illnesses
Modelling Attributes	**See service element and activity modelling parameters document**

3.3.4 Service Element – Non Acute – Intensive Care Service (Hospital)

General information	
Services Delivered	
Services provided	• Aims to provide medium to long-term treatment and rehabilitation in a safe, structured environment for people with unremitting and severe symptoms of mental illness and an associated significant disturbance in behaviour, which precludes their living in a less restrictive environment. • Services include, specialist behavioural and symptom management programs, individualised and group rehabilitation programs aimed at maximising individual functioning and minimising the effects of long-term care and recovery oriented pre-discharge and community placement planning to support safe transition to more independent living.
Key distinguishing features	• Non-acute intensive care services are located on hospital campuses. • Often operates as a hybrid model that includes sub-acute intensive care program beds • Units are designed to provide a reasonably high level of security. • Programs have a strong focus on safety, security and risk assessment and management. • They operate as a component of a district or area integrated mental health service system. • Not to be confused with low, medium and high security forensic units. • Average length of stay varies but often around 12 months. • Gazetted
Hours of operation	24 hours/7 days
Indicative unit size	24 beds
Example services	Secure Extended Care Unit (https://www2.health.vic.gov.au/mental-health/mental-health-services/services-by-type/subacute-mental-health-services/secure-extended-care-units)
Target group	
Target age	18-64 years (Young adults, Adults)
Population profile	Primary diagnoses usually include schizophrenia, psychosis or severe mood illnesses. May also have complex presentations including issues with personality illness, drug and alcohol illnesses, complex trauma and clinically significant deficits in psychosocial functioning. Associated issues of behaviour and risk which indicate a need for rehabilitation include severely disorganised behaviour leading to difficulty in managing activities of daily living, impaired impulse control, vulnerability, ongoing risk of aggression, and significant risk of self-harm.
Modelling Attributes	**See service element and activity modelling parameters document**

3.3.5 Service Element – Non Acute – Intensive Care Service Older Adult (65+) (Hospital)

General information	
Services Delivered	
Services provided	• Aims to provide non-acute care to older adults within a secure hospital setting. • Non-acute intensive care services provide medium to long-term treatment and rehabilitation in a safe, structured environment for people with unremitting and severe symptoms of mental illness and an associated significant disturbance in behaviour which precludes their living in a less restrictive environment. • Services include, specialist behavioural and symptom management programs, individualised and group rehabilitation programs aimed at maximising individual functioning and minimising the effects of long-term care and recovery oriented pre-discharge and community placement planning to support safe transition to more independent living.
Key distinguishing features	• Non-acute intensive care services are located on hospital campuses. • Units are designed to provide a reasonably high level of security. • Programs have a strong focus on safety, security and risk assessment and management. • They operate as a component of a district or area integrated mental health service system. • Not to be confused with low, medium and high security forensic units. • Usually incorporates sub-acute intensive care program beds. • Average length of stay varies but often around 12 months. • Gazetted
Hours of operation	24 hours/7 days
Indicative unit size	24 beds
Example services	
Target group	
Target age	65+ years (Older adults)
Population profile	Late onset mental illness or, early onset severe mental illness complicated by the need for additional supports associated with ageing, or, severe mental illness as a complication of dementia or other age-related illnesses. Other common diagnoses include schizophrenia and organic and mood illnesses Also may have complex presentations including personality illness, drug and alcohol illnesses, complex trauma and clinically significant deficits in psychosocial functioning. Associated issues of behaviour and risk which indicate a need for rehabilitation include severely disorganised behaviour leading to difficulty in managing activities of daily living, impaired impulse control, vulnerability, ongoing risk of aggression, and significant risk of self-harm.
Modelling Attributes	**See service element and activity modelling parameters document**

3.4 Service Category – Specialised Bed Based Non-Mental Health Care Services

Bed based non-mental health services are included in the NMHSPF model only for bed counting purposes because if these beds were not available then extra demands would be expected to be placed on the mental health beds. The bed costs are also excluded as these are non-mental health beds.

It is important to include the mental health services provided to the people in these beds, for example Consultation Liaison general (Hospital).- The mental health workforce costs are included in the modelling but non-mental health workforce costs are not included and not counted.

3.4.1 Service Element – Acute – Medical/Surgical Bed (Hospital, non-MH)

For counting purposes only, attributes and details not modelled.

These beds are provided by the general hospital.

3.4.2 Service Element – Acute – Paediatric Bed (Hospital, non-MH)

For counting purposes only, attributes and details not modelled.

These beds are provided by the general hospital.

3.4.3 Service Element – Non Acute – Adult (<24 hour support)(Residential, non-MH)

For counting purposes only, attributes and details not modelled.

These services are provided in small group residential settings. In most cases public sector mental health staff provide clinical services and community support staff provide individual support and rehabilitation as part of an integrated model of service delivery.

3.5 Service Category – Hospital Add-ons

3.5.1 Service Element – Indigenous Add-on

General information	
Services Delivered	
Services provided	• Aims to provide culturally appropriate support for Indigenous Australians in inpatient services. • Services are delivered by Indigenous specified workforce types – 50% Tertiary Qualified, 50% Vocationally Qualified.
Key distinguishing features	• Add-on service (enhancement to inpatient workforce provisions) for Indigenous Australian population receiving inpatient treatment to ensure culturally appropriate care. This service should be complementary to existing inpatient services.
Hours of operation	24 hours/7 days
Indicative unit size	n/a
Example services	n/a
Target group	
Target age	All ages
Population profile	Indigenous Australians.
Modelling Attributes	**See service element and activity modelling parameters document**

4. Service Stream – Medications and Procedures

These services represent medications and procedures, such as Transcranial Magnetic Stimulation, used in the treatment of individuals with a diagnosed mental illness.

4.1 Service Category – Medications

4.1.1 Service Element – Antidepressants

Antidepressants are indicated for major depression, premenstrual dysphoric disorder (SSRIs), anxiety disorders and eating disorders.

Medications included in class:

- SSRIs (citalopram, escitalopram, fluoxetine, fluvoxamine, paroxetine, sertraline)
- SNRIs (desvenlafaxine, duloxetine, reboxetine, venlafaxine)
- TCAs (amitriptyline, clomipramine, doxepin, dothiepin, imipramine, nortriptyline, trimipramine)
- MAOI/RIMAs (moclobemide, phenelzine, tranylcypromine)
- NaSSAs (mirtazapine, mianserin)
- Other (agomelatine)

4.1.2 Service Element – Anxiolytics

Anxiolytics are indicated for anxiety disorders.

Medications included in class:

- Benzodiazepines (alprazolam, bromazepam, clobazam, diazepam, lorazepam, oxazepam)
- Other (buspirone)

4.1.3 Service Element – Sedatives

Sedatives and hypnotics are indicated for use in anxiety disorders and acute behavioural disturbance (including in dementia). Depending on the dose, drugs classified as anxiolytics, sedatives or hypnotics (or sedative-hypnotics) have an anxiolytic affect (relief of anxiety) a sedative effect (promotes drowsiness) or a hypnotic effect (induces sleep). The distinction between drugs termed anxiolytic and sedative and hypnotic is often based on the dose and the intention of treatment.

Medications included in class:

- Benzodiazepines (flunitrazepam, midazolam, nitrazepam, temazepam, triazolam)
- Z drugs (zolpidem, zopiclone)
- Other (chloral hydrate, phenobarbitone)

4.1.4 Service Element – ADHD medications

ADHD drugs are classified as those drugs indicated for the treatment of attention deficit hyperactivity disorder (ADHD).

Medications included in class:

- Stimulants (dexamphetamine, methylphenidate)
- Other (atomoxetine)

4.1.5 Service Element – Antipsychotics

Antipsychotics are indicated for use in acute and chronic psychoses (e.g. schizophrenia) and bipolar disorder. Some antipsychotics have notable additional indications, including **quetiapine** (can also be used as adjunct in treatment-resistant major depression and generalised anxiety disorder); **chlorpromazine** and **trifluoperazine** (indicated for anxiety/agitation in non-psychotic disorders); and **risperidone** (indicated for behaviour disturbance in dementia, conduct and other disruptive behaviour disorders in people with sub-average intellectual functioning or mental retardation, and behavioural disorders in autism).

Medications included in class:

- Typical (chlorpromazine, flupenthixol, fluphenazine, haloperidol, pericyazine, thioridazine, trifluoperazine, zuclopenthixol)
- Atypical (amisulpride, aripiprazole, clozapine, olanzapine, paliperidone, quetiapine, risperidone, ziprasidone)

4.1.6 Service Element – Mood stabilisers

Mood stabilisers are indicated in bipolar disorder. Lithium is indicated for acute mania, schizoaffective disorder and chronic schizophrenia. Lithium is also clinically accepted as an adjunct treatment for treatment resistant depression (Therapeutic Guidelines Limited, 2013). Anticonvulsant mood stabilizers are clinically accepted for use as an adjunctive treatment with antipsychotics for treatment resistant schizophrenia, or in schizoaffective disorders (Therapeutic Guidelines Limited, 2013).

Medications included in class:

- Anticonvulsants (carbamazepine, lamotrigine, sodium valproate)
- Other (lithium)

References used for this Category

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4.2 Service Category – Procedures

4.2.1 Service Element – Electroconvulsive Therapy

General information	
Services Delivered	
Services provided	• Aims to deliver Electroconvulsive Therapy (ECT) by suitably trained professionals. • ECT for day patients.
Key distinguishing features	• Day only admission for the administration of ECT in a day surgery unit or an ECT suite operated as part of an Acute Mental Health Inpatient Unit. • ECT will often be a coordinated treatment procedure jointly managed by the Acute Mental Health Inpatient Unit and Operating Theatre.
Hours of operation	Business Hours
Indicative unit size	N/A
Example services	Electroconvulsive Therapy and Neurostimulation Service (https://www.goldcoast.health.qld.gov.au/our-services/electroconvulsive-therapy-ect-and-neurostimulation-service)
Target group	
Target age	18+ years (Young adults, Adults, Older adults)
Population profile	The principal indication for ECT is Major Depressive Disorder. It may also be given in certain circumstances for Mania, Schizophrenia or Schizoaffective illness, and other indications such as Catatonia, and Neuroleptic Malignant Syndrome. Indications for day treatment include those people with a low risk of suicide, no impairment of nutrition or hydration, no unstable concurrent medical illness, low anaesthetic risk, adequate social supports, ability to fast, and minimal cognitive impairment during treatment.
Modelling Attributes	**See service element and activity modelling parameters document**

4.2.2 Service Element – Transcranial Magnetic Stimulation

General information	
Services Delivered	
Services provided	• Aims to treat depression and other psychiatric illnesses. • TMS uses a very focused magnetic field to activate specific areas of the brain.
Key distinguishing features	• Repeated TMS stimulation progressively alters brain activity improving depression in some people. • TMS requires no anaesthesia or medication and generally you may go about normal activities immediately following the treatment.
Hours of operation	N/A
Indicative unit size	N/A
Example services	
Target group	
Target age	18+ years (Young adults, Adults, Older adults)
Population profile	Individuals with a mental illness
Modelling Attributes	**See service element and activity modelling parameters document**

Population-based universal services

5. Service Stream – Mental Health Promotion

These services aim to maximise population mental health and wellbeing.

5.1 Service Category – Promoting Help Seeking Behaviours

5.1.1 Service Element – Mass Promotion – Behaviours

Attribute	Details
Description	**Promoting Help Seeking Behaviours – Mass Promotion**
Fundamental Attributes	• Media campaigns, websites, books, brochures, videos, TV ads, billboards, personalities, telephone information services) • Depression or 'mental illness' more broadly • Psychosis
Service specifications and suggested modelling attributes	
Target Age:	
Target Pop'n Profile	Adults: 6.2% any affective disorder (16-85 years) (Slade et al. 2009) Professional help-seeking: 58.6% of those with affective disorder (Burgess et al., 2009) Psychosis: 12-month treated prevalence 0.45% (Morgan et al., 2012)
% Target Pop'n	
Avg contact hours and timeframe per activity (if applic)	• From one week to several years
Workforce	
Gross Cost per activity (If applic)	
Evidence Base	
Level of Evidence:	Level 3 – inconclusive evidence of effectiveness • < 10% increase in calls to suicide prevention centres and number of admissions to hospital (Dyck, 1993). • Treatment seeking in high exposure states (beyondblue) increase by 14.6% vs 6.0% in low exposure states) (Jorm, Christensen and Griffiths, 2005). • Increases in help seeking but not in those with depression (Wright et al., 2006). • Duration of untreated psychosis (DUP) reduced from 16 to 5 weeks in intervention area (Joa et al., 2008).
Key Reference:	Dumesnil and Verger (2009)
Limitations of Evidence:	• Small effects on help seeking behaviour • Longer term (beyond 6 months) effects unclear
Recommendations for future research:	

5.2 Service Category – Promoting Help Seeking Attitudes

5.2.1 Service Element – Mass Promotion – Attitudes

Attribute	Details
Description	**Promoting Help Seeking Attitudes - Mass Promotion**
Fundamental Attributes	• Short media campaigns (TV, booklets) • Long national or community programs (Media campaigns, websites, books, brochures, videos, TV ads, billboards, personalities, telephone information services) • Depression or 'mental illness' more broadly
Service specifications and suggested modelling attributes	
Target Age:	
Target Pop'n Profile	Adults: 6.2% any affective disorder (16-85 years) (Slade et al. 2009) Professional help-seeking: 58.6% of those with affective disorder (34.9% of those with any disorder) (Burgess et al., 2009)
% Target Pop'n	
Avg contact hours and timeframe per activity (if applic)	• Short-term: One TV program, information booklets • Long-term: from one week to several years
Workforce	Government or NGOs (e.g. *beyondblue*, Royal College of Psychiatrists)
Gross Cost per activity (If applic)	
Evidence Base	
Level of Evidence:	Level 5 – may be effective: Short-term Level 3 – inconclusive evidence of effectiveness: Long-term • Short-term: Intentions to seek care for depression increased by < 10% [Sogaard and Fonnebo 1995) • Long-term: 5-25% increases in willingness to seek professional help (depending on source) (Jorm, Christensen and Griffiths, 2005; Wright et al., 2006; Paykel, Hart and Priest, 1998; Institute of Mental Health, Castle Peak Hospital, 2002)
Key Reference:	Dumesnil and Verger (2009)
Limitations of Evidence:	• Short-term campaigns have limited effects on intentions • Long-term campaigns may improve attitudes to professional treatments
Recommendations for future research:	

5.2.2 Service Element – Structured Psycho Education

5.2.2.1 Service Activity – Structured Psycho Education – In person

Attribute	Details
Description	**Promoting Help Seeking Attitudes – Structured Psycho Education – in person**
Fundamental Attributes	In-person (videos, interview, seminar, written material)
Service specifications and suggested modelling attributes	
Target Age:	
Target Pop'n Profile	Adults: 6.2% any affective disorder (16-85 years) (Slade et al. 2009). Professional help-seeking: 58.6% of those with affective disorder (34.9% of those with any disorder) (Burgess et al., 2009).
% Target Pop'n	
Avg contact hours and timeframe per activity (if applic)	• One x 30-minute video (Buckley and Malouff, 2005). • 1 interview (10-15 mins) (Donohue et al., 2004). • 5-10 mins written material (Han et al., 2006). • Seminar plus written (Sharp et al., 2006).
Workforce	Research Assistant
Gross Cost per activity (If applic)	
Evidence Base	
Level of Evidence:	Level 1 - sufficient evidence of effectiveness • Post-test range - d=0.12 (general interview) to d=0.34 (video). • FU range - d=0.26 (seminar (4 weeks)) to d=0.56 (video (2 weeks)).
Key Reference:	Gulliver et al. (2012)
Limitations of Evidence:	
Recommendations for future research:	

5.2.2.2 Service Activity – Structured Psycho Education – Online

Attribute	Details
Description	**Structured Psycho Education – online**
Fundamental Attributes	• Online (incl. email and websites plus phone)
Service specifications and suggested modelling attributes	
Target Age:	
Target Pop'n Profile	Adults: 6.2% any affective disorder (16-85 years) (Slade et al. 2009). Professional help-seeking: 58.6% of those with affective disorder (34.9% of those with any disorder) (Burgess et al., 2009).
% Target Pop'n	
Avg contact hours and timeframe per activity (if applic)	• Two e-cards with basic or enhanced MHL/help seeking info
Workforce	Research Assistant, MH Professional
Gross Cost per activity (If applic)	
Evidence Base	
Level of Evidence:	Level 3 - inconclusive evidence of effectiveness • Beliefs at 6 weeks (rating any formal source as helpful) d=0.53 vs control (general health information) (Costin et al., 2009). • Emails may change attitudes.
Key Reference:	Gulliver et al. (2012)
Limitations of Evidence:	
Recommendations for future research:	

5.3 Service Category – Enhancing Community Attitudes and Stigma Reduction

5.3.1 Service Element – Contact with People with Mental Illness

Attribute	Details	
Description	**Contact with people with a mental illness**	
Fundamental Attributes	• Presentation by/interaction with person (in person or by video) with a history of mental illness (almost always accompanied by education) • Depression, depression and schizophrenia or mental illness generally	
Service specifications and suggested modelling attributes		
Target Age:	0-17 years (Children, Adolescents)	18-64 years (Young adults, Adults)
Target Pop'n Profile	Depressive disorder: 3.7% (6-17 years) (CAC-NSMHW; Sawyer et al., 2001) Any anxiety disorder: 31.9% (13-18 years) (USA NCS-A; (USA NCS-A; Merikangas et al., 2010)	Adults: 20% any mental disorder (16-85 years) (Slade et al., 2009)
% Target Pop'n		
Avg contact hours and timeframe per activity (if applic)	From one 20-min session to several hours pw for several weeks	
Workforce	MH consumer, Research Assistant, MH Professional	
Evidence Base		
Level of Evidence:	Level 1 – sufficient evidence of effectiveness • mean d=0.24 overall (mean d=0.24, attitudes, mean d=0.30 behavioural intentions) • contact in person- mean d=0.40 overall (mean d=0.37 attitudes, mean d=0.46 behavioural intentions) • contact in video- mean d=0.17 overall (mean d=0.18 attitudes, mean d=0.17 behavioural intentions) Education is more effective than contact in changing attitudes in adolescents. In-person contact more effective than by video	Level 1 – sufficient evidence of effectiveness • mean d=0.28 overall (mean d=0.41 attitudes, mean d=0.19 behavioural intentions) • contact in person- mean d=0.52 overall (mean d=0.66 attitudes, mean d=0.40 behavioural intentions) • contact in video- mean d=0.16 overall (mean d=0.30 attitudes, mean d=0.20 behavioural intentions) Contact is more effective than education in adults. In person contact more effective than by video
Key Reference:	Corrigan et al. (2012)	
Limitations of Evidence:		
Recommendations for future research:		

