Endorsed clinical guideline

# Evidence-based Clinical Practice Guideline for Anxiety in Children and Young People

Version 1.1, 2024

**RACGP** 



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Changes made:

- correction of typos, grammatical errors, and clarification of terminology
- evidence-based recommendation 5.1 (pg 15,41) corrected to remove specific symptom presentation in line with evidence
- addition of APPENDIX III. Quick reference flowchart (pg 85,86)

Note: Incremental version numbers increase with corrections.

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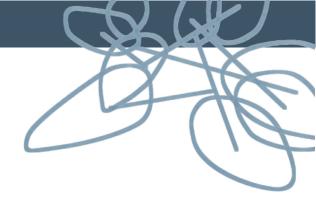
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## Preface





**Professor David Coghill** Chair Developmental Mental Health, The University of Melbourne

I would like to acknowledge the traditional owners of the lands on which this guideline was developed. I pay my respects to elders, past, present, and emerging. I also acknowledge those in Australia living with mental health difficulties. I hope that the language used throughout this guideline honours your lived experience of mental health difficulties.

Anxiety is a normal part of growing up, and in many instances is short-lived and developmentally appropriate. Worries around novel experiences or making friends are common, but some children experience anxiety more intensely and more often than others, and to a degree, that impacts on their ability to fully participate in life. An anxiety disorder may be diagnosed when anxious feelings don't go away; are out of proportion to the situation, or places/people are avoided to reduce anxiety. The most recent survey of child and adolescent mental health, Young Minds Matter, found that around seven per cent of Australian children and adolescents suffer from a diagnosable anxiety disorder [1]. This data was published in 2015 and, as we are all aware, the COVID-19 pandemic had a significant negative impact on mental health and wellbeing with suggestions that rates of anxiety may have increased even further.

The Melbourne Children's Campus Mental Health Strategy, funded through a generous donation from The Royal Children's Hospital Foundation, has allowed the three partners of the Melbourne Children's Campus, The Royal Children's Hospital (RCH), Murdoch Children's Research Institute (MCRI), and The University of Melbourne Department of Paediatrics to work together to improve the mental health of children and young people. The vision of the strategy is for all infants, children, young people and their families to be able to access high quality, equitable and consistent prevention and mental health care where and when they need it to achieve sustained, optimised developmental, health and wellbeing outcomes. This work has been conducted by using a child and family-centred lens to develop clinically driven research, workforce education and planning, and the delivery of evidence-based consistent care.

Along with my colleague, Dr Alice Morgan, I have had the honour of leading the Consistent Quality Care key area of the strategy. Our work has focused on the delivery of evidence-based care that reduces variability in clinical practice and ensures that children and young people are receiving the right care at the right time from the right people. We identified that, while anxiety is one of the most common mental health problems in children and young people, there are significant gaps in service provision for those with anxiety and significant variations in practice between clinicians managing anxiety. When we investigated the evidence, we found that there are currently no evidence-based guidelines available for the identification, assessment, and management of anxiety for this group. We therefore set ourselves the task of developing this guideline.

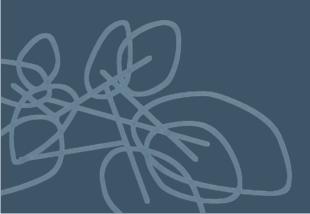
With the expert assistance of Dr Marie Misso, an experienced guideline methodologist, a Clinical Guideline Development Group (GDG) under the stewardship of first Fran Hardcastle, and then Sydney Stevens our project leads, and with generous help from Dr Zeffie Poulakis, we are proud to be able to present this guideline. It was a lot of work and I raise my hat to all those involved. Would we have tried to tackle such a gargantuan task had we know how much work was involved? We will never know. But our thanks go out to everyone who has contributed, and we hope that this, the first evidence-based guideline for the identification, assessment, and management of anxiety disorders in children and adolescents, can help reduce variability in care and improve outcomes for every child and young person affected by anxiety.

## Professor Dave Coghill and Dr Alice Morgan, Guideline Development Clinical Leads.

# How to use this guideline

Recommendations in this guideline were developed using a recognised framework for the development of evidence-based clinical guidelines that integrates the available evidence, as well as clinical expertise and lived experience perspectives.

Detailed information on the methods and people involved in the development of this guideline can be found in Appendix I.



#### There are three types of recommendations in this guideline:

Name	Acronym	Explanation
Evidence-based recommendations	EBR	Recommendations formulated from discussion of the research evidence, where a systematic search and evidence review was conducted, and evidence was identified and analysed.
Clinical consensus recommendations	CCR	Recommendations formulated by the expert panel in the absence of research evidence, where a systematic search was conducted and evidence was not identified or was of insufficient quality/quantity; or where there is known to be little high-quality evidence, in which case evidence was not sought, and the Guideline Development Group (GDG) formulated recommendations based on clinical expertise and experience.
Clinical practice points	CPP	Recommendations where the subject matter is outside of the scope of a systematic search were formulated from discussions held by an expert panel.

The wording of specific recommendations represents the GDG's interpretation of the evidence and clinical justification. The terms "should", "could", and "should not" are used to reflect the interpretation of the quality/certainty of the body of evidence and judgements of the GDG. Where the word "should" is used in the recommendations, the GDG judged that the benefits of the recommendation exceed the harms. Where the word "could" is used, either the quality of evidence was limited or the available studies did not clearly demonstrate advantage of one approach over another, or the balance of benefits to harm was unclear. Where the words "should not" are used, the harms outweigh the benefits.

This guideline endeavours to use inclusive terminology while also acknowledging the need to include some terms that align with international diagnostic classification standards. However, each community may have their own preferences regarding terminology. Individuals should take care to respect these preferences.

In this guideline, the term caregiver(s) refers to adults who have caring responsibilities for a child. While family(ies) is used to refer to the family unit including caregivers, support persons, and those who do not have a direct caring relationship with the child, such as siblings.\*

\*Note these terms do not apply when reporting on direct evidence due to specific parameters of the research.

#### Abbreviations used in this guideline:

Bib-CBT	Bibliotherapy cognitive behavioural therapy	I/P-BT	Individual BT with parental involvement
G-BT	Group BT without cognitive restructuring	I/P-CBT	Individual CBT with parental involvement
G/P-CBT	Group CBT with parental involvement	G-CBT	Group CBT
I-CBT	Individual CBT	P-CBT	Parent-only CBT
I/G-BT	Individual and group BT	I/G-CBT	Individual and group CBT
Int-CBT	Internet-assisted CBT	tCBT	Technology delivered CBT
EBR	Evidence-based recommendation	GDG	Guideline Development Group
CBR	Consensus-based recommendation	ACT	Acceptance and commitment therapy
СРР	Clinical practice point	RCT	Randomised control trial
SSRI	Selective serotonin reuptake inhibitors	ТСА	Tricyclic antidepressants
SNRI	Serotonin and norepinephrine reuptake inhibitors	RCH	The Royal Children's Hospital

## Summary of recommendations

### Identification

Number	Туре	Recommendation
1.1	CCR	Steps should be taken to ensure that pathways are available within communities, schools, and clinical settings for children, young people, and families to recognise and raise concerns about anxiety. Organisations that provide services to children and young people with
		greater vulnerability to anxiety could consider systematic screening for anxiety. These include organisations providing out of home care services, family violence services, and child protection.
1.2	EBR	When engaging with children and young people, clinicians should always consider whether anxiety is contributing to the overall presentation.
1.3	EBR	<ul> <li>Clinicians working with children and young people with any of the following high-risk factors/conditions should consider screening for possible anxiety: <ul> <li>autism spectrum disorder/autism spectrum condition</li> <li>sleep disturbance (eg insomnia, sleep terrors, sleepwalking)</li> <li>cystic fibrosis</li> <li>eating disorders</li> <li>family history of anxiety, depression, obsessive compulsive disorder, or substance use disorders</li> </ul> </li> </ul>
1.4	CCR	<ul> <li>Clinicians working with children and young people with any of the following conditions or situations could consider screening for possible anxiety (please note, this list is not exhaustive and clinicians should also rely on professional judgement and clinical assessment): <ul> <li>attention deficit hyperactive disorder</li> <li>the experience of trauma or a diagnosis of post-traumatic stress disorder</li> <li>intellectual disability, communication disorders, developmental delay, and neurodevelopmental disorders</li> <li>oppositional defiant disorder and other challenging behaviours (eg meltdowns, avoidance)</li> <li>school difficulties including academic or social impairment, school refusal, perfectionism, current or past experiences of bullying</li> <li>suicidal behaviours and self-harm</li> <li>acute exacerbation (or permanent deterioration) of the symptoms of chronic medical illnesses and conditions (eg cancer, diabetes, muscular, neuromuscular, and other neurological disorders, cystic fibrosis resulting in a hospital admission and invasive medical procedures)</li> </ul> </li> </ul>

		<ul> <li>chronic illness that impacts daily functioning, quality of life, autonomy (as identified by the young person, caregiver(s), or clinician)</li> <li>somatic symptoms (physical symptoms that are 'medically unexplained') (eg abdominal pain, headache or a diagnosis of somatoform disorder/medically unexplained symptoms)</li> <li>chronic fatigue syndrome</li> <li>sensory impairment (eg hearing/vision)</li> <li>LGBTQIA+ and/or gender diverse</li> <li>family experience/history of violence, trauma, conflict, relational difficulties</li> <li>child or young person in out of home care</li> <li>a child or young person with a refugee background, or caregivers who are from a refugee background</li> <li>changes in appetite or rapid unexplained changes in weight</li> <li>substance misuse</li> </ul>
1.5	EBR	When choosing an instrument to use to help identify whether anxiety is contributing to the overall presentation of a child or young person, it is important to look at the age range and disorder that they were designed for as well as the purpose. Different psychometric properties are required for screening and measuring change and not all instruments that are good at one job are good at the other. For screening purposes tools with a higher sensitivity (> 0.8) will be better at identifying those with true anxiety while tools with a higher specificity (> 0.8) will be better at excluding those who do not have anxiety. The GDG notes that the screening instruments related to social anxiety and those designed for adolescents tend to have better psychometric properties for screening. A selection of instruments can be found in the Technical Evidence Report. The use of these screening instruments should be supplemented by clinical questioning, and where appropriate a detailed assessment should follow.

## Assessment

Number	Туре	Recommendation
2.1	СРР	The aim of an assessment is to determine if there is a diagnosis of anxiety and/or other conditions and develop a formulation that helps understand the child or young person's presentation and informs the development of a management plan.
2.1.1	СРР	Where a child or young person has been identified as requiring a more detailed assessment for anxiety, clinicians are encouraged to undertake a thorough assessment to consider the presence, severity, and impact of anxiety in the context of all areas of the child or young person's life.
2.2	СРР	Clinicians should consider different presentations of anxiety among children and young people, and how this may change across different ages and developmental stages and different settings. For example, some children with anxiety may present as clingy towards caregivers, others may be described as angry or aggressive; others withdrawn and quiet.
2.3	CCR	In an assessment for a diagnosis of anxiety, a clinician should assess symptoms and signs of anxiety, and determine whether the symptoms meet the diagnostic criteria in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) and/or International Classification of Diseases (ICD-11).
		A diagnosis of anxiety requires a clinical assessment and interview and should not be made solely based on rating scales or observational data. However, rating scales assessing anxiety symptoms can be helpful adjuncts to the assessment process.
2.4	CCR	As anxiety commonly co-occurs with other medical and neurodevelopment/mental health conditions, the diagnosis of anxiety should prompt consideration of, and assessment for, the presence of other conditions including those noted in the high-risk group recommendations (1.3 and 1.4).
2.5	СРР	<ul> <li>Clinicians conducting diagnostic assessments should be:</li> <li>appropriately registered (such as with Australian Health Practitioner Regulation Agency)</li> <li>adequately trained in diagnostic assessment using the DSM and/or ICD</li> <li>experienced conducting clinical interviews, administering, and interpreting standardised rating scales, and assessment of functional impairment</li> <li>experienced in the identification of any associated conditions or disorders that also require investigation, intervention, and support</li> <li>experienced in diagnostic assessment of anxiety or undergoing supervision with a clinician experienced in this field</li> <li>experienced and trained in child and adolescent development</li> </ul>

## Care planning

Number	Туре	Recommendation
3.1	CCR	Care should be person-centred and culturally safe, with respect given to children, young people, and their caregivers. Decisions should always involve the child or young person and their family.
3.2	CCR	Clinicians should offer evidence-based, multimodal treatment and support. In this context, multimodal refers to a combination of psychoeducation with specific psychological therapies and possibly medication treatment in exceptional circumstances (ie if there is a need for acute severe symptom reduction associated with high levels of functional impairment).
3.3	СРР	Clinicians should explain to individuals with an anxiety disorder and their caregivers that the different components of treatment for anxiety include psychological therapy and medication, and that the purpose of these treatments are to reduce anxiety symptoms and improve functioning. Children and family members should be encouraged to discuss their preferences for treatment.
3.4	СРР	<ul> <li>When planning care, the following should be discussed with the child or young person and their caregiver(s) to ensure shared and informed decision making: <ul> <li>family attitudes to treat mental health issues</li> <li>family beliefs and understanding about methods to manage/ treat mental health conditions, for both medical and psychosocial interventions</li> <li>whether all family members share the same beliefs or if there is conflict of beliefs</li> <li>the likelihood of the child or young person adhering to the treatment plan for psychological therapy and/or medication, barriers to treatment and supports for success</li> </ul> </li> </ul>
3.5	CCR	Wherever possible* clinicians should work closely with families and engage caregivers in treatment plans, regardless of whether psychological or medical treatment (or a combination) is chosen. *There are situations where family involvement is not appropriate such as domestic violence or a history of abuse.
3.6	СРР	Anxiety commonly co-occurs with other mental health conditions. In some cases, anxiety conditions may be overshadowed in treatment plans by more severe and low prevalence disorders. For this reason, clinicians supporting children and young people with complex psychosocial needs should ensure that they assess for anxiety and manage anxiety problems wherever possible.

3.7	СРР	The treating clinician might suggest caregivers of children engaged in therapy for anxiety also engage with their own psychological supports. These supports may be targeted towards the caregiver's own adjustment to diagnosis, working on secondary reinforcers within the family or environment that may be invertedly maintaining their child's anxiety, extra parenting support for parenting a child with anxiety, or individualised
		work to address the caregiver's own anxiety or background history. Family therapy may also be beneficial for some families, and where relational issues contribute to the anxiety presentation.

### Making initial treatment choices

Number	Туре	Recommendation
4.1	CCR	<ul> <li>Psychoeducation forms the base on which all other treatment approaches are built.</li> <li>During the diagnostic process and ongoing treatment and support, clinicians should provide the child, young person and/or their family with accurate education and information on the causes and potential consequences of anxiety and about the evidence-base for different treatments. Both positive and negative impacts could be discussed, including information about: <ul> <li>the symptoms of anxiety</li> <li>the factors that perpetuate anxiety</li> <li>secondary impacts of anxiety on the family, individual quality of life and behavioural functioning</li> <li>possible negative impacts of receiving a diagnosis, including stigma and labelling</li> </ul> </li> </ul>
4.2	CCR	When initiating treatment for anxiety, psychological therapy should be offered in the first instance.
4.3	CCR	<ul> <li>Medication could be used in conjunction with psychological therapy if the child or young person's anxiety: <ul> <li>is too severe to allow the child or young person to engage meaningfully in psychological therapy, and medication may assist</li> <li>has led to significantly reduced access to education due to limited school attendance</li> <li>is associated with a moderate or greater risk of deliberate self-harm or suicide attempt</li> <li>is associated with a significant risk to the wellbeing of a family member of a child or young person (for example, a caregiver expressing high levels of distress associated with their child's mental health)</li> </ul> </li> </ul>
4.4	CCR	If a child or young person is currently accessing psychological therapy for anxiety, and medication is being considered, psychological therapy should be continued in conjunction with medication.

Number	Туре	Recommendation
5.1	EBR	Cognitive behavioural therapy (CBT) should be used to improve daily functioning of children and young people aged 8-18 with an anxiety disorder.
		It should also be used to target the remission of an anxiety diagnosis.
5.2	EBR	Parent-only CBT could be used to reduce anxiety symptoms and improve daily function of children and young people with anxiety.
5.3	EBR	Group-CBT could be used for children and young people aged 8-18 years.
5.3.1	CCR	Contraindications to Group-CBT might include social anxiety as primary presentation and other social/emotional factors that may inhibit treatment benefit and fit with the group dynamic.
5.3.2	CCR	Play-based approaches should be used to assist the child or young person to explore cognitive and behavioural concepts where developmentally appropriate.
5.4	EBR	<ul> <li>Evidence-informed internet CBT (CBT using online/app based programs) could be used for children and young people with anxiety.</li> <li>Examples of online programs are below: <ul> <li>The University of Queensland's <u>BRAVE Program</u> for the prevention and treatment of anxiety in young people</li> <li>Macquarie University's <u>Cool Kids Anxiety Program</u> aimed at teaching children, young people and their family how to better manage anxiety</li> </ul> </li> </ul>
5.4.1	СРР	Internet CBT can be used as an alternative to face to face treatment where appropriate, or an adjunct to work in session (eg for homework).
5.4.2	CCR	The treating clinician should assess whether online or app-based programs should be undertaken individually or with assistance, or be caregiver-delivered (where designed for this purpose), depending on age/ developmental stage, individual preferences of the young person and their ability to concentrate alone. Caregivers and/or therapists may be appropriate to assist individual learning.

