

**The
CAARMS**
Assessing
Young People at
Ultra High Risk
of Psychosis

Orygen
YOUTH Health
Research Centre


EPPIC
Early Psychosis
Prevention and
Intervention
Centre

The EPPIC National Support Program of Orygen Youth Health Research Centre has produced this document as part of its work to support the scaling up of the EPPIC model within headspace, the National Youth Mental Health Foundation, in Australia.

© Orygen Youth Health Research Centre 2014

This Publication is copyright. Apart from use permitted under the Copyright Act 1968 and subsequent amendments, no part may be reproduced, stored or transmitted by any means without prior written permission of Orygen Youth Health Research Centre.

ISBN 978-1-1-920718-36-7

Suggested citation

Nelson B, Yung A, Markulev C and Nicoll M. *The CAARMS: assessing young people at ultra high risk of psychosis*. Orygen Youth Health Research Centre 2014.

Acknowledgments

This manual was written by Barnaby Nelson, Alison Yung, Connie Markulev and Mandie Nicoll with contributions from Melissa Kerr and Frank Hughes. Medical writing assistance and editorial input was provided by Raelene Simpson and Raewyn Poole.

The development of this manual has built upon two previous pieces of work: the 'Comprehensive Assessment of At Risk Mental States (CAARMS) training DVD and Workbook' and the 'Neuropro-E Workshop and Workbook' provided Orygen Youth Health Research Centre.

Permission to reproduce the Abbreviated CAARMS kindly granted by Professor Alison Yung.


Disclaimer

This information is provided for general education and information purposes only. It is current as at the date of publication and is intended to be relevant for Victoria, Australia and may not be applicable in other jurisdictions. Any diagnosis and/or treatment decisions in respect of an individual patient should be made based on your professional investigations and opinions in the context of the clinical circumstances of the patient. To the extent permitted by law, Orygen Youth Health Research Centre will not be liable for any loss or damage arising from your use of or reliance on this information. You rely on your own professional skill and judgement in conducting your own health care practice. Orygen Youth Health Research Centre does not endorse or recommend any products, treatments or services referred to in this information.

Orygen Youth Health Research Centre

Locked Bag 10
Parkville Vic 3052
Australia

www.oyh.org.au



**The
CAARMS**
Assessing
Young People at
Ultra High Risk
of Psychosis



Contents

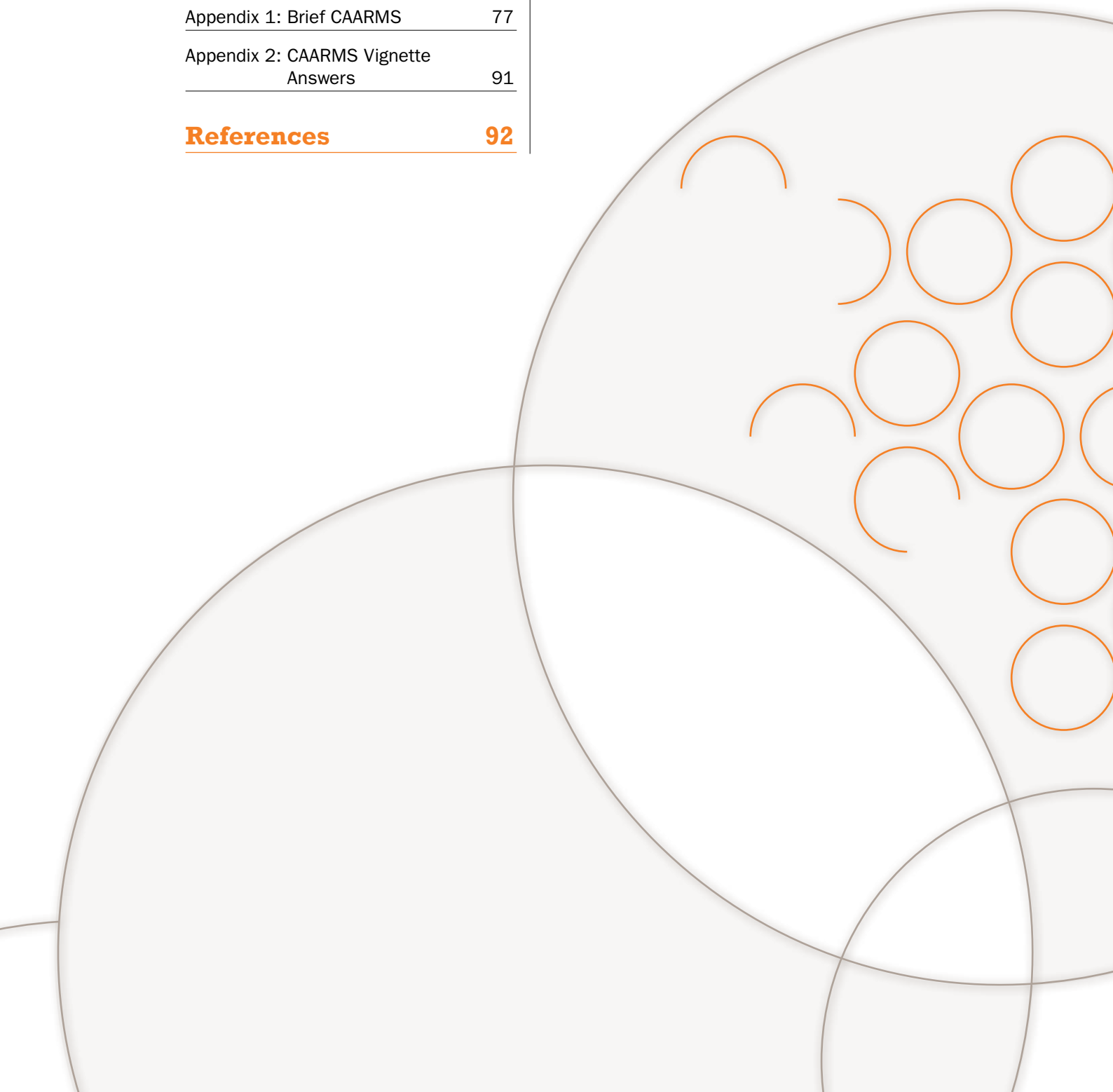
Introduction	4	The rationale for the CAARMS	19
Context of this manual	5	Transition rates	21
How to use this manual	5	Interventions for UHR individuals	21
The purpose of the CAARMS	7	The CAARMS	23
The key concepts of CAARMS	7	The aims of CAARMS	23
Background	7	CAARMS in continuing care	24
UHR and the staging model of psychosis	10	Abbreviated versus full CAARMS	25
UHR and the phases model of psychosis	11	The full CAARMS	26
Ultra high risk criteria and CAARMS	15	The abbreviated CAARMS	29
Vulnerability group	16	Rating the scales of the abbreviated CAARMS	29
Attenuated psychotic symptoms	16	The Global Rating Scale (measuring intensity of symptoms)	29
Brief limited intermittent psychotic symptoms	18	Frequency and duration	30
First episode psychosis threshold	18	Other information to collect	30
		Patterns of symptoms – rating substance use	30
		Level of distress	30
		The four subscales of the positive symptoms scale	31
		Unusual Thought Content – Global Rating Scale	31
		Non-bizarre Ideas – Global Rating Scale	34
		Perceptual Abnormalities – Global Rating Scale	37
		Disorganised Speech – Global Rating Scale	40
		The social and occupational functioning assessment scale (SOFAS) – rating function	42
		Scoring the Global Rating Scale	42
		Scoring frequency and duration	43
		Scoring pattern of symptoms	43

INTRODUCTION

Scoring the distress scale	43
Scoring the SOFAS	43
Other CAARMS 'rules of thumb'	44
Determining the criteria for UHR	46
Thresholds sub-UHR to UHR to FEP	47

**Testing your
CAARMS skills** 59

Appendix 1: Brief CAARMS	77
Appendix 2: CAARMS Vignette Answers	91

References 92

Introduction

The Comprehensive Assessment of At Risk Mental States (CAARMS) is a semi-structured assessment tool used by mental health professionals and researchers to identify help-seeking young people who are at ultra high risk (UHR) of psychosis. In addition to identifying young people at ultra high risk of psychosis, the CAARMS can also be used to track a range of psychopathology over time and to identify the onset of first episode psychosis. An abbreviated version of the CAARMS (the abbreviated or brief CAARMS) has been developed that focuses on one of the seven symptom scales of the full CAARMS. Along with a comprehensive assessment, this abbreviated version provides an efficient utility in clinically assessing young people at ultra high risk of psychosis. The latter part of this manual will focus on the abbreviated CAARMS. The abbreviated CAARMS tool can be seen in Appendix 1.

Context of this manual

This manual is aimed at mental health professionals working with young people who are at 'ultra high risk' (UHR) of psychosis and individuals responsible for early psychosis service development. The content of this manual has been derived from international evidence and more than 20 years of experience of implementing and delivering services to young people and their families with early psychosis at Orygen Youth Health.

How to use this manual

This manual has been developed as part of an overall training program delivered by the EPPIC National Support Program (ENSP) that includes face-to-face training and online learning modules, and should be read in conjunction with the other manuals in this series.

The ENSP is assisting with the implementation of the Early Psychosis Prevention and Intervention Centre (EPPIC) Model in early psychosis services. The EPPIC Model has been developed from many years' experience within the clinical program at Orygen Youth Health and has been further informed by the Early Psychosis Feasibility Study Report written and published for the National Advisory Council on Mental Health in 2011 which sought international consensus from early psychosis experts from around the world.¹

It is based on current evidence, the experience of other early psychosis programs internationally and shaped by real world considerations. The EPPIC Model aims to provide early detection and developmentally appropriate, effective, evidence-based care for young people (aged 12–25 years) at risk of or experiencing a first episode of psychosis.

There are a number of core values and principles of practice that inform the EPPIC model of care. Ideally, an early psychosis service should incorporate:²

- easily accessible expert care
- a holistic, biopsychosocial approach to clinical interventions
- a comprehensive, seamless and integrated service provision approach
- evidence-based clinical practice
- the presence of youth-friendly culture throughout the service (reflected in staff behaviour and attitudes and decor)
- a culture and spirit of hope and optimism that is pervasive throughout service
- a family-friendly ethos contained in all aspects of service
- a service culture and skills that facilitate culturally sensitive care to all patients and families
- a high level of partnerships with local service providers.

It is recommended that clinical staff also complete the CAARMS face-to-face or online training modules associated with this manual.



**The
purpose
of the
CAARMS**



The purpose of the CAARMS

The Comprehensive Assessment of At Risk Mental States (CAARMS) was developed to prospectively assess the psychopathology that is indicative of the imminent development of first episode psychosis (FEP) and to identify young people who meet the criteria for being at UHR of FEP. Furthermore, the CAARMS tool is also used to identify young people who have transitioned from UHR to FEP. The CAARMS is a semi-structured interview that was designed for use by mental health professionals to evaluate young people who are distressed and seeking help. The CAARMS was not designed as a screening tool for the general population, in which the rates of transition to psychosis would be much lower.

The key concepts of CAARMS

Background

Most episodes of psychosis are preceded by a prodromal period. This is a period of attenuated psychotic symptoms and other psychopathology as well as impaired functioning before the first psychotic episode occurs. The prodromal period is of great interest because the ability to prospectively recognise prodromal syndromes in young people opens up the possibility of pre-psychotic intervention that may delay or even prevent the onset of psychosis.

Most people with psychotic illnesses report prodromal symptoms. However, the concept of the 'prodrome' is retrospective and can only be used to refer to these symptoms after the onset of psychotic illness. When looking at the same symptoms prospectively it is not yet known whether a psychotic illness will develop, so the symptoms do not necessarily represent a prodromal phase. Furthermore, prodromal symptoms of schizophrenia and other psychotic illnesses are generally non-specific, and not all young people who experience a particular symptom or group of symptoms will go on to develop a psychotic illness. Strategies for predicting psychosis and prospectively identifying young people who are likely to develop a psychotic illness therefore focus on levels of risk.

At risk mental state

The term 'at risk mental state' (ARMS) has been used since the mid-1990s to describe a state in which a young person has a heightened risk of developing a psychotic disorder.³

A 'close-in' strategy has been adopted to identify young people with ARMS. This strategy is based on:

- identifying risk factors known to be associated with an increased risk of psychotic disorders, classified as trait factors (such as genetic loading due to the young person having a schizotypal personality disorder or a family history of psychotic illness) and state factors (such as mental distress and deteriorating functioning);
- identifying symptoms that are often present before the onset of psychosis; and
- focusing on the age range with the highest incidence of onset of psychotic disorders (age 15–25 years).

Ultra high risk

Young people who are experiencing an ARMS can be more precisely defined as being at ultra high risk of psychosis using a specific set of criteria known as the UHR criteria.

The term 'ultra high risk' is used to distinguish these criteria from the 'high risk' criteria that are based solely on identifying relatives of people with a psychotic disorder.⁴ The UHR criteria are described in more detail later in this manual.

The identification of young people in ARMS and UHR state is represented in Figure 1A and 1B. These figures demonstrate the difference between the retrospective prodromal perspective from the prospective ARMS–UHR view of the period preceding a first episode of psychosis.

FIGURE 1A. RETROSPECTIVE VIEW OF PRODROME

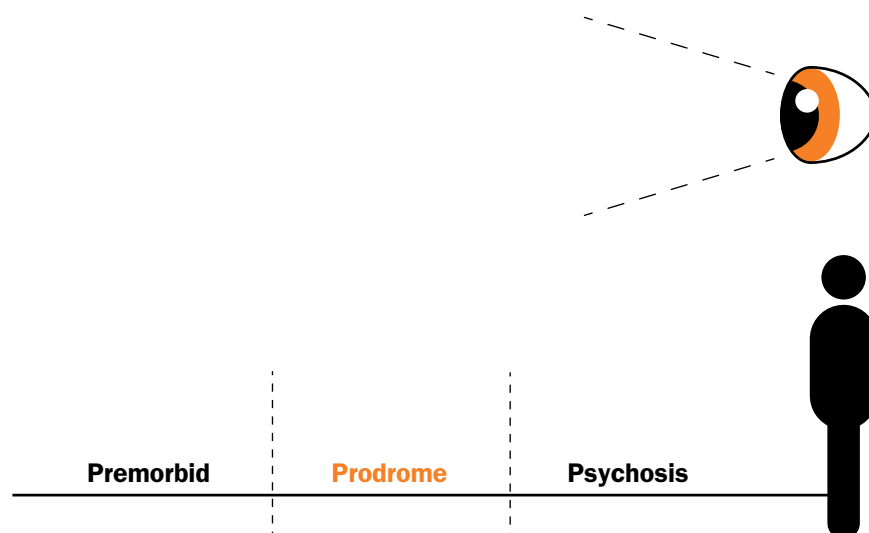
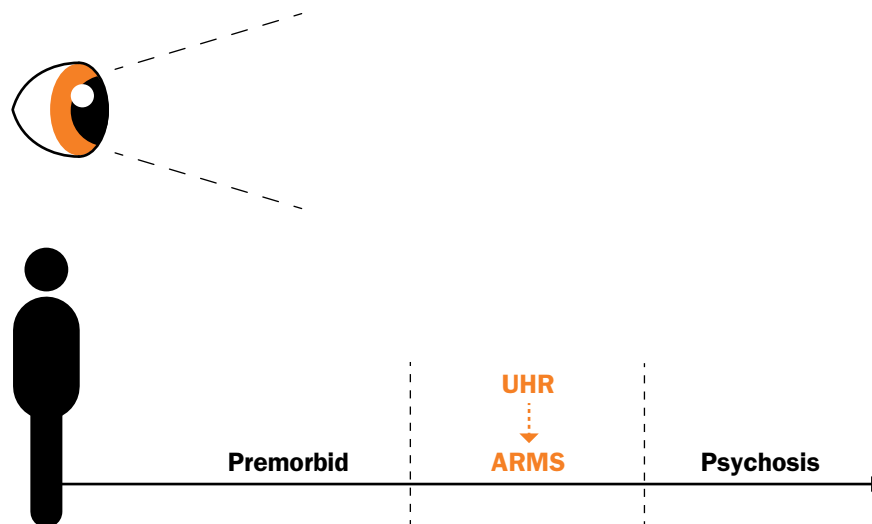


FIGURE 1B. PROSPECTIVE VIEW OF ARMS



First episode psychosis

Young people who meet the UHR criteria, have symptoms that are below a defined threshold for a psychotic episode. Not all of them will go on to develop a full-blown psychotic illness. When the young person's symptoms cross the threshold for a psychotic episode for the first time this is referred to as first episode psychosis (FEP).