5.3.2 Service Element – Intensive Educational Interventions

Attribute	Details	
Description	**Intensive educational interventions**	
Fundamental Attributes	**Adolescents:** Mostly school-based interventions Videos, written information, creation of artwork, writing, role plays, group exercises Depression, depression and schizophrenia or mental illness generally **Adults:** Lectures, websites, written material	
Service specifications and suggested modelling attributes		
Target Age:	0-17 years (Children, Adolescents)	18-64 years (Young adults, Adults)
Target Pop'n Profile	Depressive disorder: 3.7% (6-17 years) (CAC-NSMHW; Sawyer et al., 2001). Any anxiety disorder: 31.9% (13-18 years) (USA NCS-A; Merikangas et al., 2010).	Adults: 20% any mental disorder (16-85 years) (Slade et al., 2009).
% Target Pop'n		
Avg contact hours and timeframe per activity (if applic)	From one 20-min session to several hours pw for several weeks	
Workforce	Research Assistant, MH Professional, Teacher	Research Assistant, MH Professional
Gross Cost per activity (If applic)		
Evidence Base		
Level of Evidence:	Level 1 – sufficient evidence of effectiveness • d=0.39 overall (d=0.45 attitudes, d=0.30 behavioural intentions)	Level 1 – sufficient evidence of effectiveness • d=0.29 overall (d=0.31 attitudes, d=0.25 behavioural intentions)
Key Reference:	Corrigan et al. (2012)	
Limitations of Evidence:		
Recommendations for future research:		

5.3.3 Service Element – Mass Promotion/Advertising Campaigns

Attribute	Details
Description	**Mass promotion/advertising campaigns**
Fundamental Attributes	• Media campaigns, events, websites, books, brochures, videos, TV ads, billboards, personalities, telephone information services). • Depression, depression and schizophrenia or mental illness generally.
Service specifications and suggested modelling attributes	
Target Age:	
Target Pop'n Profile	Adults: 6.2% any affective disorder (16-85 years) (Slade et al. 2009).
% Target Pop'n	
Avg contact hours and timeframe per activity (if applic)	Varies from TV series to longer more intensive multifaceted campaigns
Workforce	Government or NGOs
Gross Cost per activity (If applic)	
Evidence Base	
Level of Evidence:	Level 4 – likely to be effective • Changes between 5 - 20% depending on attitudes
Key Reference:	Corrigan et al. (2012)
Limitations of Evidence:	• Longer term campaigns generally considered to work (although not in all cases (Corrigan et al., 2012) but study designs have limitations (Crisp et al., 2005; Gaebel et al 2008; Dietrich et al., 2009; Henderson et al., 2012). • Short-term (3-week) campaigns not likely to be effective [Evans-Lacko et al., 2010).
Recommendations for future research:	

5.3.4 Service Element – Enhancing First Aid Behaviours

Attribute	Details
Description	**Enhancing first Aid Behaviours**
Fundamental Attributes	
Service specifications and suggested modelling attributes	
Target Age:	
Target Pop'n Profile	Adults: 20% any mental disorder (16-85 years) (Slade et al., 2009). Adolescents: 25% any mental disorder (16-85 years) (Slade et al., 2009).
% Target Pop'n	
Avg contact hours and timeframe per activity (if applic)	12-14 hour course
Workforce	MH Professional
Gross Cost per activity (If applic)	
Evidence Base	
Level of Evidence:	Level 1 – sufficient evidence of effectiveness • 12 studies showed increased confidence in providing help. • 6 studies showed increased help provided to others • MHFA effective in enhancing confidence and first-aid behaviours
Key Reference:	Jorm and Kitchener (2011)
Limitations of Evidence:	
Recommendations for future research:	

5.4 Service Category – Promoting Mental Wellbeing

5.4.1 Service Element – Social and Emotional Learning

Attribute	Details
Description	**Social and Emotional Learning**
Fundamental Attributes	• Classroom-based interventions, interventions for parents, whole of school policy development • Most have explicit goals and focus on active learning and skills development
Service specifications and suggested modelling attributes	
Target Age:	
Target Pop'n Profile	Adolescents: depressive disorder: 3.7% (6-17 years) (CAC-NSMHW; Sawyer et al., 2001)
% Target Pop'n	
Avg contact hours and timeframe per activity (if applic)	Mean no. of sessions 41, median 24
Workforce	Teachers, non-school personnel (Research Assistants, consultants)
Gross Cost per activity (If applic)	
Evidence Base	
Level of Evidence:	Level 1 – sufficient evidence of effectiveness • Social and emotional skills g=0.57 (95% CI 0.48-0.67) • Attitudes towards self and others g=0.23 (95% CI 0.16-0.30) • Positive social behaviours g=0.24 (95% CI 0.16-0.29) • Conduct problems g=0.22 (0.16-0.29) • Emotional distress g=0.24 (95% CI 0.14-0.35) • Academic performance g=0.27 (95% CI 0.15-0.39) • At 6-mth follow-up ESs of reduced magnitude but significant for all outcomes
Key Reference:	Durlak et al. (2011)
Limitations of Evidence:	• SEL programs have positive effects. • Programs delivered by teachers more effective.
Recommendations for future research:	

5.4.2 Service Element – Positive Psychology

Attribute	Details
Description	**Positive Psychology**
Fundamental Attributes	Mindfulness, positive writing, hope therapy, positive reminiscence, gratitude, happiness programs, wellbeing therapy, positive psychotherapy, CBT
Service specifications and suggested modelling attributes	
Target Age:	
Target Pop'n Profile	Adults: 20% any mental disorder (16-85 years) (Slade et al., 2009)
% Target Pop'n	
Avg contact hours and timeframe per activity (if applic)	≤ 4 weeks to > 12 weeks
Workforce	
Gross Cost per activity (If applic)	
Evidence Base	
Level of Evidence:	Level 1 – sufficient evidence of effectiveness • Wellbeing mean r=0.29 • Depression mean r=0.31 (In non-depressed people: wellbeing mean r=0.26 Depression mean r=0.21) • Positive psychology interventions improve wellbeing and ameliorate depression
Key Reference:	Sin and Lyubomirsky (2009)
Limitations of Evidence:	
Recommendations for future research:	

5.5 Service Category – Reduction of Bullying and Cyber Bullying

5.5.1 Service Element – Whole of School Approach

Attribute	Details
Description	**Whole of School Approach**
Fundamental Attributes	Training for school personnel, material for parents, videos, school-wide rules, individual counselling
Service specifications and suggested modelling attributes	
Target Age:	
Target Pop'n Profile	• 27% bullied every few weeks or more (Cross et al., 2009)
% Target Pop'n	
Avg contact hours and timeframe per activity (if applic)	Weeks to years
Workforce	Teacher, Research Assistant, MH Professional
Gross Cost per activity (If applic)	
Evidence Base	
Level of Evidence:	Level 1 – sufficient evidence of effectiveness • Whole of school approach generally effective in reducing bullying • 8 out of 10 studies showed reduction in bullying
Key Reference:	Vreeman and Carroll (2007)
Limitations of Evidence:	
Recommendations for future research:	

Other Service Elements reviewed but not included in this Service Stream due to evidence level

See Appendix 2

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6. Service Stream – Mental Illness Prevention

These services provide population-level interventions with the aim of preventing the development of mental illness.

6.1 Service Category – Prevention of Suicide, Suicide Ideation and Behaviour

6.1.1 Service Element – Restriction to Means

Attribute	Details		
Description	Broad population-based. Community-level and community-supported strategy. Effective when the method to be restricted is: 1) highly lethal and commonly used, accounting for significant proportion of deaths. 2) specific to regional context, culturally acceptable and well-recognised 3) suitable for elimination or restriction through broad policy action 4) implementation and effects can be monitored. e.g. fire arm control legislation (US); mandatory catalytic converters in car exhaust systems (UK)		
Fundamental Attributes	Success depends on cohesive community action by individuals, social leadership and means restriction (MR) being embedded into changes in the environment.		
Service specifications and suggested modelling attributes			
Target Age:	12-17 years (Adolescents)	18-64 years (Young adults, Adults)	65+ years (Older adults)
Target Pop'n Profile			
% Target Pop'n		12-month prevalence: suicidal acts (SA) 0.4%* (16-85 years); (NMHS, 2007)	
Avg contact hours and timeframe per activity (if applic)	Not applicable	Not applicable	Not applicable
Workforce	Community-level and community-supported strategy.		
Gross Cost per activity (If applic)			
Evidence Base			
Level of Evidence:	Evidence of effectiveness only when method is highly lethal. Does not inevitably lead to means substitution, and when it does, means chosen are less lethal, have lower risk of fatality and associated with fewer deaths. Only effective upon lower fatality rate of alternative methods should means substitution occur. LEVEL OF EVIDENCE: Level of evidence 2: % decline annual suicide rate: 1.5-9.5% (guns), 19-33% (domestic gas), 23% (barbiturates) (Mann et al.,2005) all level III-3 (interrupted time series without control) – large number of III-3 studies of relatively good quality, but more so consistent in indicating effect > ecological observational BUT all systematic reviews (Mann et al., 2005; van der Feltz et al., 2011) suggest this is important and likely to be highly effective, when part of national multilevel strategy.		
Key Reference:	Yip et al. (2012); Mann et al. (2005)		
Limitations of Evidence:			

Recommendations for future research:			

6.1.2 Service Element – Gate Keeper Training (Professional)

6.1.2.1 Service Activity – Gatekeeper Training (Non-medical professionals)

RATIONALE FOR CATEGORY:

- These are non-medical community gatekeepers (not general public)
- Most consistency in effect, grouped together in such a way by Mann and van der Feltz.
- Greater exposure than general public to high risk groups, and greater ability to identify, intervene and refer

Attribute	Details
Description	Variable, often tailored for each community and local MH services e.g.: Australian Aboriginal community gatekeeper training included myths and facts about suicide, warning signs and referral strategies. Community members play critical facilitatory role in dissemination of knowledge and in early detection of depression and suicide risk. Mann et al. (2005) suggests Gate Keeper training is most likely to be effective where gatekeeper roles are formalised within organisations, and pathways to treatment are readily available. More research needed on intermediate outcomes.
Fundamental Attributes	*LINK Program (US Air Force):* 1) Look for possible concerns (suicide risk factor identification) 2) Inquire about concerns/risk (intervention skills) 3) Note level of risk 4) Know referral strategies/resources (implement referral procedures to relevant MH services).
Service specifications and suggested modelling attributes	
Target Pop'n Profile	12-month prevalence: SI: 2.3%; SP: 0.6%; SA: 0.4%* (16-85 years); NSMHW; 2007
Avg contact hours and timeframe per activity (if applic)	2 days (3 hrs – 5 days)
Workforce	**Non-medical professionals** Delivery: MHP/Trained volunteers deliver the training. Audience: only for first responders, public service and defence services.
Evidence Base	
Level of Evidence:	Level 3 – inconclusive evidence of effectiveness (knowledge, skills, attitude), level 4 - likely to be effective (SA, SI, SR) • RRR = 33% (air force *LINK program*: Knox et al., 2003) • LINK program delivered in > 5 million personnel in multilevel approach, content also shown for this LINK program - (Knox et al., 2003) • Need clear fast track to available treatment in order for preventive effect to occur/be maximised • RRR = 33% (air force LINK program: large cohort: Knox et al., 2003) • Promising positive effects on knowledge, attitudes, skills in identification and intervention in short-term, some positive effects on self-efficacy. Mixed results as to sustainability of these effects, and on referral practices. Limited evidence of efficacy in reducing suicidal behaviour in short-term. Preventive potential depends on clear fast track to treatment being available.
Key Reference:	Isaac et al. (2009) – only non-medical gatekeepers, Mann et al. (2005) and van der Feltz et al. (2011) – only non-medical gatekeepers

Limitations of Evidence:	
Recommendations for future research:	Need more research into long-term effects and suicide outcomes.

6.1.3 Service Element – Responsible Reporting in Media

6.1.3.1 Service Activity – Responsible Reporting in the Media about Suicide – Effect on Media Reporting

Attribute	Details
Description	**Implementation of media guidelines around responsible reporting of suicide** (e.g.: Mindframe guidelines; Aust)
Fundamental Attributes	• Moratorium (media blackout) on suicides e.g. in subway. • Avoid sensationalism and glorification; • Avoid detailed description of method; • Focus on treatability of mental illness and preventability of suicide • Include crisis and information service contact details in media reporting
Service specifications and suggested modelling attributes	
Target Age:	
Target Pop'n Profile	
% Target Pop'n	National consumers of media.
Avg contact hours and timeframe per activity (if applic)	
Workforce	MHP and media professionals (TV, radio, print)
Gross Cost per activity (If applic)	Training of journalists (unknown amount of sessions and minutes)
Evidence Base	
Level of Evidence:	Three different levels of evidence • Level 5 – may be effective: All pre-post case series IV • Level 4 – likely to be effective (short-term); • Level 7 – no evidence of effectiveness (long-term) EFFECTIVENESS STATISTICS: Australia (Pirkis et al., 2009): • Rates for Mindframe (Mindframe and Mental Health guidelines, Commonwealth of Australia, 2002); • Mindframe: developed in partnership with media; nationally funded dissemination; ongoing training "By combining the nine dimensions of quality, it was possible to generate a total quality score for each item across both years of the Media Monitoring Project. " • "A *total quality score* could be calculated for 415 suicide items from 2000/01 and 388 from 2006/07. The total quality scores ranged from 0 to 100 in both years, but the median score increased from 57.1% in 2000/01 to 75.0% in 2006/07. Figure 1 *(sic)* shows the distribution of total quality scores for each year, demonstrating graphically that the overall quality of suicide reporting improved significantly during the life of the Media Monitoring Project ($Chi^2 = 189.88$, $df = 9$, $p < .000$). Figure 1. Distribution of total quality scores for suicide items, by year (2000/2001, n = 415; 2006/2007, n = 388). (pg. 30)" Austria (Niederkrotenthaler and Sonneck 2007): • Significant improvement in report quality. Collaborative development; active dissemination; targeted training to local journalists; monitoring

Key Reference:	Bohanna and Wang (2012): Review of quantitative (outcomes of suicide rates (2), quality and quantity of media reports) and qualitative research (interviews with media professionals). Pirkis et al (2009); and Niederkrotenthaler and Sonneck (2007).
Limitations of Evidence:	Implementation of media guidelines may be effective in improving media reporting of suicide over the short-term only when certain conditions met (e.g. media consultation when developing; active dissemination strategy, ongoing targeted journalist training). Insufficient evidence to support long-term positive effect on media reporting. • 7 no evidence of effectiveness (long-term) • In fact, negative evidence exists if conditions not met: o likely to revert to sensational reporting over time if no ongoing training (Jamison et al., 2003) o qualitative evidence suggests journalists likely to resist when insufficient collaboration or consultation occurred in development and training (Collings and Kemp, 2010)
Recommendations for future research:	

6.1.3.2 Service Activity – Responsible Reporting in the Media about Suicide – Effect on Imitative Suicide Rates

Attribute	Details
Description	**Responsible (appropriate and sensitive) professional media coverage of suicide.**
Fundamental Attributes	Media guidelines (as above) can have positive effect only when: 1) developed collaboratively with media and mental health organisations 2) active dissemination strategy 3) includes ongoing, targeted journalist training, education and maintenance of knowledge 4) ongoing monitoring of implementation.
Service specifications and suggested modelling attributes	
% Target Pop'n	12-month prevalence: SI: 2.3%; SP: 0.6%; SA: 0.4%* (16-85 years) (NMHS, 2007)
Workforce	Media professionals (TV, radio, print)
Gross Cost per activity (If applic)	Training of journalists (unspecified amount of sessions and minutes)
Evidence Base	
Level of Evidence:	Level 5 – may be effective: limited evidence, only 2 studies assessing suicide rates (both level 3) EFFECTIVENESS STATISTICS: Niederkrotenthaler and Sonneck (2007): • Significant national decrease of 81 suicides annually since guideline introduction – ONLY significant in areas in which complaint newspapers reached more than 67% of population in a review of Austrian suicide rates from 1982-2005. Level of evidence III-3 (ecological) Sonneck, Etzersdorfer and Nagel-Kuess, (1994) • 75% decrease in subway suicides in 1987 following implementation of guidelines (moratorium on subway suicide reporting); rates remained low over 5 years; overall decrease suicide rate of 19.5% (1986-1990) (Sonneck et al., 1994) Level of evidence III-3 (ecological) • No randomized controlled trials (RCT)
Key Reference:	Bohanna and Wang (2012)
Limitations of Evidence:	• No data available for media blackouts (Mann et al 2005). Decrease of 75% in subway suicides in 1987 post implementation of guidelines; rates remained low over 5 years; overall decrease suicide rate of 19.5% (1986-1990) (Sonneck et al., 1994). Signficant decrease of 81 suicides annually (1982-2005) only in areas with high coverage of compliant newspapers (>67% pop. coverage) (Niederkrotenthaler and Sonneck, 2007). • CONCLUSION: Implementation of media guidelines may be effective in improving media reporting over the short-term only when certain conditions met. Maximal effectiveness in short-term most likely when accompanied by key features (Australian and Austrian studies proof of concept). However, significant international variability exists and journalist awareness, use and opinion of guidelines is generally low; insufficient evidence to support long-term positive effect on media reporting. • Promising evidence, however inadequate empirical evaluation to support a preventive effect on suicide due to low methodological quality of existing studies (no RCTs; 2-3 quantitative; majority qualitative).

