Tasmanian Eating Disorder Service

Statewide Operational Service Model

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# Executive Summary

The Tasmanian Eating Disorder Service (TEDS) is being developed and will be delivered by the Tasmanian Department of Health (DoH), and Tasmanian Health Service (THS).

The funding to develop and deliver the service is being provided by the Australian Government, under the Community Health and Hospitals Program. The Project Agreement states that funding is being provided to ‘plan and design the most appropriate model of care, including identifying any potential infrastructure needs, for the establishment of an eating disorder centre in Tasmania. This planning will consider Tasmania’s health needs and service configuration’. Wherever possible, TEDS will be designed to address, remove, or minimise current barriers to accessing treatment for eating disorders in Tasmania.

Eating Disorders (EDs) are complex mental illnesses associated with high levels of social and physical impairment, and significant socioeconomic costs. The National Eating Disorder Collaboration (NEDC) Stepped System of Care Framework outlines the components of a stepped system of care. Tasmania is currently missing two essential components of a complete system – intensive community‑based treatment (day / evening programs) and a residential treatment program. Consultation with stakeholders, including people with lived experience of an eating disorder, has identified other needs specific to the Tasmanian context. These include increased difficulties accessing services close to home for those in the North and North West when compared to the South; difficulty navigating the service system; shortage of staff well‑equipped to treat and support people with an eating disorder; and expense incurred when accessing services – for everyone, but especially for people who must access services that are not close to home.

TEDS has been designed to bridge these critical gaps and increase access to services. TEDS will provide a safe, high‑quality, person‑centred service to support people with an eating disorder to maximise their chances of recovery. These include assessment, treatment and Consultation Liaison services, and education and training activities. Treatment streams include a residential treatment program, located at St Johns Park, New Town, and day / evening programs located at the Centre in St Johns Park, and at sites in Launceston and Burnie that are yet to be identified.

This high‑level Model of Care has been developed in planning for the service. Future stages of service design will further develop and support the service, as discussed in Section 2.2.

# Introduction

## Clinical Background

EDs are complex mental illnesses associated with high levels of social and physical impairment, and significant socioeconomic costs1-5. These disorders involve behaviours resulting in altered consumption or absorption of food, resulting in impaired physical health and / or psychosocial functioning6, that are not explained by another health condition and are not developmentally appropriate or culturally sanctioned7. Eating Disorders are distinct from feeding behaviours, as they involve altered eating behaviour and preoccupation with food, as well as prominent body weight and shape concerns, where Feeding Disorders involve changes in feeding behaviours unrelated to body weight and shape concerns, such as eating of non‑edible substances or voluntary regurgitation of foods7. Feeding disorders are outside the scope of this service.

Eating disorders are often associated with increased morbidity and mortality8-10, and high personal costs. Personal costs differ from person to person, but can include lower education and vocational achievement, decreased quality of life and social isolation4 5 9 10. Treatment requirements for eating disorders are different to other types of mental illness, due to the complex overlapping nature of mental and physical health needs11.

Australia uses the ICD‑10 (11th Edition) for classification and clinical coding, which does not reflect the current evidence base regarding EDs. The DSM-V and ICD-11 are broadly consistent regarding Eating Disorders, so this Model of Care will reference the diagnostic groupings contained within these.

For further detail, refer to Appendix 4 – Clinical Background.

## Scope of this Model of Care

This high‑level Model of Care is planning for the development and implementation of the Tasmanian Eating Disorder Service (TEDS). This high‑level model will articulate the broad role and functions of TEDS, with the understanding that TEDS is likely to impact on other services. Further service development, in consultation with stakeholders, will be required to determine the role and responsibility of TEDS, and clarify and articulate the intersection and integration of TEDS with a range of services. Intersecting Tasmanian Health Service services will include Child and Adolescent Mental Health Services (CAMHS), Adult Community Mental Health Services (ACMHS), acute medical care (including general medical and paediatrics), and multidisciplinary teams that work across these services. Other intersecting services and stakeholders will include primary care, community‑based private providers, and other industries and sectors.

Future stages of TEDS development will include

* development of policies, procedures and protocols for clinical governance, service delivery (including therapy modalities and settings, clinical indicators of eligibility for the service, step up / step down points and recovery support), Consultation Liaison, education and training, and research and evaluation
* development of a staffing model for the service
* development of strategic direction and supporting documentation for
  + workforce development
  + education and training

These activities may be undertaken jointly by TEDS with other Statewide Mental Health Services (SMHS) or DoH business units or services, and may involve seeking external expert advice (for example, the NEDC).

# Eating Disorder Treatment

## Eating Disorder Treatment in Tasmania - currently

Tasmania does not currently provide a single coordinated approach to eating disorder treatment within the public health system and does not currently have a specialist community‑based service for the treatment of eating disorders. Treatment is currently delivered by a range of services and providers in the public, private and primary care sectors, some of which specialise in treatment of eating disorders, some of which are generalist teams or services. In some cases, service providers currently act together as cross‑service or cross‑sectoral multidisciplinary teams. These service providers include

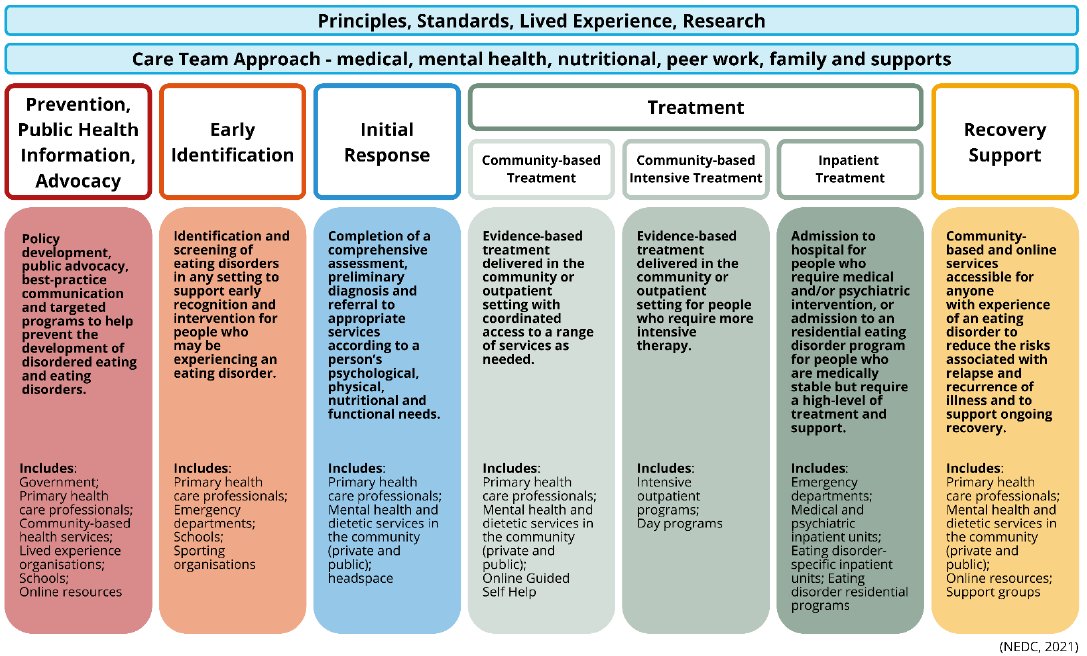
* Primary care providers, including General Practitioners
* Early intervention / first response, including headspace, schools, universities, TAFEs and student support staff
* community mental health teams, such as CAMHS and ACMHS
* private mental health providers, such as psychologists, psychiatrists and counsellors, some of whom specialise in treatment of eating disorders
* Outpatient clinics, including THS paediatrics units
* Inpatient hospital settings

Current and previous service users, people with lived experience, and service providers have all expressed that the service system is fragmented and difficult to navigate, with a range of barriers to accessing service. TEDS will add capacity to the treatment system, both through direct service delivery, and through Consultation Liaison, and education and training activities. TEDS may also play a role in care navigation.

## Stepped System of Care

Stepped care is defined as “an evidence‑based staged system comprising a hierarchy of interventions, from the least to the most intensive, matched to a person’s needs. Within a stepped care approach, a person is supported to transition up to higher‑intensity services or transition down to lower‑intensity services as their needs change”.12

The NEDC recently published the *Stepped system of care for eating disorders* briefing paper11, which articulates levels of a stepped care system for treatment of eating disorders:



This system delivers coordinated, evidence‑based services that increase or decrease in intensity, according to the person’s changing psychological, physical, nutritional and functional needs12.

Tasmania’s current system of care for eating disorders has two critical gaps in service: community‑based intensive treatment, and residential treatment program (listed in the framework above under ‘Inpatient Treatment’). TEDS will increase capacity within the existing system through direct service delivery and by building capacity of adjoining services. It will do this by providing the following functions:

* Initial response – TEDS will be one of several services providing comprehensive assessment, diagnosis and referral, according to a person’s psychological, physical, nutritional and functional needs.
* Community‑based Intensive Treatment – TEDS will provide evidence‑based treatment delivered in the community or outpatient setting for people who require more intensive therapy (day / evening programs)
* Inpatient treatment – TEDS will provide a residential treatment program for people who are medically stable, but require a high level of psychological treatment and support
* Recovery support – TEDS will provide community‑based and online services accessible for anyone with experience of an eating disorder to reduce the risks associated with relapse and recurrence of illness, and to support ongoing recovery
* System‑wide - TEDS will undertake education and training activities to build the capacity of the system, including early identifiers, initial responders and other service providers and supports. This will increase early identification and intervention, making treatment accessible earlier and increasing likelihood that treatment is effective. TEDS will provide Consultation Liaison to intersecting services and providers to increase effectiveness of treatment, and sustainability of the service system.

