

# Advanced Early Psychosis Identification, Screening & Intervention

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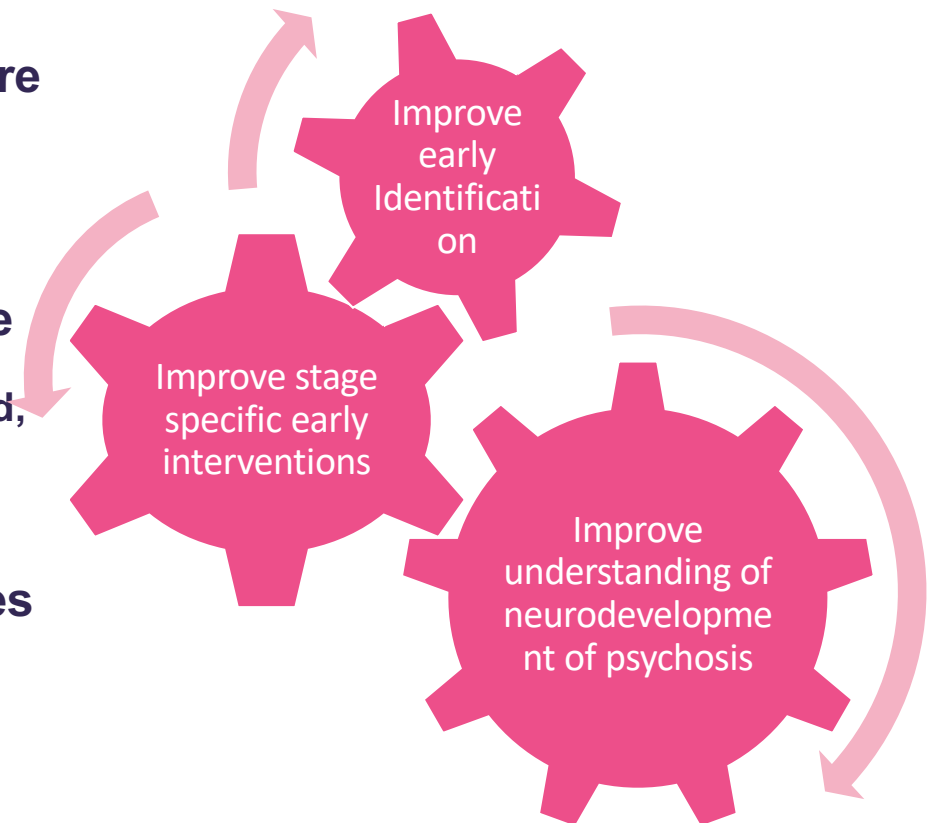
# Learning Objectives