Recommendations for future research:	

6.1.4 Service Element – Web Based Programs for Preventing Suicide Ideation

6.1.4.1 Service Activity – Cognitive Behavioural Therapy – All ages

Attribute	**Details**		
Description	Cognitive Behavioural Therapy (CBT) including components of Dialectical behaviour therapy (DBT) / Problem solving therapy (PST) / Mindfulness-based cognitive therapy (MBCT) CBT + Prolonged exposure therapy (PE) (MoodGYM)		
Fundamental Attributes			
Service specifications and suggested modelling attributes			
Target Age:	12-17 years	18-64 years	65+ years
Target Pop'n Profile			
% Target Pop'n	12-month prevalence: SI: 2.3% (16-85 years) (NSMHW, 2007) Any affective illness: 6.2% (16-85 years) (Slade et al., 2009)		
Avg contact hours and timeframe per activity (if applic)	Online; 6 weekly modules; 10.5 self-help hrs over 6 weeks; 6 mins researcher email response pp. Intervention offered to participants within national telephone crisis helpline.		
Workforce	Unguided self-help; researcher (via email response to queries regarding intervention),		
Gross Cost per activity (If applic)			
Evidence Base			
Level of Evidence:	Level 3 - inconclusive evidence of effectiveness d= 0.28, [95% CI: 0.03-0.54] (mean change in SI baseline-posttest; interv. Vs. TAU control) (van Spijker et al., in press) EFFECTIVENESS STATISTICS: • ES statistic for SI program**:** ES is 0.28, (Cohens d=0.28) with 95%CI ranging from 0.03 to 0.54 = significant mean decrease in SI. This is based on the mean change from baseline to post-test (i.e. 6 weeks after BL), comparing the intervention = TAU, with the control group (TAU only and 15 minutes information page online about suicide) on suicidal thoughts. van Spijker et al (2012): • NB: Intervention offered to participants within national telephone crisis helpline. • Data for delivery are averages per participant across 6-week intervention period. • RESULTS: "The proportion of participants that showed clinically significant change in suicidal ideation was significantly higher in the intervention group: 35% compared with 21% in the control group. For each treatment response, €34,727 (US $41,325) of societal costs were saved relative to TAU indicating the intervention on top of TAU produces better health at lower costs, compared with CAU alone." **Quote from paper <u>Suicidal Ideation results (</u>**Quotes from paper) • *IE = incremental effectiveness was given for a treatment response:* defined as a clinically significant decrease in suicidal ideation on the BSS (Beck Suicide Ideation Scale). ** Quote from paper		

	• "The proportion of participants that showed clinically significant change in suicidal ideation was significantly higher in the intervention group: 35% compared with 21% in the control group." • "In the intervention group, 35.3% (41/116) met the criteria for clinically significant change in SI, compared with 20.8% (25/120) in the control group. *The difference in effectiveness was 0.353 − 0.208 = IE = 0.15 (SE 0.06).*" Cost Effectiveness results (**Quotes from paper) • "Total per-participant costs encompassed costs of health service uptake, participants' out-of-pocket expenses, costs stemming from production losses, and intervention costs." These were expressed in Euros (€) for the reference year 2009. • *"For each significantly improved participant, €34,727 (US $41,325) of societal costs were saved relative to CAU."* • "The annualized incremental costs were −€5039 per participant. Therefore, the mean incremental cost-effectiveness ratio (ICER) was estimated to be −€5039/0.15 = −€34,727 after rounding *(US −$41,325) for an additional treatment response,* indicating annual cost savings per treatment responder." • "With no willingness to pay for one significantly improved participant, there is a 93% probability that the intervention would be regarded as more cost-effective than CAU" • "Different willingness to pay ceilings only minimally affects cost-effectiveness probability estimates. Sensitivity analyses confirmed the robustness of these findings." Control group results (**Quotes from paper) • "Effectiveness further indicated by especially given that all participants were encouraged to engage in CAU. Moreover, the control group made more use of this CAU than the intervention group and called more often for exceeding cut-off SI score." EFFECTIVENESS STATISTICS: Christensen, Farrer et al. (in preparation): • Small ES at post and medium ES at 6 month for web based, but no consistent effects for online conditions. Regardless of intervention, SI significantly declined over 12 months. Those with higher baseline SI were significantly more likely to continue SI following completion of online modules. However, those with greater improvement in depression symptoms were less likely to experience SI after the program. NB: Data presented for web-based only condition.
Key Reference:	Van Spijker et al. (in press); Van Spijker et al. (2012); Christensen et al. (in prep)
Limitations of Evidence:	Suggests potential for SI to resolve spontaneously over time, and significantly more so in those with resolving depression. Suggests interventions treating depression may beneficially affect SI, however mechanisms by which this occurs is unknown. Significant reductions in suicidality, intent to die (p<.001) during call, but not at follow-up. Initial tentative suggestion of a promising online self-help intervention for SI that is feasible, cost-saving and effective. It increases likelihood of a favourable clinical outcome (sig. mean change in SI) when offered on top of TAU at lower cost, in the short-term; with sig. However, long-term effects, and effect on SA and completed suicides, are as yet unknown. Online CBT programs are no more successful than current call centre practice in resolving suicidal ideation. Insufficient evidence at this stage to recommend online CBT

	strategies for depression to be implemented for those experiencing SI. Substantial evidence exists however, to support utility of online CBT for depression only.		
Recommendations for future research:			

6.1.5 Service Element – Crisis Intervention (Telephone and Internet Helplines)

6.1.5.1 Service Activity – Community Crisis Intervention Telephone Helplines

Research supports intervention for immediate reduction of caller distress, but then issues with the follow through with mental health services was identified. Members noted that telephone helplines are often used as a stop gap for after-hours mental health services and not particularly as a suicide prevention tool. ASIST is a mandated part of lifeline training and there are other modules to address grief and postvention etc.

There was significant discussion on whether this activity should be included in the Taxonomy due to the evidence currently available (see table below). Members noted the potential for it to be effective in immediate reduction of caller distress, with acceptable referral and action planning. On this basis and in consideration of existing funding for these services, Members agreed for this Service Element and Activity to be included, but with a strong recommendation for further research.

Attribute	**Details**		
Description	**Telephone Crisis Lines** 24-hour free call telephone hotline. Description of content and recommendations for service improvement taken from Kalafat et al. (2007) A six step problem-solving intervention model is followed during the call, consisting of 1) establishing rapport 2) defining the problem(s) and assessment of suicide risk 3) exploring affect (incl. reduction of anxiety and other negative emotional states) 4) exploring callers coping responses 5) development of alternative problem solving methods 6) development of specific plan of action and/or referral to informal or formal support resources. If caller is suicidal: a) caller with suicidal ideation (SI) or planning: 1) identify participant of suicidal state 2) generate alternative coping strategies 3) mobilise supports. OR b) caller at acute imminent suicide risk: action may include 1) obtain caller location (via direct request, tracing calls, use of caller ID) 2) dispatch emergency personnel if direct intervention is indicated. **Web-Based Programs** Online CBT programs are no more successful than current call centre practice in resolving suicidal ideation. Insufficient evidence at this stage to recommend online CBT strategies for depression be implemented for those experiencing SI. Substantial evidence exists however, to support utility of online CBT for depression only. **Real-time online chat rooms.** Suggestion chat rooms may replace telephone helplines in future, yet no research or evidence exists as to best-practice features, implementation or effect.		
Fundamental Attributes			
Service specifications and suggested modelling attributes			
Target Age:	12-17 years	18-64 years	65+ years

Target Pop'n Profile	Unknown population profile, Approx. 483,000 calls per annum (2011-2012; Lifeline, 2012)		
% Target Pop'n	12% (1.9mill) Austs. accessed MH services; 35% (1.12mill) of MI accessed MH services (16-85 years); ABS (2008); NMHS (2007)		
Avg contact hours and timeframe per activity (if applic)	24 hrs Time limited one-off calls; 21 mins (average duration; Lifeline, 2005); On call 24 hrs rapid response to acute MH crisis in community Real-time online chat rooms.		
Workforce	Trained volunteers/ trained MHP		
Gross Cost per activity (If applic)			
Evidence Base			
Level of Evidence:	Level 5 – may be effective: Single level IV study: Pre-post case series Sig reductions in suicidality, intent to die (p<.001) during call, but not at follow-up. Potential to be effective in immediate reduction of caller distress, with acceptable referral and action plan rates but inadequate follow-through of such referrals. Need for improvement in outreach strategies to increase follow-up of referrals and reduce re-attempt, particularly with callers displaying high intent to die at end of call. Suicide risk assessment with validated instrument is critical for prevention, as is improvement of referral database and outreach strategies.		
Key Reference:	Kalafat et al. (2007); Gould et al. (2007); Hawton and van Heeringen (2009) - web based programs		
Limitations of Evidence:	Results shown for suicidal callers only (Gould et al., 2007) • N = 1, 085 baseline suicidal callers. N = 380 follow-up callers (drop out rate = 64.7%) (those followed up 3 weeks later). • Average time between baseline and follow-up = 13.5 days • Overall referral rate provided was for those who were in baseline only, comprising referral to existing therapists/services and to new services. • Data provided for Rescue procedure rate, • Overall referral rate and action plan rate was for baseline sample, whilst referral follow-through rate was for those participating in follow up • No control, no randomisation, very small sample, large loss to follow-up		
Recommendations for future research:			

6.2 Service Category – Prevention of Depression and Anxiety

6.2.1 Service Element – Indicated Prevention (Screening and Intervention)

6.2.1.1 Service Activity – School-based-Anxiety (7-17 years)

6.2.1.2 Service Activity – School-based-Depression (5-18 years)

6.2.1.3 Service Activity – Parent Training and Family Strengthening (pre-school)

Attribute	**Details**		
Description	**CBT – Children**		
Fundamental Attributes	Cognitive behavioural therapy		
Service specifications and suggested modelling attributes			
Activity:	**School-Based- Anxiety (7-17 years)**	**School-based-Depression**	**Parent Training and Family Strengthening (pre-school)**
Target Age:	5-18 years	5-18 years	18-64 years
Target Pop'n Profile	Any anxiety illness: 31.9% (13-18 years) (USA NCS-A; Merikangas et al., 2010)	Depressive illness: 3.7% (6-17 years) (CAC-NSMHW; Sawyer et al., 2001)	
% Target Pop'n	31.9% (13-18 years)	3.7% (6-17 years)	
Avg contact hours and timeframe per activity (if applic)	F2F CBT: 9 (8-15) sessions, 50-70 mts per session. Web-based CBT (MoodGYM): 5 modules, 20-40 mts per module.	10 (4-15) sessions, 70-90 mts per session	Social Learning and CBT (e.g. Positive Parenting Program (Triple P), Parental Education Program [PEP]) Triple P: weekly (30-90 min) se delivered over 1-4 months for children with behaviour problems; PEP: 3 weekly 2 h group sessions and a booster se 1 month later, 2 month in total
Workforce	GRAD/Teacher/MHP	GRAD/Teacher/MHP	Triple P: MHP/nurses with accredited training; PEP: MHP
Gross Cost per activity (If applic)			
Evidence Base			
Level of Evidence:	Level 1 – sufficient evidence of effectiveness Literature references are based on adolescents FRIENDS: d= -0.20 (post-test); d= 0.10 (12 mo FU). MoodGYM: d= 0.15 (post-test); d = 0.25 (6 mo FU). (ES are compared to control condition- waitlist) 53% of indicated CBT-based trials for teenagers	Level 1 – sufficient evidence of effectiveness FRIENDS: d= 0.31 (post-test); d= 0.19 (12 mo FU). MoodGYM: d (males)= 0.41 (post-test) ; d (males)= 0.27 (6 mo FU); d (females)= 0.06 (post-test); d (females)= 0.05 (6 mo FU). (ES are compared to control-waitlist) 60% of indicated CBT-based trials for teenagers	Level 1 – sufficient evidence of effectiveness Triple P: 5 RCTs with 6 mo-3 years FU vs. waitlist controls. FU`s effectiveness is uncertain. Effective for child anxiety and stress, ; PEP: 2 RCTs (6 mo and 1 yr FU) in Australia. Effective in prevention of child anxiety illness. (no specific statistics reported)

	reported positive effects in reducing anxiety symptoms	reported positive effects in reducing depressive symptoms	
Key Reference:	Christensen (2011)	Christensen (2011)	Bayer et al. (2009)
Limitations of Evidence:	School-Based- Anxiety (7-17 years)		Most programs focus on behaviour problems. There are some programs effective for reducing emotional problems (anxiety and stress), such as PEP and Triple P in pre-school aged Australian children. However, risk of bias in these studies were high
Recommendations for future research:			

6.2.1.4 Service Activity – General Adults – Cognitive Behavioural Therapy (Group, individual) – Depression

6.2.1.5 Service Activity – General Adults – Cognitive Behavioural Therapy (web-based) – Depression

Attribute	**Details**	
Description	**General Adults – CBT (Group, individual)- Depression**	
Fundamental Attributes	Cognitive behavioural therapy	
Service specifications and suggested modelling attributes		
Activity:	**General Adults – CBT (Group, individual)- Depression**	**General Adults – CBT (web-based) – Depression**
Target Age:	18-64 years	18-64 years
Target Pop'n Profile	Any affective illness: (16-85 years) (Slade et al., 2009)	Any affective illness: (16-85 years) (Slade et al., 2009)
% Target Pop'n	6.2%*	6.2%
Avg contact hours and timeframe per activity (if applic)	Group: 8 (6-12), 2 hrs per session. Ind: 1 f2f contact, 6 telephone contacts, self-help book	8 (4-12), mts=?
Workforce	MHP/ GRAD	GRAD
Gross Cost per activity (If applic)		
Evidence Base		
Level of Evidence:	Level 1 – sufficient evidence of effectiveness Grp: RR=0.65; Ind: RR=0.74. RR is at FU, compared to TAU The typical Indicated preventive intervention is an 8 se group-based using CBT as content (e.g. Coping With Depression CWD) with a reduced risk of developing major depression of 35%.	Level 1 – sufficient evidence of effectiveness d=0.56 (-0.71--0.41) at post-test vs control group/ TAU Web-based CBT can significantly reduce depressive symptoms with an effect size of .56 at post-test. The typical intervention includes 8 modules. Supported web-based CBT is significantly more effective with greater retention.
Key Reference:	Munoz et al. (2010)	Richard (2012)
Limitations of Evidence:		
Recommendations for future research:		

6.2.2 Service Element – Universal Prevention

6.2.2.1 Service Activity – School-based Cognitive Behavioural Therapy Anxiety (7-13 years)

6.2.2.2 Service Activity – School-based Cognitive Behavioural Therapy Depression (5-19 years)

6.2.2.3 Service Activity – School-based Cognitive Behavioural Therapy Anxiety (12-17 years)

6.2.2.4 Service Activity – School-based Cognitive Behavioural Therapy Depression (5-19 years)

6.2.2.5 Service Activity – School-based Cognitive Behavioural Therapy Anxiety (12-17 years)

Attribute	**Details**				
Description	**CBT – school based**				
Fundamental Attributes	Cognitive behavioural therapy				
Service specifications and suggested modelling attributes					
Activity:	**School-Based (Primary) – CBT Anxiety**	**School-based (Primary) – CBT Depression**	**School-based (Teenage) – CBT Anxiety**	**School-based (Teenage) – CBT Depression**	**School-based (Primary) – CBT Anxiety**
Target Age:	7-13 years	5-19 years	12-17 years	5-19 years	12-17 years
Target Pop'n Profile		Depressive illness: 3.7% (6-17 years) (CAC-NSMHW; Sawyer et al., 2001)			
% Target Pop'n	31.9% (13-18 years)	4.8% males, 4.9% females (13-17 years)	31.9% (13-18 years)	4.8% males, 4.9% females (13-17 years)	31.9% (13-18 years)
Avg contact hours and timeframe per activity (if applic)	9 (8-10) + 2 booster (50-70 minutes/ session)	8-12 sessions	9 (5-10) sessions, 50-70 mts	CBT, psychoeducation 8-12 sessions	9 (5-10) sessions, 50-70 mts
Workforce	GRAD/Teacher/MHP	GRAD/Teacher/MHP	MHP, GRAD/ teachers	MHP, GRAD/ teachers	GRAD/Teacher/MHP
Gross Cost per activity (If applic)					
Evidence Base					
Level of Evidence:	Level 1 – sufficient evidence of effectiveness FRIENDS (grade 6): d=0.55 (12-mth FU, compared to control condition) 60% of universal CBT-based trials	Level 1 – sufficient evidence of effectiveness RD -0.09 (95% CI -0.14- -0.05), p=0.0003 at post-test. Effect are up significant to 12	Level 1 – sufficient evidence of effectiveness SIT: d=1.61 (post-test, within	Level 1 – sufficient evidence of effectiveness RD: -0.09 (95% CI -0.14- -0.05), p=0.0003 at post-test.	Level 1 – sufficient evidence of effectiveness FRIENDS (grade 9): d=0.17 (12-mth FU, compared to control condition)

	for teenagers reported positive effects in reducing anxiety symptoms	mths, but not at 24-mth FU, (compared to no intervention) The typical universal preventive intervention is an 8-12 se school-based using CBT as content with a reduced risk of developing a depressive illness of RD -0.09 at post-test.	group; d=1.19 sy FU, within group) 60% of universal primary school CBT-based trials reported positive effects in reducing anxiety symptoms	Effect are up to 12 mths, but not to 24 mths The typical universal preventive intervention is an 8-12 se school-based using CBT as content with a reduced risk of developing a depressive illness of RD -0.09 at post-test.	60% of universal primary school CBT-based trials reported positive effects in reducing anxiety symptoms
Key Reference:	Christensen (2011)	Merry et al. (2012)	Christensen (2011)	Merry et al. (2012)	Christensen (2011)
Limitations of Evidence:		Effects are up to 12 mths, but not to 24 mths.		Effects are up to 12 mths, but not to 24 mths.	
Recommendations for future research:					

Other Service Elements Reviewed but not included in this Service Stream due to evidence level

See Appendix 3

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6.3 Service Category – Prevention of Externalising Problems

The content under this category has been adapted from: "Brief Analysis of the Effectiveness of Interventions for the Prevention of Aggression, Violence, Antisocial, Conduct Disorder, Externalising"; prepared by Professor Mark Dadds and Dr Caroline Moul (School of Psychology, University of NSW) for use by the NHMSPF Promotion and Prevention Working Group (October 2013).