**Psychological therapy** 

5.5	EBR	Clinicians delivering cognitive-behavioural interventions to children and young people should consider the age and developmental abilities of the child or young person, including their capacity to self-reflect, their learning abilities and preferences, their theory of mind and their attention and concentration abilities, and should adjust choice of therapy or delivery of cognitive behavioural components appropriately.
5.6	CCR	In cases where a child or young person aged 8-18 years is already receiving medication for their anxiety (or related mental health condition), CBT should be used in conjunction with medication to reduce anxiety symptoms.
5.7	CCR	Acceptance and Commitment Therapy (ACT) could be used for children and young people aged 12-18.
5.7.1	СРР	ACT could be helpful for children and young people with co-occurring chronic health conditions.
5.8	CCR	CBT should be a first intervention for children under 12 years, however where they have found it difficult to engage in cognitive behavioural therapy, play-based approaches using cognitive behavioural concepts could be considered.
5.9	CCR	Play-based approaches using cognitive behavioural concepts could be considered for treatment of anxiety diagnosis in children and young people aged 8 and under.
5.10	СРР	Families should be closely involved at all stages of treatment to ensure that they understand the treatment approach and can continue to support the child or young person outside of the therapy room. This may mean that caregivers are always present in session, or it may be a combination of caregiver-only sessions, caregiver-child sessions, and child-only sessions. In most instances, completely excluding caregivers from therapy is not developmentally appropriate, however considering the child/adolescent's engagement and preferences is vital.

### **Medication**

Number	Туре	Recommendation
6.1	CPP	Prior to initiating a medication for anxiety clinicians should obtain informed consent from the legal guardian to prescribe medication to children and adolescents. The consent process should include a discussion regarding the rationale for the use of medications, the target symptoms, the effects, and improvements to be expected should the medication be effective in reducing the target symptoms, a discussion on the adverse effects. Information in plain language should be provided verbally and in writing. The older adolescent should additionally be seen on their own to discuss the medication and elicit their understanding of the information provided. Once the information is provided, time should be spent in eliciting the
		understanding of caregivers and the child or young person about the information given and follow up questions should be responded to.
6.2	EBR	When initiating medication for anxiety for the first time, a selective serotonin reuptake inhibitor (SSRI) should be used/prescribed/offered.
6.2.1	СРР	<ul> <li>When initiating a SSRI for anxiety, the following should be considered:</li> <li>that the prescription is at the correct dose for the child or young person's age.</li> <li>the principle of 'start low and go slow' should be followed in most instances. The pharmacokinetics in children and young people differ to adults. Liver enzymes, which metabolise many medications peak during childhood which typically means that children have a higher clearance rate than adults. This typically reduces in adolescence. As some medications efficacy and side effects are attributed to the active metabolites, the higher rates of metabolism can result in increased effects.</li> </ul>
6.3	CCR	If prescribing an SSRI to children and young people, clinicians should start at a low dose within an appropriate range for age and developmental stage (for eg Fluoxetine 5-10 mgs or Sertraline 12.5- 25mgs, Escitalopram 5 mgs, Fluvoxamine 12.5-25 mgs) and titrate up stepwise whilst monitoring for adverse effects to reach an effective dose that is well tolerated.
6.4	СРР	If the anxiety disorder in the child or young person is comorbid with depression, attention deficit hyperactivity disorder, or obsessive compulsive disorder, the first-line medication for anxiety should still be an SSRI.

6.5	СРР	<ul> <li>When initiating medication, a comprehensive assessment should include:</li> <li>physical health/medical history</li> <li>other medicines the child or young person regularly takes including: <ul> <li>prescription medication that might interact with anxiety medications (see information on drug interactions)</li> <li>over the counter medication</li> <li>complementary medicines</li> <li>medicines available to purchase online</li> </ul> </li> <li>medical comorbidities - specialist advice may be required before starting medications in these groups</li> </ul>
6.6	СРР	<ul> <li>Clinicians should discuss the following with the child or young person and their caregivers:</li> <li>if medication is added to the treatment plan and does not help/ causes adverse side effects, it can be stopped, and other options considered</li> <li>the potential side effects of available medication options</li> <li>methods for safe medication storage and disposal</li> <li>whether a child or young person prefers tablets, capsules, or liquids – noting that not all tablets can be crushed or evenly dispensed in water</li> <li>medication formulations need to be considered for suitability. For example, those with feeding tubes require specialist consideration as they may by-pass the site of absorption or contain excipients that increase the incidence of adverse effects.</li> </ul>
6.7	CPP	<ul> <li>When a medication is commenced, there should be regular monitoring of treatment response, adverse effects, and adherence: <ul> <li>a dosage increase would be considered if the current medication is well tolerated and there has been some, but limited effectiveness of medication evident through lack of symptom reduction or outcome measure responses</li> <li>a dose decrease/medication cessation would be considered if there are side effects that are not tolerated by the child or young person</li> <li>medication has been tried at an appropriate dose for a reasonable time (eg eight weeks) and is ineffective despite being well tolerated</li> <li>dose adjustment should be considered if there are other medical conditions and drug interactions, especially on commencement of new treatment. For example, if certain drug x drug interactions inhibit metabolism of specific drug.</li> </ul> </li> </ul>
6.8	EBR	The most common adverse effects of SSRIs include nausea, vomiting, loss of appetite, dry mouth, agitation, insomnia (or sometimes sedation), headaches, dizziness, sweating and sexual dysfunction. When initiating an SSRI, anxiety symptoms can worsen before improving.

CCR	Clinicians should be cautious when prescribing SSRIs for children and
	young people to avoid activation syndrome.
CCR	SSRIs are known to have discontinuation symptoms. To minimise these symptoms, these should be gradually reduced then discontinued.
СРР	If there are concerns about medication adherence and the consequent risk of sudden withdrawal related adverse effects including the discontinuation syndrome, the prescriber is advised to consider SSRIs with longer half-lives or those deemed to be at lower risk of discontinuation syndrome. For children and young people fluoxetine would be the best example.
CCR	When considering changes in medication/pharmacological treatment for a child or young person who has been taking SSRIs, the first change to consider is to another SSRI.
СРР	<ul> <li>When considering changes in medication/pharmacological treatment the following issues should be considered: <ul> <li>reconsider the availability and appropriateness of CBT and the quality of previous engagement in CBT</li> <li>are there any clear reasons for lack of treatment response?</li> <li>have choices of previous medication been appropriate and has medication been trialled at an adequate dose for an adequate duration?</li> <li>was previous medication adhered to, if not why?</li> </ul> </li> </ul>
EBR	<ul> <li>SNRIs could be used/prescribed/offered to children and young people if any of the following apply:</li> <li>multiple SSRIs are not tolerated</li> <li>symptoms have not responded to current treatment or treatment with at least two SSRIs.</li> </ul>
CCR	<ul> <li>When considering changing to an SNRI the following issues should be considered:</li> <li>consider safety data and known adverse effects when choosing the SNRI. The three SNRIs generally considered for use in the 6-18 years populations are duloxetine, venlafaxine and desvenlafaxine. <ul> <li>duloxetine may be associated with hepatic failure.</li> <li>compared with the other SNRIs, venlafaxine is associated with increased suicidal thinking.</li> <li>there is inadequate safety data for desvenlafaxine in the children and young people age population [2].</li> </ul> </li> </ul> Note: Desvenlafaxine is an active metabolite of venlafaxine.
	CCR CPP CCR CPP EBR

6.14	СРР	Clinicians could cautiously consider the short-term use of short acting benzodiazepines to assist in the management of an <b>acute crisis in high-risk settings</b> (such as in an emergency department or inpatient unit).
6.14.1	EBR	It is not appropriate to provide an ongoing script or repeats for benzodiazepines in management of anxiety.
6.14.2	СРР	A script for a small quantity of short acting/short term benzodiazepines (enough for three doses) may be supplied to families to assist in bridging the time between discharge from an emergency department and initiating crisis care with a mental health professional.
6.15	СРР	Anti-psychotic medications, and other medications including alpha-2 agonists (clonidine and guanfacine), atomoxetine, reboxetine and tricyclic antidepressants are not recommended for the treatment of anxiety disorders in isolation in children and young people aged 0-18.

## **Care review and monitoring progress**

Number	Туре	Recommendation
7.1	СРР	Clinicians should arrange regular and frequent follow-up until it is clinically no longer indicated.
7.2	CCR	Children and young people who are taking medication for anxiety should be encouraged to monitor and record their adverse effects. Caregiver support to undertake this is encouraged.
7.3	CCR	For both psychological and medication treatment, symptoms and adverse effects should be monitored using standardised rating scales throughout the course of treatment.
7.4	СРР	On medication initiation, and while establishing stability, it should be reviewed every two weeks. Once a stable medication dose has been established, it should be reviewed and discussed with the person with anxiety (and their caregivers) at least once every three months.
7.5	СРР	Children and young people with anxiety, and their caregivers, should be encouraged to discuss their preferences for their continuing treatment, both psychological and medication.
7.6	СРР	A trial period of ceasing treatment (psychological or medical) could be considered when the overall balance of benefits and harms indicates this may be appropriate.
7.7	СРР	Medications known to have discontinuation symptoms, such as SSRIs, should be gradually reduced then discontinued, to minimise these symptoms.

## Introduction Purpose of this guideline

The purpose of this guideline is to provide evidence-based guidance about the identification, assessment, and management of anxiety in children and young people to ensure optimal, consistent care. The recommendations are derived from discussion of the research evidence among multidisciplinary health professionals, researchers, children, young people, and their caregivers with lived and living experience.

The experience of anxiety can be a normal part of development for many children and should not in itself be a cause of concern. This guideline can help distinguish between developmentally appropriate symptoms of anxiety and those that need more intensive assessment and intervention.

#### Intended users of this guideline

This evidence-based guideline is intended to be used by clinicians, including medical and allied health professionals, nurses, pharmacists, educators, psychosocial support workers, and other professionals involved in the care of children and young people with anxiety. Professionals with appropriate training and credentials can use this guideline to inform identification, assessment, management and support for children, young people, and their families with anxiety while working within their scope of practice.

This guideline is tailored for use in a clinical context. Additional resources about anxiety in children and young people are currently being developed.

For young people with anxiety, caregivers, and other supporters reading this guideline, the RCH has developed a resource to help caregivers identify anxiety in their child and young person. <u>See anxiety resource page</u>.

### **Considerations for using this guideline**

When using this guideline, it is important to acknowledge the broad range of contextual factors that may contribute to anxiety for a child or young person (eg social determinants of health such as living situation, environment, family mental health) and also the crucial role of the family unit for that child or young person's health and wellbeing.

Optimal outcomes for a child or young person with anxiety are dependent upon, and mitigated by, the care and support provided within the family by their caregivers, siblings, and other support persons before, during, and after an episode of care. The quality of this support and care is dependent upon the wellbeing of these individuals and the family unit in its entirety. Delivering family centred care requires staff to consider the wellbeing and support needs of the child or young person's family, which may extend far beyond the clinic room, as a crucial part of care-as-usual. By acknowledging and addressing these family and systemic factors that contribute to a child or young person's anxiety, we create a more holistic approach to care and achieve optimal outcomes for them and their family.

#### Setting

This guideline is appropriate for healthcare settings including tertiary, primary, community, acute and allied healthcare, as well as in private practice.

**Note for hospital settings:** While procedural anxiety was deemed out of scope for this guideline, it is recognised as a very important issue particularly, but not limited to, within hospital settings. The interaction between anxiety disorders, procedure related anxiety, and post procedural outcomes needs to be considered, with the medical setting taking a proactive approach to anxiety management. Similarly, a child's past negative experiences in a medical setting may elicit a trauma response in the child and/or family that must be considered in the context of procedura related anxiety.

### **Existing evidence-based guidance**

Consistent with international best practice, a systematic search for existing evidence-based guidelines that address the topic of anxiety (search conducted March 2022) was conducted. An internet search as well as a guideline-relevant website search identified three guidelines that address anxiety, however none of these met criteria for update or adaptation to the Australian setting as either the detailed evidence reports were unavailable, they were based on the findings of systematic reviews, or the search was prepared in 1998 and thus would require extensive update.

Detailed methods and results can be found in <u>Technical Evidence Report</u> section "Systematic existing evidence-based guideline search".

#### **Considerations for special population groups**

The search terms used to identify the population were not limited so that studies addressing children and young people with anxiety in all cultural, geographical, and socioeconomic backgrounds and settings would be identified by the search. Despite this, there was a lack of evidence relating to some population groups, reflecting a severe gap in the research.

# First Nations children and young people and mental health and wellbeing

There is currently very little evidence to inform specific guidelines and care pathways regarding mental healthcare for Australian First Nations children and young people even though the burden of mental health disorders among this group is thought to be significantly greater than among the general population of Australian children and young people. We were not able to include specific recommendations or practice points regarding First Nations children and young people in this guideline and we acknowledge this as a significant limitation. We hope in the future to be able to address the needs of First Nations peoples more specifically. Clinicians should consider working with Aboriginal Health Services, organisations, and communities to further inform treatment and care.

The resources highlighted below might be of assistance in supporting identification, assessment and treatment of common mental health conditions experienced by First Nations children and young people:

- Gayaa Dhuwi (Proud Spirit) Australia is a government supported Aboriginal and Torres Strait Islander (Indigenous) social and emotional wellbeing, mental health, and suicide prevention leadership body. In an effort to achieve a high standard of mental health and suicide prevention outcomes for First Nations People, Gayaa Dhuwi provides <u>resources on</u> <u>Indigenous mental health</u> and <u>information on care services</u>.
- Working Together: Aboriginal and Torres Strait Islander Mental Health and Wellbeing Principles and Practice
- <u>Aboriginal and Torres Strait Islander health policies and frameworks</u>
- Orygen Aboriginal and Torres Strait Islander young people and mental ill-health

# Culturally and linguistically diverse children and young people and mental health and wellbeing

Similarly, the evidence sourced for the development of this guideline did not render any specific guidance to inform recommendations or practice points for children and young people from culturally and linguistically diverse backgrounds.

The below resources might be of use when working with children and young people from culturally and linguistically diverse backgrounds who have mental health concerns:

- Embrace Multicultural Mental Health information for service providers
- How the experiences and circumstances of culturally and linguistically diverse children and families influence child mental health – Emerging Minds

### Infant mental health and anxiety

Despite the scope and selection criteria for the evidence search including children and young people aged 0-18, there was very little evidence relating specifically to anxiety in infants (defined as a child aged 0-3 years).

The following resources developed by the Australian Government could be helpful in understanding anxiety in infants. <u>See Better Health Channel anxiety resource page</u>.

#### **Types of anxiety disorders**

Whilst some degree of anxiety is recognised as a normal response to stress, and can even be beneficial in some situations, anxiety disorders can be distinguished by their intensity and duration. Anxiety disorders are common mental health conditions characterised by excessive fear, apprehension, and other behavioural disturbances in response to an anticipated potential threat (real or imagined).

It is also important to recognise that anxiety commonly co-occurs with other mental health conditions. In some cases, anxiety conditions may be under recognised or overshadowed in the presence of treatment, assessment, and formulation of more severe and low prevalence disorders. For this reason clinicians supporting children and young people with complex psychosocial needs should ensure that they assess for anxiety and manage anxiety problems wherever possible.

While the recommendations for assessment and management are, on the whole, generic and not disorder specific, this guideline is focussed on those disorders classified in the Anxiety Disorders chapter of the Diagnostic and Statistical Manual of Mental Disorders fifth edition (DSM-5). We do not cover either obsessive compulsive disorder (OCD) or trauma and stressor related disorders for which the evidence base suggests different approaches are appropriate. We also did not specifically look for evidence around selective mutism.

#### Generalised anxiety disorder

Generalised anxiety disorder is characterised by excessive and persistent worry occurring more days than not about multiple areas of everyday life. The individual finds this worry difficult to control. Individuals with generalised anxiety disorder may experience physical symptoms such as restlessness, fatigue, difficulty concentrating, irritability, muscle tension, and sleep disturbances. These symptoms significantly impact daily functioning and must be present for at least six months, causing significant distress [3].

#### Panic disorder

Panic disorder is characterised by recurrent panic attacks - sudden episodes of overwhelming physical and psychological distress, including intense fear or discomfort. They may be accompanied by physical symptoms such as:

- palpitations, pounding heart or rapid heart-rate
- sweating
- trembling or shaking
- feeling of shortness of breath or smothering sensations
- chest pain
- feeling dizzy, light-headed or faint
- feeling of choking
- numbness or tingling
- chills or hot flushes
- nausea or abdominal pains
- feeling detached
- fear of losing control
- fear of dying [3]

Individuals with panic disorder often develop significant concern or worry about future attacks and their consequences leading to a heightened state of vigilance and fear. Due to the intensity of symptoms, individuals experiencing a panic attack often mistake it for a heart attack or a severe medical condition, causing them to attend emergency departments. The average age of onset for panic disorder is typically between 20 and 24 years. It is important to note that panic attacks can co-occur with other disorders like depression or post-traumatic stress disorder [4].