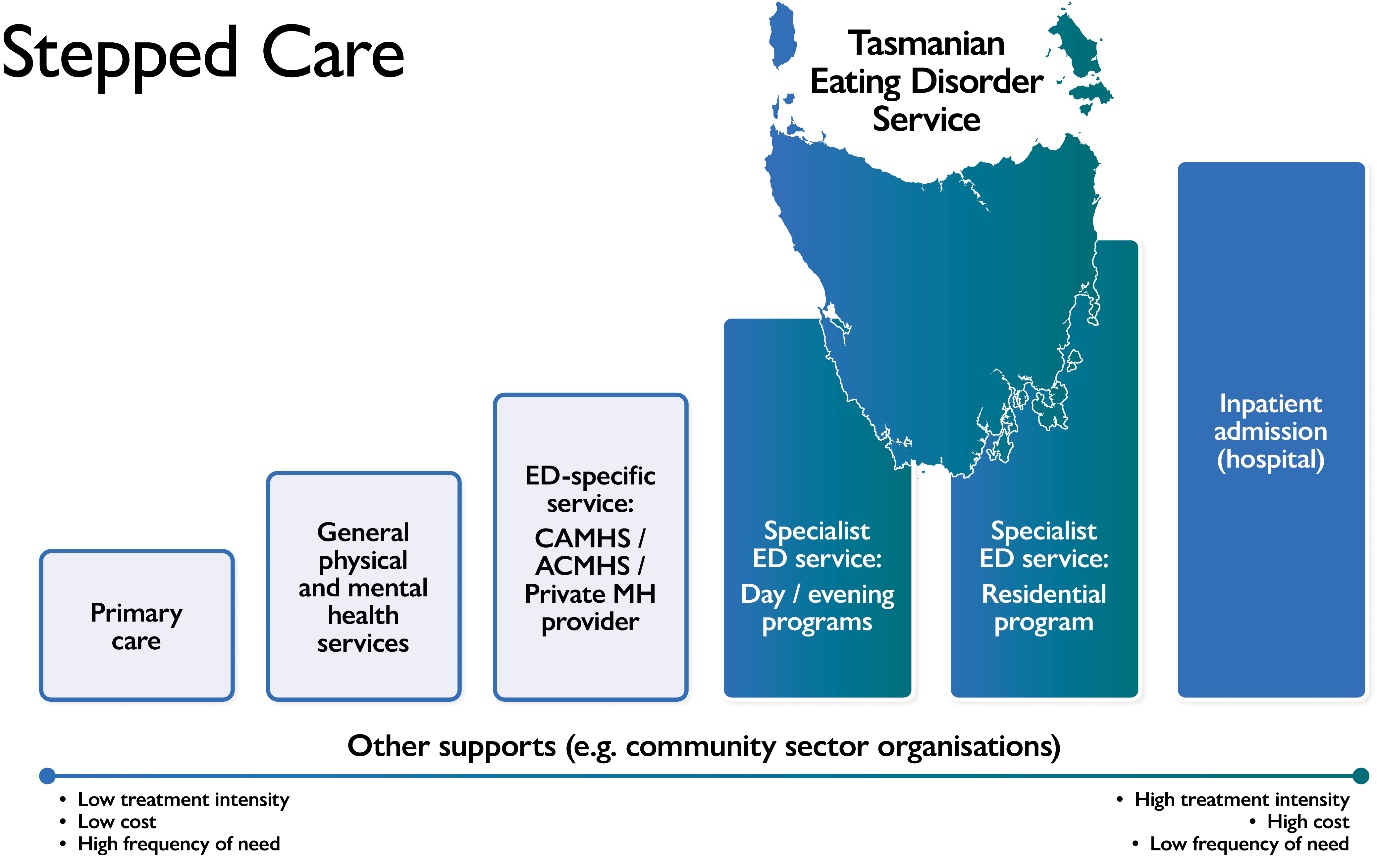
Key components of stepped care for eating disorder treatment in Tasmania will include:

* Appropriate, personalised, evidence‑based advice, treatment and support accessible to patients at each level of care
* Consumers will move up and down the levels of care according to their level of need and remain at the level required for the period that is clinically necessary, within the service design and framework for therapeutic interventions.
* Access to higher levels of care is dependent on assessment of current risk, and the effectiveness of previous levels of intervention. This should be achieved through provision of shared care planning (and where relevant, delivery), early intervention, consultation, and timely access to treatment, to minimise deterioration and escalation of illness
* The levels are not mutually exclusive. For example, a person may be engaged with a provider who delivers specialist mental health services (e.g. CAMHS, ACMHS, private providers) and participate in the TEDS day program, if this is clinically indicated. A person may also receive medical monitoring or management from a private provider or public system paediatric service while being engaged with TEDS.
* TEDS will provide advice, support, and consultation liaison functions to intersecting services or providers, in order to increase access to appropriate treatment, enabling early identification and intervention, or increased treatment effectiveness.

### Treatment

Decisions about level of treatment recommended or required must be informed by the evidence for eating disorders, and risks at each level11. Protocols for determining which level is most appropriate will be in scope for future stages of TEDS service development.

In the context of the Tasmanian system, stepped care for eating disorder treatment will look like this:



#### Community‑based Treatment – Eating Disorder Specific Services

These services are the first line in evidence‑based treatment specifically for disordered eating, eating disorders and comorbidities (e.g. CBT-E, FBT-ED), and will include CAMHS, ACMHS and private providers, including mental health clinicians, dietitians and other providers as relevant. Consultation liaison and clinical supervision will be available from TEDS to support CAMHS / ACMHS clinicians delivering eating disorder treatment. Clinical supervision of private providers may be possible, but will be subject to capacity.

These services will act as a step down from TEDS day / evening programs, and a step up from primary care and / or general health services or mental health providers and may provide longer term support.

#### Community‑based intensive treatment – TEDS day and evening programs

In the context of TEDS, this level refers to the future day / evening programs. Participation in these programs is likely to be in addition to engagement with CAMHS / ACMHS / a private provider, rather than a replacement for these services. The primary responsibility for a consumer’s care coordination is likely to remain with their longer‑term care provider.

Day programs are an effective, evidence‑based process for both adolescents and adults that can assist in weight restoration and improvements in psychological functioning, including reductions in drive for thinness, body dissatisfaction, anxiety and depression scores13-16. Research indicates that day services are associated with decreased number and duration of inpatient admissions, reducing costs to the health system and patient13 15 17-20. Day programs are effective as an alternative to inpatient treatment, or as an intensive program following a brief medical admission16 20, as the longer term care required by many patients for psychological recovery can be more appropriately provided by intensive support in the community, than in a hospital inpatient setting16 21. This is promising for those who choose not to participate in the residential treatment program after inpatient admission.

The day / evening programs will allow people to receive treatment in their communities, and will have the benefit of connection with family, friends, and supportive others by remaining at home. By receiving treatment in the community, participants in these programs will be able to continue with education, training or employment in line with their individual circumstances and goals. This will be further enabled by TEDS running evening programs. This aims increase access to treatment so that program participants will not have to make the choice between receiving treatment for themselves or a loved one, or engaging with activities such as education, training or employment that may only be available during business hours.

#### Inpatient admission - TEDS Residential program

To date, most treatment research has focussed on treatment outcomes at the individual level, with far less research addressing evaluation of residential treatment programs1. On an individual level, residential treatment programs provide a valuable setting in a stepped care model, between hospital‑based inpatient treatment and traditional outpatient services and community‑based mental health services22.

Residential care, as opposed to partial hospitalisation, is offered to people who are medically stable, but in need of a higher level of treatment intensity than that offered in outpatient or community settings1 23. Residential treatment for eating disorders is effective at the group level, effective for the majority of individuals within a group23, and effective for both males and females24. It is important to note that the literature regarding residential treatment programs does not reference transgender, gender non‑binary or gender non‑conforming people to any significant degree.

TEDS will provide full time housing and multidisciplinary treatment in a home‑like environment for a time‑limited period. Treatment at TEDS will be broadly consistent with other residential programs, which usually include meal support, individual and group therapy components, and recreational activities25. For more detail, see *Section 4.3.7 – Treatment Model*. Wherever possible, relevant and appropriate, TEDS will maximise involvement of supportive others, whether partners, other family members, or friends.

Participants in the residential treatment stream will be encouraged and supported to participate in day program activities as soon as possible, as appropriate to their individual needs and stage of recovery.

Step down planning from the residential program to the day / evening programs will consider and clarify responsibility for care coordination and planning, including providing supported referral or connection to any additional supports required.

#### Inpatient admission - hospital

The distinction between residential programs and inpatient treatment is largely based on the level and type of medical care provided – hospital‑based inpatient services offer medical refeeding and other interventions to address medical instability, which are outside the scope of services offered by TEDS. As such, medical instability will be a key factor in decision making about the step up to inpatient admission from a residential or community treatment setting. Evidence‑based escalation for step up to hospital inpatient admission, including patient care pathways, risk and decision making algorithms can be found in the MARSIPAN and J MARSIPAN26 27. There is currently no evidence that inpatient admission confers benefit for people experiencing Bulimia Nervosa, Binge Eating Disorder or ARFID, unless they are medically unstable.

Inpatient psychiatric admissions are associated with a higher rate of relapse of illness28 29, so it is unlikely that this will be the most appropriate setting for eating disorder treatment. There may be instances where inpatient psychiatric admission is required for a person to receive treatment for a comorbid condition before eating disorder interventions can be delivered effectively.

#### Medical Monitoring / Management

The built environment of the TEDS sites will allow the service to provide a certain level of medical monitoring and management for consumers engaged with the service. Responsibility for delivery of medical management services, and the eligible cohort for these services, have yet to be determined. Clinical protocols will be developed as part of future service design, and these will include protocols for step up into hospital inpatient admission for eating disorders, and for conditions other than eating disorders (such as comorbid conditions or instances of self‑harm).

# Tasmanian Eating Disorder Service

## Service Description

TEDS will address gaps in the current eating disorder service system and introduce more effective stepped care. It will do this by providing a residential treatment stream and day / evening programs for people with a primary diagnosis of an eating disorder (as defined by the DSM-V / ICD‑11).

The service will:

* Intersect with other services and service providers currently delivering treatment for eating disorders. These include services delivered by the THS, such as hospital inpatient services addressing medical instability or their corresponding outpatient clinics providing medical monitoring or management, or community mental health teams such as CAMHS or ACMHS. TEDS will also intersect with private providers, including mental health clinicians providing ED treatment, or medical specialists supporting specific health concerns or issues.
* Include a Consultation Liaison function. This will increase capacity of existing medical professionals and service providers through in-reach and outreach activities, to effectively support people with an eating disorder, and their treating clinician(s). Where relevant and appropriate, the CL function may include family members, carers and supportive others.
* Undertake education and training activities, tailored to differing audiences, including family members, carers and supportive others of people engaged with the service; health professionals; and to other sectors as appropriate and relevant, subject to capacity.

TEDS will be a statewide service, accepting referrals and program participants from any region. Although the residential treatment program will be located in the South, participation in the program will be open to residents of all regions of Tasmania.

## Service Principles

The service will focus on providing safe, high‑quality treatment and support that is person‑ and family‑centred, recovery‑oriented, evidence‑based.