UHR and the staging model of psychosis

A clinical staging model has been developed over the last decade to support the identification of young people who are UHR and the use of early intervention. The clinical staging model of psychosis is different from conventional practice in that it defines psychosis as a continuum. The different stages of psychosis are determined by the severity of symptoms and the level of distress and disability the person is experiencing (see Table 1).⁵ Different interventions are recommended at each stage on this continuum to prevent progression to the next stage and to promote recovery. By identifying young people with sub-threshold psychotic symptoms (stage 1b) using the UHR approach, intervention can begin at an earlier stage of the disorder when symptoms are milder, with treatments tailored to this early stage.

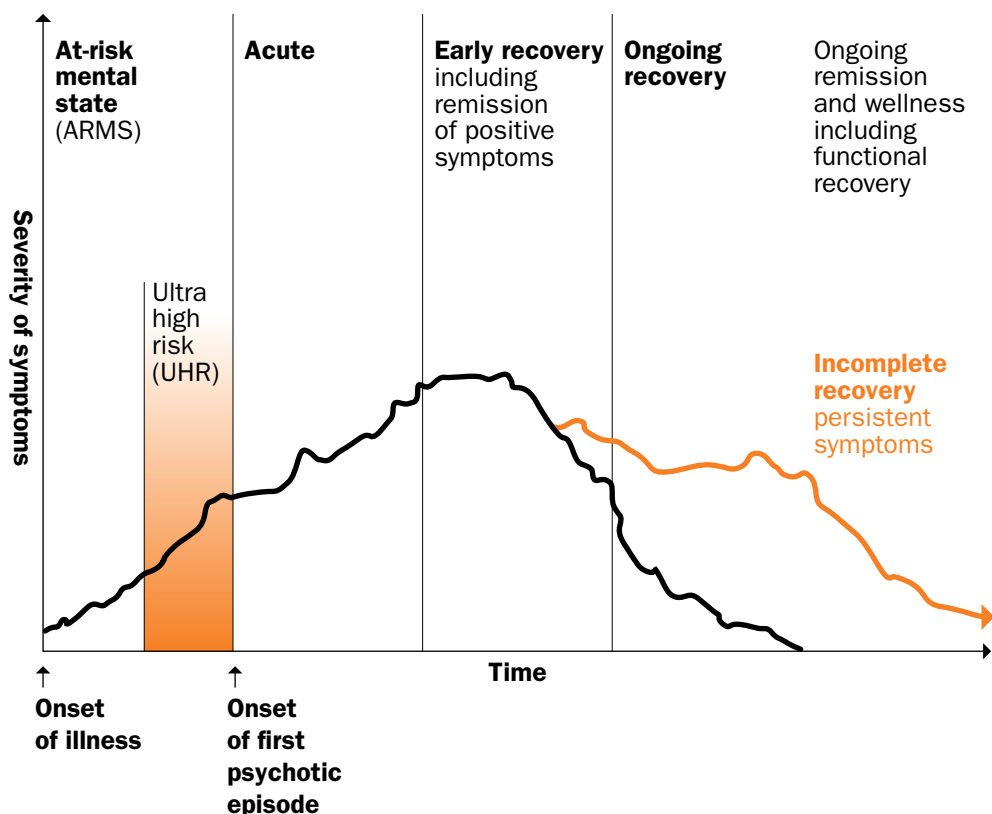
TABLE 1. THE STAGING MODEL OF PSYCHOSIS

STAGE	PSYCHOSIS	TREATMENT
0	Increased risk/no symptoms	Indicated prevention of FEP such as: improved mental health literacy, family education, drug education
1a	Mild or non-specific symptoms and functional decline	Indicated secondary prevention such as: formal mental health literacy, family psychoeducation, cognitive-behavioural therapy, active reduction in substance use
1b	UHR – sub-threshold	Indicated secondary prevention such as: psychoeducation, cognitive-behavioural therapy, substance use work, omega-3 fatty acids, antidepressants
2	FEP – full-threshold	Early intervention for FEP such as: psychoeducation, cognitive-behavioural therapy, substance use work, atypical antipsychotic meds, vocational rehabilitation
3a	Incomplete remission from first episode of care	Early intervention for FEP such as: for stage 2 plus additional emphasis on medical and psychosocial strategies to achieve remission
3b	Recurrence or relapse stabilised with treatment but still residual symptoms	Early intervention for FEP such as: for stage 3a plus additional emphasis on relapse prevention
3c	Multiple relapses with clinical deterioration	Early intervention in FEP such as: for stage 3b but with emphasis on long-term stabilisation
4	Severe, persistent or unremitting illness	As for stage 3c but with emphasis on clozapine, other tertiary treatments and social participation despite ongoing disability

UHR and the phases model of psychosis

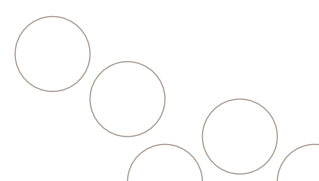
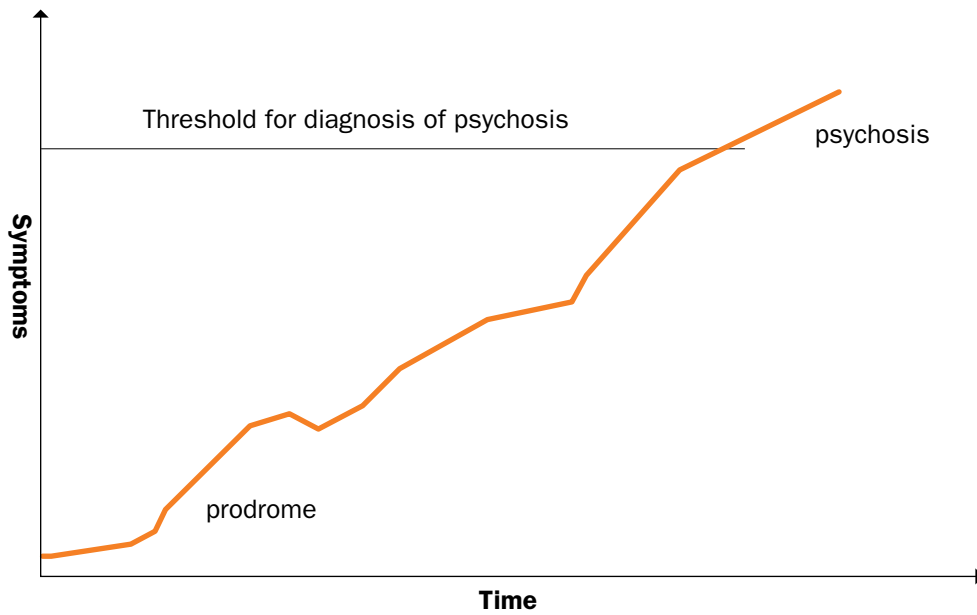
The course of the psychotic episode and recovery after a psychotic episode can also be illustrated using the phases model (Figure 2). The place of the UHR state in the context of the phases is shown in the figure below. Some, but not all, young people will transition from the UHR state into an acute first episode of psychosis. The aim of intervention for young people in the UHR phase is to reduce existing symptoms and disability, improve social and vocational function, and prevent or delay the onset of a psychotic disorder.

FIGURE 2. PHASES OF PSYCHOSIS AND RECOVERY



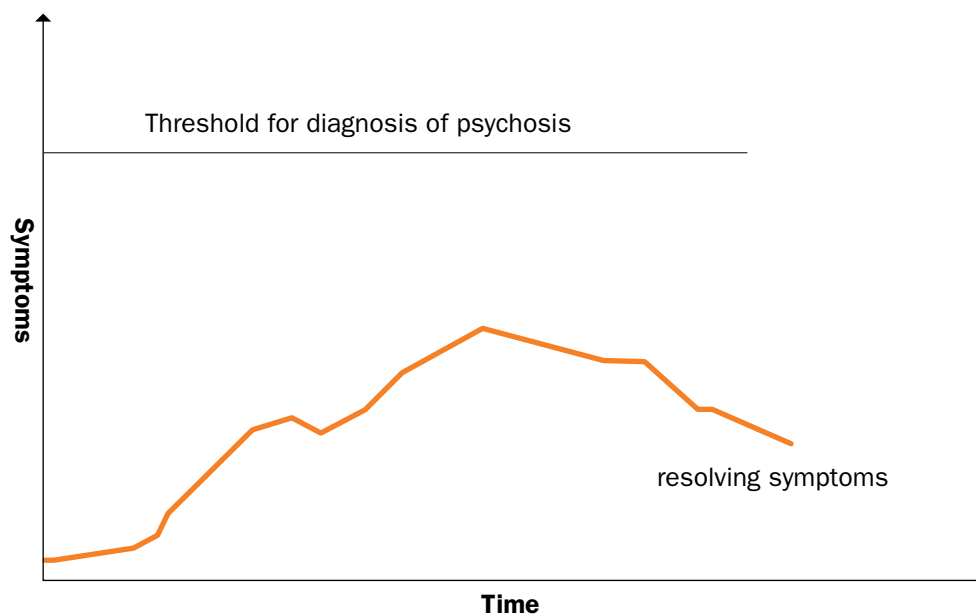
Transition to a psychotic disorder is not inevitable in young people who meet the UHR criteria for psychosis, in fact most will not transition. Young people classified as UHR who do transition to a psychotic disorder, that is, those whose symptoms cross the threshold for diagnosis of psychosis, are referred to as ‘true positive’ cases (Figure 3). This means that the UHR criteria have correctly identified these people as being in the prodromal phase of a psychotic disorder.

FIGURE 3. **TRUE POSITIVE CASES FOR PSYCHOSIS**



Young people who are classified as UHR of psychosis but do not naturally transition to a psychotic disorder are considered 'false positive' cases. This means that the criteria have incorrectly identified the person as being in the prodromal phase of a psychotic illness. Although the UHR criteria were met, their symptoms have remained below the threshold for psychosis (Figure 4).

FIGURE 4. FALSE POSITIVE CASES FOR PSYCHOSIS



It is not currently possible to distinguish ‘false positive’ cases, that is, young people who were not on the trajectory toward developing a psychotic illness despite meeting UHR criteria from those who would have transitioned to psychotic illness (i.e. ‘true positive’ case) if this had not been prevented by intervention (Figure 5). People for whom intervention has prevented transition are sometimes referred to as ‘false false positive’ cases.

FIGURE 5. FALSE FALSE POSITIVE FOR PSYCHOSIS

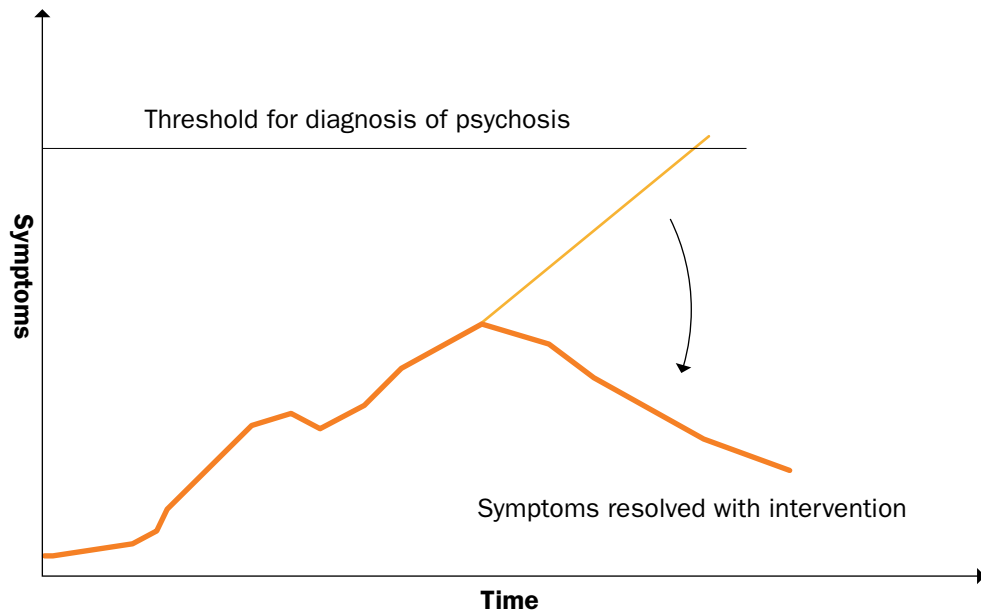
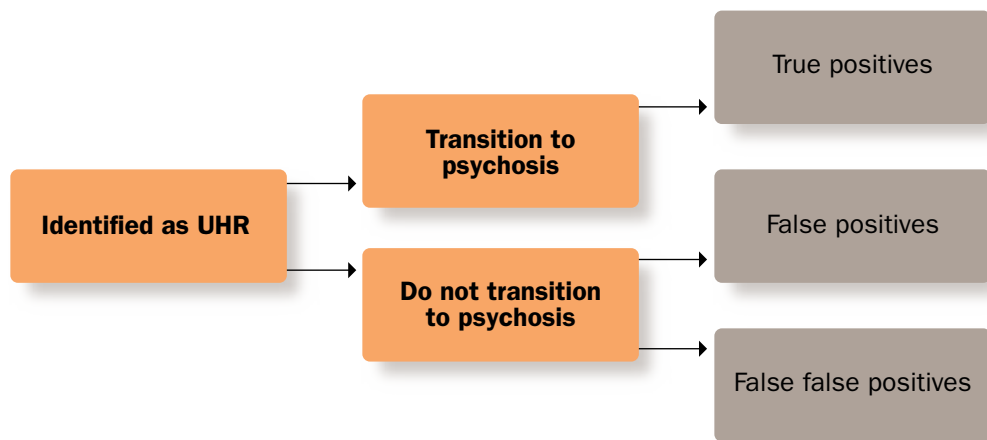


FIGURE 6. THE RELATIONSHIPS BETWEEN TRUE, FALSE AND FALSE FALSE POSITIVE CASES FOR UHR OF PSYCHOSIS

The following diagram shows the relationships between those young people who transition to psychosis or not and the true/false positive concepts.



Classification of symptoms as sub-threshold and above threshold is dependent on the level at which the threshold for psychosis is set.



**Ultra high
risk criteria
and CAARMS**



Ultra high risk criteria and CAARMS

The UHR criteria are used to identify young people at a heightened risk of developing a psychotic disorder (i.e. ARMS). The criteria for UHR consist of three groups, one or more of which must be met, plus a significant decline in functioning or chronic low functioning according to the Social and Occupational Functioning Scale (SOFAS).⁶ The UHR groups were developed in the mid-1990s based on known state and trait risk factors for psychosis and retrospective accounts of the psychosis prodrome, and are assessed using the CAARMS tool.⁷ The three groups are:

- Vulnerability group: having a schizotypal personality disorder or a first-degree relative (parent or sibling) with a psychotic disorder (also referred to as ‘trait group’).
- Attenuated Psychotic Symptoms (APS): sub threshold (intensity or frequency), attenuated forms of positive psychotic symptoms experienced during the past year.
- Brief Limited Intermittent Psychotic Symptoms (BLIPS): frank positive psychotic symptoms that have not lasted longer than a week and have spontaneously resolved without treatment.

The criteria for UHR and the three UHR groups are represented in Figure 7.

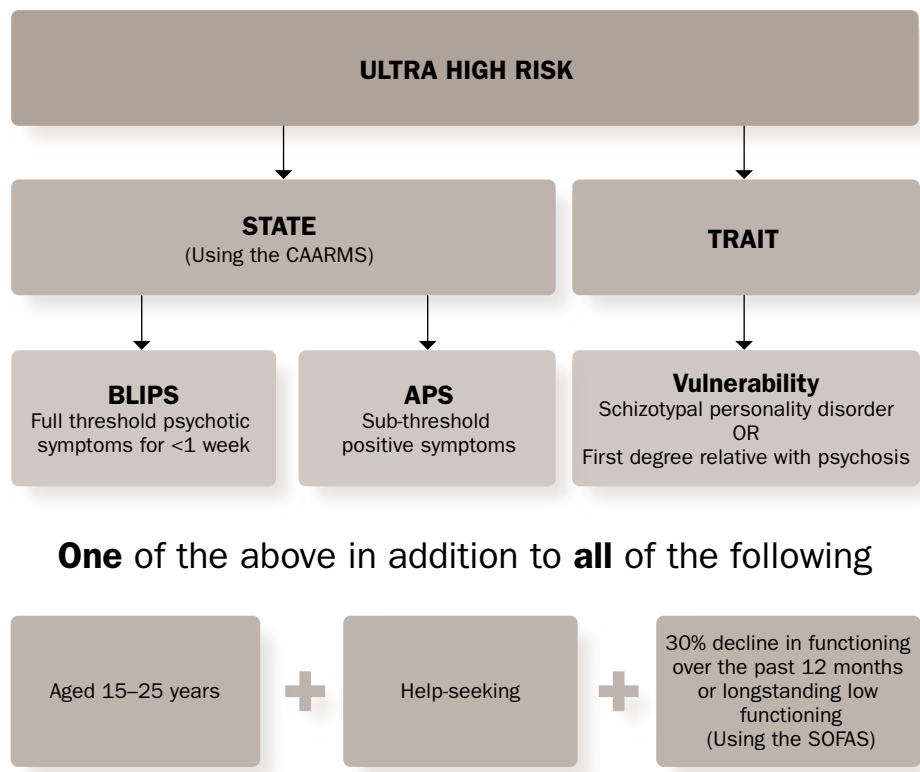
Vulnerability group

The vulnerability group is defined as young people who have a trait risk factor such as schizotypal personality disorder or a first-degree relative (mother, father, brother and/or sister) who has a psychotic illness. This must be accompanied by either chronic low functioning or a significant decline in functioning during the past 12 months, defined as a 30% decrease in SOFAS score from the premorbid level that has occurred within the last year and is sustained for at least 1 month, or a SOFAS score of 50 or less for at least the past 12 months.