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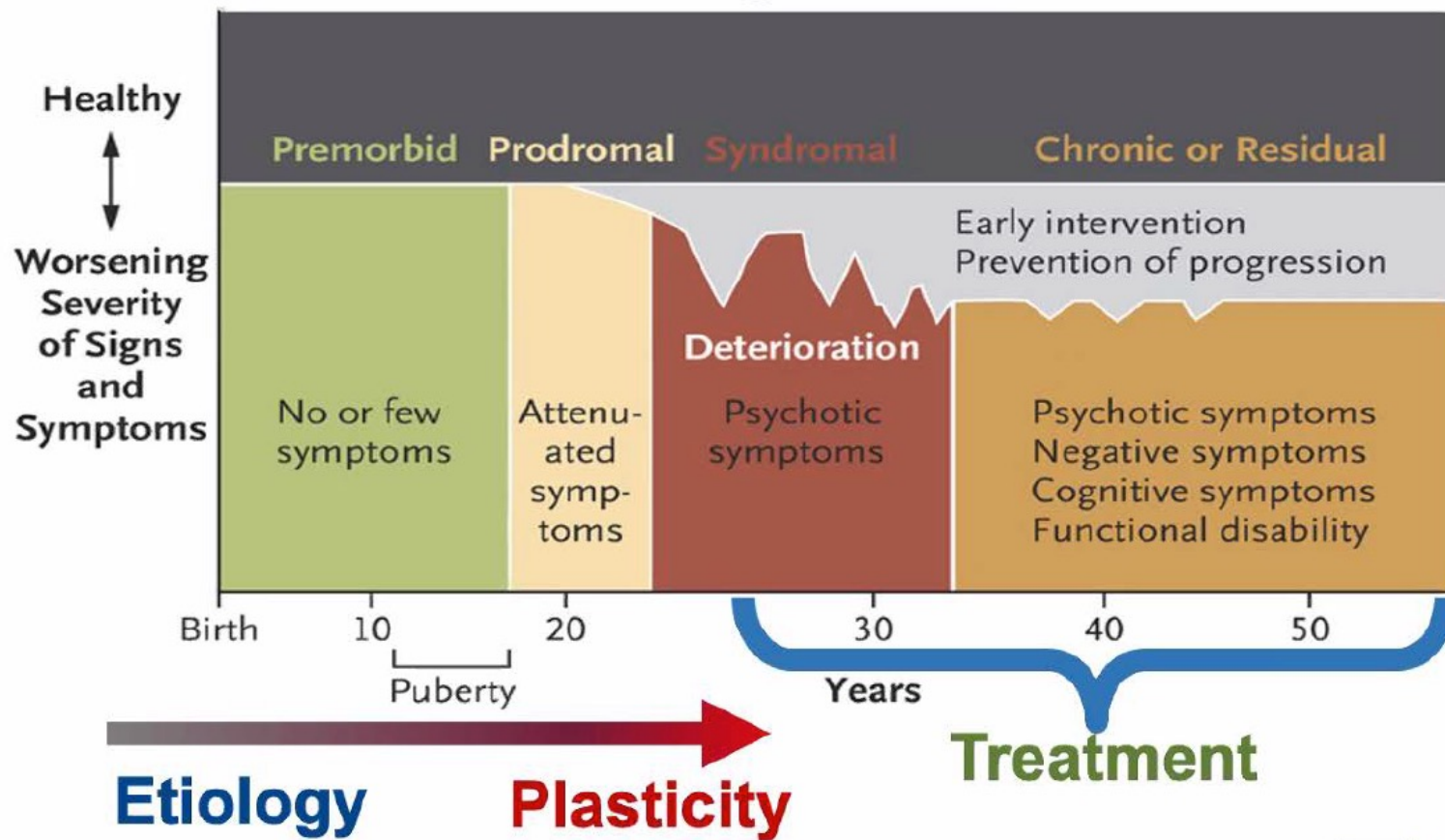
- **Describe and implement research and practice- informed strategies to assess information needed to differentiate threshold and subthreshold psychosis spectrum symptoms and disorders**
- **Identify at least two benefits of Coordinated Specialty Care for individuals with psychosis as suggested by research in this area**
- **Understand how to connect to local specialized evidenced based treatment resources for youth experiencing early psychosis**

# Early Identification and Intervention

- Many individuals experience distressing psychosis symptoms before they present for clinical care (or while they are in care for other conditions)
- Early symptoms are distressing and can interfere with a young person's life goals
  - The longer these symptoms go untreated, the harder it may be to recover
- Early identification can help us better understand and treat the earliest stages of psychosis