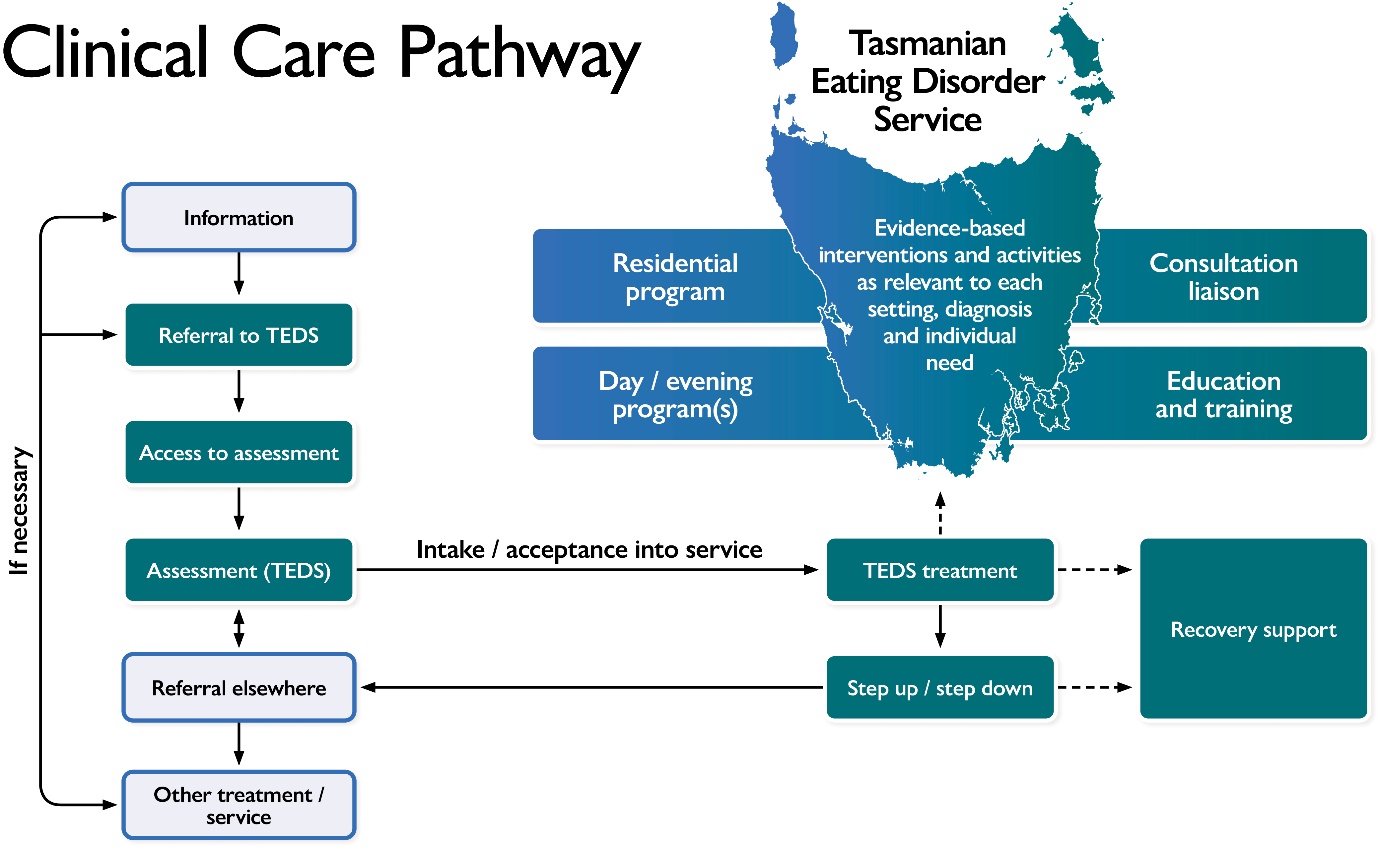
Relevant Frameworks and Standards to guide the service include the

* [National Mental Health Performance Framework 2020](https://meteor.aihw.gov.au/content/index.phtml/itemId/721188#:~:text=The%20National%20Mental%20Health%20Performance,of%20the%20Australian%20health%20system.)
* [National Standards for Mental Health Services 2010](https://www.health.gov.au/resources/publications/national-standards-for-mental-health-services-2010-and-implementation-guidelines)
* [National Safety and Quality in Health Care Standards](https://www.safetyandquality.gov.au/standards/nsqhs-standards)
* DoH Quality Governance Framework (not currently available outside the DoH/THS intranet)
* ANZAED Practice and Training Standards30-32
* RANZCP ED Guidelines9
* National Eating Disorders Framework33
* National Practice Standards for Eating Disorders34

Key service principles identified from the research, the above Standards and Frameworks, and stakeholder consultation, include

* Use of a multidisciplinary approach, and staffing to support this approach
* Trauma‑informed and culturally appropriate practice
* Health At Every Size approach
* The social milieu of the service
* Involvement of ‘supportive others’ – family, partners, friends and carers
* Peer support – to give hope that recovery is possible
* Home‑like environment for treatment settings – for treatment to be the least restrictive possible, and to have carry over to ‘real life’
* Systems support and capacity building, including Consultation Liaison
* Continuity of care, integrated treatment and support between services, and service system navigation
* The ability to access treatment and care relatively close to home and, where this is not possible, have service available through alternative delivery methods (for example, telehealth meal support)

## Clinical Care Pathway



### Information

Self‑help is not usually recommended as an effective treatment for eating disorders on its own, but as an addition to other evidence‑based treatments to improve engagement, motivation, and self‑care. When used in this way, self-help strategies, such as information-sharing, bibliotherapy and use of internet resources improve patient satisfaction, enablement and recovery35, decreasing distress of patients with eating disorders36-38, including those waiting for assessment or treatment39 40. Structured online self-help programmes have also significantly reduced depressive symptoms in carers36-38.

Supportive self‑help approaches are effective as a standalone treatment for BED, and acceptable to many patients. One of the most effective first-line treatments for BED is a supported self-help programme and manual41 42, which is recommended as a first-line intervention9. The same manual also supports the CBT‑E program for AN and BN. Use of a parent self-help manual is also a key support to the FBT approach in empowering parents43.

TEDS may provide connections to evidence‑based information and self‑help resources or may develop new resources. This is to be determined in a future stage of service design.

### Referral

There will be several referral pathways into TEDS. These will include:

* Self‑referral – either themselves or a family member / carer
  + This may include use of an intake, assessment or referral (IAR) tool or other screening tool, such as a survey
* GP referral
* Referral to and from other THS services, including
  + Statewide Mental Health Services, such as CAMHS, ACMHS, ADS and inpatient mental health services
  + Paediatrics or general medical
  + Nutrition and dietetics
* Referral by private providers of eating disorder treatment or other medical specialties

### Access to Assessment

Clinical protocols for triage, assessment and intake will be developed in a future stage of the project.

### Assessment

A key component of case recognition and assessment is the exclusion of medical conditions that may mimic eating disorders. The initial assessment will determine whether TEDS is the most appropriate service to provide therapy, and will include relevant information provided by a referring practitioner, the consumer, family members and supportive others, as relevant and appropriate.

Assessment may take place by telehealth / videoconferencing, including videoconference with another health care provider such as a GP, in person at TEDS sites, or as Consultation Liaison with collaboration between intersecting services, such as paediatrics or acute care.

Protocols for assessment, including acceptance into service, or referral elsewhere, will be determined during future service development. It is important to note that TEDS will take a Health At Every Size approach – this means that a minimum BMI may not be an appropriate clinical indicator for acceptance into service for every diagnosis or individual.

For information about the pathway if the consumer becomes a client of TEDS, please see *Section 4.3.6 Intake and access to service*.

If the consumer does not become a client of TEDS, they will be supported to access another more appropriate service (see *Section 4.3.5 - Supported referral elsewhere*). TEDS may provide CL to these services.

### Supported referral elsewhere

If TEDS is not the most appropriate service to support a consumer at the time of referral, or after their assessment, they may be referred elsewhere. This will be a supported referral, with communication and continuity of care between the services. Ongoing efforts will be made to support the consumer, including CL, and revising the most appropriate setting to support the consumer.

Circumstances that may result in referral elsewhere include:

* An eating disorder is not the primary diagnosis
* There is a more appropriate clinical setting
  + The person is medically unstable or at current psychiatric risk, and requires services provided in a hospital inpatient setting
  + The person has comorbidities (mental or physical) that require treatment before TEDS is a suitable setting for treatment
  + The person does not require intervention at the level of intensity provided by TEDS. For example, treatment by CAMHS, ACMHS, or a private provider with Clinical Liaison from TEDS may be more appropriate.

### Intake and access to service

If the assessment determines that TEDS is the most appropriate setting for treatment, the consumer and their supportive others will participate in an intake process. This will be facilitated by a multidisciplinary team (MDT), and will include identification of treatment goals and development of a treatment plan. The MDT will include professional disciplines relevant to the individual participating in intake – for example, some people will require input from a dietitian or occupational therapist, while others may not.

The MDT will include TEDS staff, and where relevant, will seek input or advice from providers external to TEDS. This may include consulting with an existing mental health provider or seeking advice from consulting medical or allied health disciplines, such as paediatrics, endocrinology, gastroenterology or other relevant health care provider.

### Treatment model

The treatment model within the Tasmanian Eating Disorder Service will comply with the service principles – safe, high quality care that is person‑ and family‑centred, and recovery‑oriented. Services must be evidence based and effective, to be safe and high quality. This means that therapeutic interventions received by service participants will vary according to their individual need and circumstances.

Expert consensus and clinical evidence support a multidisciplinary approach, to ensure that each person receives the combined medical, dietetic and psychological interventions required to maximise the chances of full recovery9. TEDS staff will have highly developed knowledge, skills, and experience in treatment of eating disorders, and ideally, so will clinicians who have input into collaborative care planning. The Department of Health and service staff will be guided by the recently published [ANZAED treatment principles, and clinical practice and training standards](https://www.anzaed.org.au/anzaed-practice-standards/#:~:text=The%20ANZAED%20clinical%20practice%20and,eating%20disorder%20treatment%20to%20individuals.)30-32.

MDTs will be comprised of

* Mental health clinician\*
* Consultant psychiatrist
* Peer support
* Dietitian
* Allied health professionals as clinically indicated (e.g. physiotherapy, exercise physiology, occupational therapy)
* Staff qualified and experienced in medical assessment and monitoring of people with eating disorders#, including consulting medical specialists as clinically indicated for each person (may include paediatrics, endocrinology, cardiology, gastroenterology, etc.).