6.3.1 Service Element – Multi-Level Behavioural Parent Training

6.3.1.1 Service Activity – Parent Management Training

The best researched intervention for the treatment of early onset externalising behaviour problems and disruptive behaviour disorders is training parents to better manage the child and family. There are a variety of well-developed and researched programs that share common core strategies.

- Programs to prevent the persistence and development of disruptive behaviour disorders have proven efficacy at both secondary and tertiary levels of intervention. Interventions at the secondary level are effective in reducing the rate of onset of new cases and reducing subclinical symptoms in at-risk populations. Interventions at the tertiary level are effective at reducing diagnostic severity for children with a disruptive behaviour disorder.
- A variety of delivery modes are available, from receipt of written advice through to intense individual therapy. The Triple P model is a world leader in development and evaluation of such a multi-level public health approach to intervention.
- The biggest effects have been associated with group and individual parent training programs delivered by specialist program leaders, however, GPs, nurses and other care professionals can be effective program leaders given adequate training and supervision from mental health professionals - an encouraging outcome when considering real-world implementation.
- Effect sizes range from -0.97 to 2.19 and the size of the sample has been found to be a significant moderator of effect size with smaller samples (<100) having, on average, significantly greater effect sizes than larger samples. This may reflect the reduction in efficacy when moving from small research-based studies to larger real-world settings.

Summary	
Effectiveness rating:	Level 1 – mean weighted effect size of 0.36 (range -0.97 to 2.19) (Piquero et al., 2009)
Reason for effectiveness rating:	Evidence of effectiveness from meta-analyses and randomised controlled trials.
Level of intervention:	Secondary or tertiary
Most appropriate age range:	3-12 years
Key references:	Brestan and Eyberg (1998); Markie-Dadds and Sanders (2006); Piquero, Farrington, Welsh, Tremblay and Jennings (2009); Webster-Stratton, Reid and Hammond (2004)

Examples of specific programs with demonstrated effectiveness

- Triple P – Positive Parenting Practices – Sanders
- The Incredible Years – Webster-Stratton
- Parent-Child Interaction Therapy – Eyberg
- Behavioural Parent Training – Dadds and Hawes

*6.3.1.2 Service Activity – Multidimensional Treatment Foster Care**

Multidimensional Treatment Foster Care (MTFC) is one of twelve blueprints model programs scientifically validated as effective by the Centre for Study and Prevention of Violence, USA. In MTFC, foster families are recruited and trained to provide a structured environment with clear and consistent rules and discipline. Multidimensional Treatment Foster Care has been found to be effective at reducing reoffending for delinquent youths at a one year follow-up.

Summary	
Prevention level:	Tertiary
Effectiveness rating:	Level 1 (effect sizes between -0.14 to -0.40 in reduction in antisocial and delinquent behaviours)
Reason for effectiveness rating:	Three randomised-controlled trials demonstrating effectiveness in the USA (studies involving the program developers) and replicated in Sweden in 2011.
Most appropriate age range:	12-18
References indicating effectiveness:	Chamberlain (2003); Eddy, Whaley and Chamberlain (2004); Westermark, Hansson and Olsson (2011)

*Included so as to provide a behavioural “parent” training intervention that is applicable for looked-after children.

6.3.2 Service Element – School-based Intervention Programs (Universal)

Universal school-based intervention programs may focus on one or more of a large range of topics, such as; education about antisocial behaviour and its prevention, emotional self-awareness, emotional control, self-esteem conflict resolution and social skills. Typically these programs utilise the classroom teacher to implement the intervention but may also use non-school personnel (university researcher) and may involve parental participation. These programs may not be solely focussed on reducing externalising behaviour problems and may also aim to improve social and emotional learning and academic performance.

- It should be noted that universal interventions are often targeted at schools in lower SES and/or high crime neighbourhoods so the children may be considered at higher than average risk for externalising behaviour problems.
- A meta-analysis demonstrated that, on average, children of lower SES and younger age show greater reductions in externalising behaviours following a universal school-based intervention than children of middle SES and older children (Wilson and Lipsey, 2007).
- A meta-analysis demonstrated that classroom teachers can successfully implement the program to produce significant change in behaviour (Durlak et al., 2011).
- There is no clear evidence to suggest that one component of universal school-based interventions (e.g. anger management, social problem solving or social skills training) is more successful than any other (Wilson and Lipsey, 2007).
- A systematic review of the effectiveness of universal school-based programs to prevent violent and aggressive behaviour found a mean effect of a 13.9% reduction in violent behaviour (effect size = 0.21) for students receiving a program compared with those not included in a program. The review also demonstrated that universal school-based interventions were effective across all age brackets; that is, kindergarten, elementary school, middle school and high school (Hahn et al., 2007).
- The long-term effectiveness of school-based universal interventions is unclear – there is some evidence to suggest that the effectiveness reduces in accordance with length of time after the intervention finished (Hahn et al., 2007).
- It should be noted that results from universal school-based interventions cannot determine where change occurred. In other words, it is unclear whether these interventions are equally useful for children with disruptive behaviour disorders or externalising behaviour problems as for those without, or vice versa.

Summary	
Prevention level:	Primary
Effectiveness rating:	Level 1
Reason for effectiveness rating	Evidence from meta-analyses and a systematic review. Meta-analyses found the effect size for reducing externalising behaviour problems associated with universal school interventions to range from 0.15 to 0.30.
Most appropriate target:	NA
Most appropriate age range:	5-17 years
Moderating or mediating factors:	Age, SES, program setting
References indicating effectiveness:	Durlack et al. (2011); Hahn et al. (2007); Wilson and Lipsey (2007)

6.3.3 Service Element – School-based Intervention Programs (Indicated)

Indicated school-based intervention programs are aimed at children identified as having a disruptive behaviour disorder or as having externalising behaviour problems. As with universal interventions, indicated school-based programs can comprise a range of modalities such as; cognitively oriented treatments such as anger management or social problem solving, social skills training, counselling and behaviour management.

- Meta-analyses demonstrate similar estimates of mean effect sizes of indicated intervention programs (effect size of 0.29; Wilson and Lipsey, 2007, effect size of 0.30 for individual school-based indicated intervention programs; Stoltz et al., 2009).
- Greater effect sizes associated with the following: individual as opposed to group interventions; behavioural strategies as opposed to other modalities; higher-risk children; higher quality implementation of the program, and smaller sample sizes.
- Comprehensive programs (those that combine indicated treatment elements with universally implemented programs) have been found to be non-significant at reducing violent and aggressive behaviours. It is not yet clear why this is the case.
- The positive relationship between risk-status and program effectiveness highlights the point that a program cannot have large effects unless there is sufficient problem behaviour, or risk for such behaviour to allow for significant improvement. Thus, the use of indicated programs may be most effectively utilised only for high-risk children – those who are already displaying significant externalising behaviour problems.
- It is important to note that not all programs included in meta-analyses had a significant effect with regards to reducing antisocial and aggressive behaviours; there was significant heterogeneity in the outcomes of programs. Some programs had a negative effect – children in the programs had greater levels of behaviour problems following treatment than children in comparison control groups. Thus, only specific school-based interventions that have a reliable evidence-base of effectiveness should be employed.

Summary	
Prevention level:	Secondary and tertiary
Effectiveness rating:	Level 1 for demonstration programs. Level 2 for programs in practice settings.[4]
Reason for effectiveness rating:	Meta-analyses demonstrating overall mean effectiveness for indicated programs (effect size = 0.29) consist predominantly of research conducted in demonstration settings. There is some evidence (Wilson et al., 2003) that programs in practice settings have smaller effects. In general, more research is required to determine the efficacy of indicated school-based programs in practice settings.
Most appropriate target:	Children at high risk of displaying externalising behaviour problems or already identified.
Most appropriate age range:	5-17 years
Moderating or mediating factors:	Age of child, risk-level of child, program content, program setting
References indicating effectiveness:	Stoltz et al. (2012); Wilson and Lipsey, (2007); Wilson, Lipsey and Derzon (2003)

[4] A problem of demonstration versus practice settings.

- The large majority of published research concerns that of interventions in demonstration settings; that is programs in which a researcher is involved with the design and application of the program. The effect size for programs conducted in demonstration settings is significantly higher than for programs conducted in practice settings in which the school is conducting the program independently from a research base (effect size = 0.10, Wilson et al., 2003).
- This problem reflects one of implementation quality and is a considerable concern as schools adopting these programs without the direct involvement of a researcher may have weak implementation. Thus, it is recommended that the best choice of a universal or indicated program for a school may be the one (evidence-based) they are most confident they can implement well.

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6.4 Service Category – Prevention of Eating Disorders and Body Image Problems

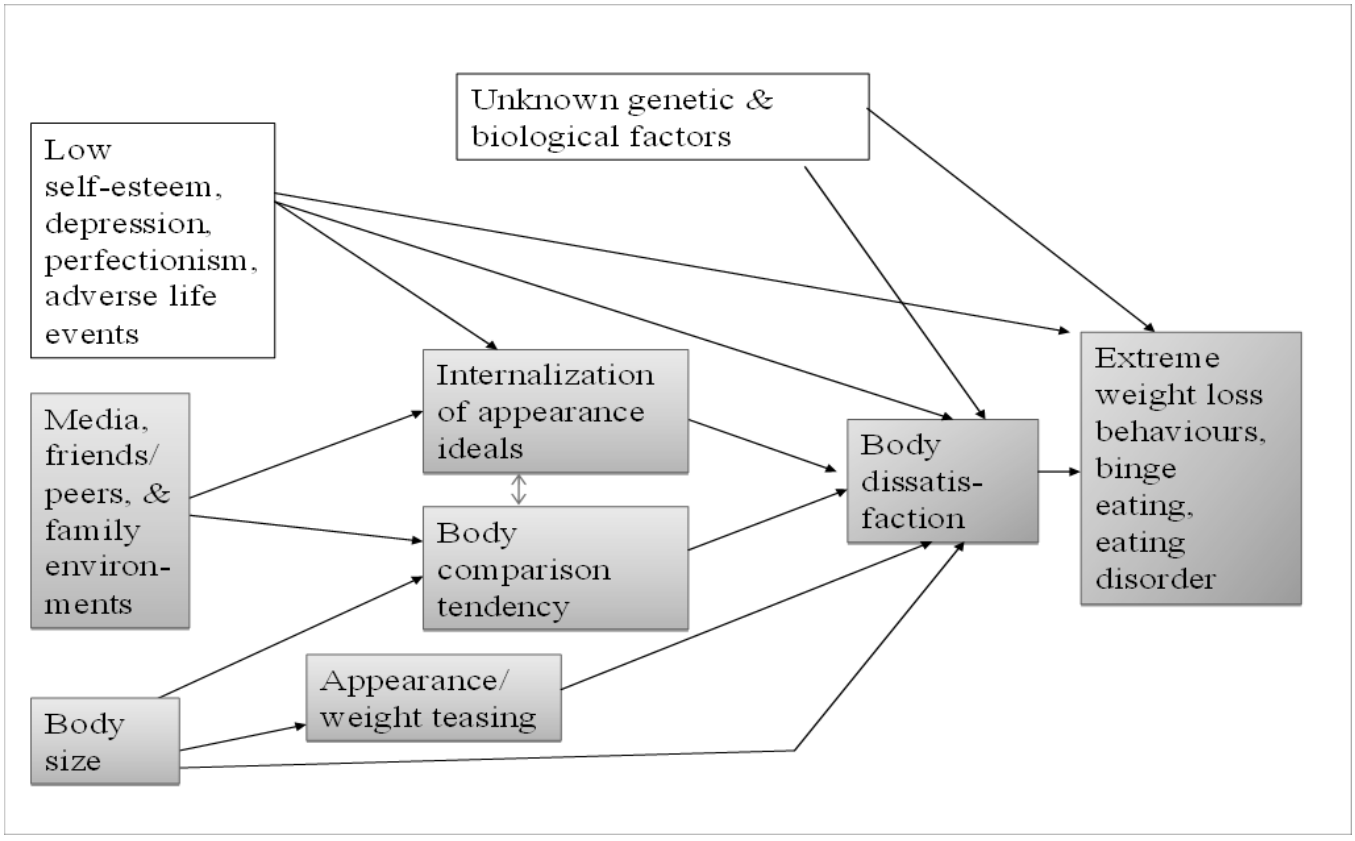
The content under this category has been adapted from: "Prevention of Body Image and Eating Disorders– Rapid Review"; prepared by Professor Susan J Paxton, Dr Laura Hart and Ms Siân McLean (School of Psychological Science, La Trobe University) for use by the NHMSPF Promotion and Prevention Working Group (October 2013).

Theoretical Framework – Risk Factor Approach

Most consistently identified risk factors for eating disorders are body dissatisfaction/weight and shape concerns, dieting and negative affect (Jacobi and Fittig, 2010; Stice, Marti and Durant, 2011). These factors have been found to increase risk for bulimia nervosa and related disorders but risk factors for anorexia nervosa have been harder to specify and are likely to be more complex. Risk factors for the development of body dissatisfaction include exposure to environmental pressures to adhere to social appearance ideals, negative affect, higher body mass index (BMI) and undetermined genetic factors (Smolak, 2009). Two psychological processes have been shown to partially or fully mediate the impact of individual and environmental risk factors, and body dissatisfaction and eating disorders. These are: internalisation of appearance ideals (adoption of appearance ideals as a personal standard) and body comparison (comparing one's appearance to others). **The goal of prevention has been to reduce the presence or impact of upstream risk factors thereby reducing the likelihood of eating disorders or body dissatisfaction** (Levine and Smolak, 2009).

Assessment of prevention program outcomes has typically included assessment of the presence of risk factors as well as body image and eating disorder symptoms although a few studies have examined long-term eating disorder outcomes (Austin et al., 2007; Berger, Sowa, Bormann, Brix and Strauss, 2008; Stice, Shaw, Burton and Wade, 2006; Taylor et al., 2006).

Figure 1: Biopsychosocial model of risk factors for the development of body dissatisfaction and eating disorders (Adapted from Wertheim and Paxton, 2012).



The body image and eating disorder prevention literature has typically been described in terms of **universal, selective and indicated prevention**. Universal and selective interventions have been delivered to groups unselected for risk status who are assumed to have low or non-clinical levels of body image and eating disorders. These

interventions have been trialled in late primary and early high school children in school environments (See Levine and Smolak, 2009). Some have also been conducted in community settings such as in girl scout groups (e.g., Coller, Neumark-Sztainer, Bulfer and Engebretson, 1999; Fiissel, 2006).

Indicated prevention programs have also been evaluated. In these studies, participants have been selected on the basis of elevated risk factors for eating disorders, particularly body dissatisfaction or disordered eating symptoms. These programs have typically been delivered to small groups of older adolescents or young adults in school, university or community settings (Stice, Marti, Spoor, Presnell and Shaw, 2008). Early intervention associated with early identification may also be considered prevention and university and community-based interventions have been developed to facilitate this (e.g., Becker, Franko, Nussbaum and Herzog, 2004; D'Souza, Forman and Austin, 2005; Hart, Jorm and Paxton, 2012).

A number of **systematic reviews and meta-analyses** have been conducted to identify prevention intervention effects and moderators of those effects. These analyses have usually included interventions across the universal – selective – indicated spectrum, and included all age groups rather than specifically identifying the setting as being school, university or community (Pratt and Woolfenden, 2002; Cororve Fingeret, Warren, Cepeda-Benito and Gleaves, 2006; Stice and Shaw, 2004; Stice, Shaw and Marti, 2007). The conclusions of these reviews will be outlined in this section. Conclusions reached can be interpreted with school, university and community settings in mind. However, two recent systematic reviews specifically review school-based (Yager, Diedrichs, Ricciardelli and Halliwell, 2013) and university-based (Yager and O'Dea, 2008) interventions and these will be reviewed in the relevant section below.

It is notable that although boys and men do experience body dissatisfaction, disordered eating and eating disorders, **only a few studies have included males** and unless mentioned the results described below refer to findings for females.

An early Cochrane Review of eating disorder prevention randomised controlled trials (RCTs) for children and adolescents conducted in 2002 found that combined data from two eating disorder prevention programs based on a media literacy and advocacy indicated a reduction in internalisation or acceptance of societal appearance ideals at a 3- to 6-month follow-up (Pratt and Woolfenden, 2002).

More recently, **three meta-analyses** of controlled prevention interventions have been conducted (Cororve Fingeret, et al., 2006; Stice and Shaw, 2004; Stice, et al., 2007). Cororve Fingeret et al. (2006) reviewed 46 separate prevention studies and found that overall the programs had large effects on improving knowledge and small net effects on reducing maladaptive eating attitudes and behaviours. Effect sizes for general eating pathology, dieting, and thin-ideal internalization ranged from d = .17 to .21 at post-test and from d = .13 to .18 at follow- up. These effects were all positive and indicated improvements in symptoms of general eating pathology, dieting behaviours, and internalization of a thin-ideal body ideal following intervention. The effects for general eating pathology and dieting behaviours were the most consistent, as homogeneous distributions of effect size estimates were found for these variables at each time point. Body dissatisfaction was the most frequently evaluated outcome variable across the studies in this meta-analysis. While the overall effects for body dissatisfaction suggested positive improvements at post-test (d = .13) and follow-up (d = .07), follow-up effect sizes were not significantly different from zero. Importantly, studies targeting participants at relatively higher risk for developing an eating disorder, (indicated prevention usually including university students), produced greater benefits.