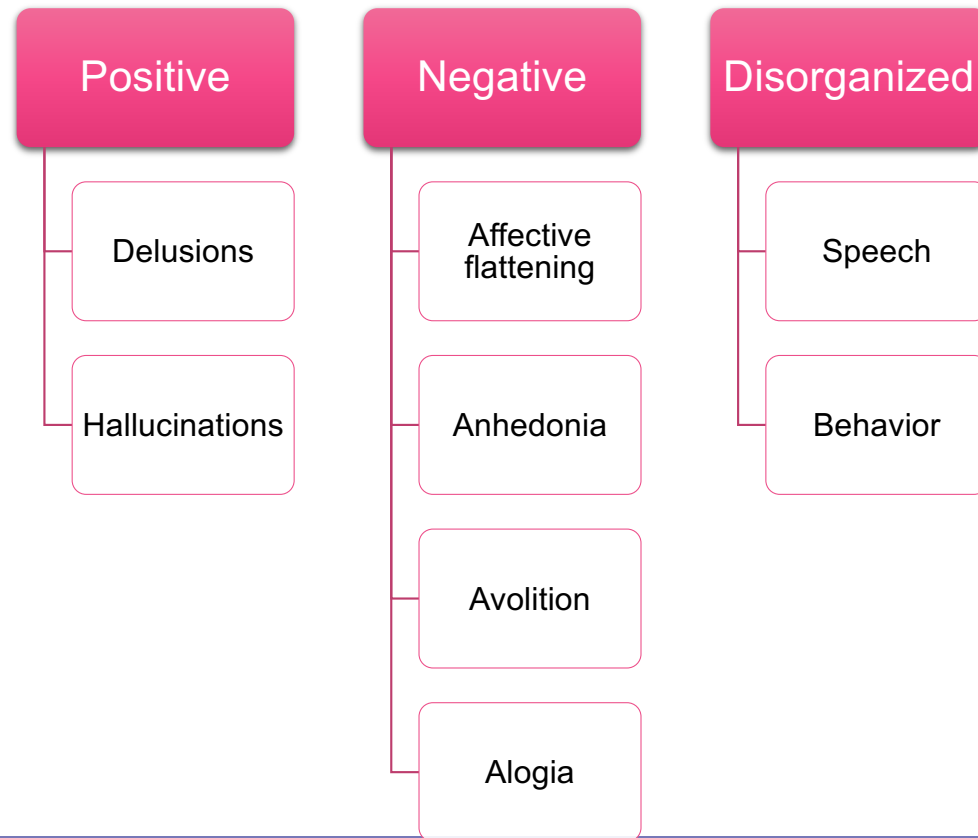
## Stages of Illness





# Psychosis Symptoms – First Episode Psychosis Stage

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# DSM-5 Mutually Exclusive Disorders\* With Psychosis Symptoms

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- Schizophrenia Spectrum and Other Psychotic Disorders

- Schizophrenia
- Schizophreniform
- Schizoaffective
- Delusional Disorder
- Brief Psychotic Disorder
- Psychotic Disorder due to Another Medical Condition (AMC)
- Substance/Medication Induced Psychotic Disorder
- Other Specified Schizophrenia Spectrum and Other Psychotic Disorder
- Unspecified Schizophrenia Spectrum and Other Psychotic Disorder