While family, friends, carers and supportive others may not necessarily form part of the treating team, we are committed to their inclusion in the planning and delivery of care, where relevant and appropriate. This will likely also include education and capacity building for family, friends and carers – skills, strategies and support to care for their loved one, and skills, strategies and support for themselves. Families / carers should be involved in all care for children and adolescents, and where possible also for adults.

All treatment streams will include meal support, psychological therapies, and wellbeing therapies. The type, and intensity of intervention will be determined by a range of factors, including the treatment stream and setting, clinical need and preferences of the individual, and be informed by the evidence base.

\*Professional discipline unspecified, and may include psychologists, social workers, mental health nurses, occupational therapists and counsellors, as long as the individual is appropriately qualified and experienced in the treatment of eating disorders.

#Service responsibility for medical monitoring and management (outside of medical specialties) will be determined in development of the staffing model.

#### Residential Treatment Stream

The model for the residential treatment stream leans heavily on the social milieu of the service, and the concept that the community itself, through self‑help and mutual support, is a powerful agent for change. In a therapeutic community, residents and staff participate in the management and operation of the community, contributing to a psychologically and physically safe learning environment where change can occur. There will be a focus on social, psychological, and behavioural dimensions, and the community will support the development of behaviours, attitudes, and values of healthy living. In the context of the residential treatment stream, the community will incorporate the service participants and the staff, with supportive others contributing to the community of each individual participant, but not for the program as a whole.

Emerging evidence indicates that residential treatment of an eating disorder is appropriate and effective for adolescents, and that considerable, meaningful and statistically significant improvements can be made in a six week period for both adults and adolescents44. Person‑centred care should drive decision making about the most appropriate and effective treatment setting for each person.

Although the residential treatment program will be located in the South of the state, the program is not restricted to residents of Southern Tasmania, with statewide eligibility.

Eligibility criteria for the residential treatment stream include

* A primary diagnosis of an eating disorder (as determined by the DSM-V / ICD-11 – See Appendix 11.4.1), and
* medically stable, not requiring urgent weight restoration or management for any other kind of medical instability, and
* people participating in the day / evening program, whose illness continues to escalate, or
* people being discharged from hospital inpatient settings who require more intensive support than would be possible at home,
* Who are of any gender, and
* Who are 16 years or older (with 14 and 15 year olds considered on a case by case basis).

At this stage, it is expected that the average length of stay will be 8 weeks, with some people attending for a shorter period, and some potentially attending for slightly longer. Recent research has demonstrated that the majority of statistically significant and meaningful progress within a residential treatment program is made within the first six weeks1 44. The additional two weeks will allow for transition to less intensive care, or ‘step down’, including revision of treatment goals, collaborative care planning between services, clinicians, consumers and carers, transition to living at home from the residential treatment centre, and any activities that need to take place to maximise success of this transition. Decisions about length of stay and step up / step down will be made by the participant, their treating team, and supportive others.

Therapies delivered in the residential treatment program will include:

* Intensive meal / eating support (*Section 4.3.7.3*)
* Recovery focussed, person‑centred psychiatric / psychosocial intervention, as indicated by the evidence‑base for each diagnosis and stage of illness (*Section 4.3.7.1*)
* Wellbeing therapies (*Section 4.3.7.5*)

The residential treatment program will be delivered in a safe, home‑like environment, constructed in line with the evidence‑base for mental health, and with input from service providers and people with lived experience of an eating disorder.

In addition to eating support, psychological therapy and wellbeing therapies, program participants will undertake household chores and other responsibilities required for daily life, such as laundry, tidying up and light cleaning. This will contribute to the ‘home‑like environment’ and community feel of the service, and will also ensure that program participants are prepared appropriately for daily life outside the residential program. Participation will be staged according to level of readiness, stage of recovery and physical ability.

#### Day / evening program(s)

The day and evening programs will be developed further in future stages of service design. Key aspects of these programs currently include:

* Programs will be provided for all ages, and a range of target groups
  + sessions and activities will be grouped appropriately according to age, diagnosis etc.
  + Programs for individuals
  + Programs to include families and/or supportive others
  + Standard length block programs
  + Intensive programs
    - some of the intensive programs may also function as recovery support
    - some of the intensive programs may occur during school / university holiday periods, where relevant
* Recognised as an important part of the stepped care system
  + Step down from residential program
  + Step up into day / evening program as additional support for people receiving community‑based treatment for eating disorders (e.g. engaged with CAMHS/ACMHS/private provider and TEDS day/evening program)
  + Participants in the residential treatment stream will be supported to participate in day and evening program activities taking place within the same service site as soon as they are ready to do so
* Blocks of treatment
  + Many interventions are supposed to be time‑limited, not indefinite – for some, if they haven’t been effective within a particular period of time, they are unlikely to be effective at all and something else should be tried
  + Blocks are likely to be open, as entry into the residential treatment program will be open
  + Length of block will be determined during future service design
* Scalable - days have independent programming / run independently of each other
  + People can attend number of days/sessions as clinically indicated, and for the intervention or area of support that is most appropriate to them, their level of illness and individual diagnosis.
  + These are likely to include
    - Nutrition education
    - Shopping, food preparation
    - Body image
    - Emotional recognition and regulation
    - Social and interpersonal difficulties and conflict
    - Managing stress, anxiety, and self‑criticism
    - the above are only examples, and the program will be drafted by the manager, and changed as needed to fit demand and different cohorts (e.g. diagnoses)
* Meal / eating support (*Section 4.3.7.3*)
* Recovery focussed, person‑centred psychiatric / psychosocial intervention, as indicated by the evidence‑base for each diagnosis and stage of illness (*Section 4.3.7.4*)
* Wellbeing therapies (*Section 4.3.7.5*)
  + Wellbeing therapies offered in the day program may differ from day to day, as the focus of some days may align better with particular wellbeing therapies (e.g. stress management and movement meditation)

#### Meal support

Meal support will be provided by the most relevant and appropriate professional discipline for each activity or component, including dietitians, social workers, occupational therapists or psychologists. Meals will be attended by staff, as part of the social milieu of the service.

Wherever possible, the service will focus on food and eating, rather than oral nutritional supplements.

Clinical protocols, including staffing ratios and specific activities for meal support will be developed in future service design, but are likely to include:

* Intensive meal / eating support:
  + All meals and snacks are supported
  + Activities are person‑centred, graded to support individual’s level of illness and readiness. Activities may include
    - Meal planning
    - Shopping
    - Food selection
    - Food preparation
  + Where possible, food selection and availability should incorporate cultural and religious beliefs, and food preferences.
* Occasional meal / eating support
  + Some meals supported.
  + Which meals are supported will likely depend on a participant’s engagement with the program. For example, day programs are likely to support morning tea, lunch and afternoon tea, while evening programs are likely to support either afternoon tea and dinner or dinner and supper. This is subject to change if the hours of operation for day programs change.

All kinds of meal support will include support as relevant for

* Nutrition education, where indicated
  + for participant
  + family or other support structures, where indicated / relevant
* Meal planning and food selection
* Shopping
* Food preparation (and cooking where relevant)
* Meal supervision, for family or other support structures
* Portion size
* Challenges

It is likely that a large amount of the food for the service will be prepared within the service, rather than coming from a central health system food supply. Details will be determined in future stages of service design.

Challenges and support will be tailored to individual need, treatment stream, stage of recovery and available support structures – for example, some people will struggle with eating in public, and will require support for this. Frequency and intensity of the above will be scalable, according to program stream and individual need.

Location, timing and meals supported will depend on program stream and individual need, and may be any of:

* Treatment Centre
* Community (restaurants, supermarkets)
* In own home
* Telehealth / videoconferencing

Other aspects to consider

* Return to school / work

#### Psychological therapy

Interventions delivered will use the most appropriate evidence‑based intervention, taking into account any factors that will influence efficacy of intervention, including age, gender, diagnosis and stage of illness, comorbidities, treatment setting, involvement of supportive others, personal readiness or preference regarding engagement.

The specific suite of interventions to be provided by the service will be determined by future service development, and may consider integration of intervention across services to maximise continuity of care.

Evidence‑based psychosocial interventions to treat eating disorders include:

* CBT-E: Cognitive Behaviour Therapy‑Enhanced for Eating Disorders9 45-47. CBT focusses on how thoughts affect feelings and recognises that learned patterns of unhelpful behaviour can be replaced with new ways of thinking and behaving. CBT-E is a manualised CBT‑ED treatment with a 20 or 40 session format starting with twice weekly sessions, and is indicated for use with adults with a diagnosis of any ED, is indicated for adolescents with diagnosis of BN48 and BED.
* DBT: Dialectical Behaviour Therapy is a modified form of CBT, and was originally developed to treat borderline personality disorder (BPD) and people with chronic suicidal thoughts and behaviours49. It has been found to be effective in treating other forms of mental illness, including BN48 50, BED51-53. In DBT, patients recognise and examine negative thoughts, but also work to accept them, helping them regulate intense emotions and control impulses54.

Both CBT and DBT involve learning how thoughts affect feelings and behaviours in the present, where DBT adds emphasis on accepting uncomfortable or distressing thoughts instead of struggling with them. CBT is usually undertaken on a shorter‑term basis than DBT, and usually involves individual sessions, whereas DBT involves group skills sessions and contact with a therapist between sessions, sometimes referred to as coaching.