Stice and colleagues (Stice and Shaw, 2004; Stice, et al., 2007) have conducted two meta-analyses but the findings of the most recent will be described here as they report on overlapping data. Stice et al. (2007) found that 26 (51%) of the interventions reviewed resulted in significant reductions in at least one established risk-factor for eating pathology, such as body dissatisfaction and 15 (29%) of the prevention programs resulted in significant reductions in eating pathology. The average effect sizes (r) were all significant with the average effect size being: .14 for body dissatisfaction; .12 for dieting; .18 for internalisation of the thin ideal; .12 for negative affect; and .13 for eating pathology.

However, there was wide variety in effect sizes indicating the importance of investigating **moderators of these effects.** As reported by Cororve Fingeret and colleagues (2006), the most notable moderator of effect sizes was **risk status** of participants. Studies in which participants were selected into the intervention on the basis of an elevated risk factor score (indicated prevention[5]), usually high body dissatisfaction, produced greater prevention effects than those that did not. The authors propose that the distress that characterises high risk-individuals may motivate them to engage in the intervention to a greater extent than in groups unselected for risk. In addition, the lower levels of eating pathology in low risk samples may reduce observable outcomes as a result of floor effects (Stice et al., 2007).

Participant age was also a significant moderator of intervention effects such that intervention effects were significantly larger for samples in which participants were over rather than under 15 years old. Interventions were also significantly stronger when interactive rather than didactic, delivered by trained leaders rather than an endogenous provide (e.g., teacher), and contained dissonance content (which challenges internalisation of appearance ideals) rather than other content. Stice et al. (2007) also concluded that intervention effects for body dissatisfaction and dieting were significantly larger for programs that focused **solely on females** compared to those that also included males in the intervention.

[5] Stice and colleagues are unusual in the eating disorder field in describing interventions of this kind as 'selected' interventions rather than indicated so the more usual terminology is used here.

6.4.1 Service Element – School-based Programs

Universal and Selective Interventions

Despite the analyses described above finding greater effects for indicated prevention in older adolescent females and young women, there are a number of reasons researchers and practitioners have continued to explore universal and selected prevention in **early adolescents, mainly in school settings**. First, it would be ideal to prevent risk factors for eating disorder, in particular, body dissatisfaction and related disordered eating behaviours, becoming established in the first place, rather than waiting until they are present to intervene. Body dissatisfaction in adolescents predicts a number of negative health outcomes in addition to eating disorders, including reduced physical activity, smoking (Neumark-Sztainer, Paxton, Hannan, Haines and Story, 2006), unsafe-sex (Schooler, 2013), depressive symptoms and low self-esteem (Paxton, Neumark-Sztainer, Hannan and Eisenberg, 2006). Thus, waiting until the establishment of body dissatisfaction to be established before intervening is not desirable. Research suggests this requires intervention ideally no later than late primary or early high school (Wertheim, Koerner and Paxton, 2001). Second, school classrooms offer an opportunity in which to reach most young people in a learning environment (Yager et al., 2013). In addition, the peer environment is one which has a significant impact on the body image of young people (e.g., Helfert and Warschburger, 2011). Finally, it has been argued that interventions that are designed specifically for adolescents at high risk of an eating disorder potentially stigmatises participants (Franko, 2001). Taken together, these factors support the use of school-based prevention especially in early adolescence.

In the school setting, universal interventions are generally those that are provided to both girls and boys, whereas selective interventions are generally delivered to girls only, girls being at higher risk of body image and eating disorders. A recent systematic review of classroom-based programs used improvement of body image as the primary outcome, and psychological (i.e., self-esteem, negative affect, internalisation of appearance ideals) and sociocultural (i.e., pressure to be thin, appearance comparison and appearance teasing) risk factors as secondary outcomes (Yager et al., 2013). The impact on eating pathology (drive for thinness, body change strategies and disordered eating) was also examined. Of 16 studies that met inclusion criteria, nine were conducted with girls only, five included boys and girls, and two were conducted with boys only.

The two programs found to be most effective were multi-session **classroom-based interventions** that aimed to reduce internalisation of appearance ideals and body comparison, by increasing media literacy and reducing appearance-related peer pressure (Richardson and Paxton, 2010; Wilksch and Wade, 2009). In the Richardson and Paxton (2010) study conducted in Australia, grade 7 girls received three lessons from a trained researcher addressing peer and media pressures, and positive program effects on body image were observed at post-test and 3 month follow-up. In a recent study conducted in Britain, the program was adapted for 10-11 year old girls and boys and positive body image outcomes were observed in girls at three-month follow-up (Bird, Halliwell, Diedrichs and Harcourt, 2013).

The study conducted by Wilksch and colleagues was also conducted in Australia (Wilksch, Durbridge and Wade, 2008; Wilksch and Wade, 2009). Participants were grade 7 and 8 girls and boys who received 8 lessons with a focus on media literacy in relation to body image but also containing lessons on peer influences and body image. In girls, no post-test or 6-month follow-up effects on body dissatisfaction or weight and shape concerns were observed, but at 30-month follow-up, weight and shape concerns were lower in the intervention than the control group. In boys, body dissatisfaction was lower than the control group at post-test and 6-month but not 30 month follow-up.

It is of interest to consider the findings of another recent universal intervention conducted in Spain in which 12-14 year old participants received either a media literacy unit (60-90 minute sessions), a media literacy unit plus a nutrition unit (one 90 minute session) or neither (Espinoza, Penelo and Raich, 2013). At 30-month follow-up, participants in both intervention groups had significantly more positive body image than the control group. These findings also provide support for media literacy intervention for body dissatisfaction.

In light of the focus on media literacy interventions, from a theoretical perspective it is relevant to note that although previous research has implicated media exposure (e.g., Schooler and Trinh, 2011) and peer environment factors as risk factors for body dissatisfaction, dieting and disordered eating (e.g., Sharpe, Naumann, Treasure and

Schmidt, 2013), there has until recently been no empirical evidence to support media literacy as a risk factor for body image and disordered eating outcomes. A recent cross-sectional investigation, however, suggests that in early adolescent girls, media literacy moderates body dissatisfaction, its impact being mediated by internalisation of appearance ideals and body comparison tendency (McLean, Paxton and McLean, 2013), thus providing theoretical support for media literacy interventions.

An important area of prevention research examines programs that target the shared risk factors for both disordered eating and obesity (e.g., Austin, Field, Wiecha, Peterson and Gortmaker, 2005; Austin, et al., 2007; Stock et al., 2007; Wilksch and Wade, 2013). Given the possible iatrogenic effects of anti-obesity programs on disordered eating, combined prevention programs are particularly valuable as they assess the impact of anti-obesity messages on eating pathology and body dissatisfaction. The healthy eating intervention, Planet Health, has been shown to reduce the odds of obesity in girls through prevention and remission during 2 school years, and also to protect against the use of purging and diet pills for weight control (Austin et al., 2007).

Taken together, there is growing evidence that supports the use of school-based curricula that address known risk factors for body dissatisfaction and disordered eating especially those interventions that address media and peer factors. The impact of these interventions appears to be on body image and associated risk factors such as internalisation of media ideals. Outcomes in relation to the prevention of clinical eating disorders have yet to be identified. **Thus, there is in relation to body image, Level 1 evidence in support of intervention package development (Mihalopoulos, Vos, Pirkis and Carter, 2011).**

Indicated Prevention Interventions

Indicated prevention interventions have also been examined in adolescent girls who are still at school. These are not strictly speaking school-based interventions but rather recruitment for participants may take place within a school but then the intervention is conducted by trained researchers or therapists away from the class-room setting.

As demonstrated in the meta-analyses described above indicated prevention has been shown to be effective, particularly in girls over 15 years old. The most notable example of an intervention of this kind is the **cognitive dissonance intervention** trialled by Stice and colleagues (Stice et al., 2008) and based on The Body Project, the original manual describing this approach (Stice and Presnell, 2007). Of relevance here is that about half the participants in the major study by Stice and colleagues describing this approach were recruited from high schools in the US using direct mailing and flyers. For inclusion, participants had to be 14-19 years old and answer in the affirmative to the question “Do you have body image concerns?” in a phone interview. This approach did indeed attract at-risk participants (mean age = 17.0 years). The dissonance intervention consisted of 3 weekly one hour small group (6-10 participants) sessions and homework tasks in which participants engaged in activities that critique the thin idea. This was compared to a healthy weight control program, an expressive writing control condition and assessment-only control condition. At 3-years follow-up, both the dissonance and healthy weight conditions resulted in significantly lower risk for onset of clinically significant eating pathology relative to assessment only controls.

A cognitive behavioural therapy (CBT) based approach, My Body, My Life, has also been shown to be effective in substantially reducing body image and eating disorder symptoms in girls who self-identified as having body image or eating problems recruited through Australian schools (mean age 14.4 years, SD=1.48) (Heinicke, Paxton, McLean and Wertheim, 2007). In this study, a six session CBT based intervention delivered on-line using chat-room technology, resulted in substantial improvements in body image and eating related psychopathology that were maintained at 6 month follow-up.

Please note, screening for eating disorders in high school students as a means of promoting early identification and intervention has been evaluated (e.g., D’Souza et al., 2005) but is not reviewed here.

Taking into account meta-analysis findings and examination of specific examples, there is Level 1 evidence in support of intervention package development for indicated prevention of body image and eating disorders drawing at-risk participants from high school settings.

6.4.2 Service Element – University-based Programs

As indicated above, meta-analyses and systematic reviews consistently observe larger effects sizes for **indicated prevention** interventions than universal and selective interventions and these have frequently been offered to **college-students** (Stice et al., 2007). One systematic review has specifically examined prevention programs for body image and eating disorders delivered on university campuses (Yager and O'Dea, 2008). They identified 27 large randomised and controlled trials of programs to improve body image, dieting, and disordered eating and exercise behaviours of male and female college students. They concluded that many studies were limited by small samples sizes and exclusion of male participants. However, they observed that **dissonance-based approaches** have achieved consistent success in reducing internalisation of the thin ideal, body dissatisfaction, dieting and disordered eating among female college students (Yager and O'Dea, 2008), a finding supported by a meta-analysis of dissonance interventions compared to other control conditions (Stice, Shaw, Becker and Rohde, 2008). In addition, in a recent trial with college participants with elevated body dissatisfaction that compared outcomes following participation in the Body Project when delivered in a small group or alternatively by internet and two control conditions, positive outcomes were observed in both intervention conditions (Stice, Rohde, Durant and Shaw, 2012).

The *Body Project* (Stice and Presnell, 2007) was briefly described above and has been trialled as an indicated prevention intervention. However, it has also been adapted for use in college sororities in the USA to be delivered by trained sorority peer leaders as the Reflections: Body Image Program (Becker, Smith, and Ciao, 2005) and evaluated in a number of studies (e.g., Becker, Smith, and Ciao, 2006; Becker, Ciao, and Smith, 2008; Becker, et al., 2010). In these studies, the whole sorority group was expected to participate in the program (although not necessarily the research) and thus included both low and high risk participants. The intervention consisted of two 2-hour sessions administered by 3-4 trained peer leaders. Significant decreases in body image and eating disorder risk factors have been observed and generally high and low risk participants respond in a similar way. The difficulty with this approach within the Australian context is that we do not have university based structures like sororities. Some students do live in colleges on university campuses but these have no mandating power over the activities of the students.

A further program which has received extensive evaluation is the **CBT-based intervention**, Student Bodies (e.g., Low et al., 2006; Jacobi et al., 2007; Taylor et al., 2006). This is an 8 session (8 week) internet-based intervention with or without a moderated online discussion group. Student Bodies has been delivered in both selected and indicated formats and high school and college students, but effects have been strongest in indicated interventions in college students (e.g., Taylor et al., 2006). Taylor et al. (2006) recruited college-age women with high weight and shape concerns through campus emails, posters and advertising and they were randomised to either Student Bodies or a wait list control. There was a significant reduction in weight and shape concerns in the intervention group at post-test, one-year and two-year follow-up. Although there was no difference in the number of participants who developed sub-clinical or clinical eating disorders during the follow-up period between the two groups, moderator analyses indicated significantly fewer of the overweight participants in the intervention than control group developed an eating disorder. In addition, at one site, significantly fewer participants with initially elevated compensatory behaviours in the intervention compared to the control group developed a clinical or sub-clinical eating disorder.

A range of other interventions have been trialled in different formats. Further supporting a web-based intervention for college women, the interactive psycho-educational program, Food, Mood and Attitude, reduced internalisation of the thin ideal in at-risk participants (Franko et al., 2005).

Please note, screening for eating disorders in a University population to promoting early identification and intervention has been evaluated (e.g., Becker et al., 2004) and supported by leaders in the field (Wilfley, Agras and Taylor, 2013) but is not reviewed here.

In conclusion, interventions for university women have been shown to reduce risk factors for body image and eating disorders, especially in high-risk women. However, the Australian university context would need to be considered to ensure appropriate translation. In addition, a number of studies have used financial or course credit incentives to encourage participation and completion of assessment which would not be practical in many contexts.

However, there is Level 1 evidence in support of intervention package development for indicated prevention of body image and eating disorders for at risk female university students.

6.4.3 Service Element – Community-based Programs

There have been relatively few evaluations of community-based prevention for body image and eating disorders and there are no meta-analyses that have attempted to group prevention interventions in this way. However, there are some examples of community-based interventions.

One early study evaluated a selective prevention intervention delivered to girl scouts with a mean age of 10 years (Neumark-Sztainer, Sherwood, Coller and Hannan, 2000). Body image and dieting outcomes were compared following a media literacy program compared to a stress management condition. There was significantly lower internalisation of the thin ideal following the media literacy compared to stress management condition, but no differences on a range of dieting behaviours.

Early intervention programs for young women have also been evaluated. One example of an **indicated intervention (or early intervention)** in which young adult female participants with body image and eating symptoms were recruited from the community was the evaluation of the 8-session, Set Your Body Free program (Paxton, McLean, Gollings, Faulkner and Wertheim, 2007). In this RCT, a therapist led, small group intervention has been shown to reduce body image and eating disorder symptoms in both internet and face-to-face delivery modes compared to a delayed treatment control. Although at this stage we have not identified a review of interventions of this kind, previous research supports early interventions of this kind (e.g., Cash and Lavallee, 1997).

A final example of a community-based **early intervention** is Eating Disorder Mental Health First Aid. Mental health first aid (MHFA) has been defined as the help provided to a person developing a mental health problem or experiencing a mental health crisis. The first aid is given until appropriate professional help is received or until the crisis resolves (Kitchener, Jorm and Kelly, 2010). Eating disorder MHFA resources have been developed and made available to the community on the internet and through MHFA training (Hart, Jorm and Paxton, 2012). A preliminary uncontrolled study suggested an Eating Disorder MHFA training session facilitated treatment seeking in individuals suspected of an eating disorder (Hart et al., 2012).

In conclusion, community-based interventions have received less research attention. There is likely to be Level 1 support for community-based small group therapy approaches to early intervention for body image and eating disorders but this review has not examined this extensively. At this stage there is only Level 3 (inconclusive) evidence for other approaches described.

Additional notes for this category

Possible Negative Effects of Interventions

Although the possibility of **iatrogenic effects** of including eating disorder related information has been raised (O'Dea and Abraham, 2000), the evidence does not support this contention. In their meta-analysis, Cororve Fingeret et al. (2006) summarised the between group effect sizes of interventions for body image and eating pathology that did or did not include descriptive information about eating disorders and generally found no significant differences between groups. Where there were significant differences, they were explained by higher mean effect sizes for interventions that did include eating disorder information.

Further Prevention Issues to be considered

Although there is sufficient evidence in a range of areas to support the development and dissemination of prevention approaches for body dissatisfaction and eating disorders, there are many areas which require attention a number of which are mentioned below.

- Research increasingly suggests that attitudes towards healthy eating, weight and shape and physical activity are formative in the pre-school years. Effective, evidence-based programs are needed for parents and in early childhood settings;

- Obesity and eating disorder prevention need to be better integrated to resolve the widespread belief that they are contradictory in message. Increasingly evidence suggests poor body image predicts poorer physical activity and eating outcomes;
- The role of social media, advertising and the internet, in the development of risk or protective factors for body dissatisfaction, are not well understood and prevention interventions have seldom addressed this important area;
- Although there is a range of generic mental health well-being programs being delivered in school settings, body image and eating disorder outcomes are seldom (perhaps never) assessed. Consequently, there is no evidence to suggest they are helpful in preventing body dissatisfaction or eating disorders;
- Although body image and eating problems are observed in males development of interventions that effectively engage males is difficult;
- Eating disorders occur across the life-span and are increasingly common in women as they experience pregnancy, childbirth and menopause. Prevention and early intervention programs across the lifespan require further development. In addition, children of parents with eating disorders are more likely to experience mental illness, disordered eating, clinical eating disorders and obesity. Prevention programs aimed at the pre-and post-natal period would therefore have secondary prevention benefits by protecting offspring;
- Further development and evaluation of screening and early identification would be especially beneficial in this area in which there is very low treatment seeking. Community interventions such as Eating Disorder MHFA training and up-skilling of the primary health care work-force could facilitate early identification and treatment seeking.
- Finally, public health interventions are likely to be required to counter the support given by industry for extreme and short-term diets, and to counter the stigma associated with eating disorders that reduces treatment seeking.

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6.5 Service Category – Prevention of PTSD

The content under this category has been adapted from: "Overview of the evidence supporting interventions for the prevention of PTSD"; prepared by Associate Professor Grant Devilly (School of Applied Psychology and Griffith Health Institute, Griffith University) for use by the NHMSPF Promotion and Prevention Working Group (October 2013).

6.5.1 Service Element – Prevention of Post-Event Pathology from Post-Event Intervention for Those Who Demonstrate Vulnerability

For the small number of people who go on to demonstrate clinical symptomatology within the first month following trauma, we know that they are at a much greater risk of going on to develop longer term psychopathology such as posttraumatic stress disorder (approximately 80% of people with ASD from motor vehicle accidents or brain injuries in New South Wales have PTSD at 6 months; e.g., Harvey and Bryant, 1999; Bryant and Harvey, 1999). However, it should be kept in mind that the majority (60-70%) of people who have PTSD did not, at some point, meet criteria for ASD.