#### Phobias, specific phobia

A specific phobia is an excessive and irrational fear of a specific object or situation. The fear is out of proportion to the actual danger posed by the stimulus, and it often leads to avoidance behaviour or enduring the situation with intense distress. The individual often knows the fear is illogical but cannot overcome it. Examples include fear of heights, animals or flying [4]. In a hospital setting needle phobias (or procedure-related distress) may present as a common barrier to treatment. While this guideline does not specifically address procedure related anxiety, it will be helpful in many situations, alongside trauma informed care to minimise distress.

#### Agoraphobia

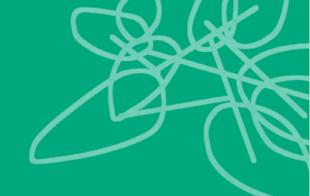
Agoraphobia is a specific phobia that involves an intense fear or anxiety about being in situations or places where escape might be difficult, or help may not be available in the event of a panic attack or other distressing symptoms. Individuals with agoraphobia commonly avoid or feel significant distress in situations such as crowded places, open spaces, public transportation, or being outside of their home alone [4]. Agoraphobia can severely impact an individual's daily functioning and may lead to social isolation as they try to limit their exposure to triggering situations. It often develops as a result of experiencing panic attacks or anxiety in specific situations. Agoraphobia is only diagnosed when the fear is excessive or significantly interrupts everyday functioning [3].

#### Social anxiety disorder (previously social phobia)

Social anxiety disorder is characterised by an intense fear or anxiety about social situations where individuals may be scrutinised or evaluated by others. People with social anxiety disorder often have a persistent fear of embarrassment or humiliation, leading them to avoid social interactions or endure them with significant distress. This condition can significantly impact a person's personal and professional life and is persistent for more than six months [3].

#### Separation anxiety disorder

A person with separation anxiety disorder experiences excessive and developmentally inappropriate distress when separated from attachment figures, such as caregivers. Individuals may experience persistent worry about potential harm or loss to the person they are attached to, nightmares about separation, and may exhibit behaviours such as refusal to go to school or excessive clinginess to their caregivers. Symptoms are commonly observed in children or young people but can carry through to adulthood [4].



## Identification and assessment

Anxiety disorders are common with around seven per cent of Australian children and young people meeting criteria for at least one anxiety disorder at any point in time [1]. They are however under recognised, under diagnosed, and under treated. For example, in Young Minds Matter, the most recent survey of mental health problems in Australian children and young people, only around half of those with a disorder had seen any health professional for support over the previous 12 months. For this reason, the GDG have addressed identification as well as assessment of anxiety in this guideline.

The distinction between identification and assessment is important. Identification is a combination of ensuring that anxiety is considered as a component of a child or young person's presentation, recognising those situations where anxiety is particularly common, alongside knowing the most efficient ways of screening for anxiety. Assessment of anxiety, as for any other mental health condition, cannot be based on questionnaires alone and requires the clinician to ask the right questions to identify not only the presence of symptoms but also the impact that these are having on the child or young person and those around them. For the purpose of distinction in this guideline, recommendations for identification and assessment have been separated, numbered 1 and 2 respectively.



## **Identification recommendations**

Number	Туре	Recommendation
1.1	CCR	Steps should be taken to ensure that pathways are available within communities, schools, and clinical settings for children, young people, and families to recognise and raise concerns about anxiety.
		Organisations that provide services to children and young people with greater vulnerability to anxiety could consider systematic screening for anxiety. These include organisations providing out of home care services, family violence services, and child protection.
1.2	EBR	When engaging with children and young people, clinicians should always consider whether anxiety is contributing to the overall presentation.
1.3	EBR	<ul> <li>Clinicians working with children and young people with any of the following high-risk factors/conditions should consider screening for possible anxiety: <ul> <li>autism spectrum disorder/autism spectrum condition</li> <li>sleep disturbance (eg insomnia, sleep terrors, sleepwalking)</li> <li>cystic fibrosis</li> <li>eating disorders</li> <li>family history of anxiety, depression, obsessive compulsive disorder, or substance use disorders</li> </ul> </li> </ul>
1.4	CCR	<ul> <li>Clinicians working with children and young people with any of the following conditions or situations could consider screening for possible anxiety (please note, this list is not exhaustive and clinicians should also rely on professional judgement and clinical assessment): <ul> <li>attention deficit hyperactive disorder</li> <li>the experience of trauma or a diagnosis of post-traumatic stress disorder</li> <li>intellectual disability, communication disorders, developmental delay, and neurodevelopmental disorders</li> <li>oppositional defiant disorder and other challenging behaviours (eg meltdowns, avoidance)</li> <li>school difficulties including academic or social impairment, school refusal, perfectionism, current or past experiences of bullying</li> <li>suicidal behaviours and self-harm</li> <li>acute exacerbation (or permanent deterioration) of the symptoms of chronic medical illnesses and conditions (eg cancer, diabetes, muscular, neuromuscular, and other neurological disorders, cystic fibrosis resulting in a hospital admission and invasive medical procedures)</li> <li>chronic illness that impacts daily functioning, quality of life, autonomy (as identified by the young person, caregiver(s), or clinician)</li> </ul> </li> </ul>

		<ul> <li>somatic symptoms (physical symptoms that are 'medically unexplained') (eg abdominal pain, headache or a diagnosis of somatoform disorder/medically unexplained symptoms)</li> <li>chronic fatigue syndrome</li> <li>sensory impairment (eg hearing/vision)</li> <li>LGBTQIA+ or gender diverse</li> <li>family experience/history of violence, trauma, conflict, relational difficulties</li> <li>child or young person in out of home care</li> <li>a child or young person with a refugee background, or family who are from a refugee background</li> <li>changes in appetite or rapid unexplained changes in weight</li> <li>substance misuse</li> </ul>
1.5	EBR	When choosing an instrument to use to help identify whether anxiety is contributing to the overall presentation of a child or young person, it is important to look at the age range and disorder that they were designed for as well as the purpose. Different psychometric properties are required for screening and measuring change and not all instruments that are good at one job are good at the other. For screening purposes tools with a higher sensitivity (> 0.8) will be better at identifying those with true anxiety while tools with a higher specificity (> 0.8) will be better at excluding those who do not have anxiety. The GDG notes that the screening instruments related to social anxiety and those designed for adolescents tend to have better psychometric properties for screening. A selection of instruments can be found in the Technical Evidence Report. The use of these screening instruments should be supplemented by clinical questioning, and where appropriate a detailed assessment should follow.

#### **Assessment recommendations**

Number	Туре	Recommendation
2.1	СРР	The aim of an assessment is to determine if there is a diagnosis of anxiety and/or other conditions and develop a formulation that helps understand the child or young person's presentation and informs the development of a management plan.
2.1.1	СРР	Where a child or young person has been identified as requiring a more detailed assessment for anxiety, clinicians are encouraged to undertake a thorough assessment to consider the presence, severity, and impact of anxiety in the context of all areas of the child or young person's life.

2.2	СРР	Clinicians should consider different presentations of anxiety among children and young people, and how this may change across different ages and developmental stages and different settings. For example, some children with anxiety may present as clingy towards caregivers, others may be described as angry or aggressive; others withdrawn and quiet.
2.3	CCR	In an assessment for a diagnosis of anxiety, a clinician should assess symptoms and signs of anxiety, and determine whether the symptoms meet the diagnostic criteria in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) and/or International Classification of Diseases (ICD-11). A diagnosis of anxiety requires a clinical assessment and interview and should not be made solely based on rating scales or observational data. However, rating scales assessing anxiety symptoms can be helpful adjuncts to the assessment process.
2.4	CCR	As anxiety commonly co-occurs with other medical and neurodevelopment/mental health conditions, the diagnosis of anxiety should prompt consideration of, and assessment for, the presence of other conditions including those noted in the high-risk group recommendations (1.3 and 1.4).
2.5	СРР	<ul> <li>Clinicians conducting diagnostic assessments should be:</li> <li>appropriately registered (such as with Australian Health Practitioner Regulation Agency)</li> <li>adequately trained in diagnostic assessment using the DSM and/or ICD</li> <li>experienced conducting clinical interviews, administering, and interpreting standardised rating scales, and assessment of functional impairment</li> <li>experienced in the identification of any associated conditions or disorders that also require investigation, intervention, and support</li> <li>experienced in diagnostic assessment of anxiety or undergoing supervision with a clinician experienced in this field</li> <li>experienced and trained in child and adolescent development</li> </ul>

### **Supporting evidence**

#### **Evidence review summary**

#### Evidence review was conducted for the following questions:

- should children and young people in the general population be screened for anxiety?
- are there high-risk groups of children and young people that should be screened for anxiety?
- what is the diagnostic accuracy of methods/tools/scales/instruments, compared to gold standard diagnosis based on DSM or ICD criteria, for diagnosis of anxiety in children and young people?
- what is the diagnostic accuracy of methods/tools/instruments, compared to gold standard diagnosis based on DSM or ICD criteria, to determine severity of anxiety in children and young people?

A current and comprehensive systematic review, commissioned to inform the US Preventive Services Task Force's evidence-based guideline, was adopted [5]. The US Preventive Services Task Force search (June 2022) did not identify any studies that directly assessed the benefits or harms of screening for anxiety disorders in children and adolescents and therefore relied on indirect evidence about the accuracy of screening tools and the benefits of treatment. It was concluded that screening for anxiety in children and adolescents aged 8 to 18 years is of benefit, but that evidence is insufficient on screening for anxiety in children eight years or younger.

The systematic review, commissioned to inform the US Preventive Services Task Force evidence-based guideline, was adopted as evidence for the screening accuracy of diagnostic tools [5]. Using structured clinical interview for anxiety diagnosis as the reference standard, Task Force concluded that the 12 screening instruments addressed in the systematic review are heterogeneous, and that anxiety screening tools alone are not sufficient to diagnose anxiety, which requires diagnostic assessment and follow up.

Evidence review of 13 articles assessed the risk of anxiety in a range of conditions. Metaanalyses based on moderate certainty evidence suggests that children and young people of parents with anxiety were at statistically significantly higher risk of panic disorder (p=0.02) [6, 7] and potential for higher risk of generalised anxiety disorder (p=0.06) [6, 8]; however, parents with anxiety was not a statistically significant risk factor for separation anxiety disorder[6, 8], social phobia[6, 8], and phobic disorder [6, 8]. Very low certainty evidence, based on three studies, suggests that parents with anxiety is a statistically significant risk factor for overall anxiety (p=0.04) [6, 9, 10]. High certainty evidence, based on two studies, suggests that parents with depression is a statistically significant risk factor for overall anxiety (p=0.004) [7, 8]. A study of moderate certainty suggests that children and young people of parents with obsessive compulsive disorder have a higher risk of anxiety (p=0.019), particularly overanxious disorder (p=0.02) and separation anxiety (p=0.002) [11]. A study of moderate certainty suggests that it is unclear whether children and young people of parents with substance disorder have a higher risk of anxiety [6]. Evidence from single studies with a control group suggest higher risk of anxiety in children and young people with: autism spectrum disorder, particularly generalised anxiety disorder (low certainty) [12]; Insomnia (low certainty) [13]; Sleep terrors and/or sleep walking (moderate certainty) [14]. A small study of very low certainty suggests that children and young people with cystic fibrosis may have higher risk of anxiety disorder (p=0.007) and specific phobia (p=0.005); however there was no statistically significant difference between children and young people with and without cystic fibrosis for separation anxiety (p=0.054), social anxiety (p=0.303) or generalised anxiety disorder (p=0.427) [15].

Please see the Technical Evidence Report for detailed methods, results, and analysis for each evidence review.

#### **Clinical context**

When considering the evidence, the GDG determined that screening is a mechanism to identify and treat anxiety early whether through opportunistic screening or in more universal contexts such as in schools. In their clinical experience, the GDG found that, when conducted routinely as part of clinical care (whether this is by a paediatrician or a mental health clinician), a screening process can also function to reduce stigma around mental health and increase opportunities to talk about how the individual child or young person is feeling and functioning. Further, caregivers and other family members might not be aware of how to recognise anxiety, so screening might prevent some children and young people from falling through the gaps if anxiety is not detected. In view of the likelihood that these screening instruments will result in relatively high levels of misclassification (ie false positives) if used alone as a diagnostic tool, it is recommended that screening is supplemented by clinical questioning to confirm that further assessment is required. Please note that there are a number of diagnostic tools and outcome measures that are validated internationally and approved for use in children and young people that can be used based on context and availability.

Given that diagnosis should be based on the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) and/or International Classification of Diseases (ICD-11) it is recommended that clinicians conducting an assessment for anxiety in children and young people are familiar with these criteria and frame their clinical interview accordingly. One important reason for highlighting that assessment cannot be by questionnaire alone is the need to assess for impact of anxiety on functioning. This is not assessed well by questionnaires and requires clinical questioning. It is also important to consider that, as anxiety commonly co-occurs with other mental health, neurodevelopmental and physical conditions it is always important to consider these as a part of the assessment.

Clinicians could consider using a structured approach to interviews for further assessment. Examples of generic interviews include the KIDDIE-SADS or Developmental and Wellbeing Assessment (DAWBA), and anxiety specific interviews such as Anxiety Disorders Interview Schedule for Children which has both caregiver and child versions. In the absence of sufficient evidence for screening in young children aged eight and below, clinical assessment, including caregiver report is an important consideration. The Spence Child and Adolescent Scale is an example of a potential measure that is validated for children under eight and should be accompanied by further assessment, as above. The evidence review for groups at high risk of anxiety was supplemented with a table of conditions that are known to have a higher prevalence of anxiety, which can be found in the Technical Evidence Report.

#### Implementation notes

If a decision is made to screen or assess for possible anxiety clinicians should consider the following:

- that they have the appropriate training and expertise to undertake screening and/or assessment
- screening tools should be used in conjunction with a clinical assessment interview and not as standalone assessment instruments
- does a pathway/resources exist where further assessment and treatment can be offered if anxiety is detected? If not, clinicians should consider the ethical issues around deciding whether to screen
- use simple language and avoid clinical jargon or acronyms
- the approach with adolescents (likely self-report) may be different to a child attending with a caregiver(s) in terms of the level of detail provided, the amount of prompting about what anxiety looks like, and the masking of anxiety (hiding of symptoms). Clinicians should adjust their language, communication (verbal and non-verbal) and who completes the screening based on the age and developmental stage of the young person. For example, an adolescent may find it easier to use the screening questionnaire as a guide for clinician questioning, rather than answering endless questions
- if anxiety is present, a pathway to treatment should be gradual and not overwhelming, particularly where treatment recommended is intensive

## **Care planning**

Care planning is a vital part of mental health treatment and support for children, young people, and their families, and can set the scene for a collaborative, engaged and strengths-based approach to recovery. Care planning serves as a road map for the journey ahead, and like all good road trips, should be planned together with the child or young person and their caregivers. Psychoeducation and space for consumers to ask questions are considered key components of any care planning session.

Good care planning sets the scene for more specific treatment recommendations. The following set of recommendations allow the treatment itself to be best suited to the needs of the family. Care planning should always include the child or young person and their caregivers whenever this is appropriate and safe to do so. Consideration should be given to whether one or more caregivers are present and whether it is developmentally appropriate for them to be involved in every aspect of care planning.



Recon		
Number	Туре	Recommendation
3.1	CCR	Care should be person-centred and culturally safe, with respect given to children, young people, and their caregivers. Decisions should always involve the child or young person and their family.
3.2	CCR	Clinicians should offer evidence-based, multimodal treatment and support. In this context, multimodal refers to a combination of psychoeducation with specific psychological therapies and possibly medication treatment in exceptional circumstances (ie if there is a need for acute severe symptom reduction associated with high levels of functional impairment).
3.3	СРР	Clinicians should explain to individuals with an anxiety disorder and their caregivers the different components of treatment for anxiety include psychological therapy and medication, and that the purpose of these treatments are to reduce symptoms and improve functioning. Children and family members should be encouraged to discuss their preferences for treatment.
3.4	CPP	<ul> <li>When planning care, the following should be discussed with the child or young person and their caregiver(s) to ensure shared and informed decision making: <ul> <li>family attitudes to treat mental health issues</li> <li>family beliefs and understanding about methods to manage/ treat mental health conditions, for both medical and psychosocial interventions</li> <li>whether all family members share the same beliefs or if there is conflict of beliefs</li> <li>the likelihood of the child or young person adhering to the treatment plan for psychological therapy and/or medication, barriers to treatment and supports for success</li> </ul> </li> </ul>
3.5	CCR	Wherever possible* clinicians should work closely with families and engage caregivers in treatment plans, regardless of whether psychological or medical treatment (or a combination) is chosen. *There are situations where family involvement is not appropriate such as domestic violence or a history of abuse.