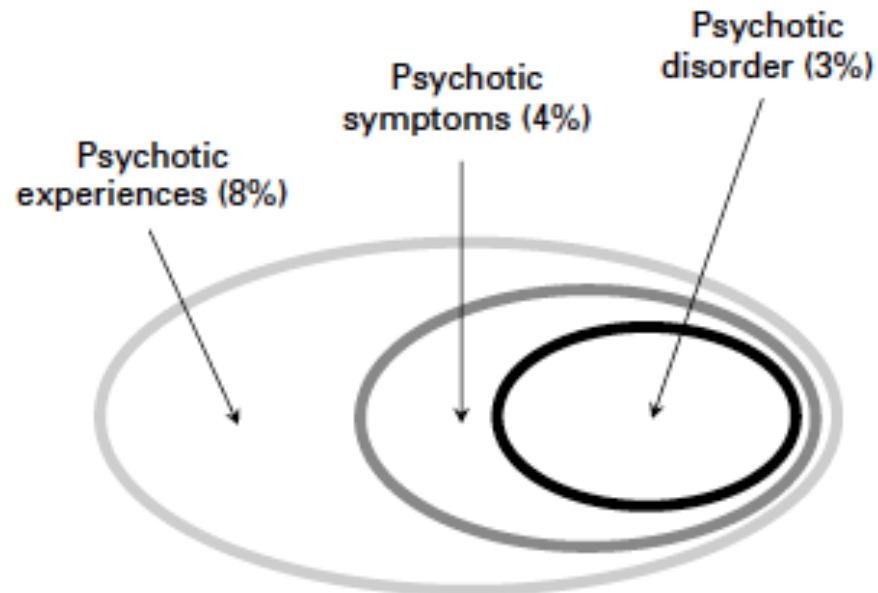
- Major Mood Disorders

- MDD with psychotic features
- Bipolar Disorder with psychotic features

\*at a given point in time

# Psychosis as a Continuum in the General Population

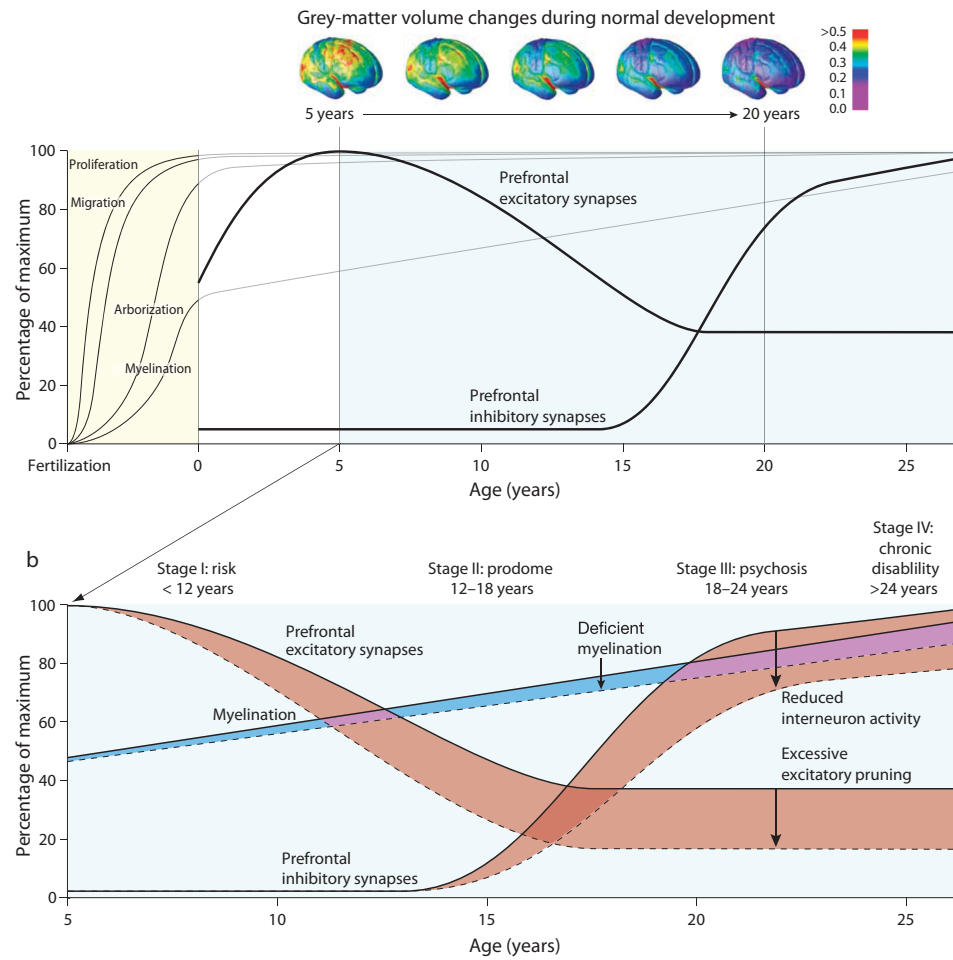
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*J. van Os et al.*  
*Psychological Medicine* (2009), 39, 179–195.