Nine RCTs have described four different types of interventions that were all started within the first month after a traumatic event. The effectiveness of interventions including TF-CBT (or using the cognitive restructuring, and prolonged exposure (PE) components), narrative exposure therapy, eye movement desensitization and reprocessing (EMDR), and providing a self-help booklet, were compared to no treatment, wait listed controls, usual care, or another psychological intervention. These nine RCTs were as follows:

- five studies (six publications) compared CBT with supportive counselling (Bryant et al., 1998; Bryant et al., 2005; Bryant et al., 2006; Bryant et al., 2003; Bryant et al., 1999; Foa et al., 2006)
- one study compared CBT with an assessment condition (Foa, Zoellner and Feeny 2006)
- one study compared CBT with prolonged exposure on its own (Bryant, et al. 1999)
- two studies compared the cognitive and exposure components of CBT with a waitlist (Bryant et al. 2008; Shalev et al. 2011)
- one study compared PE with supportive counselling (Bryant et al., 1999)
- one study compared narrative exposure therapy with relaxation-meditation therapy in children(Catani et al., 2009)
- one study compared an assessment condition with supportive counselling (Foa, Zoellner and Feeny 2006)
- one study compared eye movement desensitization and reprocessing with a wait listed control (Jarero, Artigas and Luber 2011)
- one study compared a self-help booklet with no information (Scholes, Turpin and Mason 2007)

Outcomes demonstrate that people who develop Acute Stress Disorder should be offered trauma Focussed CBT (which includes exposure and / or cognitive therapy). Of those treated with TF-CBT, less than 5% continued to have PTSD 4 years later, compared to 25% who received supportive counselling. This also leads most experts to recommend against general supportive counselling, while at the same time recommending CBT.

***Summary – Acute Stress Disorder*: The provision of early intervention for these people is recommended. Studies have demonstrated that trauma focused cognitive behavioural therapy (TF-CBT), and in particular exposure therapy, are effective in preventing PTSD.**

Other Service Elements for this Category reviewed but not included due to evidence level

See Appendix 3

References used for this Category

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Appendix 1 – Classification of Level of Evidence

The approach to the classification of evidence was drawn from the research by Mihalopoulos et al (2011) and was modified for the purposes of the NMHSPF Project. The approach will be applied to all service elements. Members noted that international evidence may not be easily generalised to the Australian service environment and to consider this in attributing the rating for level of evidence.

Members noted that the levels of evidence were not hierarchical in nature, but were rather just ways of categorising the strength of the evidence. Evidence often exists in the context of efficacy of interventions, but not necessarily on the prevalence or population to which it applies.

Table 1: National Mental Health Service Planning Framework (NMHSPF) – Classifying the level of evidence in support of service elements and care profile development (adapted from Mihalopoulos et al (2011)[6])

Level	Description	Detail
1.*	**"Sufficient evidence of Effectiveness"**	Effectiveness is demonstrated by sufficient evidence from well-designed research: a) The effect is unlikely to be due to chance (e.g. P<0.05), and b) The effect is unlikely to be due to bias, e.g. evidence from[7]: - a level I study design; - several good-quality level II studies; or - several high quality level III-1 or III-2 studies from which effects of bias and confounding can be reasonably excluded on the basis of the design and analysis.
2.*	**"Limited evidence of effectiveness"**	Effectiveness is demonstrated by limited evidence from studies of varying quality. The effect is probably not due to change e.g. P< 0.10, but bias – although not certainly an explanation for the effect – cannot be excluded as a possible explanation; e.g. evidence from: a) one level II study of uncertain or indifferent quality; b) evidence from one level III-1 or III-2 study of high quality; c) evidence from several level III-1 or III-2 studies of insufficiently high quality to rule out bias as a possible explanation; or d) evidence from a sizeable number of level III-3 studies that are of good quality and consistent in suggesting an effect.
3.*	**"Inconclusive evidence of effectiveness"**	Inadequate evidence due to insufficient research or research of inadequate quality. No position could be reached on the presence or absence of an effect of the intervention (e.g. no evidence from level I or level II studies; level III studies are available, but they are few and of poor quality).
4.#	**"Likely to be effective"**	Effectiveness results are based on: a) Sound theoretical rationale and program logic; and b) Level IV studies, indirect evidence[8] or parallel evidence[9] for outcomes; or c) Epidemiological modelling to the desired outcome using a mix of evidence types or levels.

[6] Mihalopoulos C, Vos T, Pirkis J and Carter R. (2011) "The Economic Analysis of Prevention in Mental Health Programs", *Annual Review of Clinical Psychology 2011*, 7, 169–201

[7] The evidence classifications below are based on those of the Natl. Med. Res. Counc. (2000).
I: evidence obtained from a systematic review of all relevant randomized controlled trials.
II: evidence obtained from at least one properly designed randomized controlled trial.
III-I: evidence obtained from well-designed pseudo-randomized controlled trials (alternate allocation or some other method).
III-2: evidence obtained from comparative studied with concurrent controls and allocation not randomized (cohort studies), case-control studies, or interrupted time series with a control group.
III-3: evidence obtained from comparative studies with historical control, two or more single-arm studies, or interrupted time series without a parallel Control group.
IV: evidence obtained from either pretest or posttest case series.
Source: Table is based on Habyt et al. (2006).

[8] Indirect evidence: information that strongly suggests that the evidence exists (e.g. A high and continued investment in food advertising is indirect evidence that there is positive (but proprietary) evidence that food advertisement increases sales of those products (Swinburn et al., 2005).

[9] Parallel evidence: evidence of intervention effectiveness for another public health issue using similar strategies (e.g., the role of social marketing, regulation, or behavioural change initiatives in tobacco control, sun exposure, speeding, etc) (Swinburn et al., 2005).

Level	Description	Detail
		The effect is unlikely to be due to chance (the final uncertainty interval does not include zero and there is no evidence of systematic bias in the supporting studies). Implementation of this intervention should be accompanied by an appropriate evaluation budget.
5. #	**"May be effective"**	Effectiveness results are based on: a) Sound theoretical rationale and program logic; or b) Level IV studies, indirect or parallel evidence for outcomes; or c) Epidemiological modelling to the desired outcome using a mix of evidence types or levels. The effect is probably not due to chance, but bias – although not certainly an explanation for the effect – cannot be excluded as a possible explanation. The intervention would benefit from further research and /or pilot studies before implementation.
6. ^	**"Consensus of expertise"**	Agreement by individuals with expertise in the mental health sector (including consumers, carers, community support workers and clinical workers) sourced from both within and/or external to the Project.
7. #	**"No evidence of effectiveness"**	No position could be reached on the likely credentials of this intervention. Further research may be warranted.

* Conventional approach based on epidemiological study design: Evidence from Level I-II study designs.

Additional categories utilized in the ACE-Prevention study: evidence from Level IV studies, indirect or parallel evidence, and/or from epidemiological modelling using a mixture of study designs.

^ Added for purposes of the NMHSPF Project.

Appendix 2 – Service Elements removed from Mental Health Promotion Stream

Service Category – Promoting Help Seeking Behaviours

Service Element – Structured Psycho Education

Attribute	Details
Description	**Structured psycho-education**
Fundamental Attributes	Online (incl. email and websites plus phone calls from interviewer)
Service specifications and suggested modelling attributes	
Target Pop'n Profile	Adults (16-85 years): any affective disorder: 6.2% (Slade et al., 2009). Professional help-seeking: 58.6% of those with affective disorder (34.9% of those with any disorder) (Burgess et al., 2009).
Avg contact hours and timeframe per activity (if applic)	• 3-6 weeks website (MoodGym or Bluepages) plus weekly phone calls (Christensen et al., 2006) • Two e-cards with MHL/help seeking info (Costin et al., 2009).
Evidence Base	
Level of Evidence:	Level 3 - inconclusive evidence of effectiveness Moodgym at 6 wks d=0.24, 6 mths d=0.13 Online intervention with support more effective than emails alone in increasing professional treatment seeking
Key Reference:	Gulliver al. (2012)
Limitations of Evidence:	
Recommendations for future research:	

Service Category – Promoting Help Seeking Attitudes

Service Element – Provision of online mental health information

Attribute	Details
Description	**Provision of online mental health information**
Fundamental Attributes	Websites
Service specifications and suggested modelling attributes	
Target Age:	
Target Pop'n Profile	Adults: 20% any mental disorder (16-85 years) (Slade et al., 2009) Adolescents: 25% any mental disorder (16-85 years) (Slade et al., 2009)
Evidence Base	
Level of Evidence:	Level 6 - no evidence of effectiveness
Key Reference:	Reavley and Jorm (2010)
Limitations of Evidence:	• Quality of information generally poor, although quality of info on affective disorders may be improving • Very little understanding of the influence of website quality on user behaviour.
Recommendations for future research:	

Service Category – Promoting Mental Wellbeing

Service Element – Relaxation

There was concern around whether this is the realm of health or other government. The Service Element – Relaxation was removed.

Service Element – Physical Activity

There was concern around whether this is the realm of health or other government. The Service Element – Physical Activity was removed.

Attribute	Details
Description	**Physical Activity**
Fundamental Attributes	Increase levels of physical activity
Service specifications and suggested modelling attributes	
Target Age:	
Target Pop'n Profile	Adults: 20% any mental disorder (16-85 years) (Slade et al., 2009)
% Target Pop'n	
Avg contact hours and timeframe per activity (if applic)	
Workforce	
Gross Cost per activity (If applic)	

Evidence Base	
Level of Evidence:	Level 6 – no evidence of effectiveness Evidence suggests an association between higher levels of physical activity and reduced risk of depression but no general population intervention-level evidence available (refer to universal and indicated prevention sections for specific subgroups)
Key Reference:	Jacka et al. (2012)
Limitations of Evidence:	
Recommendations for future research:	

Service Element – Lifestyle Promotion

There was concern around whether this is the realm of health or other government. The Service Element – Lifestyle Promotion was removed.

Service Category – Systemic Promotion

Service Element – Legislation and Policy

No evidence for impact of policy on reducing prevalence of disorders or suicide rates (Burgess 2004 [3]). Promotion and Prevention working group members agreed not to include this category or service element in the Taxonomy. The Service Category – Systemic Promotion and the Service Element – Legislation and Policy were removed.

Service Category – Reduction of Bullying and Cyber Bullying

Service Element – Curriculum Interventions

Promotion and Prevention working group members agreed not to include this service element in the Taxonomy. The Service Element – Curriculum Interventions was removed.

Attribute	Details
Description	**Videos, lectures, classroom discussions**
Fundamental Attributes	
Service specifications and suggested modelling attributes	
% Target Pop'n	27% bullied every few weeks or more (Cross et al., 2009)
Avg contact hours and timeframe per activity (if applic)	1 session to 15 weeks of classroom modules
Workforce	Teachers, RA, MHP
Evidence Base	
Level of Evidence:	Level 3 – inconclusive evidence of effectiveness
Key Reference:	Vreeman and Carroll (2007)
Limitations of Evidence:	No effect on bullying 6 out of 10 studies found no effect on bullying. 4 studies found some decreases but increases in some subgroups

Recommendations for future research:	

Service Element – Cyber Bullying

Attribute	**Details**
Description	**Cyber-bullying**
Fundamental Attributes	Decrease level of cyber-bullying
Service specifications and suggested modelling attributes	
Target Age:	
Target Pop'n Profile	
% Target Pop'n	10% of primary and secondary students (Cross et al., 2009)
Avg contact hours and timeframe per activity (if applic)	
Workforce	
Gross Cost per activity (If applic)	
Evidence Base	
Level of Evidence:	Level 3 – inconclusive evidence of effectiveness
Key Reference:	Wang, Nansel and Iannotti (2011)
Limitations of Evidence:	Evidence suggests an association between cyber-bullying and risk of mental disorders but no intervention-level evidence available
Recommendations for future research:	

Service Element – Workplace

Attribute	Details
Description	**Workplace bullying**
Fundamental Attributes	Organisation level interventions (work climate, leadership and job design interventions, code of conduct, policy and legislation, formal investigations/grievance procedures, monitoring, employee selection, teambuilding/team training, conflict management training, mediation, multisource feedback, bystander interventions) Individual level interventions (training, mentoring, informal support, counselling
Service specifications and suggested modelling attributes	
% Target Pop'n	6.8% of workers in a 6-month period Commonwealth of Australia, Workplace Bullying: We just want it to stop, 2012, House of representatives, Standing Committee on Education and Employment: Canberra.
Avg contact hours and timeframe per activity (if applic)	Varies very widely
Workforce	Researchers, MHPs, consultants
Evidence Base	
Level of Evidence:	Level 4 – likely to be effective Evidence suggests an association between poor work climate, managers with poor interpersonal skills and bullying. Organisation level interventions with leadership commitment and a proactive approach more likely to be successful.
Key Reference:	Illing et al. (2013)
Limitations of Evidence:	Mostly case studies and small sample sizes
Recommendations for future research:	

Appendix 3 – Service Elements removed from Mental Illness Prevention Stream

Service Category – Prevention of Suicide, Suicide Ideation and Behaviour

Service Element – Gatekeeper Training (professional)

Service Activity – Gatekeeper Training (General Practitioners)

This service activity is a combination of training for GPs and joint telephone hotline with mental health professionals. Promotion and prevention working group members agreed that the training for GPs belongs in the prevention stream and the subsequent interventions with the person with mental illness belongs to the primary care part of the Taxonomy. Members agreed for inclusion in that part of the Taxonomy. Given there is already mental health training given to GPs in Australia, members agreed not to model training for 100% GPs but rather try embedding into the continuing education program for GPs. The *Service Activity – Gatekeeper Training (General Practitioners)* was removed.

Attribute	Details
Description	**For General Practitioners in Primary Care:** 1) Connecting with own attitudes and their impact on intervention 2) Knowledge and skills in risk factors, identification and assessment of risk, development of intervention plan 3) Present model for effective intervention with at risk person, simulate and observe process in role plays 4) Provide information on local referral resources and referral practices. RATIONALE FOR only medical CATEGORY: • Justification for delineation from other professionals > specific content and delivery features for GP that are not relevant for non-medical professionals (van der Feltz et al., 2011) Neither van der Feltz et al. (2011) or Mann et al. (2005) use a general heading for "Professionals" – they always split into GP and other community-based professional gatekeepers
Fundamental Attributes	1) use of screening tools for depression and suicide risk e.g. Patient Health Questionnaire (PHQ-9) 2) information on treatment of depression and suicidality (based on existing national guidelines) 3) information on pharmacological treatments and relation to suicide risk 4) information on high risk populations. Most likely to be effective when supplemented by tools to facilitate GPs: 5) telephone helpline providing psychiatric consultation 6) guidelines outlining referral options for at risk people to local MH services 7) information pamphlets/posters for vulnerable populations in waiting rooms.
Service specifications and suggested modelling attributes	
Target Age:	16-85 years
Target Pop'n Profile	Mentally ill accessing community-based providers
% Target Pop'n	7.9% (of 3.2 mill with MI) (16-85 years) (ABS, 2008; Burgess et al., 2009; NMHS, 2007): 34.6%; GP: 24.7%; Psychologist: 13.2%; Psychiatrist:

Avg contact hours and timeframe per activity (if applic)	2 days (3 hrs – 5 days) (Isaac et al., 2009). Booster sessions recommended, teleconferencing and videoconferencing when local experts not available (Mann et al., 2005) 3 – 4 sessions x > 3 hrs, group format (role plays), embed within continuing medical education or professional supervision. Periodic delivery.
Workforce	Delivery: Members of GP primary care organisations. Psychiatric consultation for GPs via telephone hotline recommended. Audience: NA
Evidence Base	
Level of Evidence:	• Level of evidence: 2 – all cohort, some consistent effects > however, strongly endorsed as most promising by van der Feltz and Mann = likely to be effective in short-term when part of multi-component strategy • Unique effect of gatekeeper programs difficult to accurately assess, as GP gatekeeper always delivered as part of multilevel strategy – indeed, Mann and van der Feltz suggests most effective when instituted as part of multipronged attack – ensures downstream care and referral pathways remain open, and complemented by awareness in other professional roles EFFECTIVENESS STATISTICS: • EAAD Sweden, Hungary, Germany: cohort studies of primary care physician education o some significant, other non significant effects on suicidal acts (suicide attempts and completed suicides), suicide rate – some not maintained long-term. Hegerl et al. (2006): • 24% sig reduction in suicidal acts (SA) and suicide rate (SR) compared with control region. Likely to be effective in short-term improvement in knowledge, identification, and referral of suicidal people, and in short-term reduction in suicide rate. However, effect often diminishes or lost over time, with booster training sessions suggested to ensure long-term maintenance of preventive effect (Mann et al., 2005). Facilitatory tools may augment effect. Preventive potential depends on clear fast track to treatment being available. Furthermore, often implemented within multilevel interventions, so unique effect of gatekeeper programs remains unclear. Effect may occur mainly through improved identification and treatment of underlying mental illness (particularly depression via prescription of anti-depressants) (Mann et al., 2005). Embedding within primary care institutions and educational activities essential to facilitate implementation and ensure sustainability (van der Feltz et al., 2011). Likely to be effective only when part of chain of care where effective treatments are available. Institutional settings may be particularly suited to program implementation. (Isaac et al., 2009).
Key References:	Isaac et al. (2009) – only GP, van der Feltz et al. (2011) and Mann et al. (2005), NAAD study in Germany
Limitations of Evidence:	• van der Feltz et al. (2011) suggests training alone may not be enough > other facilitatory measures may augment effect. • Need clear fast track to available treatment in order for preventive effect to occur/be maximised. Likely to be effective in short-term improvement in knowledge, identification, and referral of suicidal people, and in short-term reduction in suicide rate. However, effect often diminishes or lost over time, with booster training sessions suggested to ensure long-term maintenance of preventive effect (Mann et al., 2005).

Recommendations for future research:	

Service Activity – Gatekeeper Training (Community)

This service element was also removed for the reasons outlined above.