Attenuated psychotic symptoms

The APS group is divided into two subgroups (2a and 2b), according to assessment by CAARMS. People in APS subgroup a have attenuated psychotic symptoms of sub-threshold intensity, whereas those in subgroup b have symptoms of sub-threshold frequency. The scales and scores will be explained later in this manual.

FIGURE 7. **ULTRA HIGH RISK CRITERIA**



- A Global Rating Scale score of 3–5 on the CAARMS subscale for disorders of thought content, 3–5 for Non-bizarre Ideas, 3–4 on the Perceptual Abnormalities subscale and/or 4–5 on the Disorganised Speech subscale; and
- A Frequency Scale score of 3–6 on the CAARMS Unusual Thought Content, Non-bizarre Ideas, Perceptual Abnormalities and/or Disorganised Speech subscales for at least 1 week.
- Symptoms must have been present during the past year and a 30% decrease in SOFAS score from premorbid level sustained for a month within the past year or SOFAS score of 50 or less for at least the past 12 months.

The criteria for the sub-threshold frequency group are:

- A Global Rating Scale score of 6 on the CAARMS Unusual Thought Content subscale, 6 on the Non-bizarre Ideas subscale, 5–6 on the Perceptual Abnormalities subscale and/or 6 on the Disorganised Speech subscale; and
- A Frequency Scale score of 3 on the CAARMS Unusual Thought Content, Non-bizarre Ideas, Perceptual Abnormalities and/or Disorganised Speech subscales.
- Symptoms must have been present during the past year and a 30% decrease in SOFAS score from premorbid level sustained for a month within the past year or SOFAS score of 50 or less for at least the past 12 months.

Brief limited intermittent psychotic symptoms

Young people in the BLIPS group are those who have experienced frank psychotic features that have resolved spontaneously within 7 days without antipsychotic treatment within the last 12 months. These psychotic symptoms can be drug-induced but not due to drug intoxication, and only include psychotic symptoms that do not occur during the peak intoxication. Criteria for the BLIPS group are:

- CAARMS Global Rating Scale scores of 6 on the Unusual Thought Content subscale, 6 on the Non-bizarre Ideas subscale, 5 or 6 on the Perceptual Abnormalities subscale and/or 6 on the Disorganised Speech subscale; and
- Frequency Scale score of 4–6 on the Unusual Thought Content, Non-bizarre Ideas, Perceptual Abnormalities and/or Disorganised Speech subscales; and
- Each episode of symptoms present for <7 days with spontaneous remission each time; and
- Symptoms must have been present during the past year and a 30% decrease in SOFAS score from premorbid level sustained for a month within the past year or a SOFAS score of 50 or less sustained for at least the past 12 months.

First episode psychosis threshold

The psychotic disorder threshold is defined as frank psychotic symptoms such as delusions, hallucinations and thought disorder persisting for longer than 1 week and with a frequency of at least 3–6 times a week for longer than 1 hour each time or daily for less than 1 hour each time.

The CAARMS scale criteria for the psychosis threshold are:

- A Global Rating Scale score of 6 on the Unusual Thought Content subscale, 6 on the Non-bizarre Ideas subscale, 5 or 6 on the Perceptual Abnormalities subscale and/or 6 on the Disorganised Speech subscale; and
- A Frequency Scale score of at least 4 on the Unusual Thought Content, Non-bizarre Ideas, Perceptual Abnormalities and/or Disorganised Speech subscales; and
- Psychotic symptoms present for longer than 1 week.

Antipsychotic treatment would usually be started after the psychosis threshold has been crossed, and the young person would receive access to specialised care required for FEP.



**The
rationale
for the
CAARMS**



The rationale for the CAARMS

The CAARMS was originally developed in the 1990s and has been revised since then. It is designed to determine whether a young person meets the UHR criteria, confirm or rule out criteria for the onset of psychosis and map a range of symptoms found in psychotic prodromes over time. The CAARMS has been shown to have good predictive and discriminant validity and good-to-excellent inter-rater reliability.⁷

A tool to identify UHR was developed because intervening during the UHR state has advantages over intervention after the onset of psychotic illness. Reasons for pre-psychotic intervention include:

- Intervention during the prodromal phase may prevent, delay or reduce the impact of psychosis
- Substantial psychosocial disability develops during the prodromal phase
- Early intervention reduces the duration of untreated psychosis (DUP), which has been found to correlate with poor treatment outcomes (florid psychosis may be 'toxic')
- Pre-psychotic intervention reduces the likelihood of behaviours or incidents that may stigmatize the person
- Young people who later develop psychosis may be less likely to need inpatient care if there has been intervention during the prodromal phase

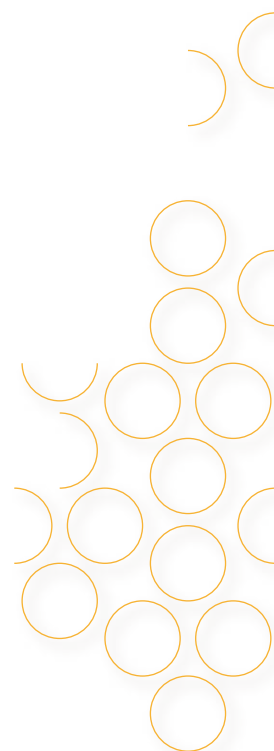
Transition rates

The first published study to use the UHR criteria found that the transition rate to a threshold psychotic disorder within one year was 40.8%.⁸ This result was replicated in international studies, with an average 1-year transition rate of 36.7%.⁹ A meta-analysis reported that transition rates in young people identified as UHR were 18% at 6 months, 22% at 12 months, 29% at 2 years and 36% at 3 years.¹⁰ A long-term follow up study conducted at the PACE Clinic at Orygen Youth Health Research Centre found that risk of transition to psychosis can extend up to 10 years post-entry to the service, with the highest risk being in the first 2–3 years.¹¹ One year transition rates in recent UHR cohorts have been about 10–20%, somewhat lower than those reported in earlier studies.¹¹

Interventions for UHR individuals

There is evidence that specific early intervention can delay or prevent FEP in the UHR population.¹² Possible interventions for young people in an UHR state include CBT, psychoeducation, addressing any substance use issues, and treatment with omega-3 fatty acids and possibly antidepressants or other medications to address symptoms and co-occurring conditions.

Initial studies indicated that antipsychotic medication may be useful in delaying or preventing transition to psychotic disorder in the UHR population. However, the potentially serious side effects associated with the use of antipsychotic drugs (weight gain, sexual dysfunction and extrapyramidal side effects) along with the equivocal results, confer an unfavourable cost–benefit ratio on the use of antipsychotic medication in this group. Naturalistic data also suggests that antidepressants may be associated with a lower transition rate to psychosis than antipsychotics. Furthermore, omega-3 fatty acids (fish oil) reduced transition rate to psychosis when compared with placebo in a randomised controlled study. The second edition of the Australian Clinical Guidelines for Early Psychosis recommendations are to use CBT and fish oil in addition to case management during the initial stages for young people, which is in line with the clinical staging model.⁵ Antipsychotics are not recommended for use in this population.^{5,13}



The background is a solid orange color with a subtle wood-grain texture. Overlaid on this are several thin, light-colored lines forming various geometric shapes: a large circle on the left, a cluster of smaller circles in the top right, and several overlapping circles in the bottom right. A large, dark blue, teardrop-shaped graphic is positioned in the center-left, containing the title text.

**The
CAARMS**



The CAARMS

The CAARMS systematically identifies those at ultra high risk of psychosis by reliably measuring the intensity, frequency, duration and patterns of sub-threshold psychotic symptoms. The CAARMS is a tool that identifies whether young people meet the BLIPS or APS groups of the UHR criteria and the point at which an individual transitions to psychosis. To meet current criteria for UHR in one of the three practically measured groups, individuals should have experienced the symptoms at some point during the preceding 12 months, in conjunction with the associated decline in functioning or sustained low functioning. It is also important to remember that clinicians should also ask the young person whether symptoms have occurred at any time in the individual's life.

The aims of CAARMS

The CAARMS tool has the following functions:

- To assess psychopathology and functioning factors thought to indicate a high likelihood of development of a FEP in the near future.
- To determine whether a person meets criteria for UHR.
- Rule out or confirm whether a person meets criteria for full-threshold psychosis.

The CAARMS is designed to be used with people who are from distressed, help-seeking populations and not as a screening tool for the general population. Help-seeking behaviour is often the result of a young person noticing changes in their usual mental state and seeking an explanation or some assistance around these changes. Young people may be help-seeking for changes related to attenuated psychotic symptoms or for co-occurring symptoms such as anxiety, depression or substance misuse.

There has been some investigation into what screening tools are useful in determining what population would require a CAARMS assessment. The Prodromal Questionnaire-16 (PQ-16) is self-report screening measure that is used to identify individuals who would require a structured diagnostic interview to determine their risk of psychosis.¹⁴⁻¹⁶ Further research investigating which tools are useful in identifying individuals who require the CAARMS tool is needed as there is a considerable lack of evidence on this particular topic.

CAARMS was specifically developed as a tool for mental health clinicians who already have experience in assessing and evaluating information obtained from a young person.⁷ Specific training is required to use the CAARMS to ensure interpretation and the rating of expressed and observed phenomena is accurate. Once a clinician is trained, they do not require ongoing training to continue to administer the CAARMS.

Clinicians from a range of different services may come into contact with young people at ARMS who are help-seeking; these clinicians are in the best position to use the CAARMS. These clinicians include those working in acute and assessment services (e.g. mobile and assessment treatment teams [MATT], youth access team [YAT] or crisis assessment [CAT] teams), research clinicians, youth early psychosis teams and UHR or early intervention clinicians.

The CAARMS is a semi-structured interview designed to be used as part of a comprehensive psychosocial assessment. While the CAARMS can accurately identify those young people at UHR or those experiencing a psychosis, it does not alone provide enough details required to develop a provisional diagnosis, formulation and management plan.

CAARMS in continuing care

The CAARMS can have a valid and ongoing role within the continuing care setting. It can be used to exclude or confirm criteria for the onset of psychosis, or more specifically, identify those individuals who have transitioned into a full-threshold psychosis. Identifying a transition to psychosis as early as possible will enable stage-specific treatment to be implemented in a timely manner, with the aims of reducing the DUP, alleviating distressing symptoms, reducing the need for hospitalisation and minimising functional loss.

Furthermore, the CAARMS can be used as a tool to map and monitor longitudinal functioning and a range of symptoms found in psychotic prodromes over time. Being aware of changes in sub-threshold symptoms will provide a clear indicator of fluctuations, patterns or worsening of symptomatology. This can be useful in the development of appropriate management plans.



**Abbreviated
versus full
CAARMS**



Abbreviated versus full CAARMS

There are two versions of the CAARMS: the full CAARMS and the abbreviated CAARMS. There is a brief description of the full CAARMS in the section below; however, the rest of this manual will focus on the abbreviated CAARMS as this is the instrument used to clinically identify young people at ultra high risk of psychosis.

The full CAARMS

The full CAARMS is organised into seven domains and is used to map a broad range of psychopathology over time; it is mainly used for research purposes. The full CAARMS can take longer than an hour to administer depending on the young person's presentation.

The seven domains of the full CAARMS are:

- 1. Positive Symptoms**
- 2. Cognitive Change – Attention/Concentration**
- 3. Emotional Disturbance**
- 4. Negative Symptoms**
- 5. Behavioural Change**
- 6. Motor/Physical Changes**
- 7. General Psychopathology**

THE FULL CAARMS DOMAINS

1. Positive Symptoms

- Unusual Thought Content
- Non-bizarre Ideas
- Perceptual Abnormalities
- Disorganised Speech

This domain will be expanded upon further in the abbreviated CAARMS section of this manual.

2. Cognitive Change – Attention/Concentration

Requires rating the subjective experience and any observed cognitive change.

3. Emotional Disturbance

Requires rating of:

- Subjective emotional experience
- Observed blunted affect
- Observed inappropriate affect

4. Negative Symptoms

Requires rating of:

- Alogia
- Avolition/apathy
- Anhedonia

5. Behavioural Change

Requires rating of:

- Social isolation
- Impaired role function
- Disorganising/odd/stigmatising behaviours
- Aggression/dangerous behaviour

6. Motor/Physical Changes

Requires rating of:

- Subjective complaints of impaired motor functioning
- Informant reported or observed changes in motor functioning
- Subjective complaints of impaired bodily sensation
- Subjective complaints of impaired autonomic functioning

Table continues over page

THE FULL CAARMS DOMAINS CONTINUED

7. General Psychopathology

Requires rating of:

- Mania
- Depression
- Suicidality and self-harm
- Mood swings/lability
- Anxiety
- Obsessive-compulsive disorder symptoms
- Dissociative symptoms
- Impaired tolerance to normal stress

These seven domains have been constructed through retrospective mapping of symptoms present in the prodrome with each domain having subscales and a rating scale that measures:

- symptom intensity
- symptom frequency and duration
- symptom onset and offset dates
- pattern of symptoms related to addressing whether, and to what extent, substance use was related to symptomatology rated.
- level of distress in relation to symptoms measured on a Likert scale.

Each subscale begins with a series of questions designed as prompts to elicit the information required to make a judgement and rate symptoms appropriately. There is space on the form to write down notes as the interview progresses. Finally, functioning needs to be rated. This is done using the Social and Occupational Functioning Assessment Scale (SOFAS).⁶ Once all the ratings have been obtained, the intake criteria checklist is used to determine whether a young person meets the criteria for UHR (BLIPS and APS groups) or meets criteria for a full threshold psychosis. How to use the subscales, rating scales and intake the criteria checklist will be discussed in further detail in 'The abbreviated CAARMS' section and scoring sections of this manual.

The abbreviated CAARMS

The BLIPS and APS subgroups of the UHR criteria are identified using the positive symptoms domain of the full CAARMS, not the other six domains; therefore, the abbreviated version of the CAARMS was developed as it is a more clinically efficient way of identifying the UHR phase. A full version of the abbreviated CAARMS can be seen in Appendix 1. The abbreviated CAARMS only uses the positive symptom domain of the full CAARMS. This domain consists of four subscales. Each subscale lists a range of symptoms that need to be explored to score appropriately. The next section will look at these four subscales in greater detail and identifies questions provided by the CAARMS that can be used as prompts to illicit information. As mentioned previously the four sub-scales of the positive domain are:

- Unusual Thought Content
- Non-bizarre Ideas
- Perceptual Abnormalities
- Disorganised Speech

Rating the scales of the abbreviated CAARMS

The rating components involved in the scoring of the abbreviated CAARMS are:

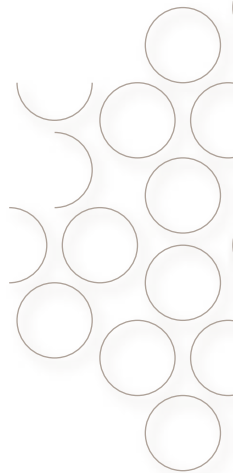
- The Global Rating Scale (measuring intensity of symptoms)
- Frequency and duration
- Onset and offset dates (also measuring duration)
- Pattern of symptoms
- Level of distress
- SOFAS

The Global Rating Scale (measuring intensity of symptoms)

The Global Rating Scale rates symptom severity from 0 to 6 for each of the four subscales. Each subscale contains its own Global Rating Scale that specifically relates to the symptoms within the subscale.