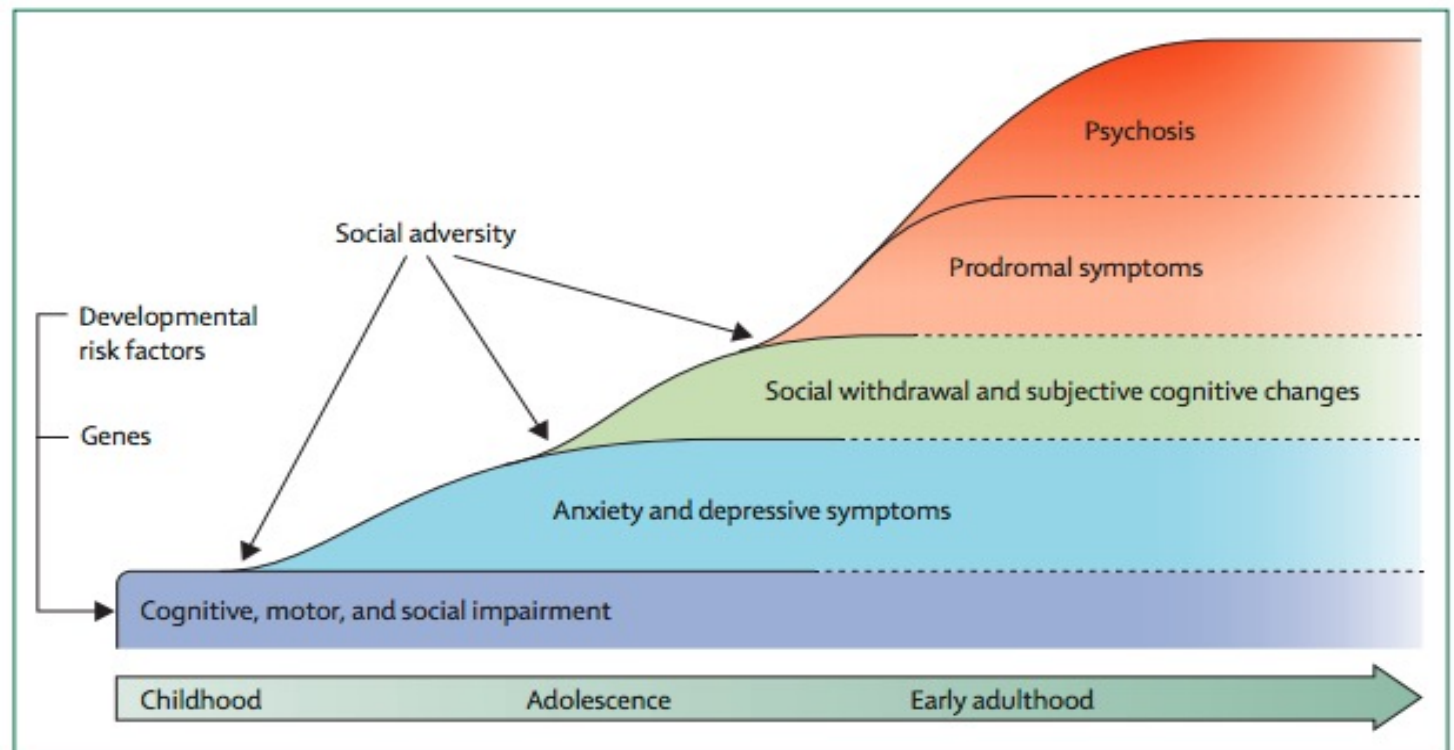
**Fig. 4.** Psychosis: variation along a continuum.

Schizophrenia and other psychosis disorders are neurodevelopmental disorders.



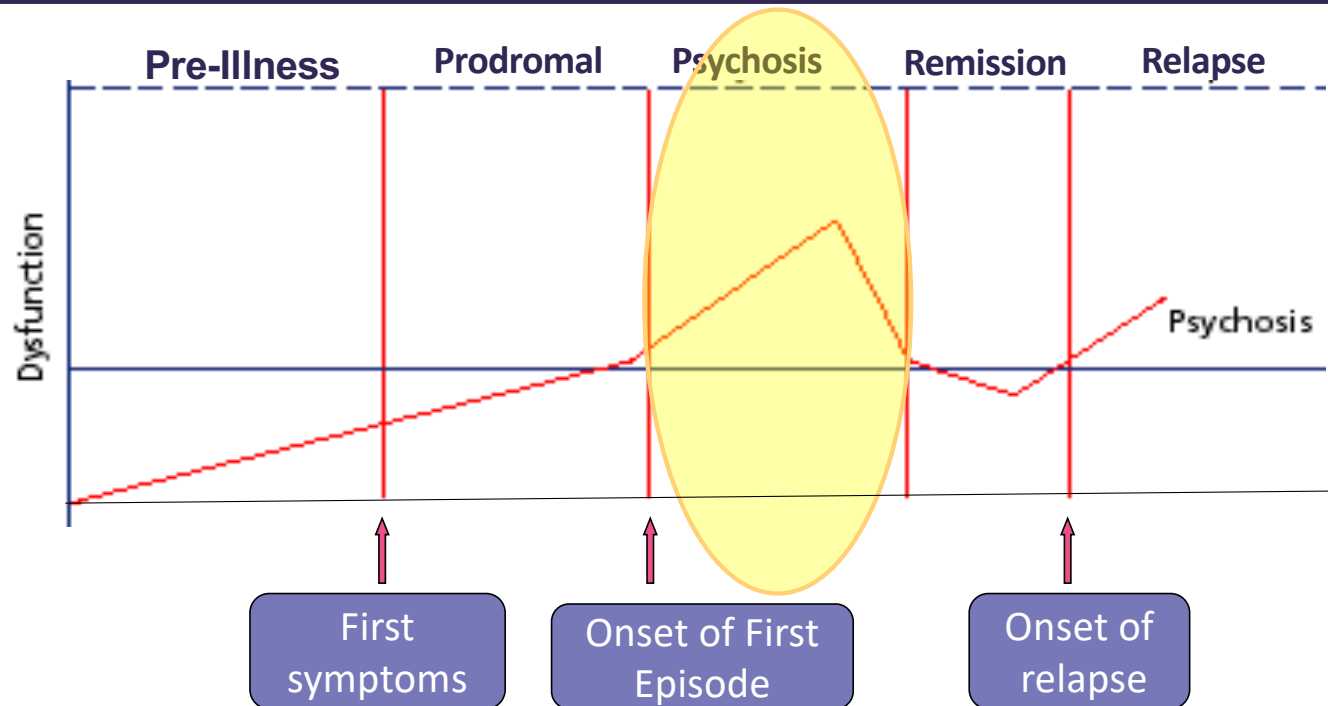
The neurodevelopmental path of early psychosis leads to barriers in achieving a typical developmental trajectory. Interventions must facilitate an improved trajectory.