## Recommendations

3.6	СРР	Anxiety commonly co-occurs with other mental health conditions. In some cases, anxiety conditions may be overshadowed in treatment plans by more severe and low prevalence disorders. For this reason, clinicians supporting children and young people with complex psychosocial needs should ensure that they assess for anxiety and manage anxiety problems wherever possible.
3.7	СРР	The treating clinician might suggest caregivers of children engaged in therapy for anxiety also engage with their own psychological supports. These supports may be targeted towards the caregiver's own adjustment to diagnosis, working on secondary reinforcers within the family/ environment that may be invertedly maintaining their child's anxiety, extra parenting support for parenting a child with anxiety, or individualised work to address the caregiver's own anxiety or background history. Family therapy may also be beneficial for some families, and where relational issues contribute to the anxiety presentation.

#### **Supporting evidence**

#### Evidence review summary

Specific clinical questions were not addressed by evidence review for care planning and Clinical Consensus Recommendations (CCRs) and Clinical Practice Points (CPPs) have been developed from discussion among the GDG, based on the evidence base for assessment, diagnosis and the effectiveness of psychological and pharmacological therapy, outlined in this guideline. Detailed methods, results and analysis for each evidence review can be found in the Technical Evidence Report.

#### **Clinical context**

It is the belief of the GDG that evidence for this section is lacking simply because it is often considered the first step of interventions (both psychological and medical) and not well researched. For the reasons listed below, it is however considered an essential part of mental health and wellbeing support, and indeed sets up interventions to be evidence-based/informed by creating a space for planning.

Creating a comprehensive and individualised care plan before treatment begins offers several benefits:

- **Individualised care:** Care planning allows clinicians to tailor treatment strategies to the unique needs, preferences, and circumstances of each young person and their family, increasing the likelihood of treatment engagement and success.
- **Collaborative decision making:** Involving both the young person and their family in the care planning process promotes shared decision-making. By valuing their input, concerns, and goals, the plan becomes a collaborative effort, fostering a sense of ownership and commitment to the treatment process.
- Holistic assessment: Care planning requires a comprehensive assessment of the young person's mental, emotional, social, familial, and contextual factors. This holistic view enables the identification of underlying strengths, issues, and triggers, ensuring an effective and well-rounded treatment approach.

- **Goal setting:** Clear treatment goals are essential in guiding the therapeutic process. Through care planning, specific and achievable objectives are established. These goals serve as benchmarks for progress and offer motivation for both the young person and their family.
- **Treatment coordination:** Mental health treatment often involves multiple professionals, interventions, and services. A well-structured care plan ensures seamless coordination among these elements, preventing fragmented care and enhancing the overall treatment experience. It allows the lead clinician to plan ahead for the involvement of other practitioners to ensure timely access to the chosen treatment modalities.
- **Empowerment and education:** Care planning empowers young people and families by fostering a deeper understanding of the treatment process. Education about the nature of mental health conditions, available interventions, and coping strategies equips them with the tools needed to actively participate in their healing journey.
- **Measurement of progress:** A well-designed care plan includes mechanisms to measure progress over time (eg goals, functional markers, outcome measures). Regular assessment of treatment outcomes allow for adjustments to the plan as needed, ensuring that interventions remain effective and relevant. A key component of measurement in this context is the need to ensure that baseline measures are made before starting on treatment. Without these it is not possible to accurately determine whether there is indeed change and if so, how much.

Good care planning ensures that all parties are on the same page and that they can work together as equal partners within the treatment alliance, and that the journey through treatment is planned and understood. It ensures that interventions are evidence-based, age-appropriate, and aligned with best practices, safeguarding the wellbeing of young people and families.

#### Implementation notes

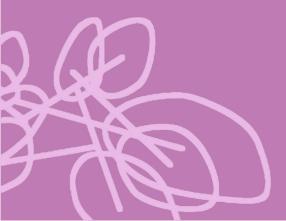
When planning, delivering, and reviewing care for the children and young people you are working with, adjustments should be made as relevant, especially in young people who:

- identify as Aboriginal and Torres Strait Islander
- are from culturally and linguistically diverse backgrounds
- have co-occurring conditions/issues, including neurodiversity
- are subject to court orders in place or legal proceedings, particularly when relating to the child's family
- are involved in the child protection system
- are in out of home care
- have a disability that may interfere with their ability to access standardised therapy

# Making initial treatment choices

Once a diagnosis has been made and care planning has begun, thoughts shift towards what type of therapy is best offered as first-line treatment. A discussion of treatment and support options should always begin with psychoeducation, followed by a consideration of the psychological and medication treatment options acceptable to the child or young person and family.

While this guideline includes definitions for some specific anxiety disorders, it adopts a more generalised approach to treatment recommendations due to lack of evidence around treatments for specific anxiety disorders, including psychotherapy and medications.



## Recommendations

Number	Туре	Recommendation
4.1	CCR	<ul> <li>Psychoeducation forms the base on which all other treatment approaches are built.</li> <li>During the diagnostic process and ongoing treatment and support, clinicians should provide the child, young person and/or their family with accurate education and information on the causes and potential consequences of anxiety and about the evidence-base for different treatments. Both positive and negative impacts could be discussed, including information about: <ul> <li>the symptoms of anxiety</li> <li>the factors that perpetuate anxiety</li> <li>secondary impacts of anxiety on the family, individual quality of life and behavioural functioning</li> <li>possible negative impacts of receiving a diagnosis, including stigma and labelling</li> </ul> </li> </ul>
4.2	CCR	When initiating treatment for anxiety, psychological therapy should be offered in the first instance.
4.3	CCR	<ul> <li>Medication could be used in conjunction with psychological therapy if the child or young person's anxiety: <ul> <li>is too severe to allow the child or young person to engage meaningfully in psychological therapy, and medication may assist</li> <li>has led to significantly reduced access to education due to limited school attendance</li> <li>is associated with a moderate or greater risk of deliberate self-harm or suicide attempt</li> <li>is associated with a significant risk to the wellbeing of a family member of a child or young person (for example, a caregiver expressing high levels of distress associated with their child's mental health)</li> </ul> </li> </ul>
4.4	CCR	If a child or young person is currently accessing psychological therapy for anxiety, and medication is being considered, psychological therapy should be continued in conjunction with medication.

## **Supporting evidence**

#### Evidence review summary

Specific clinical questions were not addressed by evidence review for initial treatment choices and Clinical Consensus Recommendations (CCRs) and Clinical Practice Points (CPPs) have been developed from discussion among the GDG, based on the evidence base for the effectiveness of psychological and pharmacological therapy, detailed methods, results and analysis for each evidence review can be found in the Technical Evidence Report.

## **Clinical context**

When considering the evidence about treatment options, the GDG made several judgements about the order in which psychological therapy and medication treatments should be offered. The GDG agreed that it was beneficial for the child to begin treatment with psychological therapy in the first instance. The GDG also discussed the potential for there to be instances where a child or young person might be experiencing heightened levels of anxiety which may compromise optimal participation in, and benefit from psychological therapy. In this instance, the GDG were in agreement that, in their clinical experience, medication may sometimes reduce anxiety symptoms enough to support optimal engagement in psychological therapy. Offering psychological therapy as a first-line therapy for children and adolescents before considering medication is based on several compelling reasons, listed below. It prioritises skill development, understanding and addressing underlying causes, and empowering young individuals to take an active role in their wellbeing, whilst minimising the potential risks associated with medication:

- **Developmental considerations:** Children and adolescents are in critical stages of cognitive, emotional, and social development. In many instances, anxious behaviours or thinking patterns may be a response to a lack of skill development in certain contexts, or learning a protective behavioural response early in life that may no longer serve them (for example, learning that avoiding the park makes them feel better). Psychological therapy when provided through a developmental lens can help them acquire essential coping skills, emotional regulation techniques, and problem-solving abilities that will serve them well throughout their lives and allow them to change behaviours that may no longer meet their needs. By building confidence through exposure and other strategies, children may reduce their anxiety levels to a point where medication is not necessary.
- **Minimising potential risks:** Medications, especially psychotropic drugs, can have potential side effects and risks, some of which might not be fully understood in the context of developing brains and bodies. Psychological therapy offers a non-invasive approach that avoids exposing young individuals to unnecessary risks.
- Addressing underlying causes: Psychological therapy delves into the root causes of mental health issues, and allows individual, relational and family issues to be addressed simultaneously. It allows children and adolescents to explore and understand their emotions, thoughts, and behaviours, which can lead to lasting changes in their wellbeing. Medications may improve the symptoms of anxiety, however that may not result in changes in family behaviour or expectations of the child or young person with anxiety.

- **Empowerment and agency:** Engaging in therapy empowers children and adolescents to actively participate in their own recovery. It fosters a sense of agency, self-awareness, and emotional intelligence that can positively impact their self-esteem and self-worth.
- **Reduced stigma:** Encouraging psychological therapy as a first-line treatment reduces the stigma associated with mental health issues and treatment and normalises anxiety as a behavioural and emotional contextual response learnt over time.

#### Implementation notes

Please refer to the implementation considerations for both psychological therapy and medication, as well as the common and possible adverse side effects of any medication being considered.

## **Psychological therapy**

As discussed in section three, Making initial treatment choices, a psychological approach to therapy should be the first-line treatment for anxiety disorders in children and young people in most situations. The recommendations below summarise the evidence-based and consensus-based recommendations formed by the GDG.

Research over the past several decades has consistently demonstrated the efficacy and effectiveness of psychological interventions in alleviating anxiety symptoms and improving overall quality of life. These therapies not only provide relief from distressing symptoms but also equip individuals with the skills to manage anxiety related challenges and prevent relapses. Central to effective treatment planning is the prioritisation of evidence-based approaches. This guideline aims to provide a comprehensive framework for clinicians working with children or young people with anxiety, outlining the rationale behind recommending specific psychological therapies as first-line choices in the treatment of anxiety disorders. This evidence-based approach not only underscores the importance of well established interventions but also aligns with the principles of personalised and targeted care.



Psychological therapies recommended in this guideline have been rigorously studied through randomised controlled trials (RCTs), systematic reviews, and meta-analyses. By promoting evidence-based psychological therapies as first-line treatments, this guideline underscores the commitment to providing individuals with anxiety disorders the best chance for recovery and improved wellbeing. Informed by scientific research, clinical expertise, and the shared goal of enhancing mental health outcomes, this guideline offers practitioners a roadmap for delivering effective, individualised, and comprehensive care to those seeking relief from the burdens of anxiety. Given that much of the evidence-base for psychological therapies has been tested in the adult population, evidence of this quality is surprisingly limited in the child and adolescent sphere and has instead relied upon individual clinician adaptations according to development age and stage.

When considering psychological therapy for children or young people experiencing anxiety, clinicians should:

- consider the developmental age and stage of the child
- include caregivers in therapy where and when appropriate
- consider the feasibility of the child or young person and their family's capacity to participate in the full course of sessions of psychological therapy
- consider alternatives if wait lists mean lengthy delays to accessing care
- consider alternatives if cost of therapy is a barrier to access for a child or young person and their family
- ensure they have appropriate training and experience before using specific therapies for a course of treatment, eg play therapy

Number	Туре	Recommendation
5.1	EBR	Cognitive behavioural therapy (CBT) should be used to improve daily functioning of children and young people aged 8-18 with an anxiety disorder. It should also be used to target the remission of an anxiety diagnosis.
5.2	EBR	Parent-only CBT could be used to reduce anxiety symptoms and improve daily function of children and young people with anxiety.
5.3	EBR	Group-CBT could be used for children and young people aged 8-18 years.
5.3.1	CCR	Contraindications to Group-CBT might include social anxiety as primary presentation and other social/emotional factors that may inhibit treatment benefit and fit with the group dynamic.
5.3.2	CCR	Play-based approaches should be used to assist the child or young person to explore cognitive and behavioural concepts where developmentally appropriate.

## **Recommendations**

5.4	EBR	<ul> <li>Evidence-informed internet CBT (CBT using online/app based programs) could be used for children and young people with anxiety.</li> <li>Examples of online programs are below: <ul> <li>The University of Queensland's <u>BRAVE Program</u> for the prevention and treatment of anxiety in young people</li> <li>Macquarie University's <u>Cool Kids Anxiety Program</u> aimed at teaching children, young people and families how to better manage anxiety</li> </ul> </li> </ul>
5.4.1	СРР	Internet CBT can be used as an alternative to face to face treatment where appropriate, or an adjunct to work in session (eg for homework).
5.4.2	CCR	The treating clinician should assess whether online/app-based programs should be undertaken individually or with assistance depending on age/ developmental stage, individual preferences of the young person and their ability to concentrate alone. Caregivers and/or therapists may be appropriate to assist individual learning.
5.5	EBR	Clinicians delivering cognitive behavioural interventions to children and young people should consider the age and developmental abilities of the child or young person, including their capacity to self-reflect, their learning abilities and preferences, their theory of mind and their attention and concentration abilities, and should adjust choice of therapy or delivery of cognitive behavioural components appropriately.
5.6	CCR	In cases where a child or young person aged 8-18 years is already receiving medication for their anxiety (or related mental health condition), CBT should be used in conjunction with medication to reduce anxiety symptoms.
5.7	CCR	Acceptance and Commitment Therapy (ACT) could be used for children and young people aged 12-18.
5.7.1	СРР	ACT could be helpful for children and young people with co-occurring chronic health conditions.
5.8	CCR	CBT should be a first intervention for children under 12 years, however where they have found it difficult to engage in cognitive behavioural therapy, play-based approaches using cognitive behavioural concepts could be considered.
5.9	CCR	Play-based approaches using cognitive behavioural concepts could be considered for treatment of anxiety diagnosis in children and young people aged 8 and under.

5.10	СРР	Families should be closely involved at all stages of treatment to ensure that they understand the treatment approach and can continue to support the child or young person outside of the therapy room. This may mean that caregivers are always present in session, or it may be a combination of caregiver-only sessions, caregiver-child sessions, and child-only sessions. In most instances, completely excluding caregivers from therapy is not developmentally appropriate, however considering the child/adolescent's engagement and preferences is vital.

## **Supporting evidence**

Evidence review was conducted for the following questions:

- what is the clinical effectiveness of psychological therapy for anxiety in children and young people?
- what is the clinical effectiveness of individual and group psychological therapy for anxiety in children and young people?
- are there any indications or contraindications for specific psychological therapies for specific types of anxiety?

Three systematic reviews and randomised control trials (RCTs) published after the systematic review's search dates were adopted. Detailed methods, results and analysis for each evidence review can be found in the Technical Evidence Report.

## **Cognitive behavioural therapy (CBT)**

#### **Evidence review summary**

A Cochrane systematic review (highest level of evidence) by James et al 2020 [16] reported meta-analyses of RCTs that addressed the effect of CBT in comparison with waitlist/no treatment, treatment as usual, or attention control. The search identified RCTs from multiple databases published up to October 2019; and 87 studies with 5,964 young people under 19 years of age with an anxiety diagnosis were included. Relevant analysis included sample sizes ranging from 12 to 206 participants with social anxiety disorder, specific phobia, separation anxiety disorder, generalised anxiety disorder, and/or panic disorder with/without agoraphobia.

CBT is defined by James 2020 as "...administered according to standard principles as a psychological model of treatment involving helping the child to recognise anxious feelings and somatic reactions to anxiety; identify cognitions in anxiety-provoking situations; modify these anxiety-provoking cognitions; and respond to behavioural training strategies with exposure in vivo or by imagination."

Meta-analyses demonstrated that CBT was better than waitlist/no treatment for remission of primary anxiety diagnosis [moderate certainty], remission of all anxiety diagnoses [moderate certainty], anxiety symptoms (child report and parent report) [low certainty], depressive symptoms [moderate certainty] and global functioning [low certainty]; but there was no statistically significant difference for acceptability, reported as lost to follow up [low certainty].

There was no statistically significant difference between CBT and treatment as usual for primary anxiety disorder remission [low certainty], acceptability [low certainty], or anxiety symptoms (child report and parent report) [low certainty]; but CBT was better than treatment as usual for remission from all anxiety disorders [low certainty]. There was insufficient data for depressive symptoms or global functioning.

Recent RCTs comparing various forms of CBT reported varying results. There was no statistically significant difference in anxiety symptoms between CBT and targeted behavioural therapy (sleep and anxiety) in 20 6-12-year-old participants with generalised anxiety disorder for 16 weeks [17].

## Cognitive behavioural therapy (CBT) formats

A comprehensive systematic review (highest level of evidence) by Zhou et al 2019 [18] reported network meta-analyses of RCTs to compare and rank the effect of various formats of CBT. The search identified RCTs from multiple databases published up to November 2017, and 101 studies with 6,625 young people with a mean age of 10.8 (3.0) years with an anxiety diagnosis were included. Relevant analysis included sample sizes ranging from 11 to 267 participants (median 54) with social anxiety disorder, specific phobia, separation anxiety disorder, generalised anxiety disorder, and/or panic disorder with/without agoraphobia. Duration of treatment ranged from 6-32 weeks (median 12).