* CRT: Cognitive Remediation Therapy is indicated for adults and adolescents with a diagnosis of AN55-58. This is a manualised add-on treatment which is focussed on thought process rather than content. It aims to improve insight and is associated with enhanced engagement and lower dropout rate from services. It is delivered in individual or group formats in inpatient, day-patient, outpatient settings for 6‑10 sessions. It is not BMI-focused.
* ACT: Acceptance and Commitment Therapy aims to help patients accept uncomfortable internal experiences while committing to behaviours in accordance with their life values59. Studies have demonstrated effectiveness of ACT in reducing ED symptoms and body image problems59-62, and indicate that people receiving ACT may require less specialised ED care than patients receiving ‘treatment as usual’ interventions59-61. For adolescents with AN or subthreshold AN, a family‑based approach using ACT(Acceptance‑based Separated Family Treatment) has shown to reduce ED pathology63-66. AFST is likely to be especially helpful in cases where adolescents and their families to not respond to manualised FBT.
* FBT: Family‑Based Treatment in children and adolescents19 20. This is a manualised first‑line treatment, usually 15-20 sessions duration. Effectiveness of the intervention is supported by evidence from Randomised Controlled Trials (RCTs), and there is increasing evidence of its efficacy in treating adolescent Bulimia Nervosa48 67.
* MFT-AN68 69: Multiple Family Therapy for Anorexia Nervosa. This is an intensive systemic group format of FT-AN (9-10 days over 9 months) which is attended by 5-6 families together, and involves family group meals. It is indicated for use with adolescents and young adults with AN, and is partly manualised.
* AFT: Adolescent-Focused Therapy is a second‑line manualised treatment for adolescents with AN that takes place in an outpatient setting70-73.
* IPT: Interpersonal Therapy is a second‑line evidence‑based treatment for adults with BN46 48 74 75. It is a manualised weekly sessional programme that takes place in an outpatient setting. Patient is weighed as part of treatment.
* MANTRA76-78: Maudsley Model of Anorexia Nervosa Treatment for Adults. This second-line treatment for adults with AN is a manualised modular programme of 20-30 session duration, depending on BMI, including sessions with dietetics and carers. 8 Modules, Recovery focused.
* SSCM: Specialist Supportive Clinical Management78 is also recommended as a second-line treatment for adult AN. A follow-up of the multicentre MOSAIC RCT in 2016 compared MANTRA and SSCM, and found no difference in outcomes at two years, but found a higher patient preference for SSCM over MANTRA78.
* FPT‑ED: Focal Psychodynamic Therapy9 79 80, a manualised treatment for adults with AN – 40 sessions, and indicated an individual does not respond to CBT, MANTRA or SSCM.
* UCAN and UNITE-BED: Uniting Couples in the Treatment of Anorexia Nervosa (use: adults – AN)81-83, and Uniting Couples in the Treatment of Binge Eating Disorders82 84 both leverage supportive others in improving outcomes for adults with eating disorders. Couple‑based treatments target potentially detrimental interpersonal dynamics and may improve outcomes, reduce relapse85, and improve partner and patient quality of life86. UCAN and UNITE‑BED target psychopathology, co‑occurring symptoms and relationship functioning by integrating core CBT for AN or BED with cognitive‑behavioural couple therapy interventions87.
* Evidence is also emerging for mindfulness and self‑compassion based interventions, especially in the case of BED, with a proposed mechanism of awareness, non‑judgemental self‑acceptance, self‑compassion and self‑efficacy around eating54 88.

It is important to remember that every client is unique, and interventions used with each client must the most effective evidence‑based treatment for their diagnosis, but also be compatible with their personal factors, such as childhood experiences, education, personality, values, world views and cognitive biases.

It is also crucial that the therapies described above are delivered by experienced and qualified mental health clinicians specialising in the treatment of eating disorders, who have training and experience delivering the therapeutic intervention or modality in question.

This may mean that the service specialises in some of the interventions listed above, rather than delivering all of these, as it can take many years of training and supervision to become proficient in a particular therapy modality.

#### Wellbeing therapies

Using mindfulness based therapies (MBTs) in treatment of eating disorders shows improved outcomes, but the exact mechanism isn’t yet understood54 89. It is proposed that this is due to MBT approaches enhancing emotion regulation skills89, and self‑compassion88, as maladaptive emotion regulation is a key psychological feature of all eating disorders89.

Mindfulness and self‑compassion are key components of all ‘movement meditation’ activities (e.g. yoga, Pilates, tai chi), so movement meditation therapies may be helpful for some people experiencing eating disorders, although these are not recommended by the NICE Guidelines90. It is important that decisions about movement and exercise are made on a case by case basis, by the program participant in conjunction with their treating team.

The service will also incorporate other wellbeing therapies, including creative expression therapy and horticultural therapy. These approaches have demonstrated improved outcomes for people with mental illness more broadly, but not eating disorders specifically. There is one scoping review currently in progress ([Arts Therapies Interventions and Their Outcomes in the Treatment of Eating Disorders: Scoping Review Protocol](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7763866/#B19-behavsci-10-00188)). The service will adapt activities in line with the findings of this study in the event that any activities are found to be unhelpful or unsafe.

#### Sensory approaches

Many people with eating disorders experience a reduced ability to modulate sensory responses, and experience changed patterns of impulse regulation, sensation seeking, and affective and emotional expressiveness91-96.It is currently unclear whether differences in sensory responsiveness play a causal role in, or are a resulting feature of, eating disorders. Sensory approaches are an evidence‑based approach to improve emotional and associated physiological dysregulation, and have been used successfully to decrease distress in a range of settings, including inpatient and residential treatment settings97-100. Given the high frequency of comorbid mental health conditions experienced by people with eating disorders, sensory approaches may provide further options in treatment of eating disorders.

The built environment at St Johns Park, New Town, will have a sensory therapy room, and sensory aspects have been considered in other parts of the built environment, including light and noise sensitivities.

#### Pharmacological therapies

Preliminary research indicates pharmacological therapies may be helpful for adults with BN or BED, in combination with psychotherapy, depending on the type of therapy and whether the therapy is ineffective or unavailable48. Little is known regarding pharmacologic treatment of BN in adolescents48.

Pharmacotherapy is frequently prescribed in combination with psychotherapy to assist in decreasing other psychological symptoms, such as anxiety or depression101 102. A recent critical review investigated treatment literature to determine whether combining psychological and pharmacologic interventions confers any additional benefits to treatment103. The authors found that the scope of research on combined therapies was limited, and have so far yielded findings that are mostly non‑significant103.

### Consultation Liaison

Consultation Liaison (CL) psychiatry often specialises in the interface between psychiatry and general medicine or paediatrics, and frequently takes place in a hospital or medical setting. The role of the Consultation Liaison psychiatrist is to see patients with both physical and psychiatric illnesses or symptoms, and to provide support and advice to the treating team responsible for managing or treating physical symptoms.

CL confers benefits to consumer outcomes, improving patient’s coping mechanisms, treatment adherence, vocational integration and quality of life. It has also been demonstrated to reduce inpatient length of stay and contribute to prevention of readmission, providing benefit to the health system.

In the context of the Tasmanian Eating Disorder Service, CL activities will include

* provision of advice to clinicians or intersecting services providing support or treatment to people with an eating disorder. This advice may be regarding mental health, nutrition, dietetics or occupational therapy.
* providing advice on psychiatric aspects to support the physical or medical management of a person suffering from an eating disorder while they are admitted as an inpatient for weight restoration
* advising mental health services clinicians providing psychological support to a person with an eating disorder

These may occur through either consultation with, or assessment of, consumers with eating disorders, or through liaison only.

CL activities will be provided in the first instance to SMHS / THS services intersecting or integrated with TEDS, then to providers who share care of patients with TEDS, and then to private providers and primary care who do not intersect or integrate with TEDS, or have shared care of TEDS patients. This last group will be provided with CL subject to capacity of the service.

### Education and training

Education and training activities may be delivered by TEDS; facilitated by TEDS but delivered by another organisation or provider; or delivered in partnership with another organisation.

Planning an education and training strategy will be undertaken in the implementation phase.

#### For health professionals

In the first instance, TEDS will provide education and training for Tasmanian Health Service clinicians, as relevant and required. Education and training for other health professionals and healthcare providers will be subject to capacity of service staff, and/or funding available. The target audiences for these activities are likely to include GPs, private providers specialising in Eating Disorders, and private providers who do not specialise in Eating Disorders.

#### For family members and supportive others

TEDS will provide education and training to the family members and supportive others of people engaged with TEDS. These will include education and training to support their loved one in recovery of their eating disorder, and also education and training to support their own mental health and wellbeing. These will be evidence‑based interventions, such as the Collaborative Care Skills Training Workshops (CCSW)104, and may be delivered in person, by videoconferencing or online learning.

#### Other support structures

It is likely that other sectors will require education and training regarding Eating Disorders, whether this is about awareness, identification, response or referral. These include the education and training sectors, workplaces, and the sporting sector. Determining need for education and training in other sectors and supports for people with eating disorders will be undertaken in subsequent stages of service design and development.

### People living in remote areas

Patient Transport Assistance Scheme – It has been identified that future bodies of work with PTAS will be required in order to clarify, and potentially amend, the policy / program.

Telehealth / videoconferencing will potentially be used for

* Assessment
* Care planning
* Participation in programs, including
  + telehealth meal support
  + recovery support / relapse prevention
  + online group or individual therapy sessions
* Involvement of ‘supportive others’, such as family, friends and carers

People living in remote areas, and their treating team, will also have the support of telehealth CL services from TEDS to local clinicians (GPs, mental health professionals etc.), as discussed in the Consultation Liaison section.

### Level of care – step up / step down

Navigating health systems for eating disorder treatment is complex. Consumers and their support persons must navigate across primary care, mental health services and medical teams, with many transitioning between age‑limited services (e.g. paediatrics and/or Child and Adolescent Mental Health Services to general medical and/or Adult Community Mental Health Services).

Transitions between levels of care should be as seamless as possible, providing the greatest integration and continuity of care for the consumer, their support persons, and intersecting services33 34.

Formal care pathways assist collaborative working, and improve patient safety and outcomes26 27.

Pathways will be developed and articulated in future service design stages, in consultation with stakeholders. These will be revised regularly in line with the current evidence base. This will include protocols for stepped care, including clinical checkpoints, and the roles and responsibilities of intersecting services, including communication, care planning and review and transition of care coordination (where relevant).

### Recovery support and relapse prevention

This refers to community‑based and online services to support ongoing recovery and reduce the risk of relapse / recurrence of illness. This support can be provided by a range of providers, including primary health care, community‑based mental health and dietetic services, and support groups. Online resources can also support recovery.

TEDS will contribute to recovery support, but the exact mechanisms are currently unclear and will be developed with stakeholder input, as part of future service design.

## Service Characteristics – Resources required

The Tasmanian public health system will require additional infrastructure to deliver the Model of Care and Tasmanian Eating Disorder Service.

This includes

* staffing
* system support
* supporting documentation for the service, including clinical procedures and protocols, and
* built environment

Funding for the built environment is being provided by the Australian Government through the Commonwealth Department of Health’s Community Health and Hospitals Program.

### Built environment

The built environment for the service will incorporate evidence‑based design to support recovery and improve mental health and wellbeing. This includes provision of a safe, home‑like environment, connection with green space, the built environment emphasising the therapeutic community, and enabling access to service delivery – in person and digitally.

The service sites will require confidential and soundproofed spaces for conducting assessments (both psychological and medical); for engaging in therapies outlined in the treatment / therapy model (S4.7.7), including individual, group, and partner or family psychosocial interventions, and wellbeing therapies; break out and social spaces; kitchen and dining / meals areas for both the residential treatment program and the day / evening programs; and medication storage. Spaces for conducting medical assessments should also be capable of fulfilling any medical monitoring requirements of the service.