Primary and secondary anchors

The Global Rating Scale has descriptive explanations under each rating called primary and secondary anchors. Primary anchor descriptions within the Global Rating Scale refer to the quality of the experience and are usually at the top of the rating scale. Secondary anchor descriptions are related to the impact the symptoms has on the young person's functional capacity or the level of distress associated with the experiences and appear at the bottom of the rating scale. Rely on the primary anchors to make your rating in the first instance, and if an individual falls between two primary anchors, then use the secondary anchors to decide which rating to select. For example, it is important to determine the impact of a symptom on a young person's behaviour when trying to distinguish between a rating of a 4 or 5 on the Unusual Thought Content. If a young person states that they are receiving messages from the TV and that this causes them to watch less TV, then this would be rated a 5.



The image below shows an example of the Global Rating Scale for ‘Unusual Thought Content’.

GLOBAL RATING SCALE

0 Never, absent	1 Questionable	2 Mild	3 Moderate	4 Moderately severe	5 Severe	6 Psychotic and Severe
No Unusual Thought Content...	Mild elaboration of conventional beliefs as held...	Vague sense that something...	A feeling of perplexity. A stronger...	Referential ideas that certain...	Unusual thoughts that contain...	Unusual thoughts containing...

Frequency and duration

The frequency and duration subscales are rated using a 0 to 6 rating scale illustrated below for each of the Global Rating Scales. The onset and offset dates measure duration. Onset dates refers to the time when the symptoms reached maximum on the Global Rating Scale. The offset date is when symptoms stopped reaching maximum intensity.

0	1	2	3	4	5	6
Absent	Less than once a month	Once a month to twice a week – less than one hour per occasion	Once a month to twice a week – more than one hour per occasion OR 3 to 6 times a week – less than one hour per occasion	3 to 6 times a week – more than an hour per occasion OR daily – less than an hour per occ.	Daily – more than an hour per occ. OR several times a day	Continuous

How do I tell what onset/offset date to use?

It is important to rate ‘onset’ as the time when the symptom reached its maximum on the Global Rating Scale (i.e. if scoring as ‘5’, onset is when it first met criteria for a 5). It is important for clinicians to ask young people about the time frames of their signs and symptoms, and whether the symptoms have fluctuated in intensity or frequency over time. Usually young people will report symptoms as fluctuating and the clinician needs to ask more questions to rate the symptoms based on when they were most intense or frequent.

Patterns of symptoms – rating substance use

Rating symptoms and substance use determines whether there is a relationship between the two.

0	1	2
No relation to substance use noted	Occurs in relation to substance use and at other times as well	Noted only in relation to substance use

Level of distress

The level of distress scale is a 100-point Likert scale (0= not distressed at all; 100= extremely distressed) that subjectively measures the distress related to each subscale.

Delusional mood and perplexity ('non crystallised ideas')

This component of the subscale covers vague, non-definable feelings of confusion. It is often described as a feeling that 'something (e.g. things or self) is not quite right'. As this can often be quite a vague and not easily defined area, poor understanding of the young person's experience can produce false-positives. Careful and thorough questioning to ensure full understanding of the quality, frequency and duration of the young person's experiences within this subscale is required.

Have you had the feeling that something odd is going on that you can't explain?

Do you feel puzzled by anything?

Do familiar surroundings feel strange?

Do you feel that you have changed in some way?

Do you feel that others, or the world, have changed in some way?

Ideas of Reference

The Ideas of Reference component is based around exploring the feeling that things or people have special meaning or significance to oneself. It can include a belief or feeling that specific, personalised messages are being conveyed through TV, radio or newspapers. As the domains of Unusual Thought Content and Non-bizarre Ideas both fall under the broader category of disorders of thought, knowing where to rate Ideas of Reference can be challenging. Ideas of Reference are generally considered as part of the Unusual Thought Content domain unless the Ideas of Reference are exclusively in the context of paranoia and suspiciousness. In this case, they should be rated under Non-bizarre Ideas. For further clarification around Ideas of Reference and the differences between Unusual Thought Content and Non-bizarre Ideas, please see the box across the page.

Have you felt that there were messages for you on TV or in the news?

Have you felt that things that were happening around you had a special meaning, or that people were trying to give you messages?

What is it like?

How did it start?

Please note: example questions that clinicians can use when interviewing young people about their symptoms appear at the end of each section.

RULES OF THUMB

What is the difference between Unusual Thought Content and Non-bizarre Ideas?

Just because an experience rates on the unusual thought content subscale, it does not mean that it will rate on the Non-bizarre Ideas subscale. You should rate experiences such as Ideas of Reference, somatic passivity or thought broadcasting/insertion/withdrawal on the unusual thought content subscale whereas experiences such as suspiciousness, grandiosity, significant guilt, nihilistic/jealous/religious/erotomantic ideas should be rated on the Non-bizarre Ideas subscale. These examples are not exhaustive; you should also become familiar with the content of each subscale.

How do I rate Ideas of Reference?

If Ideas of Reference occur exclusively in the context of paranoia and suspiciousness, then only rate this experience on the Non-bizarre Ideas subscale. If the person experiences Ideas of Reference that are not related to any experiences of paranoia and suspiciousness, then rate it on the Unusual Thought Content subscale.

Bizarre ideas ('crystallized ideas')

Bizarre ideas are based around disorders of thought including thought control, insertion, withdrawal, broadcasting and mind reading. It also includes somatic passivity – the feeling or belief that bodily sensations are being imposed upon or controlled by an external force (e.g. another person, electrical currents or laser beams).

Thoughts, feelings, impulses

Have you felt that someone, or something, outside yourself has been controlling your thoughts, feelings, actions or urges?

Have you had feelings or impulses that don't seem to come from yourself?

Somatic passivity

Do you get any strange sensations in your body? Do you know what causes them?
Could it be due to other people or forces outside yourself?

Thought insertion

Have you felt that ideas or thoughts that are not your own have been put into your head?

How do you know they are not your own?

Where do they come from?

Thought withdrawal

Have you ever felt that ideas or thoughts are being taken out of your head?

How does that happen?

Thought broadcasting

Are your thoughts broadcast so that other people know what you are thinking?

Thoughts being read

Can other people read your mind?

Thought control, insertion, withdrawal, broadcasting, mind reading

Have you felt that ideas or thoughts that are not your own have been put into your head?



Non-bizarre Ideas – Global Rating Scale

The Non-bizarre Ideas subscale includes suspiciousness, persecutory ideas, grandiose ideas, somatic ideas, ideas of guilt, nihilistic ideas, jealous ideas, religious ideas and erotomanic ideas.

0 Never, absent	1 Questionable	2 Mild	3 Moderate	4 Moderately severe	5 Severe	6 Psychotic and severe
No Non-bizarre Ideas.	Subtle changes that could be reality based e.g. very self-conscious.	Increased self-consciousness e.g. feeling that others look at the subject, or talk about the subject. Or feeling of increased self-importance. Subject able to question.	Odd or unusual thoughts but whose content is not entirely implausible – may be some logical evidence. More evidence than rating of 4. Content of thoughts not original i.e. jealousy, mild paranoia.	Clearly idiosyncratic beliefs, which although ‘possible’ have arisen without logical evidence. Less evidence than rating of 3 e.g. thoughts that others wish the subject harm, which can be easily dismissed. Thoughts of having special powers, which can be easily dismissed.	Unusual thoughts about which there is some doubt (not held with delusional conviction), or which the subject does not believe all the time. May result in some change in behaviour, but minor.	Unusual thoughts containing original and highly improbable material held with delusional conviction (no doubt). May have marked impact on behaviour.
Onset date:			Offset date:			

FREQUENCY AND DURATION

0	1	2	3	4	5	6
Absent	Less than once a month	Once a month to twice a week – less than one hour per occasion	Once a month to twice a week – more than one hour per occasion OR 3 to 6 times a week – less than one hour per occasion	3 to 6 times a week – more than an hour per occasion OR daily – less than an hour per occ.	Daily – more than an hour per occ. OR several times a day	Continuous

PATTERN OF SYMPTOMS

0	1	2
No relation to substance use noted	Occurs in relation to substance use and at other times as well	Noted only in relation to substance use

LEVEL OF DISTRESS (IN RELATION TO SYMPTOMS)

0 – Not at all distressed						Extremely distressed – 100					

Suspiciousness, persecutory ideas

This component focuses on the feeling of being watched, followed, monitored or talked about. It also includes thinking around persecutory themes that may include the feeling that other individuals are out to cause harm to the self or others.

Has anybody been giving you a hard time or trying to hurt you?

Do you feel like people have been talking about you, laughing at you, or watching you?

What is it like? How do you know this?

Grandiose ideas

Grandiose ideas can include exaggerated self-opinion, belief in special abilities or powers or feelings of importance, superiority or omnipotence. Grandiosity can also include self-identifying as someone who is rich, famous or closely linked to a rich or famous personality.

Have you been feeling that you are especially important in some way, or that you have powers to do things that other people can't do?

Somatic ideas

Somatic ideas revolve around the feeling or perception that the body has in some way changed in appearance or function. This could include feelings that the body is diseased or infected.

Have you had the feeling that something odd is going on with your body that you can't explain?

What is it like?

Do you feel that your body has changed in some way, or that there is a problem with your body shape?

Ideas of guilt

These often include over concern, remorse or regret for past behaviour. It can also include a belief or feeling around being deserving of punishment.

Do you feel you deserve punishment for anything you have done wrong?

Do you ever feel very regretful about things that you have done in the past?

Nihilistic ideas

Nihilistic ideas pertain to the feeling or the perception that the world or oneself is not real or does not exist – or has never existed. This can also include the feeling that one is dead.

Have you ever felt that you, or a part of you, did not exist, or was dead?

Do you ever feel that the world does not exist?

Jealous ideas

Jealous ideas can present as mistrust around relationships or the belief that a partner is being unfaithful. These ideas commonly are associated with close or romantic relationships.

Are you a jealous person? Do you worry about relationships that your spouse/girlfriend/boyfriend has with other people?

Religious ideas

These ideas are concerned with a preoccupation with religious themes and unusual religious experiences.

Cultural and personal beliefs should be explored. Ratings based on cultural beliefs should be reduced, but not omitted, if the experience is within cultural norms. Exploring whether family or community members share similar beliefs is important, as it will impact upon rating. Please see *Rules of thumb* section of this manual for more information on considering cultural norms.

Are you very religious? Have you had any religious experiences?

Erotomantic ideas

These ideas are characterised by thoughts and feelings about relationships that may not actually exist. It can include a person believing or feeling that others are in love with them.

Is anyone in love with you? Who? How do you know this? Do you return his/her feelings?

SOME MORE NOTES ON UNUSUAL THOUGHT CONTENT AND NON-BIZARRE IDEAS

To receive a score of 3 or above on either subscale the experience must have an 'odd' quality. For example, if the person is socially anxious rather than suspicious or mildly paranoid, then they should only score a 2 on the Non-bizarre Ideas subscale.

The difference between a global/intensity score of 5 and 6 on Unusual Thought Content and Non-bizarre Ideas is mainly in relation to whether or not the person can question the experience. To receive a score of 5, the person must be able to question the experience at some times, whereas to receive a 6 the person must believe the delusion at the time, and afterwards (i.e. they cannot question the experience).

Visual changes

Visual changes can range from experiencing a change in the way things look to seeing things that aren't really there, or things that others can't see.

Distortions, illusions

Is there a change in the way things look to you?

Do things somehow look different, or abnormal?

Are there alterations in colour, or brightness of objects (things seeming brighter, or duller in colour)?

Are there alterations in the size and shape of objects?

Do things seem to be moving?

Hallucinations

Do you have visions, or see things that may not really be there?

Do you ever see things that others can't, or don't seem to?

What do you see? At the time that you see these things, how real do they seem?

Do you realise they are not real at the time, or only later?

Auditory Changes

Auditory changes can include noticing a change in the way things sound or increased (or changed) sensitivity to sound. It also includes hearing things others may not or that may not be real.

Distortions, illusions

Is there any change in the way things sound to you?

Do things somehow sound different, or abnormal?

Does your hearing seem more acute, or have increased sensitivity?

Does your hearing seem muted, or less acute?

Hallucinations

Do you ever hear things that may not really be there?

Do you ever hear things that other people seem not to (such as sounds or voices)?

What do you hear?

At the time you hear these things, how real do they seem?

Do you realise they are not real at the time, or only later?

Olfactory changes

Olfactory changes revolve around the sense of smell. It can include changes in sensitivity or smelling things that others can't or that may not be present or real.

Distortions, illusions

Does your sense of smell seem to be different, such as more, or less intense, than usual?

Hallucinations

Do you ever smell things that other people don't notice?

At the time, do these smells seem real? Do you realise they are not real at the time, or only later?

Gustatory changes

Gustatory changes are related to the sense of taste. This might include noticing that things taste differently to their usual taste or noticing odd tastes in the mouth.

Distortions, illusions

Does your sense of taste seem to be different, such as more, or less intense, than usual?

Hallucinations

Do you ever get any odd tastes in your mouth?

At the time that you taste these things, how real do they seem?

Do you realise they are not real at the time, or only later?

Tactile changes

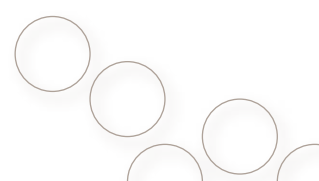
Tactile changes relate to the sense of touch. It can include odd or different sensations or feelings on or under the skin. This could also include a feeling or perception that something may be on or crawling on the skin.

Distortions, illusions, hallucinations

Do you ever get strange feelings on, or just beneath, your skin?

At the time that you feel these things, how real do they seem?

Do you realise they are not real at the time, or only later?



Somatic changes

Somatic changes revolve around feelings that the body may have changed or is distorted or functioning differently or abnormally. This may not only include the self-belief that 'something has changed' but the belief that others also notice the changes. Changes to bodily sensations such as the feeling of burning or numbness also fit into this category.

Distortions, illusions

Do you ever get strange feelings in your body (e.g. feel that parts of your body have changed in some way or that things are working differently)?

Do you feel/think that there is a problem with some part, or all of your body, i.e. that it looks different to others, or is different in some way? How real does this seem?

Hallucinations

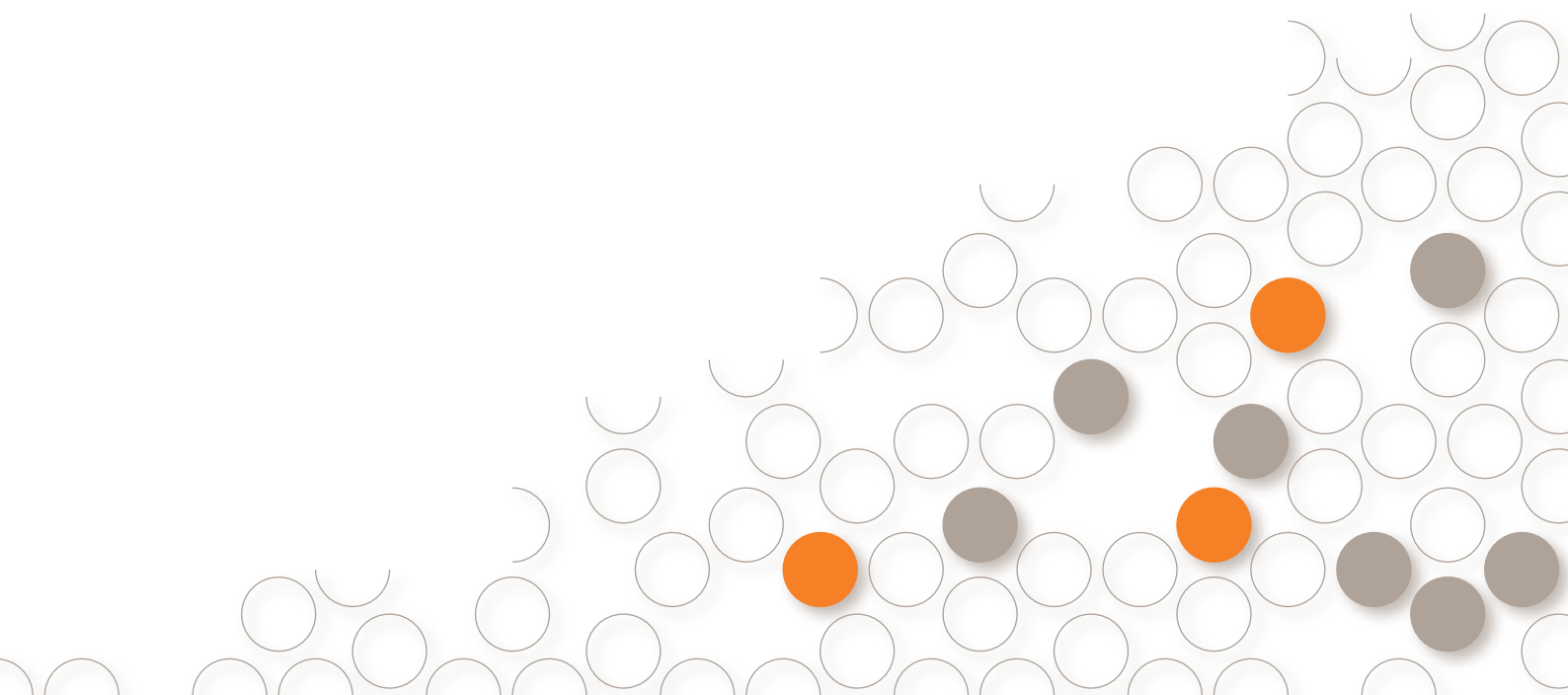
Have you noticed any change in your bodily sensations, such as increased, or reduced intensity?