CBT is defined by Zhou 2019 as "... a combination of BT and CT [cognitive therapy]. It therefore should include cognitive restructuring. Additional CBT skill-building techniques are used in many programs by teaching relaxation techniques to cope with environmental stressors, providing social skills and resolution training, and teaching general problem solving."

#### Group CBT (G-CBT)

For anxiety symptoms, the network meta-analyses demonstrated that G-CBT was better than placebo [low certainty]; and was better than individual CBT (I-CBT), group CBT with parent involvement (G/P-CBT), individual CBT with parent involvement (I/P-CBT), parent-only CBT (P-CBT), bibliography CBT (BiB-CBT), internet CBT (Int-CBT/iCBT), treatment as usual, no treatment, and waitlist. There was no statistically significant difference between G-CBT and group BT (G-BT), individual BT with parent involvement (I/P-BT), individual and group BT (I/G-BT), and individual and group CBT (I/G-CBT) for anxiety symptoms. For acceptability, reported as all cause discontinuation, G-CBT was better than BiB-CBT; but there was no statistically significant difference between G-CBT and all other interventions or controls. For quality of life and functional improvement, G-CBT was better than placebo and waitlist; but there was no statistically significant difference for diagnosis remission, anxiety symptoms or functional impairment between G-CBT and I/P-CBT in 183 7-16-year-old participants with different types of anxiety for 12-14 weeks [19].

#### Group CBT with parent involvement (G/P-CBT)

For anxiety symptoms, there was no statistically significant difference between G/P-CBT and placebo [very low certainty]. G/P-CBT was better than waitlist but there was no statistically significant difference between G/P-CBT and all other interventions and controls for anxiety symptoms. For acceptability, reported as all cause discontinuation, G/P-CBT was better than BiB-CBT; but there was no statistically significant difference between G/P-CBT and all other interventions or controls.

For quality of life and functional improvement, G/P-CBT was better than placebo and waitlist; but there was no statistically significant difference between G/P-CBT and all other interventions or controls. In a recent RCT, there was no statistically significant difference in diagnosis remission, treatment response or anxiety symptoms between child-focused CBT and mother-child-focused CBT in 142 7-12-year-old participants with different types of anxiety for 8-10 weeks [20].

#### Individual CBT (I-CBT)

For anxiety symptoms, there was no statistically significant difference between I-CBT and placebo [very low certainty]. I-CBT was better than waitlist but there was no statistically significant difference between I-CBT and all other interventions and controls for anxiety symptoms. For acceptability, reported as all cause discontinuation, I-CBT was better than BiB-CBT; but there was no statistically significant difference between I-CBT and all other interventions or controls. For quality of life and functional improvement, I-CBT was better than placebo and waitlist; but there was no statistically significant difference between I-CBT and all other interventions or controls.

#### Individual CBT with parent involvement (I/P-CBT)

For anxiety symptoms, there was no statistically significant difference between I/P-CBT and placebo [low certainty]. I/P-CBT was better than waitlist but there was no statistically significant difference between I/P-CBT and all other interventions and controls for anxiety symptoms. For acceptability, reported as all cause discontinuation, there was no statistically significant difference between I/P-CBT and all other interventions or controls. For quality of life and functional improvement, I/P-CBT was better than placebo and waitlist; but there was no statistically significant difference between I/P-CBT and all other interventions or controls.

#### Parent-only CBT (P-CBT)

For anxiety symptoms, there was no statistically significant difference between P-CBT and placebo [low certainty]. P-CBT was better than waitlist but there was no statistically significant difference between P-CBT and all other interventions and controls for anxiety symptoms. For acceptability, reported as all cause discontinuation, there was no statistically significant difference between P-CBT and all other interventions or controls. For quality of life and functional improvement, P-CBT was better than treatment as usual, placebo and waitlist; but there was no statistically significant difference between P-CBT and all other interventions or controls. In a recent RCT, 8 weeks of Triple P-parent-focused CBT was better than waitlist in 55 parents of 8-12-year-old participants with different types of anxiety for anxiety symptoms and global functioning [21].

#### Individual and group CBT (I/G-CBT)

For anxiety symptoms, there was no statistically significant difference between I/G-CBT and placebo [low certainty] or any other intervention or control. For acceptability and for quality of life and functional improvement, there was no statistically significant difference between I/G-CBT and any other intervention or control.

#### Bibliography CBT (BiB-CBT)

For anxiety symptoms, there was no statistically significant difference between BiB-CBT and placebo [low certainty]. BiB-CBT was better than waitlist but there was no statistically significant difference between BiB-CBT and all other interventions and controls for anxiety symptoms. For acceptability and for quality of life and functional improvement, there was no statistically significant difference between BiB-CBT and any other intervention or control.

#### Internet CBT (Int-CBT/iCBT)

For anxiety symptoms, there was no statistically significant difference between iCBT and placebo [very low certainty]. iCBT was better than waitlist for anxiety symptoms but there was no statistically significant difference between iCBT and all other interventions and controls. In a recent RCT, iCBT was better than waitlist for diagnostic remission in 91 12-17-year-old participants with different types of anxiety for 8 weeks [22]. In another two recent RCTs, there was no statistically significant difference in anxiety symptoms or global functioning between iCBT and internet-delivered supportive therapy (iSUPPORT) in 103 10-17-year-old participants with social anxiety disorder for 10 weeks [23]; nor for diagnostic severity, anxiety symptoms, life interference, wellbeing or self-efficacy when iCBT was compared with waitlist in 70 13-17-year-old participants with different types of anxiety for 14 weeks [24]. For acceptability, reported as all cause discontinuation, there was no statistically significant difference between iCBT and all other interventions or controls. For quality of life and functional improvement, iCBT was better than placebo and waitlist; but there was no statistically significant difference between iCBT and all other interventions or controls.

#### Technology-delivered CBT (tCBT)

A systematic review (highest level of evidence) by Cervin and Lundgren 2022 [25] reported meta-analyses of RCTs assessing the effect of technology-delivered CBT in participants <18 years of age with an anxiety diagnosis. The search identified RCTs from multiple databases published up to January 2022, and 9 studies with 711 participants were included. Relevant analysis included sample sizes ranging from 32 to 131 participants with social anxiety disorder, specific phobia, separation anxiety disorder, generalised anxiety disorder, and/or panic disorder with/without agoraphobia. tCBT is defined by Cervin 2022 as "CBT delivered predominantly via internet/app/cell phone/tablet/computer". Meta-analyses demonstrated that tCBT was better than control (waitlist/treatment as usual/placebo) for primary anxiety disorder [moderate certainty] and remission for all anxiety disorders [moderate certainty] but there was no statistically significant difference for youth-reported anxiety [low certainty], caregiver-reported anxiety [low certainty] or clinician-rated functioning [low certainty].

#### **Exposure-focused CBT**

Two recent RCTs assessed exposure-focused CBT. One RCT assessed a SAD-specific exposurebased CBT intervention for 16 weeks in 67 9-13-year-old participants with SAD and reported no difference when compared to waitlist [26]; the second RCT for 12 weeks in 102 8-15-year-old participants with different types of anxiety reported a benefit over relaxation-based control for anxiety symptoms [27].

### **Clinical context**

CBT in its various forms has demonstrated significant efficacy in treating anxiety disorders in children and young people. It helps them identify and challenge irrational thoughts, learn coping skills, and gradually confront feared situations through exposure techniques.

### Implementation notes

When offering evidence-based therapy to children and young people with anxiety, therapists should consider the following recommendations:

- Start with Individual CBT: given evidence supporting individual CBT's effectiveness, particularly for improvement of function and quality of life, it is recommended as a starting point. Individual sessions allow for personalised interventions and a strong therapeutic alliance, which is crucial for anxiety treatment. It can also be less intimidating for a child with anxiety to attend individually over groups.
- Tailoring of interventions will be based on a thorough assessment to understand the child's specific anxiety triggers, symptoms, and severity, as well as engagement preferences (eg play-based therapy or technology-based components).
- CoGroup CBT can be a valuable option as it can provide a shared learning experience with peers that allows for modelling and support. For social anxiety it can provide exposure to social situations, which whilst anxiety-provoking may provide an opportunity to experientially practice CBT skills. Evidence suggests that Group CBT may be more effective than other types of therapy for the treatment of anxiety symptoms, however, may not improve quality of life and function better than other types of therapies.
- It is helpful to incorporate caregiver-focused interventions, especially for younger children, with evidence suggesting that teaching caregivers strategies to support their child's anxiety management can enhance treatment outcomes. Evidence suggests involving caregivers in Group CBT improves function and quality of life.
- Computerised CBT can be considered for individuals who prefer a more independent learning approach or struggle to engage with therapy. It can also serve as a supplement to in-person therapy, as an engagement tool in session, or as a homework exercise. Evidence appears to support using Internet-based CBT to reduce anxiety symptoms and improve function and quality of life, however it is no better than other types of CBT so it should be chosen based on individual engagement factors or practical considerations.
- It is important to note here, that a 2014 review concluded that CBT is not necessarily the most effective form of treatment for young people, but the only one that has been researched enough to provide evidence to support its use [28].

## **Behavioural therapy (BT)**

#### **Evidence review summary**

BT is defined by Zhou 2019 as using "...some kind of behavioural training and psychoeducation. BT programs provide parents and youths information about the condition and interventions; teach youths to monitor their mood, thoughts, and behaviours; proposed pleasant activity scheduling and behavioural activation. It should not include cognitive restructuring."

#### Group BT (G-BT)

For anxiety symptoms, there was no statistically significant difference between G-BT and placebo [low certainty]. G-BT was better than waitlist but there was no statistically significant difference between G-BT and all other interventions and controls for anxiety symptoms. For acceptability, reported as all cause discontinuation, there was no statistically significant difference between G-BT and all other interventions or controls. No evidence was identified for quality of life and functional improvement.

#### Individual and group BT (I/G-BT)

For anxiety symptoms, there was no statistically significant difference between I/G-BT and placebo [very low certainty]. There was no statistically significant difference between I/G-BT and any other intervention or control for anxiety symptoms, acceptability and for quality of life and functional improvement.

#### Individual BT with parent involvement (I/P-BT)

For anxiety symptoms, there was no statistically significant difference between I/P-BT and placebo [very low certainty]. I/P-BT was better than waitlist but there was no statistically significant difference between I/P-BT and all other interventions and controls for anxiety symptoms. For acceptability, reported as all cause discontinuation, there was no statistically significant difference between I/P-BT and all other interventions or controls. No evidence was identified for quality of life and functional improvement.

#### **Clinical context**

BT focuses on modifying behaviour through reinforcement and conditioning techniques and can be an effective anxiety intervention. This approach involves exposure therapy, systematic desensitisation, and other behaviour-focused interventions. Exposure Therapy gradually exposes individuals to anxiety-provoking situations in a controlled and safe manner, allowing anxiety responses to decrease over time through repeated exposure. Systematic desensitisation involves pairing relaxation techniques with gradually increasing exposure to anxiety triggers.

The evidence suggests that whilst BT delivered either as a group or individually (with parent support) is better than waitlist at improving symptoms of anxiety, it is no better than any other effective intervention and provides no improvement in quality of life or functioning.

### Implementation notes

When offering evidence-based BT to children and young people with anxiety, therapists should consider:

- Exposure therapy can be administered individually or in group settings depending on comfort level and the nature of their anxiety. Group exposure therapy provides peer support and normalisation allowing for modelling of bravery and mastery experiences. For more severe cases specific adaptations may be needed for therapy to be successful in these cases individual input may be preferable. Similarly, children with neurodiversity or learning issues may benefit from individual adaptations to their learning style.
- Start with exposure therapy: given the evidence supporting its effectiveness, exposure therapy is recommended as a starting point for behavioural therapy. Including caregivers in the therapy process may enhance its effectiveness as they can learn how to support exposure exercises at home and create a supportive environment that does not unintentionally reinforce the anxiety.

## **Ranking of CBT and BT interventions**

#### **Evidence review summary**

Additionally, Zhou 2019 statistically ranked interventions from the network meta-analyses to suggest which are more effective than other interventions. The detailed table of ranks for mean overall change in anxiety symptoms, all cause discontinuation, and mean overall change in quality of life and functional improvement can be found in the Medication section of the Technical Evidence Report.

## Acceptance and commitment therapy (ACT)

#### Narative review summary

In the systematic review, no articles met the selection criteria to assess the effectiveness of this intervention in children and young people with anxiety. ACT is an emerging therapeutic model and the evidence-base for ACT with children and young people continues to develop, with studies suggesting reductions in anxiety symptoms, increases in psychological flexibility and improvement in quality of life and daily function. While research in broad population groups demonstrates that ACT improves psychological flexibility, the relationship between this concept and mental health and wellbeing is yet to be clearly demonstrated [29]. Despite this, there is one study which found that psychological flexibility mediated anxiety and that increased flexibility was associated with decreased anxiety [30]. ACT is an emerging therapy using a (third wave) cognitive behavioural approach that includes acceptance and mindfulness strategies, together with identification of values and commitment to value-based living.

Hayes et al. state that ACT focuses on helping individuals develop psychological flexibility by learning to accept their thoughts and feelings, commit to values-based actions, and stay present in the moment [31]. ACT encourages individuals to let go of attempts to control or eliminate uncomfortable thoughts and emotions, and instead, work on aligning their actions with their core values. ACT therefore approaches anxiety reduction indirectly by promoting a healthier relationship with the natural experience of anxious thoughts and feelings and reducing the impact of these on quality of life and functioning.

A systematic review of 14 randomised controlled trials reported that ACT significantly improved symptoms of anxiety and depression in children when compared to usual treatment/waitlist controls [32]. Another Australian randomised control trial suggests that ACT is as effective as CBT in improving anxiety symptoms, with larger effect sizes for improvements in quality of life [33]. It also noted that ACT was designed as a transdiagnostic approach, so targets mental health and wellbeing with a wider lens than anxiety in isolation.

ACT could also be particularly beneficial for children with chronic medical conditions, with one meta-analysis suggesting that ACT improves symptoms of avoidance and fusion behaviour, anxiety, behaviour, and interpersonal problems, all of which may affect anxiety [34]. The full ACT narrative review can be read in the Technical Evidence Report.

### **Implementation notes**

- ACT has potential advantages for use with children and adolescents for example its experiential focus and use of metaphors may engage younger children better than more didactic forms of therapy. Similarly, the less instructive approach may appeal to adolescents. The emphasis on values may be pertinent for adolescents due to the exploratory nature of abstract thinking during this developmental period.
- ACT can be particularly well suited to children and adolescents living with chronic health conditions experiencing anxiety as their overwhelming feelings and challenges are likely a reflection of reality rather than a cognitive distortion.
- ACT, as with all therapies, should be conducted by clinicians trained and experienced in administering it.

## **Psychoeducation**

#### Narrative review summary

Psychoeducation is a foundation for building the child's understanding of anxiety and its management and should be a key component in all stages of treatment. It sets the stage for subsequent therapeutic interventions and empowers them with knowledge to navigate their anxiety more effectively. In some instances, psychoeducation can be an intervention in and of itself.

No articles met the selection criteria to assess the effectiveness of this intervention in children and young people with anxiety, however psychoeducation is often incorporated as a core component of any psychological therapy, including CBT, BT, ACT and EMDR. It is likely that much of the evidence for psychoeducation is therefore incorporated within studies examining therapeutic interventions more wholly. There is evidence for the benefits of psychoeducation for a different range of mental health conditions and settings. A systematic review of 20 studies about the effectiveness of brief psychoeducation (programmes of 10 sessions or less) in people with severe mental illness found that it appeared to reduce relapse, promote medication compliance, and improve mental state and social functioning (noting low to very low-quality evidence) [35]. Psychoeducation is not only aimed at educating and providing technical information about the condition to the patient, their family, and caregivers; it is also a critical, ongoing component of the care pathway [36]. Using a structured approach, whether designed for the individual, family or group setting, psychoeducation can include: goal setting; information sharing about the disorder and mental health and wellbeing in general, early warning signs and relapse prevention; and practical skills training in coping, communication, and problem solving [37]. Orygen promotes that "using psychoeducation to provide young people (and their families) with information on their mental illness helps them feel more engaged, reduces stigma, and empowers them in a situation where they are likely to feel helpless" [38]. Psychoeducation can also reduce the consumption of potentially harmful misinformation that may be more visible for service users, caregivers and support people seeking education, whether through forums, social media, or other non-evidence information sources. For a detailed list of considerations when engaging in psychoeducation, please see the Psychoeducation narrative review in the Technical Evidence Report.