Participants in the residential treatment program will require accommodation and amenities facilities, including bathrooms and laundries.

The service sites will require spaces for activities aimed at education, training and capacity building. These activities will be provided for mental health clinicians; families, carers and supportive others; intersecting service providers; and other sectors and industries as relevant (e.g. education or sporting), subject to capacity of the service staff.

The service sites will require staff offices and amenities, including spaces to enable confidentiality of patient medical records. There must be an understanding that the treatment delivered by TEDS leans heavily on the therapeutic community mindset – requiring the staff to be part of the social milieu of the service and participating with program participants for meals and service activities.

Where possible, spaces should be multipurpose. For example, a large room for group wellbeing activities, such as movement meditation, also being used for education and training activities. Where spaces are multipurpose, service delivery activities should be prioritised for scheduling.

### Technical

The service requires high grade IT infrastructure, to enable telehealth / videoconferencing, Clinical Liaison and education and training activities, as well as supporting effective data collection and information management. All service sites will have WiFi that is available to all program participants.

### Service system and staffing

The staffing model for the service will be further developed in future stages of the TEDS project.

The model will include a range of professional disciplines required for the service to provide evidence‑based treatment and support for people with eating disorders, their families, carers and supportive others. These professional disciplines will include mental health clinicians, dietitians, occupational therapists, exercise physiologists, consulting psychiatrists, medical professionals as necessary to support the level of medical monitoring and/or management in scope for TEDS (which is yet to be determined), with consideration given to any professional disciplines or expertise not yet identified.

The staffing model will also include administrative, care coordination, consultation liaison and education and training capacities and capabilities, in addition to individual and group service delivery such as assessment and treatment.

TEDS is designed to enhance and integrate with the existing service provision of eating disorder treatment in Tasmania. Any existing ED treatment capacity within CAMHS and ACMHS will continue to be provided as part of a stepped system of care. It is also recognised that some people with EDs will prefer to attend CAMHS or ACMHS service for many reasons, including access, individual preferences regarding intervention or provider, and / or treatment for comorbid conditions.

TEDS will be staffed by clinicians with expertise in the treatment of EDs, with the necessary skills and experience to provide training and clinical supervision. Where staffing can be provided by in‑reach and outreach to and from TEDS, this will be leveraged, as this is likely to increase integration between services and maximise continuity of care for Tasmanians receiving treatment for EDs. This may include joint staffing appointments between services, or collocation of services, and will be decided in future stages of service design. Training, professional development, and clinical supervision will be offered by TEDS to clinicians providing ED treatment in CAMHS and ACMHS.

It is extremely likely that the Tasmanian public health system will require additional staff from a range of disciplines, due to the shortage of health professionals currently well equipped to treat eating disorders. This shortage exists nationally, and it is therefore likely that a workforce development strategy will be required, rather than simply recruiting existing staff.

The Clinical Care Pathway discusses the expertise required to provide safe, high quality, evidence‑based treatment for eating disorders in a residential program and day / evening program setting. The staffing levels and specific requirements will be developed further in future service planning.

### Care Setting – Residential Program

The TEDS residential treatment program will be located at St John’s Park, New Town. The residential program will be staffed and operational 24 hours per day, 7 days per week.

Tasmanian hospital inpatient admission and discharge data from 2018-2020 has been used to determine that, for an 8‑week length of stay in the residential program, four beds are required for step down from hospital inpatient care. TEDS will provide step up into the residential stream, as well as step down. Stakeholder engagement has also articulated barriers to accessing current treatment and indicated that the level of need is currently underestimated, and once the service and residential program exists, an as‑yet unidentified population will be identified.

TEDS will therefore provide 12 beds, with two of these in single rooms designed for wheelchair access, two further single rooms, and four bedrooms with two‑person occupancy.

The bedroom configuration of having both single and double rooms addresses concerns about future capacity, and also cohort matching within shared bedrooms, increasing flexibility of the service.

### Care setting – Day and Evening Programs

TEDS will deliver day / evening programs at the following sites:

* Tasmanian Eating Disorder Service site at St John’s Park, New Town.
* Location in Launceston (site yet to be determined)
* Location in Burnie (site yet to be determined)

Specific timing of day and evening programs will be determined by demonstrated need, and are subject to change in response to need, and in consultation with consumers, carers and relevant service providers (public and private). Development of day and evening programs will be explored in future stages of service design.

### Partnerships

The service will establish and maintain partnerships that will enable and encourage continuous improvement in the fields of quality, safety, clinical best practice, and research and evaluation.

These may include partnerships with professional bodies, expert advisory bodies and organisations, advocacy organisations, intersecting services in the public, private, and primary care sectors, research and training organisations and institutions. These may also include partnering with health services and departments within Australia, including Departments of Health in other States and Territories, the Commonwealth Department of Health and Primary Health Tasmania.

# Participant Journey

This Model of Care, and the service it describes, will support the education and enablement of people with EDs, their families and supportive others by:

* Recommending educational, bibliotherapy self‑help resources to patients that are accurate, safe, well researched, recovery-focussed, and relevant.
* Supporting people with EDs to become empowered and actively involved in planning of their care and treatment, through shared decision-making and the active use of any patient manuals, protocols or supporting documentation that accompany treatment programs. Patient education and shared decision-making has been associated with patient enablement, satisfaction, better coping and adherence to treatment both across healthcare105 and specifically in mental health106. This may in turn help services to manage their resources more effectively.
* Supporting, and contributing to an integrated system of care for eating disorders, including collaboration and communication across services, shared care planning, formal referral and service navigation pathways, supported referral between service and particular attention paid at the transition points across services (for example, between physical and mental health services, or moving between services with age range eligibility).
* Providing information about additional supports and supporting involvement with these supports. These include The Butterfly Foundation, Eating Disorders Families Australia, Mental Health Families and Friends Tasmania and Flourish: Mental Health Action in Our Hands.
* Providing training, capacity building and support to family members, carers and supportive others
* Supporting family members, carers and supportive others to be involved in therapy, collaborative care planning and other service activities as relevant and appropriate to their loved one’s treatment and recovery
* Educating patients, parents and supportive others of the risks of accessing websites that promote eating disorders (pro-ana and pro-mia), and advice on the safe use of social media such as Facebook and Instagram for adolescents. This must be done carefully to avoid informing patients about these websites if they are not already aware of them.
* Involving service-user representatives in the development of ED services through consumer and carer representative services
* Collaborating with participants and researchers in developing and evaluating resources that can support self-management and empower people with eating disorders towards optimal recovery.

# Governance

Future service design will determine which governance documents are required to support the service. This will involve drafting of new documents, and potentially amending existing documents to include requirements of TEDS. These are likely to include:

* Clinical Protocols
* Risk management
* Clinical effectiveness and evidence‑based practice
* Service‑user involvement and experience
* Clinical audit and evaluation
* Staff training, development, and support
* Staffing and management
* Research and development

The development of clinical governance tools will reference National Model Clinical Governance Framework107, developed by the Australian Commission on Safety and Quality in Health Care, which was established to support the delivery of safe and high-quality care. Any clinical governance tools will also consider and incorporate any other required documents or materials, including ensuring compliance with the legislative framework (below).

# Legislative Framework

[*Mental Health Act 2013*](https://www.legislation.tas.gov.au/view/html/inforce/current/act-2013-002)*;*

[*National Standards for Mental Health Services*](https://www1.health.gov.au/internet/main/publishing.nsf/Content/mental-pubs-n-servst10)*;*

[*National Safety and Quality Health Service Standards*](https://www.safetyandquality.gov.au/standards/nsqhs-standards)*;*

[*Guardianship and Administration Act 1995*](https://www.legislation.tas.gov.au/view/html/inforce/current/act-1995-044)*;*

[*Criminal Justice (Mental Impairment) Act 1999*](https://www.legislation.tas.gov.au/view/html/inforce/current/act-1999-021)*;*

[*Children, Young Persons and their Families Act 1997*](https://www.legislation.tas.gov.au/view/html/inforce/current/act-1997-028)*;*

[*Personal Information Protection Act 2004*](https://www.legislation.tas.gov.au/view/html/inforce/current/act-2004-046)*;*

[*Registration to Work With Vulnerable People Act 2013*](https://www.legislation.tas.gov.au/view/html/inforce/current/act-2013-065)

# Monitoring and Evaluation

## KPIs

The purpose of KPIs is to enable clinical auditing of services provided – both at an individual treatment level, and the service and system level. These will be developed, or finalised, during future service design.

### Clinical outcome and quality evaluation metrics (each case)

Information to be collected will include the following:

|  |  |
| --- | --- |
| **Measure** | **Frequency** |
| DSM-V / ICD-11 criteria | Assessment or admission, if not performed previously, or if requiring revision of previous diagnosis |
| EQ-5D-3L Health Questionnaire  HONOS / HONOSCA  WHO-DAS | Admission, transfer of care and follow-up |
| BMI | Weekly, where clinically relevant and appropriate |
| ED15 | Weekly |
| EDE-Q  Body Image Acceptance and Action Questionnaire  PHQ-9  GAD-7  Clinical Impairment Assessment | Start of treatment, every 4 weeks during admission, every 3 months post-discharge over 12 months |
| Your Experience of Service (YES) Survey^  Carer Experience of Service (CES) Survey^ | Offered at transfer of care, and at regularly scheduled time period performed by SMHS |

^With potential to add eating disorder‑specific questions.

Clinical outcome measures may be further refined or additions made as part of future service development.

### Outcomes and quality evaluation metrics (for the service)

To be developed during future stages of service design.

## Data collection

Collection of data in Tasmania is governed by the [*Personal Information Protection Act 2004*](https://www.legislation.tas.gov.au/view/html/inforce/current/act-2004-046) (the *PIP Act).* The PIP Act outlines the requirements of Personal Information Custodians, such as the Department of Health, in asking for, receiving, and storing personal, sensitive and health information.

Where possible and appropriate, consumers and carers should have the option of anonymity (for example, the YES and the CES Surveys).

Any research other than clinical audit and evaluation undertaken by the service, partners, external researchers or institutes must align with research principles, including human ethics, principles of informed consent, confidentiality, anonymity, the rights of the patient, and not over‑researching vulnerable or accessible populations.