Or unusual bodily sensations such as pulling feelings, aches, burning, numbness, vibrations?

RULES OF THUMB

How do I rate hypnogogic/hypnopompic perceptual disturbances?

Any hypnogogic or hypnopompic (occurrences during falling asleep or waking up) perceptual disturbance, regardless of the quality of the experience, should be rated as a global/intensity score of 2 on perceptual abnormalities.



Disorganised Speech – Global Rating Scale

The Disorganised Speech subscale is structured a little differently as both subjective and objective observations need to be taken into account. Therefore questions and prompts relate to the young person’s own experience in the subjective component of the subscale and areas to be aware of and note as a *clinician* are covered in the objective component.

The example questions in this section are also used when rating alogia, which is found in the negative symptoms domain of the full CAARMS.

0 Never, absent	1 Questionable	2 Mild	3 Moderate	4 Moderately severe	5 Severe	6 Psychotic and Severe
Normal logical speech, no disorganisation, no problems communicating or being understood.		Slight subjective difficulties e.g. problems getting message across. Not noticeable by others.	Somewhat vague, some evidence of circumstantiality, or irrelevance in speech. Feeling of not being understood.	Clear evidence of mild disconnected speech and thought patterns. Links between ideas rather tangential. Increased feeling of frustration in conversation.	Marked circumstantiality, or tangentiality in speech, but responds to structuring in interview. May have to resort to gesture, or mime to communicate.	Lack of coherence, unintelligible speech, significant difficulty following line of thought. Loose associations in speech.
Onset Date:			Offset Date:			

FREQUENCY AND DURATION

0	1	2	3	4	5	6
Absent	Less than once a month	Once a month to twice a week – less than one hour per occasion	Once a month to twice a week – more than one hour per occasion OR 3 to 6 times a week – less than one hour per occasion	3 to 6 times a week – more than an hour per occasion OR daily – less than an hour per occ.	Daily – more than an hour per occ. OR several times a day	Continuous

PATTERN OF SYMPTOMS

0	1	2
No relation to substance use noted	Occurs in relation to substance use and at other times as well	Noted only in relation to substance use

LEVEL OF DISTRESS (IN RELATION TO SYMPTOMS)



0 – Not at all distressed

Extremely distressed – 100

Subjective change

The subjective component of Disorganised Speech looks at difficulties with speech and communication with others. It relates directly to changes or difficulties *the young person is observing and reporting*.

Do you notice any difficulties with your speech, or ability to communicate with others?

Do you have trouble finding the correct word at the appropriate time?

Do you ever use words that are not quite right, or totally irrelevant?

Have you found yourself going off on tangents when speaking and never getting to the point?

Is this a recent change?

Are you aware that you are talking about irrelevant things, or going off the track?

Do other people ever seem to have difficulty in understanding what you are trying to say/trouble getting your message across?

Do you ever find yourself repeating the words of others?

Do you ever have to use gesture or mime to communicate due to trouble getting your message across? How bad is this?

Does it ever make you want to stay silent and not say anything?

Objective rating of Disorganised Speech

The objective component of Disorganised Speech looks at difficulties with speech and communication *observed by the clinician*. It is possible to rate a 3 or higher on the Global Rating Scale if there is objective evidence (clinician or family/friend reported observation). If a person reports difficulties (many do) but denies others observing or saying anything and the assessor also does not notice any difficulties, then a rating of 2 or less should be given.

Is it difficult to follow what the subject is saying at times due to using incorrect words, being circumstantial or tangential?

Is the subject vague, overly abstract or concrete? Can responses be condensed?

Do they go off the subject often and get lost in their words? Do they appear to have difficulty finding the right words?

Do they repeat words that you have used or adopt strange words (or 'non-words') in the course of regular conversation?

RULES OF THUMB

What if a person reports Disorganised Speech but their speech seems fine?

For the Disorganised Speech subscale, 'objective' evidence (which can include your impression in the interview) is required for a global rating of 3 and above.

PRACTICAL TIPS FOR EXPLORING INFORMATION

Once a young person has said 'yes' to one of the probe questions in the CAARMS, the clinician needs to know what question to ask next.

Some helpful prompt questions are:

How often does it happen?

When did it last happen?

Does it stop you from doing anything?

When was it at its worst?

What was it like at the worst point?

What do your friends and family say about it?

How distressed were you?

How long does it last?

Do other people see it the same way?

Can you give me a specific example of that?

Has it changed you behaviour in any other way?

The Social and Occupational Functioning Assessment Scale (SOFAS) – rating function

The Social and Occupational Functioning Assessment Scale (SOFAS) measures the social and functional capacity of an individual; this measurement is independent of diagnosis and severity of symptoms.⁶ The SOFAS is used as part of CAARMS to determine and rate the highest level of functioning in the past 12 months, and to determine and rate the lowest level of functioning sustained for at least a month. If there is a difference of 30% on the SOFAS score then the individual is considered to have a clinically significant decline in functioning. If an individual rates as 50 or below on the SOFAS for the past 12 months they are considered to have chronic low functioning. If an individual has a significant decline in functioning or chronic low functioning they meet the criteria for UHR.

Scoring the Global Rating Scale

Assessment of intensity needs to be made and scored on the Global Rating Scale. For example, using the Unusual Thought Content, a decision about whether the intensity of symptoms rates 3, 4 or 5 and so on needs to be made. The level of conviction of the subject has to be considered, does it rate a 4, 5 or 6? Once decisions have been made based on the information provided, the number associated with the level of intensity should be circled then frequency and duration needs to be determined before moving to the next subscale and so on and so on. Ratings for all four subscales need to be completed. It is important to note that the scales of the CAARMS tool are designed to rate 'psychotic-like experiences' as well as more serious symptoms. The intention is to measure such experiences

for assessing UHR criteria and research purposes rather than to pathologise the behaviour of the person. The headings listed next to the global/intensity rating scale numbers do not denote categories. For example, if an individual scores a 5 on perceptual abnormalities this does not necessarily mean that they meet the psychosis criteria. The only exception to this is when objective evidence is explicitly used (e.g. Disorganised Speech, see below). The distress scale that appears on the first four subscales should be rated by the person themselves, but this can be done by asking them how distressed they are (0–100) in relation to that particular attenuated psychotic symptoms.

Scoring Frequency and Duration

For each subscale, explore frequency and duration of symptoms present by ascertaining how often a symptom occurs and how long it lasts. Once this has been established, circle the corresponding rating. Ensure onset and offset dates are also recorded.

Scoring Pattern of Symptoms

Any relationship between symptoms and substance use needs to be rated and recorded. Rate the symptoms as reported if the young person denies substance use or only uses cannabis. If the young person is using substances other than cannabis, the remaining symptoms will need to be assessed once the intoxication period is over.

RULES OF THUMB

What if the person was intoxicated during the experience?

If a person reports a symptom in the context of substance use, only exclude a rating if the symptoms occur exclusively under peak intoxication. If you cannot differentiate due to the chronicity of substance use, then include the rating.

Scoring the Distress Scale

The CAARMS is a subjective scale, meaning information is gathered and recorded as reported by the young person. The only exception to this is when objective evidence is explicitly used (e.g. the Disorganised Speech subscale requires information observed by the clinician to be recorded). The distress scale that appears on the first four subscales should be rated by the young person themselves, but this can be done by asking them how distressed they are (0–100) in relation to that particular APS.

Scoring the SOFAS

Once all the subscale rating scales have been scored, functioning needs to be determined. Use the SOFAS to determine, rate and record:

- The highest level of functioning in the past 12 months
- The lowest level of functioning sustained for at least a month

If there is a difference of 30% on the SOFAS score then the individual is considered to have a clinically significant decline in functioning. If an individual rates as 50 or below on the SOFAS for the past 12 months they are considered to have chronic low functioning. If an individual has a significant decline in functioning or chronic low functioning they meet the criteria for UHR.

For further information about scoring the CAARMS, please see the CAARMS rules of thumb section of this manual. Once all the rating scales have been completed and scored, it needs to be determined whether the young person meets the criteria for UHR.

Other CAARMS 'rules of thumb'

Here are some more 'rules of thumb' for the abbreviated CAARMS that do not sit under any particular subscale heading but can help guide clinicians when using the tool.

RULES OF THUMB

What if the person reports more than one symptom per subscale?

If there are two symptoms that could rate on the one subscale, then you need to choose which one to rate. Consider the following factors in order:

- If one rating would allow the person to meet the attenuated symptoms inclusion criteria and the other rating would not allow this, then rate the symptom that would include the person.
- If both or none of the symptoms would allow the person to meet a criteria group, then rate the symptom that is most prominent (usually based on the severity of the symptom).
- If both symptoms are of equal severity and frequency/duration, then choose the one that has not been rated elsewhere on the CAARMS.

How do I tell if the experience is real or not?

If you are unsure if someone's experiences are real or psychotic e.g. feeling paranoid because the police really are after them, ask the person about the reaction of friends and family (i.e. do friends and family agree the person's reaction is appropriate and proportionate).

How do I rate psychotic symptoms that I think are accounted for by another diagnosis or experience?

You should always rate the experience regardless of how the symptom developed or what it is in relation to (excluding experiences that occur during peak intoxication). Although some psychotic symptoms may be clearly accounted for by another diagnosis or experience, this does not mean that the young person has a lessened risk of developing a psychotic disorder. So, for the purpose of the CAARMS and identifying young people at UHR, you are required to disregard the context of the psychotic symptom, and rate the symptom according to what the client reports.

Do you take into consideration cultural norms?

When rating the CAARMS, you need to take into consideration cultural beliefs and norms. Ratings based on cultural beliefs should be reduced, but not omitted, if the experience is within cultural norms, that is family/community members share similar beliefs. If there are discrepancies between the family/community beliefs and the young person's beliefs, then rate the experience according to the CAARMS anchors.

Determining the criteria for UHR

Once all the rating scales have been completed and scored, the clinician needs to determine whether the young person meets the criteria for UHR. The UHR criteria determination sheet below will assist the clinician to determine whether the young person meets the UHR criteria.

UHR 1: VULNERABILITY GROUP

Individuals with a combination of a trait risk factor (schizotypal personality disorder or a family history of psychotic disorder in a first-degree relative) and a significant deterioration in mental state and/or functioning or sustained low functioning during the past year.

Schizotypal personality disorder in identified individual

OR History of psychotic illness in a first-degree relative (mother, father, sister or brother)

PLUS

30% drop in SOFAS score for at least 1 month in the past 12 months

OR SOFAS score of 50 or less for the past 12 months (chronically low)

UHR 2: ATTENUATED PSYCHOSIS GROUP

2a) SUB-THRESHOLD INTENSITY

Individuals with sub-threshold (intensity or frequency) positive psychotic symptoms. The symptoms must have been present during the past year and be associated with a significant reduction in or sustained low functioning.

Unusual Thought Content (UTC) or

Non-bizarre Ideas (NBI) Intensity = 3–5, Frequency & Duration = 3–6

OR Disorganised Speech (DS) Intensity = 4–5, Frequency & Duration = 3–6

OR Perceptual Abnormalities (PA) Intensity = 3–4, Frequency & Duration = 3–6

PLUS

30% drop in SOFAS score for at least 1 month in the past 12 months

OR SOFAS score of 50 or less for the past 12 months (chronically low)

2b) SUB-THRESHOLD FREQUENCY

UTC or NBI or DS Intensity = 6, Frequency & Duration = 3

OR PA Intensity = 5–6, Frequency & Duration = 3

PLUS

30% drop in SOFAS score for at least 1 month in the past 12 months

OR SOFAS score of 50 or less for the past 12 months (chronically low)

UHR 3: BRIEF LIMITED INTERMITTENT PSYCHOTIC SYMPTOMS

Individuals with a recent history of frank psychotic symptoms that resolved spontaneously (without antipsychotic medication) within one week. The symptoms have been present during the past year and be associated with a significant reduction in or sustained low functioning.

UTC or NBI or DS Intensity = 6, Frequency & Duration = 4–6
OR PA Intensity = 5–6, Frequency & Duration = 4–6

PLUS

30% drop in SOFAS score for at least 1 month in the past 12 months

OR SOFAS score of 50 or less for the past 12 months (chronically low)

Symptoms resolve in less than 7 days

PSYCHOTIC (DOES NOT MEET UHR CRITERIA)

UTC or NBI or DS Intensity = 6, Frequency & Duration = 4–6
OR PA Intensity = 5–6, Frequency & Duration = 4–6

Symptoms resolve in less than 7 days

Sub-threshold UHR to UHR to FEP

Once all the rating scales have been scored, the clinician can determine what the scores mean in terms of whether a young person meets the criteria for sub-threshold UHR, UHR or FEP. The role of the intake criteria checklist (also described as a scoring key) is to determine these three categories. The scores obtained on the Global Rating Scale (0–6) and frequency and duration (0–6) can be used to mark a ‘yes’ or ‘no’ according to the definitions provided.

The scores and scales required to meet each UHR criteria or psychosis threshold will differ when working through the checklist. It is important to methodically work through the checklist to ensure accuracy. As more experience is gained through using the tool, it will become easier to remember the level of information required to score a person on each subscale and how this relates to UHR criteria.

Intake criteria

Group 1: Vulnerability group

Criteria 1 is the vulnerability group and identifies young people at risk of psychosis due to the combination of a trait risk factor and a significant deterioration in mental state and/or functioning. If a young person answers yes to family history OR schizotypal personality disorder PLUS a decrease in functioning or chronic low functioning as measured by SOFAS then criteria for UHR has been met.

	YES	NO
Family history of psychosis in first-degree relative	<input type="checkbox"/>	<input type="checkbox"/>
OR Schizotypal personality disorder in identified patient	<input type="checkbox"/>	<input type="checkbox"/>
PLUS		
30% drop in SOFAS score from premorbid level, sustained for a month, occurred within past 12 months	<input type="checkbox"/>	<input type="checkbox"/>
OR SOFAS score of 50 or less for past 12 months or longer	<input type="checkbox"/>	<input type="checkbox"/>
CRITERION MET FOR GROUP 1 – Vulnerability group	<input type="checkbox"/>	<input type="checkbox"/>

Group 2: Attenuated psychosis group

This criterion identifies young people at risk of psychosis due to a sub-threshold psychotic syndrome. That is, these young people have symptoms that do not reach threshold levels for psychosis due to sub-threshold intensity (the symptoms are not severe enough) or they have psychotic symptoms but at a sub-threshold frequency (the symptoms do not occur often enough).

2a) SUB-THRESHOLD INTENSITY	YES	NO
Global Rating Scale Score of 3–5 on Unusual Thought Content subscale, 3–5 on Non-bizarre Ideas subscale, 3–4 on Perceptual Abnormalities subscale and/or 4–5 on Disorganised Speech subscales of the CAARMS	<input type="checkbox"/>	<input type="checkbox"/>
PLUS		
Frequency Scale Score of 3–6 on Unusual Thought Content, Non-bizarre Ideas, Perceptual Abnormalities and/or Disorganised Speech subscales of the CAARMS for at least a week	<input type="checkbox"/>	<input type="checkbox"/>
2b) SUB-THRESHOLD FREQUENCY	YES	NO
Global Rating Scale Score of 6 on Unusual Thought Content, 6 on Non-bizarre Ideas, 5–6 on Perceptual Abnormalities and/or 6 on Disorganised Speech subscales of the CAARMS	<input type="checkbox"/>	<input type="checkbox"/>
PLUS		
Frequency Scale Score of 3 on Unusual Thought Content, Non-bizarre Ideas, Perceptual Abnormalities and/or Disorganised Speech subscales of the CAARMS	<input type="checkbox"/>	<input type="checkbox"/>
PLUS (for both categories)		
Symptoms present in past year	<input type="checkbox"/>	<input type="checkbox"/>
PLUS (for both categories)		
30% drop in SOFAS score from premorbid level, sustained for a month, occurred within past 12 months	<input type="checkbox"/>	<input type="checkbox"/>
OR SOFAS score of 50 or less for past 12 months or longer	<input type="checkbox"/>	<input type="checkbox"/>
CRITERION MET FOR GROUP 2 – Attenuated psychosis group	<input type="checkbox"/>	<input type="checkbox"/>

Group 3: Brief limited intermittent psychotic symptoms group

This criterion identifies young people at risk of psychosis due to a recent history of frank psychotic symptoms that resolved spontaneously (without antipsychotic medication) within one week.