## **Family therapy**

## Narrative review summary

No articles met the selection criteria to assess the effectiveness of this intervention in children and young people with anxiety to the level required for review. One randomised controlled trial compared emotional socialisation training (EST n=17), family accommodation modification (FAM n=16), a combination of both emotional socialisation and family accommodation modification (n=17), and waitlist control (n=16) in mothers of children with an anxiety disorder [39]. The results were not accompanied by values of statistical significance, however the authors concluded that the emotional socialisation training, family accommodation modification, and combined groups were more effective than waitlist control in improving emotion regulation and reducing anxiety severity; and that children in the combined group showed greater reductions in the severity of anxiety symptoms and emotion dysregulation than emotional socialisation training or family accommodation modification. Another randomised controlled trial compared 12 face-to-face weekly therapy sessions lasing 45-55 minutes of family-based exposure-focused treatment (FET n=14) to treatment as usual (TAU n=18) control in children and young people aged 6-17 years with anxiety and autism spectrum disorder [40]. The results were not accompanied by values of statistical significance for outcome data at post intervention, however the authors concluded that the results strongly supported FET with a 79 per cent (v 0 per cent treatment as usual) response rate, 86 per cent (v 0 per cent treatment as usual) remission in primary anxiety diagnosis, and large between-group effects on clinicianrated anxiety severity and most parent-rated domains of anxiety-related impairment.

Family therapy is a therapeutic approach that focuses on treating psychological and emotional issues within the context of the family unit. It views the family as a complex system with interconnected relationships, and aims to improve communication, understanding, and collaboration among family members. It seeks to create positive changes in family interactions and functioning to promote the wellbeing of all family members [41].

Family therapy can be a particularly useful approach for intervention when working with children and young people with anxiety. Anxiety disorders can often be partially caused and maintained by the environment in which they live and the context in which they grew up, and a child with anxiety in turn can have a significant effect on the family system that they reside in. Addressing the family dynamics and improving family communication can help support the young person with anxiety to thrive.

The Australian Institute of Family Studies recognise the value of incorporating family-inclusive approaches when working with young people accessing mental health support; and note the following evidence-informed key principles [42]:

- Whole-of-family context: understanding family context and relationships is essential to supporting a young person's mental health needs.
- **Strengths-based perspective:** practitioners recognise that young people and their families have, and can develop, skills to support their mental health needs and recovery.
- **Families can provide support:** family members are often a young persons' closest social relationship. Young people can receive effective support through their family members.
- **Communication and collaboration:** regardless of the level of direct family involvement with the approach, communication between practitioners, children, young people, and their families should be collaborative and respectful.
- All families are unique: the culture and language traditions of each family should be respected and diversity across and within families should be appreciated.

#### Implementation notes

- Integrating family therapy with other evidence-based interventions, such as CBT or medication, can enhance treatment outcomes for anxiety.
- While family therapy can be effective, it's important to note that not all individuals with anxiety may require or benefit from family-focused interventions. The suitability of family therapy depends on factors such as the nature of the anxiety, the family's dynamics, and the preferences of the individuals involved.

## **Play-based approaches**

#### Narrative review summary

Play-based approaches using cognitive behavioural concepts, including play therapy, are developmentally sensitive therapeutic approaches which includes a broad range of processes, from non-directive approaches, such as child-centred play therapy through to more directive approaches, such as cognitive behavioural play therapy. One RCT met the selection criteria to assess the effectiveness of this intervention in children and young people with anxiety [43] however this was insufficient evidence on which to make an evidence-based recommendation. Play-based approaches have been found to be effective for children with a range of externalising and internalising challenges (not directly related to an anxiety diagnosis) [44-46]. It can allow for symbolic expression of emotions and events, through verbal or non-verbal stories. Children can learn to regulate their emotions through creative play, which can later translate to real life situations, and they can experience mastery and control through their play environment.

A full narrative review of play-based approaches, including play therapy narrative review can be read in the Technical Evidence Report.

### Implementation notes

• Play therapy should only be used where developmentally appropriate – for example, adolescents may not engage well with some play techniques but may benefit from role play or board games.

## **Other therapies**

In compiling this guideline, the GDG were asked to prioritise psychological therapies used for the management of anxiety regarding their inclusion in the guideline.

The above recommendations and accompanying evidence have summarised the state of evidence for psychological therapies that were rated as a high priority to address. Other therapies rated as less important ('moderate' priority) in this context were not included in the guideline systematic and narrative reviews. These include:

- counselling
- cognitive bias modification
- eye movement desensitisation and reprocessing
- exposure
- hypnosis
- interpersonal psychotherapy
- mindfulness training
- psychodynamic psychotherapy
- relaxation (for example, progressive muscle relaxation)
- self-help (facilitated and non-facilitated; CBT and other modalities)
- social skills training, support groups, supportive therapy
- art therapy
- music therapy

# Medication

As detailed in section three, Making initial treatment choices, while medication can be considered as a component of the treatment plan for children and young people with anxiety disorders it is not considered a first-line treatment except in exceptional circumstances.

When considering the use of medication, it is best initiated by a clinician with knowledge, training, and experience in prescribing psychotropic medications in children.



## **Recommendations**

Number	Туре	Recommendation
6.1	СРР	Prior to initiating a medication for anxiety clinicians should obtain informed consent from the legal guardian to prescribe medication to children and adolescents. The consent process should include a discussion regarding the rationale for the use of medications, the target symptoms, the effects, and improvements to be expected should the medication be effective in reducing the target symptoms, a discussion on the adverse effects.
		Information in plain language should be provided verbally and in writing. The older adolescent should additionally be seen on their own to discuss the medication and elicit their understanding of the information provided. Once the information is provided, time should be spent in eliciting the understanding of the caregivers and the child or young person about the information given and follow up questions should be responded to.
6.2	EBR	When initiating medication for anxiety for the first time, a selective serotonin reuptake inhibitor (SSRI) should be used/prescribed/offered.
6.2.1	СРР	<ul> <li>When initiating a SSRI for anxiety, the following should be considered:</li> <li>that the prescription is at the correct dose for the child or young person's age.</li> <li>the principle of 'start low and go slow' should be followed in most instances. The pharmacokinetics in children and young people differ to adults. Liver enzymes, which metabolise many medications peak during childhood which typically means that children have a higher clearance rate than adults. This typically reduces in adolescence. As some medications efficacy and side effects are attributed to the active metabolites, the higher rates of metabolism can result in increased effects.</li> </ul>
6.3	CCR	If prescribing an SSRI to children and young people, clinicians should start at a low dose within an appropriate range for age and developmental stage and titrate up stepwise whilst monitoring for adverse effects to reach an effective dose that is well tolerated.
6.4	СРР	If the anxiety disorder in the child or young person is comorbid with depression, attention deficit hyperactivity disorder, or obsessive compulsive disorder, the first-line medication for anxiety should still be an SSRI.

6.5	CPP	<ul> <li>When initiating medication, a comprehensive assessment should include:</li> <li>physical health/medical history</li> <li>other medicines the child or young person regularly takes including: <ul> <li>prescription medication that might interact with anxiety medications (see information on drug interactions)</li> <li>over the counter medication</li> <li>complementary medicines</li> <li>medicines available to purchase online</li> </ul> </li> <li>medical comorbidities - specialist advice may be required before starting medications in these groups</li> </ul>
6.6	СРР	<ul> <li>Clinicians should discuss the following with the child or young person and their caregivers:</li> <li>if medication is added to the treatment plan and does not help/ causes adverse side effects, it can be stopped, and other options considered</li> <li>the potential side effects of available medication options</li> <li>methods for safe medication storage and disposal</li> <li>whether a child or young person prefers tablets, capsules, or liquids – noting that not all tablets can be crushed or evenly dispensed in water</li> <li>medication formulations need to be considered for suitability. For example, those with feeding tubes require specialist consideration as they may by-pass the site of absorption or contain excipients that increase the incidence of adverse effects.</li> </ul>
6.7	СРР	<ul> <li>When a medication is commenced, there should be regular monitoring of treatment response, adverse effects, and adherence: <ul> <li>a dosage increase would be considered if the current medication is well tolerated and there has been some, but limited effectiveness of medication evident through lack of symptom reduction or outcome measure responses</li> <li>a dose decrease/medication cessation would be considered if there are side effects that are not tolerated by the child or young person</li> <li>medication has been tried at an appropriate dose for a reasonable time (eg eight weeks) and is ineffective despite being well tolerated</li> <li>dose adjustment should be considered if there are other medical conditions and drug interactions, especially on commencement of new treatment. For example, if certain drug x drug interactions inhibit metabolism of specific drug.</li> </ul> </li> </ul>
6.8	EBR	The most common adverse effects of SSRIs include nausea, vomiting, loss of appetite, dry mouth, agitation, insomnia (or sometimes sedation), headaches, dizziness, sweating and sexual dysfunction. When initiating an SSRI, anxiety symptoms can worsen before improving.

6.9	CCR	Clinicians should be cautious when prescribing SSRIs for children and young people to avoid activation syndrome.
6.10	CCR	SSRIs are known to have discontinuation symptoms. To minimise these symptoms, these should be gradually reduced then discontinued.
6.11	СРР	If there are concerns about medication adherence and the consequent risk of sudden withdrawal related adverse effects including the discontinuation syndrome, the prescriber is advised to consider SSRIs with longer half-lives or those deemed to be at lower risk of discontinuation syndrome. For children and young people fluoxetine would be the best example.
6.12	CCR	When considering changes in medication/pharmacological treatment for a child or young person who has been taking SSRIs, the first change to consider is to another SSRI.
6.12.1	СРР	<ul> <li>When considering changes in medication/pharmacological treatment the following issues should be considered: <ul> <li>reconsider the availability and appropriateness of CBT and the quality of previous engagement in CBT</li> <li>are there any clear reasons for lack of treatment response?</li> <li>have choices of previous medication been appropriate and has medication been trialled at an adequate dose for an adequate duration?</li> <li>was previous medication adhered to, if not why?</li> </ul> </li> </ul>
6.13	EBR	<ul> <li>SNRIs could be used/prescribed/offered to children and young people if any of the following apply:</li> <li>multiple SSRIs are not tolerated</li> <li>symptoms have not responded to current treatment or treatment with at least two SSRIs.</li> </ul>
6.13.1	CCR	<ul> <li>When considering changing to an SNRI the following issues should be considered:</li> <li>consider safety data and known adverse effects when choosing the SNRI. The three SNRIs generally considered for use in the 6-18 years populations are duloxetine, venlafaxine and desvenlafaxine.</li> <li>duloxetine may be associated with hepatic failure.</li> <li>compared with the other SNRIs, venlafaxine is associated with increased suicidal thinking.</li> <li>there is inadequate safety data for desvenlafaxine in the children and young people age population [2].</li> </ul> Note: Desvenlafaxine is an active metabolite of venlafaxine.

6.14	СРР	Clinicians could cautiously consider the short-term use of short acting benzodiazepines to assist in the management of an <b>acute crisis in high-risk settings</b> (such as in an emergency department or inpatient unit).
6.14.1	EBR	It is not appropriate to provide an ongoing script or repeats for benzodiazepines in management of anxiety.
6.14.2	СРР	A script for a small quantity of short acting/short-term benzodiazepines (enough for three doses) may be supplied to families to assist in bridging the time between discharge from an emergency department and initiating crisis care with a mental health professional.
6.15	СРР	Anti-psychotic medications, and other medications including alpha-2 agonists (clonidine and guanfacine), atomoxetine, reboxetine and tricyclic antidepressants are not recommended for the treatment of anxiety disorders in isolation in children and young people aged 0-18.

## Drugs that may contribute to serotonin toxicity

Class	Drugs
Antidespressants	Citalopram, clomipramine, desvenlafaxine, duloxetine, escitalopram, fluoxetine, fluvoxamine, imipramine, moclobemide, paroxetine, phenelzine, sertraline, St John's wort, tranylcypromine, venlafaxine, vortioxetine.
Opioids*	Dextromethorphan, fentanyl, pethidine, tramadol.
Other	Dapoxetine, illicit drugs (eg 'ecstasy' (MDMA), hallucinogenic amphetamines, LSD), linezolid, lithium, methylene blue, phentermine, tryptophan.

\*See also therapeutic guidelines on opioid and antidepressants and which combinations to avoid.

Ref: Australian Medicines Handbook, Adverse effects of antidepressants. 2023.[47]

## **Supporting evidence**

Evidence review was conducted for the following questions:

- what is the clinical effectiveness of pharmacological therapy for anxiety in children and young people?
- are there any indications or contraindications for specific medications?

Three systematic reviews conducted network meta-analyses comparing up to seven medication classes to each other and are adopted here, along with one additional RCT published after the systematic review's search dates.

One of the systematic reviews ranked the medication classes to inform which of the medications are better than others, including placebo. Detailed methods, results and analysis for each evidence review can be found in the Technical Evidence Report.

#### Selective serotonin reuptake inhibitors (SSRIs)

There was statistically significant benefit of SSRIs when compared to placebo over 8-16 weeks for treatment response [low to moderate certainty], symptom improvement [low certainty], and remission [moderate certainty]. There was statistically significant harm of SSRIs when compared to placebo over 8-16 weeks for adverse event-related discontinuation, activation, sedation/drowsiness, abdominal pain, and headache [all outcomes low certainty]. There was no statistically significant difference between SSRIs and placebo over 8-16 weeks for all cause early discontinuation, suicidality, insomnia, nausea, and diarrhea [all outcomes low certainty].

No evidence was identified for acceptability [49-52].

#### **SSRI versus SNRI**

There was statistically significant benefit of SSRIs when compared to SNRIs over 8-16 weeks for treatment response [low certainty]. There was statistically significant benefit of SNRIs when compared to SSRIs over 8-16 weeks for adverse event-related discontinuation [low certainty]. There was no statistically significant difference between SSRIs and SNRIs over 8-16 weeks for symptom improvement, all cause early discontinuation, suicidality, activation, sedation/ drowsiness, abdominal pain, headache, and nausea [all outcomes low certainty]. No evidence was identified for acceptability or remission [49-51].

#### **SSRI versus TCA**

There was statistically significant benefit of SSRIs when compared to TCAs over 6-16 weeks for suicidality [low certainty]. There was no statistically significant difference between SSRIs and TCAs over 6-16 weeks for treatment response, symptom improvement, all cause early discontinuation, and adverse event-related discontinuation [all outcomes low certainty]. No evidence was identified for acceptability or remission [48].

#### SSRI versus benzodiazepine

There was no statistically significant difference between SSRIs and benzodiazepines over 3-16 weeks for treatment response, symptom improvement, all cause early discontinuation, and adverse event-related discontinuation, and suicidality [all outcomes low certainty]. No evidence was identified for acceptability or remission [48].

#### **SNRI versus TCA**

There was statistically significant benefit of SNRIs when compared to TCAs over 6-16 weeks for suicidality [low certainty]. There was no statistically significant difference between SNRIs and TCAs over 6-16 weeks for treatment response, symptom improvement, all cause early discontinuation, and adverse event-related discontinuation [all outcomes low certainty]. No evidence was identified for acceptability or remission [48].

#### Tricyclic antidepressants (TCAs)

There were no statistically significant benefits of TCAs when compared to placebo over 6-12 weeks. There was statistically significant harm of TCAs when compared to placebo over 6-12 weeks for suicidality [very low certainty]. There was no statistically significant difference between TCAs and placebo over 6-12 weeks for treatment response, symptom improvement, all cause early discontinuation and adverse event-related discontinuation [all outcomes low to very low certainty]. No evidence was identified for acceptability or remission [48].

#### TCA versus benzodiazepine

There was statistically significant benefit of TCAs when compared to benzodiazepines over 3-12 weeks for adverse event-related discontinuation [very low certainty]. There was no statistically significant difference between TCAs and benzodiazepines over 3-12 weeks for treatment response [low certainty], symptom improvement [very low certainty], all cause early discontinuation [low certainty], and suicidality [very low certainty]. No evidence was identified for acceptability or remission [48].

#### Benzodiazepine

There were no statistically significant benefits of benzodiazepines when compared to placebo over 3-8 weeks. There was statistically significant harm of benzodiazepines when compared to placebo over 3-8 weeks for adverse event-related discontinuation [low certainty]. There was no statistically significant difference between benzodiazepines and placebo over 3-8 weeks for treatment response, symptom improvement, all cause early discontinuation and suicidality [all outcomes low to very low certainty]. No evidence was identified for acceptability or remission [48].

#### **Ranking of medications**

Dobson 2019 [48] statistically ranked medications from the network meta-analyses to suggest which are more effective than other medications. The detailed table of ranks for treatment response, symptom improvement, all cause early discontinuation, and adverse event-related discontinuation (tolerability), and suicidality can be seen in the below.