Service Activity – Gatekeeper Training (Schools)

Evidence is also less robust in preventing suicide behaviour, but it could be argued that it is having a positive effect on the cultural environment, skills and awareness of students in schools, which could have subsequent effects against suicide. Recommended for further research. The *Service Activity School-based Prevention Programs – Gatekeeper Training (Schools)* was removed.

Attribute	**Details**
Description	**Gatekeeper training (school staff specific)**
Fundamental Attributes	
Service specifications and suggested modelling attributes	
Target Age:	
Target Pop'n Profile	Audience: teachers/school counsellors/peer leaders.
% Target Pop'n	12-month prevalence: SI: 3.4%; SP: 1.0%; SA: 1.1%* (16-24 years); Johnston et al. (2009); NMHS (2007)
Avg contact hours and timeframe per activity (if applic)	1-1.5 – 8 hrs; 1-2 sessions
Workforce	MHP/trained volunteers.
Gross Cost per activity (If applic)	
Evidence Base	
Level of Evidence:	Data not available.
Key Reference:	Robinson et al. (2012)
Limitations of Evidence:	Limited evidence exists to support implementation of gatekeeper programs for school staff (increases in knowledge, attitudes, self-efficacy, some evidence for suicide prevention activities).
Recommendations for future research:	Controlled studies are necessary though to determine optimal content, frequency and confirm effect for suicide prevention, and long-term outcomes overall.

Service Element – Prevention of Online Contagion around Suicide

Service Activity – Online

No data available. Members agreed not to include this service element or activity in the Taxonomy but to recommend for further research. The Service Element Prevention of Online Contagion around Suicide and *Service Activity Prevention of Online Contagion around Suicide* were removed.

Attribute	Details		
Description	**Prevention of Online Contagion around Suicide**		
Fundamental Attributes			
Service specifications and suggested modelling attributes			
Target Age:	12-17 years	18-64 years	65+ years
Target Pop'n Profile			
% Target Pop'n	1-5% of suicides are part of a cluster (Gould, Wallestsein and Kleinman, 1987). Clusters account for approximately 0.016-0.08% of suicide deaths in the Australian population		
Workforce	Real-time online chat rooms.		
Evidence Base			
Level of Evidence:	Level 7 – no evidence of effectiveness No research exists on how, why or what occurs in online contagion No understanding of underlying mechanisms, real-time spread, how young people are affected by online suicides New media may have harmful iatrogenic effects (e.g. pro-suicide) to which youth are particularly susceptible. However, online media also holds potential as information source and treatment, support of bereaved etc. To date, no research on prevention of online contagion exists.		
Key References:	Hawton and van Heeringen (2009); Hawton (2012); Cox et al. (2012)		
Limitations of Evidence:			
Recommendations for future research:	• Calls for empirical research and development, piloting and testing of internet interventions to harness online for good, not harm • Cited references that call for more research and outline main challenges for field • Need better understanding of suicide and self harm clusters and social contagion. More research needed, as currently mechanisms underlying contagion remain unclear, as are best-practice guidelines in managing contagion (particularly for youth).		

Service Activity – Community

No data available. Members agreed not to include service element or activity in the Taxonomy but to recommend for further research. Members suggested there could be some interventions provided to Indigenous communities that have resulted in a reduction in the suicide rate. The service element Service Element – Prevention of Online Contagion around Suicide and *Service Activity Methods Preventing Contagion around Suicide – Community* were removed.

Attribute	**Details**		
Description			
Fundamental Attributes			
Service specifications and suggested modelling attributes			
Target Age:	12-17 years	18-64 years	65+ years
Target Pop'n Profile			
% Target Pop'n	1-5% of suicides are part of a cluster; Gould et al. (1987). Clusters account for approximately 0.016-0.08% of suicide deaths in the Australian population.		
Avg contact hours and timeframe per activity (if applic)			
Workforce			
Gross Cost per activity (If applic)			
Evidence Base			
Level of Evidence:	Literature largely explores possible underlying reasons for suicide clusters, or relates to identification of clusters Research mainly centres around youth – as thought to be most sensitive to peer suicide and susceptible to contagion Need better understanding of suicide and self-harm clusters and social contagion.		
Key Reference:	Hawton et al. (2012)		
Limitations of Evidence:			
Recommendations for future research:	More research needed, as currently mechanisms underlying contagion remain unclear, as are best-practice guidelines in managing contagion (particularly for youth).		

Service Element – Crisis Intervention (Phone and Internet Help Lines)

Service Activity – 24 hr Crisis Teams

The 24-hr crisis teams service element and activity belongs in other parts of the Taxonomy. The Service Element Crisis Intervention (Phone and Internet Help Lines) and *Service Activity – Community Crisis Intervention – 24 hr Crisis Teams* were removed.

Attribute	Details		
Description	**Community Crisis Intervention – 24 hr Crisis Teams** Role of team: A single point of access for people in crisis; available 24 hours a day; provide prompt short-term response to mental health crisis in the community until other services available.		
Fundamental Attributes			
Service specifications and suggested modelling attributes			
Target Age:	12-17 years	18-64 years	65+ years
Target Pop'n Profile		35% (16-85 years)	
% Target Pop'n	12% (1.9mill) Australians. accessed MH services; 35% (1.12mill) of MI accessed MH services (16-85 years); ABS (2008); NSMHW (2007)		
Avg contact hours and timeframe per activity (if applic)	On call 24 hrs rapid response to acute MH crisis in community		
Workforce	MHP trained in acute MH in community-based services		
Gross Cost per activity (If applic)			
Evidence Base			
Level of Evidence:	Level 5 – may be effective: only one Level 3 study (sig results; interrupted time series without control) yet only one in UK so no consistent evidence of effect Pre-post: Sig. Reduction in suicide rates from 11.44 to 9.32 per 10 000 patient contacts (p<.0001)		
Key Reference:	While et al. (2012)		
Limitations of Evidence:	Limited evidence from pre-post study in UK. Translation/replicability in Australian context unknown, as are long-term effects. No controlled studies. Insufficient evidence to recommend implementation.		
Recommendations for future research:			

Service Activity – Community Crisis Intervention Internet Helpline

Very limited evidence base however, despite the lack of serious empirical evaluation, there are services that have existed for several years and continue to attract funding from increase in utilisation, which could be construed as positive evidence. Members agreed not to include this service activity and recommend for future research. The Service Element Part of Service Element Crisis Intervention (Phone and Internet Help Lines) and *Service Activity Community Crisis Intervention Internet Helplines* were removed.

Service Element – School Based Prevention Programs

Service Activity – Targeted screening of at risk youth

Screening process is effective where there are referral pathways to effective and evidence-based treatment. Screening can happen in school environments and then therapeutic interventions happen in clinical settings. Members concerned that the success is subject to the quality of the treatment, not the screening itself. Therefore, members agreed not to include the activity at this time, but recommend it for further research. The Service Element School Based Prevention Programs – Targeted Screening and *Service Activity School Based Prevention Programs – Targeted Screening* were removed.

Attribute	**Details**
Description	**MH and suicide risk screening of at-risk youth** Two stages: 1) brief screen to identify at-risk individuals. 2) In-depth f2f clinical assessment of those indicated individuals to determine who requires ongoing support
Fundamental Attributes	Need to weigh up cost effectiveness whole school vs targeted, need appropriate culturally valid screening tool, high false negative and false positive rate when universal screening; often miss those at suicide risk, as suicidality is transient therefore, need regular screening.
Service specifications and suggested modelling attributes	
Target Age:	12-18 years
Target Pop'n Profile	School staff (teachers, counsellors).
% Target Pop'n	12-month prevalence: SI: 3.4%; SP: 1.0%; SA: 1.1%* (16-24 years); Johnston et al. (2009); NMHS (2007)
Avg contact hours and timeframe per activity (if applic)	
Workforce	Audience: School staff (teachers, counsellors).
Gross Cost per activity (If applic)	
Evidence Base	
Level of Evidence:	Level 4 – likely to be effective Mann et al. (2005) = not recommended (may have negative results and trigger vulnerable people, need to weigh up cost effectiveness whole school vs targeted, need appropriate culturally valid screening tool, high false negative and false positive rate when universal screening; often miss those at suicide risk, as suicidality is transient therefore, need regular screening. 4-45% students identified as at risk; > 50% referral rate (average)

	Targeted screening of high risk individuals potential to be effective in identifying those with known risk factors when a sensitive and valid screening tool is used. Some indication of preventive suicide effect, but contingent upon clear referral pathways to available treatments. Strategy is problematic when identifies at risk individuals, but treatment is unavailable. Does not cause undue distress (Robinson et al., 2012). In the absence of appropriate school-based indicated interventions, individual therapeutic interventions should be delivered in clinical settings only.
Key References:	Mann et al. (2005); Robinson et al. (2012) - potential for effectiveness
Limitations of Evidence:	
Recommendations for future research:	

Service Activity – School-based Postvention – Other strategies

Attribute	**Details**
Description	**Details of other postvention strategies** 6 main approaches: 1) Community response team [see below] 2) educational/psychological debriefings 3) individual and group counselling 4) screening of high-risk 5) responsible media reporting (particularly social media) 6) promotion of healthy community recovery Only one strategy has been empirically evaluated, and only then in immediate effect, so only include this strategy: community response team and plan **(School-based Postvention – Crisis Response Plan and Teams)**
Fundamental Attributes	
Service specifications and suggested modelling attributes	
Target Age:	12-18 years
Evidence Base	
Level of Evidence:	Level 4 – likely to be effective (for crisis teams): only 2 pre-post case studies – Level IV studies
Key Reference:	
Limitations of Evidence:	
Recommendations for future research:	CONCLUSION: Literature is descriptive, no empirical evaluation of these strategies. In absence of evidence indicating otherwise, solid recommendations for the use of these strategies cannot be made. Furthermore, Cox et al. (2012) suggests looking to broader interventions found to be effective in preventing suicide and identifying at risk youth, and general population, to

	inform future cluster postvention programs. Also recommends updating of guidelines to take into account social media, email and mobile phone technologies.

Service Activity – Crisis Response Plan and Team

Limited empirical evidence but supports some short-term containment and identification of at-risk individuals. Some of the resources that perform this function currently exist as part of a larger role (e.g. crisis team or acute mental health services). However, the need for specialised expertise was noted and therefore the need for specialist team. Members agreed not to include the service element but recommend it for further research. The Service Element Reduce Stress and Contagion Following Suicide in Schools and the *Service Activity – School Based Postvention* were removed.

Attribute	Details
Description	**Crisis response plan and team** Role of team: 1) investigate the suicide event 2) provide immediate frontline support to distressed individuals 3) implement postvention strategies (e.g. liaise with media, police, school officials, deceased family; debrief peers and teachers; screen and assess high-risk peers; referral of high-risk peers to local MH services; offer gatekeeper training to key stakeholders [teachers, parents]). Timeframe of delivery: Development of plan: pre-existing. Rollout of plan and team: immediate (day after suicide event). Format of delivery: Group psychoeducation and debriefing; f2f screening and referral; f2f and group meetings with stakeholders
Fundamental Attributes	Key elements critical to an effective crisis team response: • Adequate training (e.g. post-traumatic stress management; suicide intervention) of crisis team, • immediate set-up of team and timely implementation of plan, • collaborative approach using existing partnerships Success of team also contingent upon having plan in place before SA/SE, and effective treatment services being available to receive referrals.
Service specifications and suggested modelling attributes	
Target Age:	12-18 years
Target Pop'n Profile	High School Students who have been exposed to suicide in the school.
% Target Pop'n	1-5% of suicides are part of a cluster (Gould, Wallestsein and Kleinman, 1987); contagion estimated to be key factor in 60% suicides in youth (Davidson et al., 1989)
Avg contact hours and timeframe per activity (if applic)	Variable.
Workforce	Leaders: Community-based MH trauma teams (trained in PTSD). Collaborating agencies: law enforcement (police, coroner); school staff; local MH treatment services; local media and community liaison; parents.

Gross Cost per activity (If applic)	
Evidence Base	
Level of Evidence:	Level 4 – likely to be effective 39 high-risk individuals identified and referred by team to MH services (Askland et al., 2003). Only one unrelated suicide recorded following crisis team operation, and steady decrease in hospitalisations for SA over following 2 years (Hacker et al., 2008) Literature predominantly descriptive, very limited empirical evaluation (particularly of long-term). Initial tentative suggestion of some positive short-term effects on identification, referral of at-risk peers and containment of suicide contagion however controlled, long-term evaluation of crisis teams is lacking.
Key References:	Askland et al. (2003); Hacker et al. (2008); Cox et al. (2012); Beautrais (2000).
Limitations of Evidence:	
Recommendations for future research:	

Service Category – Prevention of Depression and Anxiety

Service Element – Targeted Early Childhood Programs

Service Activity – Home Visiting Programs for Disadvantaged New Mothers and Babies

There is only limited evidence supporting the value of home visiting programs on anxiety and depression. One report did have evidence for the PPP program and so that could be recommended for anxiety. There are important outcomes for social and cognitive development and therefore, home visiting programs would only be included if social and cognitive development was an outcome measure. Members agreed to remove the service element and the service activities from the Taxonomy. Note: Programs such as PPP (Positive Parenting Program) and PEP (Parental Education Program) are also described in Parenting Training and Family Strengthening Service Element.

Attribute	**Details**
Description	**Home Visiting Programs for Disadvantaged New Mothers and Babies**
Fundamental Attributes	
Service specifications and suggested modelling attributes	
Target Age:	16-64 years
Target Pop'n Profile	Mothers with infants.
% Target Pop'n	
Avg contact hours and timeframe per activity (if applic)	1 to 3-13 visits per year (minutes per visit is unknown)
Workforce	MHP/ Specially trained lay providers
Gross Cost per activity (If applic)	
Evidence Base	
Level of Evidence:	Level 6 – no evidence of effectiveness. Macdonald et al. (2007): No evidence for improving maternal psychosocial health or outcomes for children. WA (2012): Most studies reported some degree of effectiveness on child maltreatment, improvement in children`s cognitive and social development
Key References:	Macdonald et al. (2007); WA (2012)
Limitations of Evidence:	No statistically significant differences between intervention and control condition (TAU, or not described) for mothers on depression (SMD=-0.08 (95%CI -0.26,0.11, I(2)=63%) and anxiety (P=.85). (No data on child internalizing illnesses)
Recommendations for future research:	

Service Element – Indicated Prevention (Screening and Intervention)

Service Activity – Diet Quality

Members agreed this service activity is not for inclusion now. The Service Activity was removed.

Attribute	Details
Description	**Diet Quality**
Fundamental Attributes	Note: Dietary improvement is: no processed food, no red meat, no take away. But: vegetables and fruit.
Service specifications and suggested modelling attributes	
Target Age:	All Ages
Target Pop'n Profile	Any affective illness
% Target Pop'n	6.2% (16-85 years) (Slade et al., 2007)
Avg contact hours and timeframe per activity (if applic)	N.A.
Workforce	N.A
Gross Cost per activity (If applic)	
Evidence Base	
Level of Evidence:	Level 6 – no evidence of effectiveness Evidence suggests there is an association between diet quality and affective illnesses.
Key Reference:	Jacka et al. (2012)
Limitations of Evidence:	There are no RCTs published yet, but several are currently in preparation.
Recommendations for future research:	

Service Activity – Exercise

Effectiveness shown in reducing symptoms of existing depression, not necessarily in preventing depression. Members agreed not to include exercise at this time. The *Service Activity – Exercise* was removed.

Attribute	Details
Description	**Exercise**
Fundamental Attributes	
Service specifications and suggested modelling attributes	
Target Age:	All Ages
Target Pop'n Profile	Any affective illness: 6.2% (16-85 years) (Slade et al., 2009)
% Target Pop'n	6.2% (16-85 years)
Avg contact hours and timeframe per activity (if applic)	No data available (DIAGNOSIS) Structured, supervised exercise programs 3 per week (45-60 mts) for 10-12 weeks Note: amount of hours training is based on NICE guideline 2007 and is cited in Mead et al., 2010.

Workforce	Sport instructor
Gross Cost per activity (If applic)	
Evidence Base	
Level of Evidence:	Level 1 – sufficient evidence of effectiveness Exercise seems to improve depressive symptoms in people with a diagnosis of depression, but when only methodologically robust trials are included, the effect sizes are only moderate and not statistically significant. SMD= -0.82 (95% CI: -1.12- -0.51) – high quality studies. SMD= -0.42 (95% CI: -0.88- 0.03)
Key Reference:	Mead et al. (2010)
Limitations of Evidence:	Note: Mead is based on diagnosis of depression. There is very limited evidence for prevention exercise interventions for depression (Dunn, 2008).
Recommendations for future research:	

Service Activity – Exercise (children and adolescents (<21 years))

Evidence not as strong as other interventions and assumption is that the exercise would be in addition to exercise programs conducted in school environments. Members discussed the various models but agreed this service activity is not for inclusion now in the Taxonomy and recommended for future research. The *Service Activity – Exercise* (children and adolescents (<21 years)) was removed.

Attribute	**Details**
Description	**Exercise (children and adolescents (<21 years))**
Fundamental Attributes	
Service specifications and suggested modelling attributes	
Target Age:	<21 years
Target Pop'n Profile	Any affective illness
% Target Pop'n	6.2% (16-85 years) (Slade et al., 2009)
Avg contact hours and timeframe per activity (if applic)	Vigorous exercise (aerobic exercise, weight lifting) 45 min (20-90), 3 times a week, min of 4 weeks
Workforce	Sport instructor
Gross Cost per activity (If applic)	
Evidence Base	
Level of Evidence:	Level 1 – sufficient evidence of effectiveness Anxiety: SMD= -0.48 (95%CI: -0.97-0.01; ns). Depression: SMD= -0.66 (95% CI -1.25--0.08 sig) compared to no intervention at post-test

Key Reference:	Larun (2009)
Limitations of Evidence:	Exercise has a small effect in reducing depression and anxiety scores in the general population of children and adolescents, but research is scarce and of low methodological quality.
Recommendations for future research:	

Service Activity – Workplace Screening and Care Management

Limited evidence showing effectiveness. However, issues of discrimination around disclosure prevents inclusion of this activity at this time. The *Service Activity – Workplace Screening and Care Management* was removed.