	YES	NO
Global Rating Scale Score of 6 on Unusual Thought Content subscale, 6 on Non-bizarre Ideas, 5 or 6 on Perceptual Abnormalities subscale and/or 6 on Disorganised Speech subscales of the CAARMS	<input type="checkbox"/>	<input type="checkbox"/>
PLUS		
Frequency Scale Score of 4–6 on Unusual Thought Content, Non-bizarre Ideas, Perceptual Abnormalities and/or Disorganised Speech subscales	<input type="checkbox"/>	<input type="checkbox"/>
PLUS		
Frequency Scale Score of 4–6 on Unusual Thought Content, Non-bizarre Ideas, Perceptual Abnormalities and/or Disorganised Speech subscales	<input type="checkbox"/>	<input type="checkbox"/>
PLUS		
Symptoms occurred during last year	<input type="checkbox"/>	<input type="checkbox"/>
PLUS		
30% drop in SOFAS score from premorbid level, sustained for a month, occurred within past 12 months	<input type="checkbox"/>	<input type="checkbox"/>
OR SOFAS score of 50 or less for past 12 months or longer		
CRITERION MET FOR GROUP 3 – Brief limited intermittent psychotic symptoms group	<input type="checkbox"/>	<input type="checkbox"/>

Psychosis threshold

	YES	NO
Severity Scale Score of 6 on Unusual Thought Content subscale, 6 on Non-bizarre Ideas, 5 or 6 on Perceptual Abnormalities subscale and/or 6 on Disorganised Speech subscales of the CAARMS	<input type="checkbox"/>	<input type="checkbox"/>
PLUS		
Frequency Scale Score of greater than or equal to 4 on Unusual Thought Content, Non-bizarre Ideas, Perceptual Abnormalities and/or Disorganised Speech subscales	<input type="checkbox"/>	<input type="checkbox"/>
PLUS		
Symptoms present for longer than one week	<input type="checkbox"/>	<input type="checkbox"/>
PSYCHOSIS THRESHOLD CRITERION MET	<input type="checkbox"/>	<input type="checkbox"/>

Case scenarios

A number of case scenarios are presented in the following section. The scoring for the first scenario will be given directly after the scenario to enable you to get direct feedback. The subsequent scenarios are for the reader to use as practice with the scores appearing in Appendix 2.

CASE SCENARIO 1 JUSTIN

Justin is an 18-year-old male living with his family. He had recently completed Year 12 and 4 weeks ago commenced working in a factory. He described having a good supportive network and had plans to work as a security guard with the longer term goal to be a prison officer.

At the time of referral Justin described being worried he was going crazy. He reported for the past 12 months infrequently hearing whispering and screaming that would last from a few seconds up to 20 minutes in duration. In the past 4 weeks he reported hearing whispering most days and screaming a few times a week. This mainly occurred at work which he attributed to being in a noisy environment. He described the whispering as annoying and distracting and the screaming as frightening. He reported infrequently hearing his name being called and seeing fleeting shadows in his peripheral vision for many years.

Justin said he worries that people look at him because he is obese. However he noticed in the past few months he was being more anxious that strangers were looking at him and he could not completely attribute this to being self-conscious about his appearance. He guessed this occurred most days when he was out in public. Despite these concerns, Justin continued to carry out his normal routine. He denied feeling depressed but identified feeling slightly more irritable. He described long-standing difficulties with sleep and having low energy. He reported regularly binge drinking when out with friends and infrequent cannabis use.

During his early childhood he experienced a number of changes. His father was in and out of jail and died from a heroin overdose when Justin was 4. His mother re-partnered when he was 8 years old and had another two children. From a young age Justin was bullied for being overweight and reported having no friends until his mid-teens when he started to stand up to the bullies.

Scoring

SUBSCALE	INTENSITY	FREQUENCY
Unusual Thought Content		
Non-bizarre Ideas		
Perceptual Abnormalities		

CASE SCENARIO 1 JUSTIN (CONTINUED)

- Does not meet UHR criteria because they are below threshold
- Does not meet UHR criteria because they are psychotic
- Meets UHR criteria (choose one group from below):
- Vulnerability / Family History
- Attenuated psychotic symptoms – 2a
- Attenuated psychotic symptoms – 2b
- BLIPS

Justin meets the UHR criteria for UHR – specifically, attenuated psychotic symptoms group 2a (sub-threshold intensity). He scores 3 on the Non-bizarre Ideas scale on the basis of his thoughts that people are watching him. These thoughts go beyond heightened self consciousness due to his weight. Justin scores 3 on the Frequency Scale for this as he experiences it most days.

On the perceptual abnormality scale, Justin scores 4 on the intensity rating because of the screaming he hears which he finds frightening and a 3 on the frequency rating as it occurs ‘a few times a week’ which could be interpreted as 3 to 6 times per week.

SUBSCALE	INTENSITY	FREQUENCY
Unusual Thought Content		
Non-bizarre Ideas	3	3
Perceptual Abnormalities	4	3

Meets the inclusion criteria? Yes: Attenuated Psychotic Symptoms (APS group 2a)

CASE SCENARIO 2 SONJA

Sonja is a 17-year-old school student who lives at home with her parents and her older brother. Sonja's paternal grandmother was diagnosed with schizophrenia and her cousin was diagnosed with an anxiety disorder. Sonja was referred to Orygen by her GP, who has been treating Sonja for depression with medication for the past year.

About one year ago, Sonja's friend completed suicide by taking an overdose of prescription medication. Sonja felt that her other friends 'didn't really feel it' like Sonja did, and several arguments ensued between her and her peers about the reasons their friend may have felt suicidal. Since then, Sonja has stopped socialising with her friends and has attended school only sporadically. The school have tried to be compassionate, but are now viewing her non-attendance as a long-term problem, and have asked Sonja to leave the school.

Sonja still feels very distressed by her friend's death and often has visions of her friend dying. Instead of pills, however, Sonja has been seeing her friend with stab wounds and at other times with a rope around her neck. When asked more about this, Sonja believes that she is actually seeing her friend. Sonja has not previously felt suicidal, even when her friend died, but now thinks about death each day. She sees images of her friend every day for about 20 minutes each time and is very distressed by these experiences.

Scoring

SUBSCALE	INTENSITY	FREQUENCY
Unusual Thought Content		
Non-bizarre Ideas		
Perceptual Abnormalities		

- Does not meet UHR criteria because they are below threshold
- Does not meet UHR criteria because they are psychotic
- Meets UHR criteria (choose one group from below):
 - Vulnerability / Family History
 - Attenuated psychotic symptoms – 2a
 - Attenuated psychotic symptoms – 2b
 - BLIPS

Please see the appendices section for answers.

CASE SCENARIO 3 BETH

Beth is a 20-year-old history student at university, now doing her honours year. She was referred to Orygen by the university counselling service. She had been seeing a counsellor there for the last 4 months due to feelings of anxiety and not being able to cope with the pressure of doing a thesis and course work.

In the interview she reported that about 4 months ago when she was very stressed at university she felt that people were looking at her and laughing. This happened in lectures and when she was just walking around the campus. It occurred several times a week and made her feel very uncomfortable; however, she realised when she calmed herself down that it was not true. When present it could last for a whole lecture and linger after that (i.e. over one hour). At other times it would be briefer, especially if she left the lecture. One time she disclosed her feelings to a friend who told her it was not true, and this made her feel a bit better, but it still happened the next day. She tried telling herself that it could not be happening. She stopped going to some lectures and was handing in coursework late or not at all. She also refused invitations from friends to go out as she worried that she would be overwhelmed. She was feeling very tired and felt too anxious to eat.

Also during this time she heard her name being called and sometimes whispering noises. This only occurred for a few seconds. She realised it was her mind playing tricks on her and attributed it to stress.

This difficult time lasted for about 3.5 months. In the last 2 weeks she has felt a bit better since talking to a tutor about it. He was understanding and gave her extensions on several essays that were due. Sometimes she still thinks people might be laughing at her if she goes past a group of people laughing. Now she is able to dismiss it quickly.

She still hears a voice saying her name about once a week, usually at night. This doesn't bother her as she realises she is getting better.

Scoring

SUBSCALE	INTENSITY	FREQUENCY
Unusual Thought Content		
Non-bizarre Ideas		
Perceptual Abnormalities		

- Does not meet UHR criteria because they are below threshold
- Does not meet UHR criteria because they are psychotic
- Meets UHR criteria (choose one group from below):
 - Vulnerability / Family History
 - Attenuated psychotic symptoms – 2a
 - Attenuated psychotic symptoms – 2b
 - BLIPS

Please see the appendices section for answers.

CASE SCENARIO 4 TAMARA

Tamara is a 19-year-old telemarketer who was referred to Orygen by her GP. Tamara presented to her GP with an 8-month history of deliberate self-harm and antisocial behaviour. About 1 year ago a dispute arose with her neighbour over damage to her neighbour’s car. The neighbour had suggested that Tamara’s friends, who were often over at Tamara’s place until late, were to blame. Several arguments ensued over the next month, and on one occasion Tamara threw a rock through her neighbour’s window. The police were called, and the local newspaper reported the story. Tamara’s employer found out about the incident and asked her to resign. She did so, and since then has been unemployed and has not been actively looking for work.

Tamara became very depressed during this time and began using amphetamines and cannabis during weekends. She said she used to smoke cannabis when she was younger but had not done so for several years. Tamara still spends time with her friends, although she says they do not talk much and just sit around doing nothing and smoking cannabis.

About 6 weeks ago, Tamara disclosed to her GP that over the past 8 months she has heard her neighbour calling her name at night when she is alone. Tamara reports that this has happened about 6 times, and that she gets upset about it, although she can cope because her name is only called about once or twice each time.

Tamara soon has to face charges over the damages to property and is concerned about attending court.

Scoring

SUBSCALE	INTENSITY	FREQUENCY
Unusual Thought Content		
Non-bizarre Ideas		
Perceptual Abnormalities		

- Does not meet UHR criteria because they are below threshold
- Does not meet UHR criteria because they are psychotic
- Meets UHR criteria (choose one group from below):
 - Vulnerability / Family History
 - Attenuated psychotic symptoms – 2a
 - Attenuated psychotic symptoms – 2b
 - BLIPS

Please see the appendices section for answers.

CASE SCENARIO 5 JOHN

John is an 18-year-old apprentice electrician who lives at home with his mother and younger sister. He reports that both his mother and maternal grandfather have been diagnosed with anxiety disorders. His mother, who is very concerned about John's reaction to his father's death, referred John to Orygen. John's father died 7 months ago from a heart attack, and John returned to work shortly after. John works for an electrician who owns his own business, and so often works with his boss, or unsupervised for short periods of time.

Since his father's death, John has seen visions of his father. At first, this only happened occasionally and usually at night, when he was falling asleep. In the past 2 months, this has also been happening when John has been alone at work. The visions last for a few minutes each time, and are now occurring most days. John describes them as comforting, and is unsure whether they are 'part of his imagination' or not. He can't explain why they occur, but states that he likes seeing his dad and looks forward to times when he is alone.

Lately, John's boss has noticed that John appears distracted a lot of the time. Although John is usually a good worker, the boss gave John a warning and said that if he did not 'pull up his socks' at work then he would have to let him go. This concerns John very much, as the family relies on his modest wage to get by now that his father has passed away. John has stopped seeing many of his friends and cousins who he normally socialises with weekly. He has been spending more time in his room alone when at home and his mother is very keen for him to seek help.

Scoring

SUBSCALE	INTENSITY	FREQUENCY
Unusual Thought Content		
Non-bizarre Ideas		
Perceptual Abnormalities		

- Does not meet UHR criteria because they are below threshold
- Does not meet UHR criteria because they are psychotic
- Meets UHR criteria (choose one group from below):
 - Vulnerability / Family History
 - Attenuated psychotic symptoms – 2a
 - Attenuated psychotic symptoms – 2b
 - BLIPS

Please see the appendices section for answers.

CASE SCENARIO 6 JESSICA

Jessica was an 18-year-old female who recently completed Year 12. She lived with her grandmother. She was referred to the PACE Clinic by her social worker due to concerns about mood instability, suicidal ideas, paranoid ideas and intrusive thoughts. These difficulties appeared to have intensified with Jessica recently being discharged from State care, and the stress associated with leaving school.

Jessica presented with a history of neglect, physical and sexual abuse and frequent changes in her caregivers and placements. She was removed from her mother's care when she was 12 years old. Following that, she lived in at least 12 placements that reportedly broke down in the context of challenging behaviours. She had brief involvement with mental health services in the past, with one inpatient admission following an overdose. Previously, she had been diagnosed with major depressive episode, conduct disorder and borderline personality disorder.

On assessment, Jessica reported for the past 2 years worrying that people are out to get her which mainly occurred when feeling upset and distressed, which tended to occur when she was out in public on her own. She realised that this did not make sense and that she should be of no importance to strangers, but said that when she felt stressed she worried that people were looking at her and wanted to harm her. This occurred once to twice a week but could last 2 hours or more if she was having a 'really bad day'. She reacted by avoiding eye contact with people, and making her way home as quickly as possible.

For the past few weeks she reported several times a week worrying that people could read her mind and in response to this she would deliberately change her thoughts. At the time she was convinced people could read her mind but later was able to challenge this. This only lasted a few seconds at a time before she realised that it would be impossible. It was distressing for her at the time, but afterwards she would dismiss it.

Also in the last few weeks she had begun to experience a voice (male) inside her head making derogatory comments. The voice would occur approximately twice a week for seconds to minutes in duration. She reported feeling distressed by the voice and feeling unable to control it. However, at interview she did not appear distressed. Indeed she recounted her whole history with an air of slight indifference.

CASE SCENARIO 6 **JESSICA** (CONTINUED)

Scoring

SUBSCALE	INTENSITY	FREQUENCY
Unusual Thought Content		
Non-bizarre Ideas		
Perceptual Abnormalities		

- Does not meet UHR criteria because they are below threshold
- Does not meet UHR criteria because they are psychotic
- Meets UHR criteria (choose one group from below):
 - Vulnerability / Family History
 - Attenuated psychotic symptoms – 2a
 - Attenuated psychotic symptoms – 2b
 - BLIPS

Please see the appendices section for answers.





**Testing
your
CAARMS
skills**



Testing your CAARMS skills

Clinicians can practice rating various scales of the abbreviated CAARMS over the page. A number of dialogue scenarios between a clinician and a young person are presented after which you will be asked to make a rating that will help to develop your skills in using the CAARMS.

Read the following dialogue between a young person and clinician. Answer the question that follows the dialogue and then rate the quality of the experience above any other factor.

Example
1

Rating Perceptual Abnormalities

Clinician: Have you noticed any changes in the way things sound to you?

Young person: In what way are you talking about?

Clinician: Do things somehow seem different or abnormal?

Young person: Yeah a bit on occasions – like I do sort of hear some weird stuff.

Clinician: Do you ever hear things that other people don't hear?

Young person: Yeah, I can hear a conversation happening in my head, like there are two people talking to each other.

Clinician: What are they talking about?

Young person: They talk about what's happening around me. I can hear them as clearly as I can hear you now.

Clinician: Okay, do these voices bother you?

Young person: Um, yeah I actually find it really scary – I feel like I'm going crazy. At the time I feel like there are people there – but now I'm not sure. Which then makes me think ... that ... maybe this is all in my head.

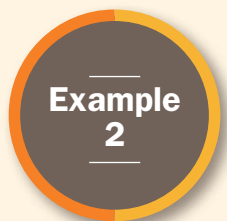
Q

What global rating would you give this?

A

5

It is rated 5 because there is distress but the young person is able to question it.



Rating Perceptual Abnormalities

Clinician: Do you ever hear things that other people don't hear?

Young person: Yeah, I feel like I can hear someone talking in my head.

Clinician: Can you hear what they're saying?


Young person: Yeah of course I can – there are people talking to me. Why would I not be able to hear them? It scares me to have constant voices talking in my head – knowing that people are around me.

Q What global rating would you give this?

A 6

In comparing examples 1 and 2, although both examples are true hallucinations when we examine the primary anchors, it is the secondary anchors that guide us on our ratings. The first example the young person is able to question the voices but holds full conviction in the second example and hence the different scores.