Rank	Medication class		
Outcome: Effica	Outcome: Efficacy - treatment response		
1st	SSRI		
2nd	$\alpha_2$ agonist (not relevant to this evidence review)		
3rd	SNRI		
4th	TCA		
5th	Benzodiazepine		
6th	5-HT1A agonist (not relevant to this evidence review)		
7th	Placebo		
Outcome: Effica	acy - symptom improvement		
1st	SSRI		
2nd	$\alpha_2$ agonist (not relevant to this evidence review)		
3rd	SRNI		
4th	TCA		
5th	5-HT1A agonist (not relevant to this evidence review)		
6th	Benzodiazepine		
7th	Placebo		

#### **Medication ranking**

Outcome: Tolerability - all cause early discontinuation		
1st	SSRI	
2nd	Benzodiazepine	
3rd	Placebo	
4th	SNRI	
5th	ТСА	
6th	$\alpha_2$ agonist (not relevant to this evidence review) and 5-HT_{1A} agonist (not relevant to this evidence review)	
Outcome: Toler	ability - adverse event-related discontinuation	
1st	SNRI	
2nd	Placebo	
3rd	ТСА	
4th	SSRI	
5th	5-HT1A agonist (not relevant to this evidence review)	
6th	Benzodiazepine	
7th	$\alpha_2$ agonist (not relevant to this evidence review)	
Outcome: Suicio	dality	
1st	Placebo	
2nd	SNRI	
3rd	SSRI	
4th	5-HT1A agonist (not relevant to this evidence review)	
5th	Benzodiazepine	
6th	$\alpha_2$ agonist (not relevant to this evidence review)	
7th	ТСА	

## **Clinical context**

The evidence search undertaken using the guideline scope and agreed selection criteria for pharmacological therapies enabled evidence-based recommendations to be made for the use of some medications. Clinical Consensus Recommendations (CCR) and Clinical Practice Points (CPP) were made based on evidence rendered that could inform practice but did not meet the 'evidence-based' criteria. This was coupled with discussion from GDG members including experienced psychiatrists and paediatricians with some input from an experienced pharmacist, around practice experience and wisdom as well as expertise from Lived Experience Advisors.

In summary, the evidence does not support the use of medication as a first-line treatment for anxiety in children and adolescents. Where a consideration of medication for anxiety is indicated the evidence supports the use of SSRIs as the first-line medications for treating anxiety in children and young people. There was no evidence to support the use of one SSRI over another and the guideline does not therefore make recommendations on which medication should be preferred. Prescribers are recommended to familiarise themselves with two or three SSRIs with respect initial and target doses and adverse effect profiles. No SSRIs, or other medications, are currently licensed by the TGA for use in anxiety or depression in Australia. As fluoxetine and escitalopram are currently the only SSRIs with marketing authorisation in children and adolescents (by the Food and Drug Administration for the treatment of major depressive episodes in the USA) it would seem sensible for clinicians to consider including these in their options.

While caution is required and a policy of start low and increase gradually is advised, it is also important to go slow and titrate medications up as required monitoring both positive effects and tolerability. SSRIs take several weeks to become effective for anxiety and the benefits when seen often continue to increase over time (months). For this reason, it is important to ensure that, before deciding that a particular medication has not been effective, you have persisted for long enough at the maximum tolerated dose (around eight weeks is generally recommended).

Clinicians need to be aware of the potential for adverse effects including behavioural activation, discontinuation syndrome, and activation syndrome (ie increased activity, impulsivity, disinhibition, restlessness, irritability, and insomnia) when using SSRIs and adjust their psychoeducation and monitoring accordingly. Discontinuation syndrome is increased in those who do not take their medication regularly and those who have been taking their SSRI or SNRI for over eight weeks and those prescribed short half-life medications such as paroxetine and venlafaxine. Symptoms include flu-like symptoms (chills, myalgia, excessive sweating, headache, nausea), brain buzz – shock like sensations, dizziness exacerbated by movement, insomnia, excessive (vivid) dreaming, irritability, and crying spells.

Serotonin syndrome is a rare but serious condition that is one danger associated with the simultaneous administration of two antidepressants or an antidepressant and another medication (see Table 2). Symptoms include restlessness, diaphoresis, tremor, shivering, myoclonus, confusion, convulsions, and death. Most cases however are self-limiting. Recognising the possibility of serotonin syndrome and diligent supportive care are the mainstays of treatment. All patients with moderate or severe serotonergic symptoms should be admitted to hospital.

If there is no clinical response to the first SSRI, at a reasonable dose and after a reasonable time, or the medication is not tolerated, then the advice is to switch to a second SSRI which again should be titrated up as required and as tolerated. If there is no response to the second SSRI then either a third SSRI or an SNRI can be considered.

Benzodiazepines should only be considered for short-term in acute crisis in high-risk settings (such as in an emergency department or inpatient unit). Other medications including anti-psychotics, alpha-2 agonists (clonidine and guanfacine), atomoxetine, reboxetine and tricyclic antidepressants are not recommended for the treatment of anxiety disorders in children and young people.

## Implentation notes

Clinicians working with children and young people and their families and supporting medication initiation should consider:

- the cultural or ethnic background of a child or young person and any evidence around differences in metabolism of certain drugs
- potential side effects of certain medications

# Care review and monitoring progress



## **Recommendations**

Number	Туре	Recommendation
7.1	СРР	Clinicians should arrange regular and frequent follow-up until it is clinically no longer indicated.
7.2	CCR	Children and young people who are taking medication for anxiety should be encouraged to monitor and record their adverse effects. Caregiver support to undertake this is encouraged.
7.3	CCR	For both psychological and medication treatment, symptoms and adverse effects should be monitored using standardised rating scales throughout the course of treatment.
7.4	СРР	On medication initiation, and while establishing stability, it should be reviewed every two weeks. Once a stable medication dose has been established, it should be reviewed and discussed with the person with anxiety (and their caregivers) at least once every three months.
7.5	СРР	Children and young people with anxiety, and their caregivers, should be encouraged to discuss their preferences for their continuing treatment, both psychological and medication.
7.6	СРР	A trial period of ceasing treatment (psychological or medical) could be considered when the overall balance of benefits and harms indicates this may be appropriate.
7.7	СРР	Medications known to have discontinuation symptoms, such as SSRIs, should be gradually reduced then discontinued, to minimise these symptoms.

## **Supporting evidence**

#### Evidence review summary

Specific clinical questions were not addressed by evidence review for review and monitoring and Clinical Consensus Recommendations (CCRs) and Clinical Practice Points (CPPs) have been developed from discussion among the GDG, based on the evidence base for the effectiveness of psychological and pharmacological therapy summarised in above sections; and detailed methods, results and analysis for each evidence review can be found in the Technical Evidence Report.

## **Clinical context**

Ongoing monitoring of clinical response and adverse effects and adjustment of treatment based on these assessments is as important in mental health as it is in physical health. However, while it is often possible to use clinical tests (eg HbA1C for diabetes) or observational measures (height, weight, blood pressure) to monitor somatic disorders for mental health we need to rely on data from standardised rating scales. While these are often as accurate as physical measures they are not as widely used. While evidence is starting to support the effectiveness of measurement-based-care approaches in child and adolescent mental health further studies are required to identify how best to implement these approaches in day-to-day clinical practice. The guideline does however emphasise the importance of routinely measuring outcomes and this should be considered a routine part of clinical care.

#### Implementation notes

When planning, delivering, and reviewing care, special consideration should be given, and adjustments made where relevant when working with children, young people, and families:

- who identify as Aboriginal and Torres Strait Islander
- are from culturally and linguistically diverse backgrounds
- where the child or young person has cooccurring conditions/issues
- where there are any court orders in place or legal proceedings
- involved in the child protection system
- where the child or young person is in out of home care

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# APPENDIX I. Governance and guideline development groups

#### Guideline Development Clinical Leads

Professor Dave Coghill	Child and Adolescent Psychiatrist Financial Markets Foundation Chair of Developmental Mental Health, Department of Paediatrics - the University of Melbourne
Dr Alice Morgan	Clinical Psychologist, The Royal Children's Hospital Melbourne Acting Head of Psychology, The Royal Children's Hospital Melbourne
Dr Zeffie Poulakis	Clinical Psychologist, The Royal Children's Hospital Melbourne Research Officer, Murdoch Children's Research Institute Honorary Fellow, University of Melbourne

#### Consistent Quality Care Advisory Group

Associate Professor Gehan Roberts	Developmental Paediatrician, Associate Director, Centre for Community Child health, The Royal Children's Hospital Melbourne
Dr Ric Haslam	Director Mental Health, The Royal Children's Hospital Melbourne Hon Senior Lecturer, University of Melbourne
Bernadette O'Connor	Former Director of Allied Health, The Royal Children's Hospital Melbourne
Elise Gallagher	Nurse Coordinator, The Royal Children's Hospital Melbourne
Robyn Clark	Social Worker – Clinical Practice Development, The Royal Children's Hospital Melbourne
Dr Sophie Oldfield	Clinical Practice Guideline Fellow, The Royal Children's Hospital Melbourne Associate Lecturer, University of Melbourne
Kelle Reid	Lived Experience Advisor
Deanna DeCicco	Lived Experience Advisor
Karuna Santosa	Lived Experience Advisor
Lauren Collinson	Lived Experience Advisor
Professor Chidambaram Prakash	Principal Psychiatrist, The Royal Children's Hospital Melbourne
Associate Professor Mike Starr	Paediatrician, The Royal Children's Hospital Melbourne Honorary Associate Professor, University of Melbourne

### Guideline Development Group – Identification and Assessment

Dr Fiona Zandt	Senior Clinical Psychologist and Clinical Lead, The Royal Children's Hospital Melbourne Clinical Fellow, University of Melbourne
Dr Cate Rayner	Adolescent Medicine, The Royal Children's Hospital Melbourne
Caroline Keating	Developmental Psychologist, The Royal Children's Hospital Melbourne
Kelle Reid	Lived Experience Advisor
Cath Freney	Lived Experience Advisor
Dr Louise Crowe	Research Officer, Murdoch Children's Research Institute Psychologist - Psychology Service, The Royal Children's Hospital Melbourne
Dr Kieren Fahey	Paediatric Trainee, The Royal Children's Hospital Melbourne
Professor Amanda Wood	Psychologist, The Royal Children's Hospital Melbourne Senior Principal Research Fellow, Murdoch Children's Research Institute

### Guideline Development Group – Delivery of Care: Psychological Therapy

Dr Fiona Zandt	Senior Clinical Psychologist and Clinical Lead, The Royal Children's Hospital Melbourne Clinical Fellow, University of Melbourne
Carlie Alicastro	Senior Child Life Therapist, The Royal Children's Hospital Melbourne
Dr Louise Crowe	Research Officer, Murdoch Children's Research Institute Psychologist, Psychology Service, The Royal Children's Hospital Melbourne
Deanna DeCicco	Lived Experience Advisor
Alex Dalton	Lived Experience Advisor
Dr Catherine Olweny	Consultant Anaesthetist, The Royal Children's Hospital Melbourne
Dr Helen Kambouridis	Senior Psychologist, The Royal Children's Hospital Melbourne

### Guideline Development Group - Delivery of Care: Medication

Professor Chidambaram Prakash	Principal Psychiatrist, The Royal Children's Hospital Melbourne
Dr Cate Rayner	Adolescent Medicine, The Royal Children's Hospital Melbourne
Kelle Reid	Lived Experience Advisor
Deanna DeCicco	Lived Experience Advisor
Dr Kieren Fahey	Paediatric Traine, The Royal Children's Hospital Melbourne
Dr Sophie Oldfield	Clinical Practice Guideline Fellow, The Royal Children's Hospital Melbourne Associate Lecturer, University of Melbourne

### Guideline Development Technical and Project Management Team

Dr Marie Misso	Evidence Synthesis Lead and Guideline Methodologist
Fran Hardcastle	Senior Project Officer – Consistent, Quality Care, The Royal Children's Hospital Melbourne
Sydney Stevens	Senior Project Officer – Consistent, Quality Care, The Royal Children's Hospital Melbourne Research Associate, Murdoch Children's Research Institute
Melissa McKinlay	Research Assistant – Consistent Quality Care, Murdoch Children's Research Institute
Belinda Horton	Program Director, Murdoch Children's Research Institute

### **APPENDIX II. Methods**

This guideline was developed using evidence-based principles including systematic review methods and evidence to decision methods informed by the GRADE (Grading of Recommendations, Assessment, Development and Evaluation) approach [52].

### Governance

#### **Campus Mental Health Strategy**

The development of this evidence-based guideline occurred as a sub-project of the Consistent Quality Care key area of the Campus Mental Health Strategy, a partnership with The Royal Children's Hospital (RCH), Murdoch Children's Research Institute (MCRI), and The University of Melbourne's Department of Paediatrics. The Strategy is funded by the RCH Foundation and is governed by The Strategy Steering Committee, made up of Senior Leaders from the three partner organisations and the Program Direction.

#### Guideline development – Chair, advisory leads and advisory group

The guideline development process was supported by Clinical Advisory Leads, including the Chair of the GDG, all responsible for final decisions regarding recommendations and clinical practice points. This group was supported by the Clinical and Lived Experience expertise of the Consistent, Quality Care Advisory Group. See Appendix 1 for the details of the Chair, Advisory Leads and Advisory Group.

#### Project management and technical team

The Consistent Quality Care Guideline Development Project was supported by a Senior Project Officer, Research Assistant, and a guideline methodologist who led the evidence search and synthesis for the development of this guideline. See Appendix I for details of the project and technical team members.

### Multidisciplinary guideline development group members

Three multidisciplinary GDGs were convened for the three major components of the guideline: Identification and assessment; Psychological therapy; and Medication. Each GDG was comprised of members with lived and living experience, including those caring for children and young people with anxiety; health professionals working in psychology, psychiatry, paediatrics, nursing, clinical pharmacology, community care and health services, and researchers in relevant fields. See Appendix 1 for a list of GDG members and their affiliations.

Online workshops were held, where the methods of reviewing evidence and developing recommendations were detailed. Additionally, guideline development groups met frequently to discuss the evidence and draft recommendations, considering the implications of recommendation implementation.

#### **Conflict of interest**

Conflict of interest was managed by the co-chairs throughout the guideline development process. All members of the GDGs were required to provide declarations of interest as they arose throughout the process as outlined in the GDG Role and Responsibilities document which is available on request.

### Adapt, update, new

ADAPTE II methods were followed to identify existing current (with a search date within five years), high-quality, evidence-based guidelines. The intention was to adapt or update the evidence and/or recommendations of an existing evidence-based guideline current setting, where clinical questions, selection criteria and methods of evidence review were sufficiently similar.

### Methods to search for existing evidence-based guidelines

The evidence team undertook a systematic search for existing guidelines that address anxiety in children and young people (existing guideline search conducted in February 2022). To be eligible, the guideline must have a description of evidence-based guideline development method containing the following benchmark criteria:

- multidisciplinary working group
- evidence review methods with search strategy documented
- methodological quality/risk of bias assessment of included evidence

#### Phase 1: Searches of relevant guideline websites

Websites of national and international guideline clearinghouses, guideline developers, centres of evidence-based practice, government health services and websites of specific relevance known to contain evidence-based guidelines were searched.

15 websites and 355 potentially applicable guidelines were identified and reviewed, of which six were about anxiety in children and young people. None of these met the benchmark criteria to be adopted.

#### Phase 2: Internet searches to identify topic-specific websites

Additional websites of specific relevance were sought via an internet search using the Google 'Advanced Search' function with the following string:

(Anxiety AND (children OR young OR adolescent)) AND (professional OR association OR organisation OR college OR society OR academy OR peak) 28 results retrieved, of which nine websites were reviewed.

#### Phase 3: Topic-specific website searches to identify relevant evidence-based guidelines

Where an internal search engine was available, websites were searched. If no search engine was available, lists of guidelines, publications or other resources identified on the site were scanned for relevant documents. Of the nine websites identified in Phase 2, one guideline was identified, however it did not meet the benchmark criteria to be adopted.

#### Phase 4: Internet searches to identify relevant evidence-based guidelines

An internet search strategy was conducted to identify evidence-based guidelines using the Google 'Advanced Search' function with the following string limited to pages in English:

(Anxiety AND (children OR young OR adolescent)) AND (Guideline OR evidence) 30 results retrieved. The same US, NICE and Beyond Blue guidelines were identified here that were identified in the guideline website search at Phase 1. No new guidelines were identified here.

Of the guidelines identified but not able to be adopted, three completed evidence review searches within the previous five years. The most current of these guidelines (NICE 2018) covered the same content as the previous two, from Germany and USA, that at times referred to the NICE guideline.

The evidence team compiled and consolidated the questions addressed by the three guidelines to inform the steps to identify and prioritise the key areas of interest and clinical questions for the current evidence-based guideline for anxiety in children and young people.

### Key areas of interest

Based on the three evidence-based guidelines identified above, the Advisory Group decided on the following key areas of interest:

- access to services and principles of care
- care planning and delivery
- identification and assessment
- what works for treating anxiety: psychological therapy
- what works for treating anxiety: medication
- what works for treating anxiety: combination of psychological therapy and medication or other

### **Clinical question: development and prioritisation**

Based on the key areas of interest, table 1 lists the clinical questions that were drafted and finalised by the GDGs in consultation with the clinical advisory leads. The questions were prioritised by the GDG. Using an adapted GRADE approach, GDG members were asked to rank each question 1-9, where 9 is the highest priority.

1	2	3	4	5	6	7	8	9
_						-		

	LOW PRIORITY	MODERATE PRIORITY	HIGH PRIORITY
	Of limited importance	Important	Of critical importance
(	may not be addressed in the	(likely to be addressed in the	(will be addressed in the
	guideline if time does not	guideline whether narrative or	guideline).
	permit).	evidence review).	