Attribute	**Details**
Description	**Workplace Screening and Care Management**
Fundamental Attributes	Screening + telephone support + care management
Service specifications and suggested modelling attributes	
Target Age:	18-64 years
Target Pop'n Profile	Any affective illness: 6.2% (16-85 years) (Slade et al., 2009)
% Target Pop'n	6.2% (16-85 years)
Avg contact hours and timeframe per activity (if applic)	For patients reluctant for F2F treatment: 8 sessions CBT, 30-40 mts each by phone. For patients agreed to F2F treatment: not described.
Workforce	Care manager
Gross Cost per activity (If applic)	
Evidence Base	
Level of Evidence:	Level 3 – inconclusive evidence of effectiveness b=-1.0, p=.01
Key Reference:	Harvey et al. (in prep)
Limitations of Evidence:	Screening [followed by care management] can reduce the impact of depression, but the possibility of false positives and the discrimination surrounding disclosure brings into question the usefulness of screening in this environment.
Recommendations for future research:	Further evidence is needed before wide scale screening can be recommended.

Service Activity – Workplace Stress Management Techniques

Evidence shows CBT effective and members noted the similarities to other service activities and agreed that this activity would be subsumed in General Adults Group and Web Based CBT. The *Service Activity – Workplace Stress Management Techniques* was removed.

Attribute	**Details**

Description	**Workplace Stress Management Techniques**
Fundamental Attributes	Cognitive behavioural therapy
Service specifications and suggested modelling attributes	
Target Age:	18-64 years
Target Pop'n Profile	Any affective illness: 6.2% (16-85 years) (Slade et al., 2007)
% Target Pop'n	6.2% (16-85 years)
Avg contact hours and timeframe per activity (if applic)	CBT/PE/PS 7.4 (2-14), no data available for how many mts each session is.
Workforce	N.A.
Gross Cost per activity (If applic)	
Evidence Base	
Level of Evidence:	Level 5 – may be effective CBT: pooled d=1.164 (95%CI: 0.46-1.87), p<.01 (post-test, vs control and treatment conditions); all interventions: pooled d=0.53). CBT had moderate levels of evidence for their effectiveness in reducing self-reported stress and symptoms of both depression and anxiety
Key Reference:	Harvey et al. (in prep)
Limitations of Evidence:	
Recommendations for future research:	

Service Activity – Pregnancy – Individual and Group CBT

Group based psychoeducation study claimed better results than CBT. There is some uncertainty on the reliability of results across different studies. Not for inclusion at this time, but recommended for further research. The *Service Activity – Pregnancy – Individual Group CBT* was removed.

Attribute	Details
Description	**Pregnancy – Individual and Group CBT**
Fundamental Attributes	Cognitive behavioural therapy
Service specifications and suggested modelling attributes	
Target Age:	18-64 years
Target Pop'n Profile	
% Target Pop'n	13% (Munoz et al., 2010)
Avg contact hours and timeframe per activity (if applic)	GRP: PE: 8 se, 2 hrs / CBT: 12 se,? Hrs; IND: PS: 9 phone calls (min=4), 14 mts per call.
Workforce	MHP
Gross Cost per activity (If applic)	
Evidence Base	
Level of Evidence:	Level 3 – inconclusive evidence of effectiveness RR: PS:0.65; PE: 0.43; CBT:0.57 at FU compared to TAU Significant preventive effects were demonstrated only in the psycho-educational study. This is an 8 sessions, 2 hrs group-based psycho-educational study to prevent Major Depressive Disorder (MDD) in pregnant women with a relative risk reduction of 57%
Key Reference:	Munoz et al. (2010)
Limitations of Evidence:	
Recommendations for future research:	

Service Activity – Child and Adolescent Web-based CBT

Attribute	Details
Description	**Child and Adolescent Web-based CBT**
Fundamental Attributes	
Service specifications and suggested modelling attributes	
Target Age:	All Ages
Target Pop'n Profile	
% Target Pop'n	
Avg contact hours and timeframe per activity (if applic)	CBT Self-guided 5 modules (20-40 mts)
Workforce	
Gross Cost per activity (If applic)	
Evidence Base	
Level of Evidence:	Level 3 – inconclusive evidence of effectiveness Anxiety: d= 0.15 (post-test); d=0.25 (6 mo FU). Depression: d=0.43 (males only, post-test), d=0.27 (6 mo FU). All significant. ES is compared to wait-list. There is early support for the effectiveness of internet-based intervention programs for anxiety and depression in children and adolescents. The typical web-based intervention is CBT-based and can be delivered without support.
Key Reference:	Calear et al. (2010)
Limitations of Evidence:	
Recommendations for future research:	

Service Activity – General Adults – CBT (Group, Individual) – Anxiety

Individual intervention was more effective than group based interventions and media based interventions were also more effective. Evidence indicates good effects in the short-term, but not in the longer term. Therefore, members agreed not to include this activity. The *Service Activity General Adults – CBT (Group, individual) - Anxiety* was removed.

Attribute	**Details**
Description	**General Adults – CBT (Group, individual)- Depression/Anxiety**
Fundamental Attributes	Cognitive behavioural therapy
Service specifications and suggested modelling attributes	
Target Age:	18-64 years
Target Pop'n Profile	Any anxiety illness: 16-85 years (Slade et al., 2009)
% Target Pop'n	14.4%
Avg contact hours and timeframe per activity (if applic)	1-10, (total time range 30 mts-16 hrs).
Workforce	MHP
Gross Cost per activity (If applic)	
Evidence Base	
Level of Evidence:	Level 1 – sufficient evidence of effectiveness g= 0.25 for GAD, g=.24 for illness specific symptoms, compared to active control. Significant at post-test, but not at 6 and 12 mo FU. Individually administered media interventions are more effective than human-administered group interventions at preventing Generalized Anxiety Disorder (GAD).
Key Reference:	Zalta (2011)
Limitations of Evidence:	Not Significant at 6 and 12-month follow-up.
Recommendations for future research:	

Service Activity – General Adults – CBT (Web-Based) – Anxiety

No evidence to support it. Members agreed not to include it. The *Service Activity – General Adults – CBT (web-based) – Anxiety* was removed.

Service Element – Universal Prevention

Service Activity – Workplace – Training Managers

This service activity is not for inclusion. Level of evidence 7 - no evidence of effectiveness, key reference: Harvey et al (in prep). The *Service Activity – Workplace – Training Managers* was removed.

Service Activity – Workplace Mediation

One randomised control trial showed meditation was effective in reducing symptoms of depression and anxiety in full time workers (Author: Minoka, 2012). Members agreed not to include this activity. Level of evidence 3 inconclusive evidence of effectiveness, key reference: (Harvey et al in prep). The *Service Activity – Workplace Meditation* was removed.

Service Activity – Workplace – CBT at Times of Transition

There was very little research. Level of evidence 3 - inconclusive reference: Harvey et al (in prep). The *Service Activity – Workplace – CBT at Times of Transition* was removed.

Service Activity – Workplace – Resilience Training and Interventions for high-risk occupations

Stress Inoculation training (SIT) level of evidence 4 - likely to be effective. Resilience training appears to be an intervention of great interest within certain high-risk groups (e.g. military and emergency services). There is, however, limited evidence that resilience training is effective amongst these groups. Reference (Harvey et al., in prep). Members agreed not to include this activity at this time. The *Service Activity – Workplace – Resilience Training and Interventions* for high-risk occupations was removed.

Service Category – Prevention of PTSD

Prevention of post-event pathology from pre-event training

Pre-event training has been called 'resilience training', 'inoculation training' and also variants of 'psychological preparation'. It shall be referred to as resilience training here. Although the bulk of resilience research has been conducted in recent years, the term 'resilience' was first used in the 1950s to describe individuals who survived stressful environments (for review see Kaplan, 1999; Masten, Best and Garmezy, 1990). The foundation of the concept of resilience was the possession of selective strengths or assets that help an individual survive adversity (Richardson, 2002). Over the last two decades, various models of resilience have been proposed, each emphasising various ecological and psychological contexts. Garmezy and colleagues defined resilience as a 'capacity' for successful adaptation in face of hardship (Garmezy, 1993; Masten et al., 1990) whilst Rutter (1987) described it as a positive response to stress and adversity.

As noted by Bonanno and colleagues (Bonanno, Rennicke, et al., 2005), there have been few attempts in the trauma literature to distinguish sub-groups within the broad category of individuals who are exposed to a traumatic incident yet do not go on to develop PTSD. Most studies of resilience have focused on children, with fewer studies examining resilience among adults. Many of these studies have been aimed at improving our understanding of how children growing up in adverse circumstances successfully avert later psychiatric disorder as opposed to halting posttraumatic disequilibrium (e.g., Elder, 1986; Smith, Smoll, and Ptacek, 1990; Werner, 1990; Zoccolillo, Pickles, Quinton and Rutter, 1992).

In one of the very first studies to examine resilience in adults, Manhattan residents were randomly surveyed by phone following the September 11 terrorist attack (Bonanno, Galea, Bucciarelli and Vlahov, 2006). With mild to moderate PTSD defined as two or more PTSD symptoms, and resilience defined as one or no PTSD symptoms in the first 6 months after the attack, over 65% of the residents were classified as being resilient. Resilient outcomes have also been documented in studies that utilised structured clinical interviews, and anonymous ratings from participants' friends or relatives (Bonanno, Moskowitz, Papa and Folkman, 2005; Bonanno, Rennicke, et al., 2005).

To my knowledge, there are only three published randomised controlled trials, of which only two are field trials assessing the utility of resilience training with adults following traumatic life events. However, even one of these was not a randomly controlled study, was group delivered and retrospectively assessed participants who agreed to take part. This study (Sharpley, Fear, Greenberg, Jones and Wessely, 2008) referred to their intervention as pre-deployment stress briefing when provided to UK armed forces (Royal Navy and Royal Marines) before deployment to the 2003 Iraq War. This intervention consisted of education regarding the "role of the mental health team; an

outline of the medical facilities in the Primary Casualty Receiving Facility; definition of stress, pressure and strain; types of stressors (physical, social, occupational and traumatic); effects of stress on individuals; advice on handling human remains; managing stressful thinking in a chemical or biological environment; simple advice on reducing stress; the importance of morale; levels of support available and when/where to seek this" (p. 31, Sharpley et al., 2007). On returning from Iraq all troops completed a questionnaire regarding their reactions. Those who had received the pre-briefings were allocated as the treatment group and those Naval and Marine personnel not registered as having received the pre-briefings were seen as a no-treatment control. As may be expected when using post-hoc and self-selected samples, the treatment group significantly differed to the control group on a number of variables - most notably experiencing more traumatic events and with a higher percentage having a combat role during deployment. Even considering these differences in groups, the results could be seen as generating some hope in the area. The results, whilst not significant, all pointed towards lowered pathology in the pre-briefing group. However, without a longitudinal study with an a priori experimental design, we could not be sure that the results are not due to participant biases and type III errors.

The other randomised controlled trial compared resilience training in Victorian police cadets (n=141) to 'training as usual' with additional psychologist's presence (n=140; Devilly and Varker, 2013). Program components had an evidence-base, drawing on findings from an extensive literature review and an experimental, analogue, study (described below; Varker and Devilly, 2012). Built upon the notion of serial approximation to the feared event and the provision of adaptive psychological resources, it was hypothesised that these would increase adaptive expectations and provide a sense of psychological and physical control. Cadet cohorts were randomly allocated to the study condition and these cadets were then followed-up at 6 and 12 months post-training. Results showed that, in general, recruits had low levels of stress. However, the treatment condition demonstrated a lack of correlation between number of traumatic events and symptomatology. The control condition continued to show the usual correlation between the number of traumatic events and symptomatology, a relationship expected in all large samples from the research literature. We argue that this may have demonstrated a break between trauma exposure and symptomatology, which can only be properly demonstrated in the much longer term. The resilience training groups also rated their training with higher satisfaction than the control groups. Twelve month follow-up data displayed a trend for the resilience group to display higher relationship satisfaction, lower affective distress, lower trauma reactivity and lower workplace burnout. However, this 12-month follow-up only assessed half the sample in each condition, and hence why the differences between condition did not reach significance. A true test of resilience with emergency services personnel is in the longer term (i.e., > 5 years).

As noted above, we have also recently published a randomised controlled trial of inoculation (resilience) training using an analogue design (Varker and Devilly, 2012). Outcome was established from people's short-term and long-term (4 weeks) reactions to watching a stressful video of paramedics attending the scene of a road traffic accident. Built upon the premise that reducing shock and increasing a sense of control would directly interfere with known peri-traumatic predictors of pathology, the study provided serial approximation to a stressful event, psycho-education and coping strategies to deal with aversive physiological responses and high levels of stress in the experimental group. In this study community participants were either given this 'inoculation training' or 'pragmatic training' which we called 'accident management training'. This pragmatic training consisted of participants being given practical tips and strategies on what to do if they are involved in, or witness a traffic accident. Both sets of training were provided to participants one week before they were exposed to a video which had previously been used to investigate the effects of psychological debriefing (Devilly and Annab, 2008; Devilly, and Varker, 2008; Devilly, Varker, Hansen, and Gist, 2007). Considering that we had previously found prophylactic strategies to have possibly noxious outcomes using this stimulus (see below under 'debriefing'), we wished to make sure that any intervention was grounded in empirical data before progressing to a field trial. What we found was cause for cautious optimism. Those who received the inoculation training faired no worse than the control group on the main outcome measures – in other words there did not appear to be any deleterious effects on psychological distress measures or memory performance. However, participants who received the inoculation training displayed improvements in negative affect (with notable trends in depression and stress levels) suggesting a more general positive result from the intervention than normal 'pragmatic training'.

Summary – Resilience: The above comprise the only randomised controlled trials published in the research literature as of October 2013. The evidence points towards having a degree of cautious optimism in the utility of resilience training programs for 'at risk' groups. All of the field trials also demonstrate the natural resilience of humans and the low base rates of pathological reactivity to trauma exposure (in the short-term) for populations where exposure is expected. However, it should be stressed that two field trials does not make a body of evidence – just a correlation. For this reason one could argue for 'trialling' resilience training at a larger level, or one could argue for not providing this level of care until more research outcomes have become available.

Prevention of post-event pathology from post-event intervention for all exposed

This approach to prevent trauma reactions falls into the 'Debriefing' type intervention and the more recent 'Psychological Fist Aid (PFA)' approach. I will deal with the PFA first as the research literature is easy to summarise.

Psychological First Aid: Psychological First Aid (PFA) is an evidence-informed model used to assist those affected in the hours and early days following trauma (Uhernik and Husson, 2009). The Medical Reserve Corp Psychological First Aid Field Operations Training Manual (National Center for Child Traumatic Stress Network, 2006) emphasises that PFA is designed to reduce initial distress caused by traumatic events, and to foster short- and long-term adaptive functioning and coping. PFA comprises an assortment of processes and strategies that may be selected and used based upon a case formulated approach. As of today, there are no randomised controlled trials of the utility of PFA.

Debriefing: Debriefing is a generic term for the provision of services for targeted populations. This intervention is usually targeted towards people who have been exposed to traumatic events. They are provided with trauma education and ventilation opportunities, either in groups or individually. This generic term should be differentiated from the trademarked and specific term "Critical Incident Stress Debriefing (CISD)" (or the more recent "Critical Incident Stress Management (CISM)"). CISD and CISM have become ubiquitous terms in common parlance, but they represent a specific approach to debriefing – that of a private company called the International Critical Incident Stress Foundation (inc).

Debriefing "is best described as a generic term for a class of immediate interventions following trauma (usually within 3 days) that seeks to relieve stress with the goal of mediating or avoiding long-term pathology. PD relies predominantly on ventilation/catharsis, normalisation of distress, and 'psycho-education' regarding presumed symptoms. CISD, on the other hand, is a proprietary PD variant originally articulated by Mitchell during the 1980's (Mitchell, 1983) through trade magazines, trade conferences, and proprietary seminars. It centers predominantly around group based interventions, though individual (or 'one-on-one') debriefings have always been advocated as an acceptable and expected variant, and relies heavily on reconstruction of the traumatic event, ventilation, and normalization. It also includes a structured "teaching" component." (p. 320, Devilly, Gist and Cotton, 2006).

Outcome from randomised controlled trials and meta-analyses of trials into CISD / CISM are quite consistent – there is either no psychological or economic benefit from this intervention, or it interferes with people's resolution following trauma. In other words, for an exposed population, at best it offers nothing – at worst it stops people from recovering from the shock of the event. This seems to be more prominent when the people debriefed are more distressed (Mayou, Ehlers and Hobbs, 2000) or where the stressor is greater (Devilly and Varker, 2008). One meta-analysis differentiated between generic debriefing and CISD (van Emmerik et al., 2001). They found CISD to harm improvement following exposure and generic debriefing to have no clear positive effect. Overall, meta-analyses have generally come to the conclusion that such interventions should not be part of routine practice. Meta-analyses which have come to this opinion include the Australian Guidelines for the Treatment of Acute Stress Disorder & Posttraumatic Stress Disorder (ACPMH, 2013), the UK's National Institute for Health and Care Excellence (NICE, 2005) and the UK and USA's Cochrane Collaboration (Rose, Wessely and Bisson, 2004). Individual researchers have likewise come to such conclusions following quantitiative and qualitative reviews (e.g., Devilly, Gist and Cotton, 2006; McNally, Bryant and Ehlers, 2003).

Summary – Intervention for all: At this stage the evidence is a). new methods of 'intervention for all' are unproven and b). old methods are not recommended. Current recommendations centre around the provision of practical and emotional support where requested and that victims are made aware of the availability of this support.

"Although immediate debriefing has yielded null or paradoxical outcomes, the value of contemporaneous instrumental assistance and support—those kinds of practical help often learned better from grandmothers than from graduate training—has increasingly been found to be useful in disaster response. Structured interventions, however, may be better embedded in models of stepped care, where the nature and level of intervention is conservatively tailored to the needs, context, and course of individual resolution." (p. 741, Devilly and Gist, 2002).