Please note: that without exploring the frequency and duration – we are unable to determine full threshold psychosis symptoms.



Example
3

Scoring on the Unusual Thought Content

Clinician: Have you ever felt that ideas or thoughts that are not your own are being put into your head?

Young person: Like some sort of reverse lobotomy? Ahhhhhh no!

Clinician: What about ever feeling like your thoughts are being broadcast out loud so that other people could hear what you're thinking?

Young person: Actually I do have that sometimes ... like people on the bus or just when I'm walking along. It sounds a bit weird, but I feel like other people know what I am thinking without me even saying or doing anything.

Clinician: Okay so, it's more like people can hear your thoughts out loud, rather than interpret your facial expressions or your body language?

Young person: Yeah I guess it's like that – it's difficult to explain. Also, I think about it some more a couple of hours later, and I kind of wonder if it is true – like I sort of think maybe it's not possible.

Clinician: Right, so at the time it seems real, but a few hours later you begin to question whether it's possible?

Young person: [nods]

Clinician: At the time when you're on the train, do you do anything differently to stop the thoughts?

Young person: Yeah, I try to change what I am thinking about by singing a song or thinking about a movie in my head. That way, if people are able to read my thoughts, then they can't hear anything private.

Q


Guess the global rating.

A

When only considering primary anchors, it may have been difficult to distinguish whether patient is a 4 or a 5 on Unusual Thought Content.

Therefore, you need to take into consideration the secondary anchors located towards the bottom on the global column. Minor behavioural change is the difference between rating of a 4 and a 5; therefore, the young person receives a 5 on Unusual Thought Content because she is deliberately trying to think of something else to prevent private thoughts from being broadcast.

Rely on the primary anchors to make your rating in the first instance, and if somebody falls between two primary anchors, then use the secondary anchors to decide which rating to select.



Example
4

When the young person reports more than one symptom per subscale?

Clinician: Has there ever been a change in the way things look to you – like do things somehow look different or abnormal?

Young person: I wouldn't say things look entirely different but it's more that I feel my vision has more to it.

Clinician: So have you seen things that other people can't see?

Young person: I sort of get flashes sometimes in the corner of my eye. I turn to look at it but there's nothing there.

Clinician: Can you see what it is?

Young person: No not really, it's just like a shadow.

Clinician: And how often does this happen?

Young person: Not often maybe 3–4 times a week. And it only lasts for a few seconds but it really freaks me out.

Clinician: What about hearing things that other people can't hear?

Young person: Oh, the only thing is my name being called.

Clinician: What does it sound like?

Young person: It sounds a bit like my mum or a teacher, I don't know.

Clinician: What do you do?

Young person: Well, sometimes I'll say 'Did you call me?' if someone is around but if no-one is around, I look around for that person.

Clinician: And how often does that happens?

Young person: About the same, 3–4 times a week.

Q

How would you rate this when the young person reports more than one symptom per subscale?

A

If there are two symptoms that could rate on the one subscale, then you need to choose which one to rate. Consider the following factors in order:

- If one rating would allow the person to meet the attenuated symptoms inclusion criteria and the other rating would not allow this, then rate the symptom that would include the person.
- If either both or neither of the symptoms would allow the person to meet a criteria group, then rate the symptom that is most prominent (usually based on the severity of the symptom).
- If both symptoms are of equal severity and frequency/duration, then choose the one that has not been rated elsewhere on the CAARMS.

In the case above, the auditory is more prevalent than the visual because the auditory is a clear calling of the name versus the shadow in the corner of the eye.

Example 5

Identifying the onset date to use?

Clinician: When did you begin to feel worried about people talking about you?

Young person: I would say this feeling has been there since I was around 12 – probably since I started high school. People just seem like to be constantly talking about me ... muttering about me ...

Clinician: That's awful ... has it always been this bad?

Young person: No, it's become a lot worse since I started my job last month. Now I feel like almost everyone is saying something bad about me, and I almost always feel like this when I am at work.

Q

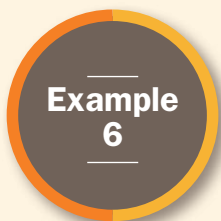
What is the onset date?

A

This example is referring to onset dates and how you go about accurately establishing these.

You must rate the onset date as the time when the symptom reached its maximum on the Global Rating Scale.

So, the onset date in this case would be last month.



Example
6

Rating Ideas of Reference

The questions under example 6 all relate to the Unusual Thought Content or Non-bizarre Ideas subscales and will help you to distinguish between them and score them.

Clinician: Do you ever have the feeling like someone is watching you?

Young person: Yeah, sometimes I feel like my aunty is watching me from the other side. Do you ever watch something and feel it is just *made for you*?

Sometimes when I see a TV show with a character that looks like her, I feel like she is trying to say something to me, that she might be trying to give me a message to pass on to my family.

Q

Is this Unusual Thought Content or Non-bizarre Ideas?

A

Unusual Thought Content because the theme is Ideas of Reference.

Clinician: Do you ever get the feeling that someone is watching you?

Young person: Yeah I feel like my aunty is watching me. Not just watching me ... it's kind of like she's watching to see if I do something wrong ... I don't know like ... she is making sure I don't do anything too bad. Some people will think I'm weird but I can feel her around me and I'm conscious of not doing anything bad.

Q

Is this Unusual Thought or Non-bizarre Ideas?

A

Non-bizarre Ideas because the theme is paranoia, regardless of whether it is possible or not.

Example
6 cont.

Clinician: Do you feel like people have been talking about you, laughing at you, or watching you?

Young person: Sometimes I feel like people stare at me when I am in public places. Usually it's when I am walking through the shopping centre or when I am buying things.

Clinician: What gives you the idea that people might be staring at you?

Young person: Mum says I talk really quietly and the sales assistants can't hear me. But I think they might be staring because I look weird. I don't know it's probably just my imagination.

Q

How would you rate this?

A

2 on the Non-bizarre Ideas subscale

To receive a score of 3 or above on either subscale the experience must have an 'odd' quality. For example, if the person is socially anxious rather than suspicious or mildly paranoid, then they should only score a 2 on the Non-bizarre Ideas subscale.

Clinician: Do you feel like people have been talking about you, laughing at you, or watching you?

Young person: Yeah sometimes I feel like my friends at school are talking behind my back.

Clinician: What gives you the impression that you are being spoken about behind your back? Do you see them talking about you? Or do certain things get back to you?

Young person: No, not really. I just get this sense that my friends are waiting for me to go somewhere and then they say bad things about me. I've never caught them, but I get that feeling every now and again. To my face they are really nice to me so I don't really know why I get these feelings.

Q

How would you rate this?

A

3 on the Non-bizarre Ideas subscale

This is not based on any evidence and has an odd quality to it, therefore, able to rate 3 or above depending on level of conviction, and behavioural change.

If this young person began to change their behaviour (e.g. not attending school/confronting friends) or they were unable to question (i.e. held with delusional intensity) then you would be rating at the upper end of the scale. To receive a 6 (i.e. potentially psychotic), the young person must believe the delusion all the time.

Example
7

Rating psychotic symptoms that may be accounted for by another diagnosis or experience?

Clinician: So you've told me that since the car accident last year, you've started to hear things that others can't hear, including hearing screaming and the sound of tyres screeching. Can you tell more about this?

Young person: Well, it all started just after the accident. I was really upset about what had happened and I haven't been coping well ever since. Sometimes when I least expect it, I hear the sounds. It's so vivid and realistic. It's very upsetting for me, and it always brings back the memory of that night.

Q

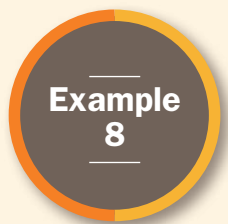
How would you rate this?

A

Yes. You should *always* rate the experience regardless of how the symptom developed or what it is in relation to (apart from substance use, which we have already discussed). In this case, you might suspect that the young person has developed post-traumatic stress disorder and the auditory hallucinations are a result of trauma.

While this is possible, we don't consider this when rating the CAARMS. This person is still hearing things that others can't hear, and therefore, may still be at risk of developing a psychotic disorder.

It's the clinician's job to identify and monitor psychotic like experiences, even if we think the symptoms are better accounted for by something else. We can never be sure that there isn't something more going on, so always include the rating.



Example
8

What if a person reports Disorganised Speech but their speech seems fine?

Clinician: Have you noticed any difficulties with your speech or your ability to communicate with others?

Young person: Yeah, I often find that I have trouble trying to find the right word or I forget what I was about to say ... I can't keep my mind on track or something – it's a bit annoying.

Clinician: Do you think that other people notice when you're having these problems? Has anyone ever commented on your speech?

Young person: No, probably not. No-one has ever said anything, so I don't think so.

Q

What would you rate for Disorganised Speech?

A

Global score is 2.

For the Disorganised Speech subscale, you need 'objective' evidence in order to rate a 3 or above.

You can include your impression in the interview.

Example 9

What if the person was intoxicated during the experience?

Clinician: You've said that you only see human figures when you're high. Do you see these figures when you're coming down or any other time?

Young person: Not often, maybe sometimes. It almost always happens when I am high, but I guess there have been a few times when I saw the figures a few days later.

Q

How would rate this on the Pattern of Symptoms Scale and the Global Rating Scale?

A

If a person reports psychotic symptoms only in the context of substance use, then include the rating, but make sure you specify that it occurs only in relation to substance use, that is, a 2 on pattern of symptoms.

You need to rate the global intensity as per usual, only considering the quality of the experience, not how the symptoms developed.

In this example, the young person reports experiencing perceptual disturbances mostly during peak intoxication, but only occasionally at other times. Therefore, you would rate the pattern of symptoms as a 1.

A young person can't be considered UHR if their symptoms are explained entirely by acute intoxication.

If you can't differentiate if the substance is related or not then just include the rating.

If the person is constantly intoxicated (e.g. a chronic cannabis user) then rate the experience as per usual.



Rating hypnogogic/hypnopompic perceptual disturbances?

Clinician: Do you ever have visions or see things that might not really be there?

Young person: Sometimes I see things at the end of my bed; it can give me a fright. Most of the time it's a person but I don't know who they are.

Clinician: So you experience this when you're in bed?
Does that mean you are falling asleep or waking up? Or are you just lying awake in your bed?

Young person: It only happens when I'm waking up, so generally in the morning, or occasionally in the middle of the night.

Q How would you rate this?

A Global score is 2.

Any hypnogogic or hypnopompic perceptual disturbance, regardless of the quality of the experience, should be rated as a global/intensity score of 2 on perceptual abnormalities.

Example 11

How do I tell if the experience is real or not?

Clinician: So you've told me that you feel like the police are after you. What gives you the impression that this is happening?

Young person: Well, I can see a car tailing me when I drive around town. I think it's the police monitoring me to see whether I am selling drugs again.

Clinician: Does this mean you have previously been in contact with the police about selling drugs?

Young person: Yeah, I got busted a few years back dealing. Haven't been caught any other time, and I've stopped dealing now. But, I still think they're after me.

Clinician: What do your family and friends say about this?

Young person: My friends reckon I'm losing the plot and my family say the same thing. They tell me I need to relax because I've stopped dealing now, so the cops wouldn't be after me. I think they're wrong.

Q

How do I tell if the experience is real or not?

A

If you are unsure if someone's experiences are real or psychotic then ask the person about the reaction of friends and family (i.e. do friends and family agree the person's reaction is appropriate and proportionate?). If you have family or friends involved, then you can ask them with the permission of the young person.



Example
12

Considering cultural norms

Clinician: You've told me that you are especially important because you have abilities that others don't typically have. Can you tell me more about this?

Young person: Well since I was little, I've felt that I had the ability to read people. I can know how they're feeling without them even saying so. It's more than just reading body language, I think I have a real 'sense' for people, and that I am able to connect on a different level. I am also an excellent judge of character. I can know instantly what people are feeling just based on the vibe I get.

Clinician: So do you think that others in the world have gifts like these, or is it just you?

Young person: I am not the only one who has this sense, but very few people do. My mum and my brother share a similar ability. We are all really good at reading people. Mum tells me it is a gift that has been passed down.

Q

Do you take into consideration cultural norms?

A

You should take into consideration cultural norms. Ratings based on cultural beliefs should be reduced if the experience is within cultural norms. You should still rate it on the CAARMS but not as high.

You should always check with the young person whether their family and friends share similar beliefs. If you find that there are a lot of discrepancies then you should rate the experience higher.



Appendices

BIZARRE IDEAS ('CRYSTALLIZED IDEAS')

Thoughts, Feelings, Impulses

Have you felt that someone, or something, outside yourself has been controlling your thoughts, feelings, actions or urges? Have you had feelings or impulses that don't seem to come from yourself?

Somatic Passivity

Do you get any strange sensations in your body? Do you know what causes them? Could it be due to other people or forces outside yourself?

Thought Insertion

Have you felt that ideas or thoughts that are not your own have been put into your head? How do you know they are not your own? Where do they come from?

Thought Withdrawal

Have you ever felt that ideas or thoughts are being taken out of your head? How does that happen?

Thought Broadcasting

Are your thoughts broadcast so that other people know what you are thinking?

Thoughts Being Read

Can other people read your mind?

Unusual Thought Content – Global Rating Scale

0 Never, absent	1 Questionable	2 Mild	3 Moderate	4 Moderately severe	5 Severe	6 Psychotic and Severe
No unusual thought content.	Mild elaboration of conventional beliefs as held by a proportion of the population	Vague sense that something is different, or not quite right with the world, a sense that things have changed but not able to be clearly articulated. Subject not concerned/worried about this experience	A feeling of perplexity. A stronger sense of uncertainty regarding thoughts than 2.	Referential ideas that certain events, objects or people have a particular and unusual significance. Feeling that experience may be coming from outside the self. Belief not held with conviction, subject able to question. Does not result in change in behaviour.	Unusual thoughts that contain completely original and highly improbable material. Subject can doubt (not held with delusional conviction), or which the subject does not believe all the time. May result in some change in behaviour, but minor.	Unusual thoughts containing original and highly improbable material held with delusional conviction (no doubt). May have marked impact on behaviour.
Onset Date:			Offset Date:			

FREQUENCY AND DURATION

0	1	2	3	4	5	6
Absent	Less than once a month	Once a month to twice a week – less than one hour per occasion	Once a month to twice a week – more than one hour per occasion OR 3 to 6 times a week – less than one hour per occasion	3 to 6 times a week – more than an hour per occasion OR daily – less than an hour per occ.	Daily – more than an hour per occ. OR several times a day	Continuous

PATTERN OF SYMPTOMS

0	1	2
No relation to substance use noted	Occurs in relation to substance use and at other times as well	Noted only in relation to substance use

LEVEL OF DISTRESS (IN RELATION TO SYMPTOMS)

0 – Not at all distressed					Extremely distressed – 100				

1.2 NON-BIZARRE IDEAS

Non-bizarre Ideas ('Crystallized Ideas')

Suspiciousness, Persecutory Ideas: Has anybody been giving you a hard time or trying to hurt you? Do you feel like people have been talking about you, laughing at you, or watching you? What is it like? How do you know this?

Grandiose Ideas

Have you been feeling that you are especially important in some way, or that you have powers to do things that other people can't do?

Somatic Ideas

Have you had the feeling that something odd is going on with your body that you can't explain? What is it like? Do you feel that your body has changed in some way, or that there is a problem with your body shape?

Ideas of Guilt

Do you feel you deserve punishment for anything you have done wrong?

Nihilistic Ideas

Have you ever felt that you, or a part of you, did not exist, or was dead?
Do you ever feel that the world does not exist?

Jealous Ideas

Are you a jealous person? Do you worry about relationships that your spouse/girlfriend/boyfriend has with other people?

Religious Ideas

Are you very religious? Have you had any religious experiences?

Erotomantic Ideas

Is anyone in love with you? Who? How do you know this? Do you return his/her feelings?

Non-bizarre Ideas – Global Rating Scale

The Non-bizarre Ideas subscale includes suspiciousness, persecutory ideas, grandiose ideas, somatic ideas, ideas of guilt, nihilistic ideas, jealous ideas, religious ideas and erotomanic ideas.