Adapted from GRADE [52].

## Table 1 Clinical questions: priority and whether they were addressed by evidence review or narrative review.

		Priority
Access to services and principles of care		
What methods are effective for improving uptake of and engagement with services for those requiring support for anxiety?	Narrative	Mod
How can communication between those requiring support for anxiety and support providers be optimised?	Narrative	Mod
Which health professionals and services should be involved in supporting children and young people with anxiety and their parents, caregivers, community?	Narrative	Mod
Care planning and delivery		
What steps should be followed when planning care for anxiety in in infants, children, and young people?	Narrative	High
Which health professionals and services should be involved in care of children and young people with anxiety (is it different for psych therapy versus medication?)	Narrative	High
What is the best way of involving parents in the treatment of children and young people (at different stages of development) with anxiety?	Narrative	High
How should the recommended treatments for anxiety be delivered to those with anxiety and their parents, caregivers, community?	Narrative	High
How should care be monitored and by whom? Considering: review of care, maintenance, continuation, discontinuation	Narrative	High
How can relapse of anxiety be prevented in children and young people?	Narrative	High
Should care be different for those with co-occurring conditions?	Narrative	High
What are the therapeutic targets for treating anxiety?	Narrative	High
Identification and assessment		
What are the clinical features of anxiety in children and young people?	Narrative	High
Should children and young people in the general population be screened for anxiety?	Evidence	Low
Are there high-risk groups of children and young people that should be screened for anxiety?	Evidence	High
What is the diagnostic accuracy of methods/tools/scales/ instruments, compared to gold standard diagnosis based on DSM or ICD criteria, <b>for diagnosis</b> and/or to determine <b>severity</b> of anxiety in children and young people?	Evidence	High
What conditions need to be considered for a differential diagnosis in children and young people with possible anxiety?	Narrative	High
What conditions co-occur with anxiety in children and young people?	Narrative	High

What works for treating anxiety: psychological therapy		
What is the clinical effectiveness of psychological therapy for anxiety in	n children ar	nd vouna
people? Considering:		,
CBT (individual, group), psychoeducation, family therapy, Play therapy, acceptance and commitment therapy (ACT).	Evidence	High
Counselling, cognitive bias modification, exposure, hypnosis, interpersonal psychotherapy, mindfulness training, psychodynamic psychotherapy, relaxation (for example, progressive muscle relaxation), self-help (facilitated and non-facilitated; CBT and other modalities), social skills training, support groups, supportive therapy, EMDR, art therapy, music therapy.	N/A	Mod
Attention training, dietetics, other.	N/A	Low
Are there any indications or contraindications for specific psychological therapies for specific types of anxiety?	Narrative	High
What is the clinical effectiveness of individual and group psychological therapy for anxiety in children and young people?	Evidence	High
What works for treating anxiety: medication	·	
What is the clinical effectiveness of pharmacological therapy for anxiet young people? Considering:	ty in childrer	n and
SSRIs, SNRIs, Beta-blockers	Evidence	High
Tricyclic antidepressants, Benzodiazepines	Evidence	Mod
MAOIs, reversible MAOIs, other	Evidence	Low
Are there any indications or contraindications for specific meds?	Narrative	High
What works for treating anxiety: other	·	
What is the clinical effectiveness of other therapies for anxiety in children and young people? Considering: surgical interventions (for example, for blushing), botulinum toxin injections, (for example, for sweating), complementary meds.	N/A	Low
	1	Low
Are there any indications or contraindications for any of the other	N/A	
Are there any indications or contraindications for any of the other therapies?		
Are there any indications or contraindications for any of the other therapies? What works for treating anxiety: combination of psychological therapy What is the clinical effectiveness of combinations of psychological therapy, medication or other therapies for anxiety in children and young people? Considering the lists above.		

NA, not addressed.

### **Narrative review methods**

Narrative evidence reviews were completed where questions were less well suited to a systematic evidence review format; or for lower prioritised questions; or where there was insufficient evidence identified for a question where an evidence review was conducted. Narrative reviews were prepared by GDG members according to their content expertise.

Narrative reviews include key information to answer the clinical question and to guide the GDG to draft consensus recommendations and/or practice points; and were informed by research and clinical experience. For some questions, the narrative review was based on an existing guideline, systematic review or other existing guidance document.

### **Evidence review methods**

#### Clinical question scope and criteria for selection of evidence

The PICO framework (P: population, I: intervention, C: comparison, O: outcomes) was used to explore the components of each clinical question and finalise the selection criteria (detailed in each evidence review in the Technical Evidence Report). These components were used to design the search strategies and to include and exclude studies in the evidence review screening stage.

#### Systematic search for evidence

A systematic search for terms related to anxiety was combined with specific searches tailored for the clinical question according to the selection criteria/PICO developed by the GDG. The search terms used to identify studies addressing anxiety were not limited so that studies addressing people with anxiety in all cultural, geographical and socioeconomic backgrounds and settings would be identified by the search. Furthermore, while a formal analysis of cost effectiveness was not conducted in this guideline data from studies addressing a clinical question that also reported cost effectiveness were documented in the evidence to recommendation process. The search strategy was limited to English language articles and there were no limits on year of publication. Full search strategies for each clinical question are detailed in respective evidence reviews in the Technical Evidence Report.

The following electronic databases were employed to identify relevant evidence:

- Medline (OVID) with Medline in-process and other non-indexed citations (OVID)
- PsycINFO (OVID)
- EBM Reviews (OVID)
  - ° Cochrane Database of Systematic Reviews (Cochrane Reviews)
  - <sup>o</sup> Database of Abstracts of Reviews of Effects (Other Reviews)
  - ° Cochrane Central Register of Controlled Trials (Clinical Trials)
  - <sup>o</sup> Cochrane Database of Methodology Reviews (Methods Reviews)
  - <sup>o</sup> The Cochrane Methodology Register (Methods Studies)
  - ° Health Technology Assessment Database (Technology Assessments)
  - ° NHS Economic Evaluation Database (Economic Evaluations)
- EMBASE (OVID)

The bibliographies of relevant systematic reviews and primary studies identified by the search strategy were also searched for identification of additional studies.

#### **Inclusion of studies**

Search results were stored and managed in EndNote X9 software where duplicate records were removed before screening according to the selection criteria. To determine the evidence to be assessed further, an evidence team reviewer scanned the titles, abstracts and keywords of every record retrieved by the search strategy using the PICO selection criteria established *a priori*. Full articles were retrieved for further assessment if the information in the citation and abstract suggested that the study met the selection criteria and needed to be confirmed. Any uncertainty was resolved through discussion among the evidence team and the clinical leads.

The highest form of evidence - the most current (within five years), comprehensive (with the most outcomes relevant to the PICO) and high-quality systematic review that meets the benchmark criteria (Table 2) and meets the selection criteria - were used in the evidence reviews. Additional systematic reviews that met benchmark and selection criteria were used if it reported additional outcomes relevant to the PICO, that were not addressed in the first, most comprehensive systematic review. Additional studies (as appropriate to the level of evidence specified for each type of question ie RCTs for an intervention question) that met the selection criteria and are not included in the systematic reviews were also used. Where a systematic review met the benchmark criteria but did not meet the selection criteria, or synthesised studies that did not meet our selection criteria, the risk of bias appraisals of individual studies that did meet the PICO, from that systematic review were adopted so as to not duplicate. Systematic reviews that met the benchmark and the selection criteria but did not report data additional to the highest included evidence, were not included.

#### Table 2. Benchmark criteria for existing systematic reviews

- 1. Must have completed a search in at least Medline/Pubmed and another relevant database.
- 2. Must have listed key search terms.
- 3. Must have listed selection criteria.
- 4. Must have used an appropriate framework to assess risk of bias/quality appraisal.
- 5. Where the evidence is sought for an intervention question and a systematic review has included non-RCTs, the analysis must be subgrouped by RCTs to be eligible for

#### Appraisal of the methodological quality/risk of bias of included studies

Methodological quality of the included studies was evaluated using criteria developed *a priori* to assess risk of bias according to study design. Using this approach, each study was allocated a risk of bias rating (see Table 3). Detailed risk of bias assessments are tabulated in each evidence review in the Technical Evidence Report.

Rating	Description
Low	All of the criteria have been fulfilled or where criteria have not been fulfilled it is very unlikely the conclusions of the study would be affected.
Moderate	Some of the criteria have been fulfilled and those criteria that have not been fulfilled may affect the conclusions of the study.
High	Few or no criteria fulfilled or the conclusions of the study are likely or very likely to be affected.
Insufficient information	Not enough information provided on methodological quality to be able to determine risk of bias.

#### Table 3. Risk of bias ratings

#### **Data extraction**

Study characteristics and data were documented according to the selection criteria, including general details (title, authors, reference/source, country, year of publication, setting), participants (age, gender, withdrawals/losses to follow-up, subgroups), results (point estimates and measures of variability, frequency counts for dichotomous variables, number of participants, intention-to-treat analysis) and validity results.

#### Data synthesis

In order to make a summary statement about the effect of the intervention to inform evidencebased recommendations, data were presented in tables, and where appropriate, using statistical methods such as meta-analyses. When participants, interventions, outcome measures and timing of outcome measurements were considered sufficiently similar, the Review Manager 5.3 software was used for meta-analyses. Where appropriate, subgroup analysis was conducted according to the specifications of the *a priori* selection criteria/PICO. Network meta-analyses were considered for the intervention questions but was deemed unnecessary as these analyses were already conducted in existing systematic reviews that were adopted.

# Quality/certainty of the body of evidence using GRADE evidence profiles (for intervention evidence reviews)

A GRADE evidence profile/table was prepared for each comparison within each clinical question listed by outcome. For each outcome, a certainty rating was documented with consideration of the number and design of studies addressing the outcome; and judgments about the risk of bias of the single studies and/or synthesised evidence, inconsistency, indirectness, imprecision, and any other considerations that may influence the quality/certainty of the evidence. It reflects the extent to which our confidence in an estimate of the effect is adequate to support a particular recommendation (adapted from GRADE [52]).

### Table 4. Quality/certainty of the body of evidence

High	We are very confident that the true effect lies close to that of the estimate of the effect.
Moderate	We are moderately confident in the effect estimate: The true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different.
Low	Our confidence in the effect estimate is limited: The true effect may be substantially different from the estimate of the effect.
Very low	We have very little confidence in the effect estimate: The true effect is likely to be substantially different from the estimate of effect.

GRADE note that the quality of evidence is a continuum; any discrete categorisation involves some degree of arbitrariness. Nevertheless, advantages of simplicity and transparency outweigh these limitations [52].

### **Drafting recommendations**

Specific, unambiguous, actionable recommendations were drafted based on the evidence, and the knowledge and expertise of clinical and lived or living experience advisors.

The terms "should", "could" and "should not" were used to reflect the interpretation of the quality/certainty of the body of evidence and judgements of the GDG. Where the word "should" is used in the recommendations, the GDG judged that the benefits of the recommendation exceed the harms. Where the word "could" is used, either the quality of evidence was limited or the available studies did not clearly demonstrate advantage of one approach over another, or the balance of benefits to harm was unclear. Where the words "should not" are used, the harms outweigh the benefits.

#### Table 5: Recommendation types

EBR	Evidence to answer a prioritised question was sought and identified, and was sufficient to inform an evidence-based recommendation (EBR).
CCR	Evidence to answer a prioritised question was sought, however there was insufficient evidence to inform an EBR, therefore a narrative review was prepared by an expert within the guideline development group. Resulting recommendations are categorised as clinical consensus recommendation (CCR). <b>Or</b>
	For questions of lower priority or where there is known to be little high-quality evidence, evidence was not sought and an expert within the GDG prepared a narrative review and/or guided discussion. Resulting recommendations are categorised as CCR.
СРР	Evidence not sought. A clinical practice point (CPP) was made where important issues arose from discussion of evidence-based or clinical consensus recommendations and where implementation issues such as safety, side effects and risks need to be considered.
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### **Public consultation**

Public and targeted consultation was undertaken on the draft guideline for a period of 18 days, commencing 6–29 September 2023. The draft guideline was available for download and review and an online feedback form provided. Consultation feedback, including decisions around incorporation of feedback was made publicly available on the Mental Health Central webpage.

### Scheduled review and update of the guideline

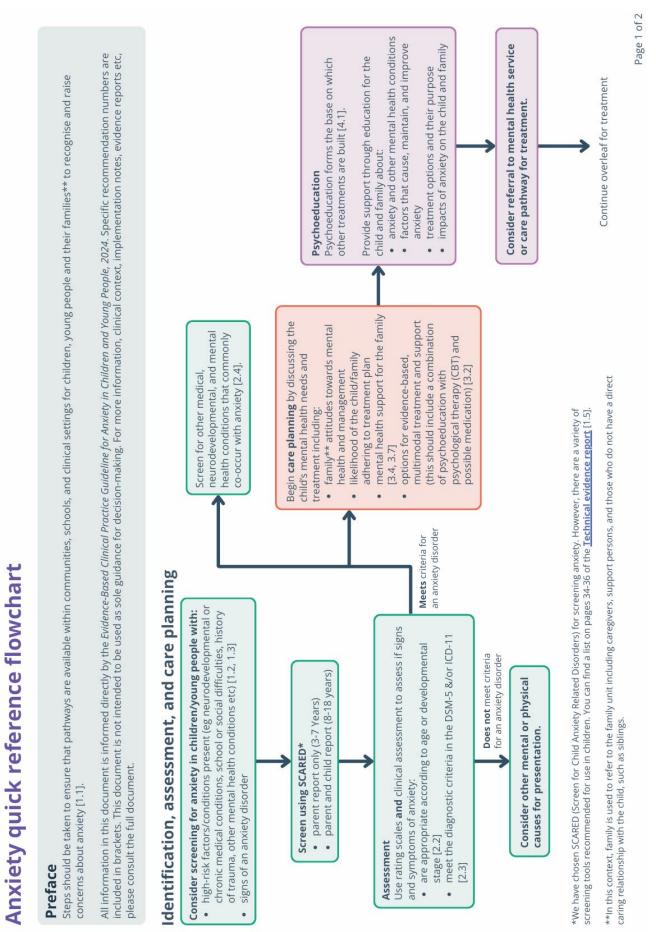
The GDGs will be re-convened to review relevant sections of this guideline if any of the following occur within five years:

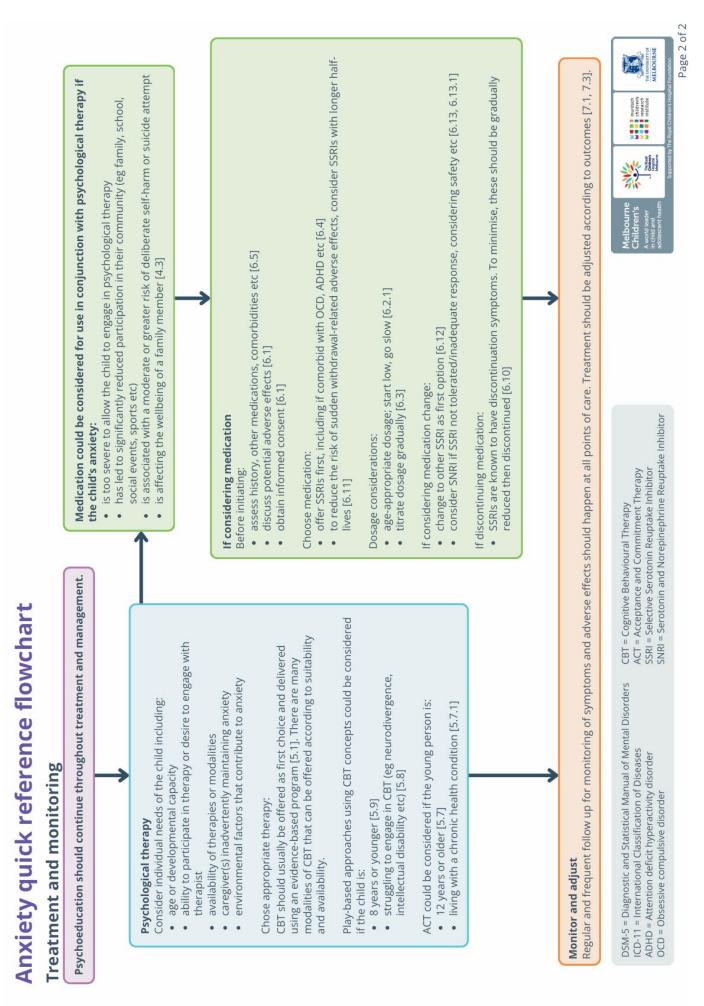
- a change in the indications registered by regulatory bodies for any drug included in this guideline; or
- publication of any new major randomised controlled trials or systematic reviews that potentially have a bearing on the safety of the recommendations in this guideline

After five years, a guideline group will be reconvened by the Campus Mental Health Strategy partners to review the guideline and update as necessary.

### **APPENDIX III. Quick reference flowchart**

Flowchart can be found on Mental Health Central.







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