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# Appendices

## Appendix 1 – Abbreviations within this document

|  |  |
| --- | --- |
| ACMHS | Adult Community Mental Health Services |
| ADS | Alcohol and Drug Services |
| ANZAED | Australian and New Zealand Academy for Eating Disorders |
| CAMHS | Child and Adolescent Mental Health Services |
| Department of Health | DoH |
| NEDC | National Eating Disorders Collaboration |
| PTAS | Patient Travel Assistance Scheme |
| RANZCP | Royal Australian and New Zealand College of Psychiatrists |
| SMHS | Statewide Mental Health Services |
| TEDS | Tasmanian Eating Disorder Service |
| THS | Tasmanian Health Service |

## Appendix 2 – Key international clinical practice standards

* Eating Disorder Services. HSE Model of Care for Ireland35
* RANZCP clinical practice guidelines for the treatment of eating disorders. Royal Australia and New Zealand College of Psychiatrists (RANZCP).9
* National Eating Disorders Collaboration National Practice Standards for eating disorders34 (includes workforce competencies)
* National Eating Disorders Collaboration NEDC National Framework: An Integrated Response to Complexity33
* ANZAED eating disorder treatment principles and general clinical practice and training standards31
* ANZAED practice and training standards for dietitians providing eating disorder treatment30
* ANZAED practice and training standards for mental health professionals providing eating disorder treatment32
* Physiotherapy guidance notes for exercise and physical activity in adult patients with Anorexia and Bulimia Nervosa, Royal College of Psychiatrists108.
* Practice Parameter for the assessment and treatment of children and adolescents with eating disorders, AACAP109
* Clinical practice recommendation for residential and inpatient ED programs, Academy of Eating Disorders110.
* MARSIPAN: Management of Really Sick Patients with Anorexia Nervosa, 2nd edition. RCPsych26
* Junior MARSIPAN: Management of Really Sick Patients under 18 with Anorexia Nervosa CR 168. RCPsych.27
* Position of the Academy of Nutrition and Dietetics: Nutrition intervention in the treatment of eating disorders, Academy of Nutrition and Dietetics111
* National Institute for Health and Care Excellence (NICE) guideline: Eating disorders: recognition and treatment90
* Prevention and Treatment of Refeeding Syndrome in the Acute Care Setting. Irish Society for Clinical Nutrition & Metabolism112.
* Critical Points for Early Recognition & Medical Risk Management in the Care of Individuals with Eating Disorders. Academy for Eating Disorders113.

## Appendix 2 – Staffing Resources

ANZAED eating disorder treatment principles and general clinical practice and training standards31

ANZAED practice and training standards for mental health professionals providing eating disorder treatment32

ANZAED practice and training standards for dietitians providing eating disorder treatment30

Credentialing for eating disorder clinicians: a pathway for implementation of clinical practice standards114

National Eating Disorders Collaboration (Australia) National Practice Standards for eating disorders34 (includes workforce competencies)

National Eating Disorders Collaboration NEDC National Framework: An Integrated Response to Complexity33

## Appendix 3 – GP resources:

[InsideOut Institute Information Pack for General Practitioners](https://insideoutinstitute.org.au/assets/eating%20disorders;%20an%20information%20pack%20for%20general%20practitioners.pdf)

[National Eating Disorders Collaboration Resources for GPs](https://www.nedc.com.au/assets/NEDC-Resources/NEDC-Resource-GPs.pdf)

[Royal Australian College of General Practitioners Early Detection of Eating Disorders](https://www.racgp.org.au/afp/2017/november/early-detection-of-eating-disorders/)

## Appendix 4 – Clinical Background

### Classification and clinical coding

Eating Disorders are diagnosed and coded using one of two systems – the International Statistical Classification of Diseases and Related Health Problems (ICD, WHO)7 115 or the Diagnostic and Statistical Manual of Mental Disorders (DSM, APA)6.

The Australian public health system uses the ICD for diagnosis, coding and billing, with ICD‑10 (11th Ed) currently in use. The ICD-10 was originally released in 1992, and, although several editions and revisions have occurred, it is not consistent with the current evidence base for diagnostic groupings for feeding and eating disorders.

The ICD-11 was adopted by the World Health Assembly in May 2019 who propose this will come into effect in January 2022. The ICD-11 section for feeding and eating disorders is consistent with the DSM‑V6, released in 2014 by the American Psychiatric Association. Many of the clinical practice resources, such as the RANZCP clinical practice guidelines for the treatment of eating disorders9 use the more recent diagnostic groupings.

This Model of Care will therefore use the diagnostic classifications found in the DSM-V and ICD-11. It may be helpful for clinicians and clinical coders to note that the DSM-V contains instruction on corresponding ICD-10 codes for each diagnostic category.

It is important to mention that, while people with larger bodies may suffer from an eating disorder, obesity and overweight are not eating disorders in and of themselves. Health At Every Size is a service principle of TEDS – the service will identify and provide therapeutic interventions to address the underlying eating disorder.

All diagnostic indicators are taken from the DSM-V 6.

#### Anorexia Nervosa.

* Persistent restriction of energy intake, leading to significantly low body weight (in the context of what is minimally expected for age, sex, developmental trajectory, and physical health).
* Intense fear of gaining weight or of becoming fat, or persistent behaviour that interferes with weight gain (even though at significantly low weight).
* Disturbance in the way one’s body weight or shape is experienced, undue influence of body shape and weight on self-evaluation or persistent lack of recognition of the seriousness of the current low body weight.

Subtypes: Restricting type, Binge/purging type (based on individual’s last 3 months).

Subcategories within the ICD‑11 include

* AN with significantly low bodyweight
* AN with dangerously low bodyweight
* AN in recovery with normal body weight
* Other specified AN
* AN unspecified

#### Avoidant and Restrictive Food Intake Disorder (ARFID)

* An eating or feeding disturbance as manifested by persistent failure to meet appropriate nutritional and/or energy needs associated with one (or more) of the following:
  + Significant loss of weight (or failure to achieve expected weight gain or faltering growth in children)
  + Significant nutritional deficiency
  + Dependence on enteral feeding or oral nutritional supplements
  + Marked interference with psychosocial functioning
* The behaviour is not better explained by lack of available food or by an associated culturally sanctioned practice.
* The eating disturbance does not occur exclusively during AN or BN, and there is no evidence of a disturbance in the way one’s body weight or shape is experienced.
* The eating disturbance is not attributed to a medical condition or better explained by another mental health disorder. When it does occur in the presence of another condition/disorder, the behaviour exceeds what is usually associated, and warrants additional clinical attention.

#### Binge Eating Disorder

* Recurrent episodes of binge eating. An episode of binge eating is characterised by both of the following:
  + Eating, in a discrete period (e.g. within any 2-hour period), an amount of food that is larger than most people would eat during a similar period, and under similar circumstances, and
  + A sense of lack of control overeating during the episode (for example, a feeling that one cannot stop eating or control what or how much one is eating)
* Associated with three or more of:
  + Eating much more rapidly than normal
  + Eating until uncomfortably full
  + Eating large amounts of food when not feeling physically hungry
  + Eating alone because of embarrassment over how much one is eating
  + Feeling disgusted or ashamed by oneself, depressed or very guilty afterwards
* Marked distress regarding binge eating is present.
* Binge eating occurs, on average, at least once a week for three months.
* Binge eating is not associated with the recurrent use of inappropriate compensatory behaviours and is not occurring exclusively during the course of BN, AN or ARFID.

Note: Binge Eating Disorder is less common but much more severe than overeating. It is associated with more subjective distress regarding the eating behaviour and coexists commonly with other psychological problems.

#### Bulimia Nervosa

* Recurrent episodes of binge eating. An episode of binge eating is characterised by both of the following:
  + Eating, in a discrete period of time (e.g. within any 2-hour period) an amount of food that is definitely larger than most people would eat during a similar period of time and under similar circumstances
  + A sense of lack of control overeating during the episode (e.g. a feeling that one cannot stop eating or control what or how much one is eating).
* Recurrent inappropriate compensatory behaviour in order to prevent weight gain, such as self-induced vomiting, misuse of laxatives, diuretics or other medications, fasting or excessive exercise.
* The binge eating and inappropriate compensatory behaviours both occur, on average, at least once a week for three months.
* Self-evaluation is unduly influenced by body shape and weight.
* The disturbance does not occur exclusively during episodes of Anorexia Nervosa

#### Other Specified Feeding and Eating Disorders

* Significant distress and impairment in areas of functioning, but does not meet the full criteria for any of the other feeding and eating disorders.
* A diagnosis might then be allocated that specifies a specific reason why the presentation does not meet the specifics of another disorder (e.g. Bulimia Nervosa – low frequency).
* The following are further examples of OSFED:
  + Atypical Anorexia Nervosa: All criteria are met, but, despite significant weight loss, the individual’s weight is within or above the normal range.
  + Binge Eating Disorder of low frequency and/or limited duration: All of the criteria for BED are met, except that they occur at a lower frequency and/or for less than three months.
  + Bulimia Nervosa of low frequency and/or limited duration: All of the criteria for Bulimia Nervosa are met, except that the binge eating and inappropriate compensatory behaviour occurs at a lower frequency and/or for less than 3 months.
  + Purging Disorder: Recurrent purging behaviour to influence weight or shape in the absence of binge eating.
  + Night Eating Syndrome: Recurrent episodes of night eating, eating after awakening from sleep, or excessive food consumption after the evening meal.
* The behaviour is not better explained by environmental influences or social norms. The behaviour causes significant distress or impairment. The behaviour is not better explained by another mental health disorder (e.g. BED)

#### Unspecified Feeding and Eating Disorders

This category applies to where behaviours cause clinically significant distress or impairment of functioning, but do not meet the full criteria of any of the other feeding or eating disorder criteria. This category may be used by clinicians where a clinician chooses not to specify why criteria are not met, including presentations where there may be insufficient information to make a more specific diagnosis (e.g. in emergency room settings).

### Causes of eating disorders

The causes of eating disorders are complex and still under investigation. We do know that risk factors include biological factors, personality traits, social environment, sex, gender, age, ethnicity, culture.

Psychological factors and personality traits that may predispose people to developing an eating disorder include neuroticism, obsessiveness and perfectionism, particularly in the case of AN and BN93. Individuals with these personality features are prone to anxiety and depression, and display perfectionistic and self‑critical tendencies, all of which may contribute to an eating disorder6. Body image disturbance may also be observed.

In all eating disorders, there is an increased frequency of family history and genetic heritability9, with shared genetic predispositions being observed for a range of disorders (for example, anxiety and eating disorders116-119). Likelihood may differ by diagnosis, with different eating disorders potentially having different degrees of heritability, or different likelihood of occurring despite genetic predisposition. Current research estimates that additive genetic factors, including epigenetics, gene expression and interaction118, account for approximately 40-60% of the likelihood of a person developing an eating disorder120. Epigenetics may link malnutrition and life stresses (gestational, perinatal, childhood and adult) to risk of ED development118.