0 Never, absent	1 Questionable	2 Mild	3 Moderate	4 Moderately severe	5 Severe	6 Psychotic and Severe
No Non-bizarre Ideas.	Subtle changes that could be reality based. Eg. Very self-conscious.	Increased self-consciousness. Eg. Feeling that others look at the subject, or talk about the subject. Or feeling of increased self-importance. Subject able to question.	Odd or unusual thoughts but whose content is not entirely implausible – may be some logical evidence. More evidence than rating of 4. Content of thoughts not original i.e. jealousy, mild paranoia.	Clearly idiosyncratic beliefs, which although 'possible' have arisen without logical evidence. Less evidence than rating of 3. Eg. Thoughts that others wish the subject harm, which can be easily dismissed. Thoughts of having special powers, which can be easily dismissed.	Unusual thoughts about which there is some doubt (not held with delusional conviction), or which the subject does not believe all the time. May result in some change in behaviour, but minor.	Unusual thoughts containing original and highly improbable material held with delusional conviction (no doubt). May have marked impact on behaviour.
Onset Date:			Offset Date:			

FREQUENCY AND DURATION

0	1	2	3	4	5	6
Absent	Less than once a month	Once a month to twice a week – less than one hour per occasion	Once a month to twice a week – more than one hour per occasion OR 3 to 6 times a week – less than one hour per occasion	3 to 6 times a week – more than an hour per occasion OR daily – less than an hour per occ.	Daily – more than an hour per occ. OR several times a day	Continuous

PATTERN OF SYMPTOMS

0	1	2
No relation to substance use noted	Occurs in relation to substance use and at other times as well	Noted only in relation to substance use

LEVEL OF DISTRESS (IN RELATION TO SYMPTOMS)

0 – Not at all distressed						Extremely distressed – 100				

1.3 PERCEPTUAL ABNORMALITIES

Visual changes

Distortions, illusions: is there a change in the way things look to you? Do things somehow look different, or abnormal? Are there alterations in colour, or brightness of objects (things seeming brighter, or duller in colour)? Are there alterations in the size and shape of objects? Do things seem to be moving?

Hallucinations: do you have visions, or see things that may not really be there? Do you ever see things that others can't, or don't seem to? What do you see? At the time that you see these things, how real do they seem? Do you realise they are not real at the time, or only later?

Auditory changes

Distortions, illusions: is there any change in the way things sound to you? Do things somehow sound different, or abnormal? Does your hearing seem more acute, or have increased sensitivity? Does your hearing seem muted, or less acute?

Hallucinations: do you ever hear things that may not really be there? Do you ever hear things that other people seem not to (such as sounds or voices)? What do you hear? At the time you hear these things, how real do they seem? Do you realise they are not real at the time, or only later?

Olfactory changes

Distortions, illusions: does your sense of smell seem to be different, such as more, or less intense, than usual?

Hallucinations: do you ever smell things that other people don't notice? At the time, do these smells seem real? Do you realise they are not real at the time, or only later?

Gustatory changes

Distortions, illusions: does your sense of taste seem to be different, such as more, or less intense, than usual?

Hallucinations: do you ever get any odd tastes in your mouth? At the time that you taste these things, how real do they seem? Do you realise they are not real at the time, or only later?

Tactile changes

Distortions, illusions, hallucinations: do you ever get strange feelings on, or just beneath, your skin? At the time that you feel these things, how real do they seem? Do you realise they are not real at the time, or only later?

Somatic changes

Note: Probes also used to rate Impaired Bodily Sensation.

Distortions, illusions: do you ever get strange feelings in your body (eg feel that parts of your body have changed in some way, or that things are working differently)? Do you feel/think that there is a problem with some part, or all of your body, that is, that it looks different to others, or is different in some way? How real does this seem?

Hallucinations: have you noticed any change in your bodily sensations, such as increased, or reduced intensity? Or unusual bodily sensations such as pulling feelings, aches, burning, numbness, vibrations?

Perceptual Abnormalities – Global Rating Scale

0 Never, absent	1 Questionable	2 Mild	3 Moderate	4 Moderately severe	5 Severe	6 Psychotic and Severe
No abnormal perceptual experience.		Heightened, or dulled perceptions, distortions, illusions (e.g. lights/shadows). Not particularly distressing. Hypnogogic/hypnopompic experiences	More puzzling experiences: more intense/vivid distortions/illusions, indistinct murmuring, etc. Subject unsure of nature of experiences. Able to dismiss. Not distressing. Derealisation/depersonalisation	Much clearer experiences than 3 such as name being called, hearing phone ringing etc. but may be fleeting/transient. Able to give plausible explanation for experience. May be associated with mild distress.	True hallucinations i.e. hearing voices or conversation, feeling something touching body. Subject able to question experience with effort. May be frightening or associated with some distress.	True hallucinations which the subject believes are true at the time of, and after, experiencing them. May be very distressing
Onset Date:			Offset Date:			

FREQUENCY AND DURATION

0	1	2	3	4	5	6
Absent	Less than once a month	Once a month to twice a week – less than one hour per occasion	Once a month to twice a week – more than one hour per occasion OR 3 to 6 times a week – less than one hour per occasion	3 to 6 times a week – more than an hour per occasion OR daily – less than an hour per occ.	Daily – more than an hour per occ. OR several times a day	Continuous

PATTERN OF SYMPTOMS

0	1	2
No relation to substance use noted	Occurs in relation to substance use and at other times as well	Noted only in relation to substance use

LEVEL OF DISTRESS (IN RELATION TO SYMPTOMS)

0 – Not at all distressed						Extremely distressed – 100				

1.4 DISORGANISED SPEECH

Subjective change

Do you notice any difficulties with your speech, or ability to communicate with others?

Do you have trouble finding the correct word at the appropriate time?

Do you ever use words that are not quite right, or totally irrelevant?

Have you found yourself going off on tangents when speaking and never getting to the point?
Is this a recent change?

Are you aware that you are talking about irrelevant things, or going off the track?

Do other people ever seem to have difficulty in understanding what you are trying to say/trouble getting your message across?

Do you ever find yourself repeating the words of others?

Do you ever have to use gesture or mime to communicate due to trouble getting your message across?
How bad is this?

Does it ever make you want to stay silent and not say anything?

Objective Rating of Disorganised Speech

Is it difficult to follow what the subject is saying at times due to using incorrect words, being circumstantial or tangential?

Is the subject vague, overly abstract or concrete? Can responses be condensed?

Do they go off the subject often and get lost in their words? Do they appear to have difficulty finding the right words?

Do they repeat words that you have used or adopt strange words (or 'non-words') in the course of regular conversation?

Disorganised Speech – Global Rating Scale

0 Never, absent	1 Questionable	2 Mild	3 Moderate	4 Moderately severe	5 Severe	6 Psychotic and Severe
Normal logical speech, no disorganisation, no problems communicating or being understood.		Slight subjective difficulties e.g. problems getting message across. Not noticeable by others.	Somewhat vague, some evidence of circumstantiality, or irrelevance in speech. Feeling of not being understood.	Clear evidence of mild disconnected speech and thought patterns. Links between ideas rather tangential. Increased feeling of frustration in conversation.	Marked circumstantiality, or tangentiality in speech, but responds to structuring in interview. May have to resort to gesture, or mime to communicate.	Lack of coherence, unintelligible speech, significant difficulty following line of thought. Loose associations in speech.
Onset Date:			Offset Date:			

FREQUENCY AND DURATION

0	1	2	3	4	5	6
Absent	Less than once a month	Once a month to twice a week – less than one hour per occasion	Once a month to twice a week – more than one hour per occasion OR 3 to 6 times a week – less than one hour per occasion	3 to 6 times a week – more than an hour per occasion OR daily – less than an hour per occ.	Daily – more than an hour per occ. OR several times a day	Continuous

PATTERN OF SYMPTOMS

0	1	2
No relation to substance use noted	Occurs in relation to substance use and at other times as well	Noted only in relation to substance use

LEVEL OF DISTRESS (IN RELATION TO SYMPTOMS)

0 – Not at all distressed						Extremely distressed – 100				

INCLUSION CRITERIA

Intake criteria

Group 1: Vulnerability group

This criterion identifies young people at risk of psychosis due to the combination of a trait risk factor and a significant deterioration in mental state and/or functioning.

	YES	NO
Family history of psychosis in first degree relative OR Schizotypal Personality Disorder in identified patient	<input type="checkbox"/>	<input type="checkbox"/>
PLUS 30% drop in SOFAS score from premorbid level, sustained for a month, occurred within past 12 months OR SOFAS score of 50 or less for past 12 months or longer	<input type="checkbox"/>	<input type="checkbox"/>
CRITERION MET FOR GROUP 1 – Vulnerability Group	<input type="checkbox"/>	<input type="checkbox"/>

Group 2: Attenuated psychosis group

This criterion identifies young people at risk of psychosis due to a sub-threshold psychotic syndrome. That is, these young people have symptoms that do not reach threshold levels for psychosis due to sub-threshold intensity (the symptoms are not severe enough) or they have psychotic symptoms but at a sub-threshold frequency (the symptoms do not occur often enough).

2a) SUB-THRESHOLD INTENSITY:	YES	NO
Global Rating Scale Score of 3–5 on Unusual Thought Content subscale, 3–5 on Non-bizarre Ideas subscale, 3–4 on Perceptual Abnormalities subscale and/or 4–5 on Disorganised Speech subscales of the CAARMS	<input type="checkbox"/>	<input type="checkbox"/>
PLUS Frequency Scale Score of 3–6 on Unusual Thought Content, Non-bizarre Ideas, Perceptual Abnormalities and/or Disorganised Speech subscales of the CAARMS for at least a week	<input type="checkbox"/>	<input type="checkbox"/>
2b) SUB-THRESHOLD FREQUENCY:	YES	NO
Global Rating Scale Score of 6 on Unusual Thought Content, 6 on Non-bizarre Ideas, 5–6 on Perceptual Abnormalities and/or 6 on Disorganised Speech subscales of the CAARMS	<input type="checkbox"/>	<input type="checkbox"/>
PLUS Frequency Scale Score of 3 on Unusual Thought Content, Non-bizarre Ideas, Perceptual Abnormalities and/or Disorganised Speech subscales of the CAARMS	<input type="checkbox"/>	<input type="checkbox"/>
PLUS (for both categories) Symptoms present in past year	<input type="checkbox"/>	<input type="checkbox"/>
PLUS (for both categories) 30% drop in SOFAS score from premorbid level, sustained for a month, occurred within past 12 months OR SOFAS score of 50 or less for past 12 months or longer	<input type="checkbox"/>	<input type="checkbox"/>
CRITERION MET FOR GROUP 2 – Attenuated psychosis group	<input type="checkbox"/>	<input type="checkbox"/>

Group 3: Brief limited intermittent psychotic symptoms group

This criterion identifies young people at risk of psychosis due to a recent history of frank psychotic symptoms that resolved spontaneously (without antipsychotic medication) within one week.

	YES	NO
Global Rating Scale Score of 6 on Unusual Thought Content subscale, 6 on Non-bizarre Ideas, 5 or 6 on Perceptual Abnormalities subscale and/or 6 on Disorganised Speech subscales of the CAARMS	<input type="checkbox"/>	<input type="checkbox"/>
PLUS Frequency Scale Score of 4–6 on Unusual Thought Content, Non-bizarre Ideas, Perceptual Abnormalities and/or Disorganised Speech subscales	<input type="checkbox"/>	<input type="checkbox"/>
PLUS Frequency Scale Score of 4–6 on Unusual Thought Content, Non-bizarre Ideas, Perceptual Abnormalities and/or Disorganised Speech subscales	<input type="checkbox"/>	<input type="checkbox"/>
PLUS Symptoms occurred during last year	<input type="checkbox"/>	<input type="checkbox"/>
PLUS 30% drop in SOFAS score from premorbid level, sustained for a month, occurred within past 12 months OR SOFAS score of 50 or less for past 12 months or longer	<input type="checkbox"/>	<input type="checkbox"/>
CRITERION MET FOR GROUP 3 – Brief limited intermittent psychotic symptoms group	<input type="checkbox"/>	<input type="checkbox"/>

Psychosis threshold

	YES	NO
Severity Scale Score of 6 on Unusual Thought Content subscale, 6 on Non-bizarre Ideas, 5 or 6 on Perceptual Abnormalities subscale and/or 6 on Disorganised Speech subscales of the CAARMS	<input type="checkbox"/>	<input type="checkbox"/>
PLUS Frequency Scale Score of greater than or equal to 4 on Unusual Thought Content, Non-bizarre Ideas, Perceptual Abnormalities and/or Disorganised Speech subscales	<input type="checkbox"/>	<input type="checkbox"/>
PLUS Symptoms present for longer than one week	<input type="checkbox"/>	<input type="checkbox"/>
PSYCHOSIS THRESHOLD CRITERION MET	<input type="checkbox"/>	<input type="checkbox"/>

Appendix 2: CAARMS Vignette Answers

Sonja

SUBSCALE	INTENSITY	FREQUENCY
Unusual Thought Content		
Non-bizarre Ideas		
Perceptual Abnormalities	6	4

Meets the inclusion criteria? No: Psychotic

TAKE HOME VIGNETTES

Beth

SUBSCALE	INTENSITY	FREQUENCY
Unusual Thought Content		
Non-bizarre Ideas	5	4
Perceptual Abnormalities	4	3

Meets the inclusion criteria? Yes: Attenuated psychotic symptoms (APS group 2a)

Tamara

SUBSCALE	INTENSITY	FREQUENCY
Unusual Thought Content		
Non-bizarre Ideas		
Perceptual Abnormalities	4	1

Meets the inclusion criteria? No: Below threshold

John

SUBSCALE	INTENSITY	FREQUENCY
Unusual Thought Content		
Non-bizarre Ideas		
Perceptual Abnormalities	4	4

Meets the inclusion criteria? Yes: Attenuated psychotic symptoms (APS group 2a)

Jessica

SUBSCALE	INTENSITY	FREQUENCY
Unusual Thought Content	5	3
Non-bizarre Ideas	5	3
Perceptual Abnormalities	5	2

Meets the inclusion criteria? Yes: Attenuated psychotic symptoms (groups 2a & 2b)

References

1. National Advisory Council on Mental Health. *Early Psychosis Feasibility Study Report*. 2011.

2. Staveland H, Hughes F, Pennell K et al. *EPPIC Model and Service Implementation Guide*. Melbourne: Orygen Youth Health Research Centre, 2013.

3. Yung AR and McGorry PD. The initial prodrome in psychosis: descriptive and qualitative aspects. *Aust N Z J Psychiatry* 1996; 30: 587-99.

4. Yung AR, Phillips LJ, Yuen HP et al. Risk factors for psychosis in an ultra high-risk group: psychopathology and clinical features. *Schizophr Res* 2004; 67: 131-42.

5. Early Psychosis Guidelines Writing Group. *Australian Clinical Guidelines for Early Psychosis*. Melbourne: Orygen Youth Health, 2010.

6. Goldman HH, Skodol AE and Lave TR. Revising axis V for DSM-IV: a review of measures of social functioning. *Am J Psychiatry* 1992; 149: 1148-56.

7. Yung AR, Yuen HP, McGorry PD et al. Mapping the onset of psychosis: the Comprehensive Assessment of At-Risk Mental States. *Aust N Z J Psychiatry* 2005; 39: 964-71.

8. McGorry PD, Yung AR and Phillips LJ. The "close-in" or ultra high-risk model: a safe and effective strategy for research and clinical intervention in prepsychotic mental disorder. *Schizophr Bull* 2003; 29: 771-90.

9. Ruhrmann S, Schultze-Lutter F, Maier W et al. Pharmacological intervention in the initial prodromal phase of psychosis. *European Psychiatry* 2005; 20: 1-6.

10. Fusar-Poli P, Borgwardt S, Bechdolf A et al. The psychosis high-risk state: a comprehensive state-of-the-art review. *JAMA psychiatry* 2013; 70: 107-20.

11. Nelson B, Yuen HP, Wood SJ et al. Long-term Follow-up of a Group at Ultra High Risk ("Prodromal") for Psychosis: The PACE 400 Study. *JAMA psychiatry* 2013; 1-10.

12. van der Gaag M, Smit F, Bechdolf A et al. Preventing a first episode of psychosis: meta-analysis of randomized controlled prevention trials of 12 month and longer-term follow-ups. *Schizophr Res* 2013; 149: 56-62.

13. International Early Psychosis Association, Addington J, Amminger GP et al. International clinical practice guidelines for early psychosis. *British Journal of Psychiatry* 2005; 187: 120-124.

14. Loewy RL, Bearden CE, Johnson JK et al. The prodromal questionnaire (PQ): preliminary validation of a self-report screening measure for prodromal and psychotic syndromes. *Schizophr Res* 2005; 77: 141-9.

15. Loewy RL, Johnson JK and Cannon TD. Self-report of attenuated psychotic experiences in a college population. *Schizophr Res* 2007; 93: 144-51.

16. Ising HK, Veling W, Loewy RL et al. The validity of the 16-item version of the Prodromal Questionnaire (PQ-16) to screen for ultra high risk of developing psychosis in the general help-seeking population. *Schizophr Bull* 2012; 38: 1288-96.