The impact of dietary restriction and subsequent physical starvation then plays a significant role in the maintenance of restrictive eating disorders, through the effects of malnutrition on cognitive, emotional and physical functioning 9 28 120. Dietary restriction has been recognised as a key risk factor, with starvation syndrome perpetuating the impact on psychological presentation, and experience for the individual.

Previous research has found that the strongest sociodemographic risk factors for having an eating disorder are being female, from cultures where the ‘thin ideal’ is prevalent (predominantly developed countries) 9 121 122, a premorbid tendency towards anxiety119 123-125, perfectionism (especially for AN), difficulty managing emotions (especially for BN), low self‑esteem, onset of puberty, severe or traumatic life events (70% of eating disorders), dieting and trying to lose weight9 35.

### Epidemiology and priority populations

Determining the prevalence of eating disorders is complicated by the likelihood that a large number of eating disorders go undiagnosed and untreated4 5 126. Reasons for this include lack of services, lack of awareness of disordered eating and eating disorders both within the community and within health, and other, service sectors, including the prevailing opinion of what a person with an eating disorder ‘looks like’, and stigma4 5 127-129.

Australian data about health service access, particularly in primary care and community‑based treatment, are lacking130. The introduction in late 2019 of new eating disorder‑specific Medicare Benefits Scheme (MBS) items may aid in data collection, as eating disorder treatment and referral data is less likely to be grouped under generic mental health service items. It is also likely that changes in diagnostic categories, and out of date classification systems impact data collection. For example, there is no specific classification under the ICD-10 for Binge Eating Disorder7.

Estimates of prevalence vary substantially between data sources and by diagnosis, due to different diagnostic thresholds and the small number of large-scale population research projects121. In 2015, the estimated prevalence of any eating disorder for Australians aged 15 years and over was 4-16%121 131 132.

Several inputs indicate that the frequency of eating disorders is increasing; these include population surveys, increased numbers of people accessing services and helplines, and reports from service providers and health systems10 126 132. The Institute for Health Metrics and Evaluation estimate that the global burden of eating disorders, as measured in Disability Adjusted Life Years (DALYs) rose by 27.5% between 1990 and 2010133.

Eating disorders may occur at any stage of life, and for any gender9. To date, the vast majority of research suggests that they occur most often among young women10 121 130-132, although there is emerging evidence indicating increased frequency in boys and young men134-136. The Australian Child and Adolescent Survey of Mental Health and Wellbeing estimated that, in 2012–13, 2.4% of young people aged 11–17 reported problem eating behaviours130 137, with a greater proportion of females (3.5%) than males (1.4%) reporting these behaviours130 137. In 2015–16, 95% of Australian hospitalisations with a principal diagnosis of an eating disorder were for females, and the largest proportion of these hospitalisations, at 57%, occurred in 15-24 year olds130.

As eating disorders occur most frequently in girls and young women, eating disorders in boys, men and older persons often go undiagnosed due to a lack of awareness or screening by health services and other early identifiers135 136 138.

Estimated prevalence varies according to the type of disorder – research suggests that binge eating disorder (BED) and other specified feeding or eating disorders (OSFED) are the most common disorders in Australia10 131, and that the gender ratio normally observed in eating disorders (more women than men) is lower in BED than for other eating disorders9 139.

Emerging research indicates that eating disorders also occur with increased frequency among people who identify as Lesbian, Gay, Bisexual, Transgender, Intersex, and Queer (LGBTIQ) people, especially people who are transgender, compared to the straight, cis‑gender population, although the data report mixed results for lesbians140-148. It is hypothesised that the increased incidence of eating disorders among transgender people may stem from body dissatisfaction, and so may be ameliorated by gender confirmation143 144 147. There is a need for further research in this area, including the development of validated tools to work with people from gender and sexual minorities, including groups not already mentioned in this section, such as gender non‑binary or gender non‑conforming people. LGBTIQ people are a priority population under both the Fifth National Mental Health and Suicide Prevention Plan12, and Rethink 2015 and 2020, the Tasmanian strategic plans for mental health149. Culturally secure, safe service provision is a key component of high performing health systems150. The Private Lives 3 report into the health and wellbeing of LGBTIQ Australians found that 46.9% of respondents would prefer to access health services from a mainstream health or support service that is LGBTIQ‑inclusive (46.9%), or from a health or support service that caters only to LGBTIQ people151. It is important to note that a higher percentage of respondents with high or very high levels of psychological distress would prefer to access a health or support service that caters only to LGBTIQ people than respondents with low or moderate psychological distress (25.1% to 16.5%)151. As eating disorders are severe, complex mental illnesses that cause a high degree of psychological distress, it is therefore even more important that health services providing assessment and treatment for eating disorders are LGBTIQ inclusive and appropriate.

A recent scoping review also suggests that Aboriginal and Torres Strait Islander people should be classified as a priority population for eating disorders, and that prevalence is as high, or higher, compared to the non‑Indigenous population152. Tasmania is not a large jurisdiction, and this means that the number of Aboriginal or Torres Strait Islander people engaging with the service may be small, recognising Aboriginal and Torres Strait Islander people as a priority population has important implications for inclusivity, cultural safety and cultural appropriateness of the service, and the built environment.

### Comorbidity

#### Physical

The physical effects on the body of eating disorders, and especially AN, are extensive and have negative impacts on every bodily system. Longstanding endocrine, cardiac and metabolic complications are often seen, with impacts such as osteoporosis, delayed growth and ovarian damage being potentially irreversible. For children and adolescents, physical comorbidity often includes delays in pubertal development.

Acute and chronic physical comorbidities of eating disorders include

* core hypothermia
* dehydration
* cardio‑respiratory conditions, including hypotension, bradycardia and heart failure, and emphysema‑like lung changes
* Gastrointestinal – usually differs by eating disorder
* Electrolyte disturbance
* Haematological, including leukopaenia, due to nutritional deficiencies
* Neurological and muscular
* Impacts on skin, teeth and bones, due to nutritional deficiencies or purging behaviour

#### Psychological

People with an eating disorder have an increased lifetime risk of having another mental illness, with 56.6% of adults with AN and 94.5% of adults with BN meeting lifetime criteria for a second psychiatric disorder153, particularly anxiety, depression, substance use disorders and impulse control disorders9 10 42 119 124 153-156. Increased risk of self-harm and suicidality are also significant risks associated with both AN and BN 9 10 153 157 158.

Increasing evidence also points to comorbidities of Eating Disorders with OCD116 159 and Autism Spectrum Disorder (ASD)160.

A growing body of evidence is indicating that people with an eating disorder have a high likelihood of previous trauma or significant adverse experience157. For instance, people with EDs and childhood abuse (one form of ACEs) have greater ED psychopathology and impairment161 162, greater psychiatric comorbidity and lower odds of recovery163 compared to peers without childhood abuse. Some research also indicates that the symptoms that maintain EDs among people with a history of childhood abuse differ from those that maintain EDs in people with no history of childhood abuse164 165. Less is currently known about non‑abuse traumatic or adverse life experiences.

This has implications for service provision, and mental health professionals who treat EDs, as they must also have expertise in the recognition, diagnosis and treatment of comorbid mental health conditions, provide trauma‑informed care, and provide appropriate linkages with other services that provide treatment for these, including alcohol and other drug services.

### Mortality and prognosis

A systematic review of 36 studies found that eating disorders increase the standardised mortality ratio (the increased risk of dying prematurely from a condition) to three times that of the general population8. For AN, this increases further to 5.86 times higher than the general population - the highest rate of all mental illnesses8. For adolescents with AN, this figure rises to 10 times that of their peers, and current data indicates that 10% of those who present with AN will die prematurely from it within 10 years of onset. The causes of death from AN are commonly physical, with one-third of people dying from cardiac dysfunction resulting from the direct impact of starvation8 122. Other medical causes of death include diabetic hypoglycaemia, oesophageal tears and rupture166. People with eating disorders have an increased likelihood of attempting suicide157. Some studies estimate that, of people who die due to an eating disorder, twenty percent of these will die by suicide8 166.

Despite the increased mortality associated with eating disorders, there have been significant changes in prognosis in the last decade. The evidence base surrounding eating disorders and their treatment has increased significantly. Current first line evidence‑based treatments such as Family Based Therapy (FBT) and CBT-E (Enhanced CBT for Eating Disorders) have enabled 40-45% of people seeking treatment for Eating Disorders to achieve recovery, with a further 30% having a clinically significant partial recovery28 41-43 46. Full recovery for adolescent AN typically takes two to five years, with better prognosis if intervention occurs early – the British National Surveillance Study reported a 73% recovery rate for adolescents in this category (Nichols, 2011; Barrett, 2015). BN has higher remission rates, but relapse is more common. Vos (2001) estimated that the average duration of AN for adults in the community is eight years, and five years for BN.

It is estimated that only 15% of patients with EDs seek treatment4. Even with treatment, some people will experience a chronic eating disorder, with significant associated mortality and morbidity – particularly for AN. Early intervention reduces the likelihood that an eating disorder becomes severe and enduring (SE‑ED), and should therefore be the focus of health systems and services treating eating disorders. People with SE-EDs have particular service, treatment and support needs, and good ED services that meet their needs can increase the chances of optimal recovery, even at later stages of an eating disorder167.

### Impact

Eating disorders represent an extremely difficult, time‑consuming and costly condition to treat. In 2011, treatment for an episode of anorexia nervosa came second only to coronary artery bypass surgery for costs in the private hospital sector in Australia168. Eating disorders were the tenth highest cause of non‑fatal disease burden for females aged 15-44 in 2011130. In 1996, eating disorders accounted for 6.3% of the mental health burden for Australian women, calculated in disability‐adjusted life years (DALYs)169.

*Paying the price: the economic and social impact of eating disorders in Australia*, commissioned by The Butterfly Foundation and delivered by Deloitte Access Economics, notes that there are few data available regarding the economic costs of eating disorders4. The report estimates eating disorder‑related costs to the health system in 2012 at close to $100 million, based on 2008-2009 AIHW health expenditure data and adjusted for inflation4 130. It estimates the flow on impact on productivity as $15 billion4 130. These economic costs cannot estimate the social, psychological and emotional impact of an eating disorder on the person experiencing the eating disorder, or their families, friends and supportive others.