*Oliver D Howes, Robin M Murray*  
www.thelancet.com Vol 383 May 10, 2014



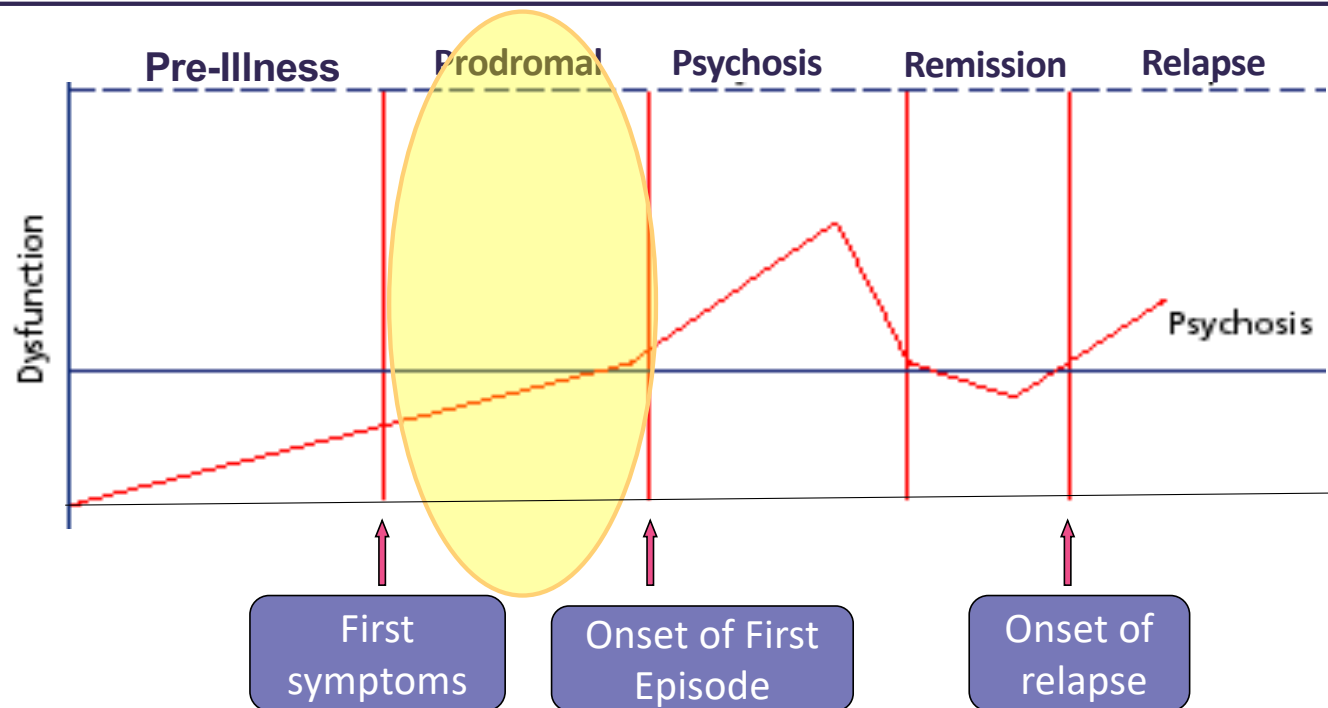
**Figure 1: The trajectory to schizophrenia showing the evolution of symptoms and the main risk factors**

# Traditional Strategy for Identifying, Studying and Treating Psychotic Disorders



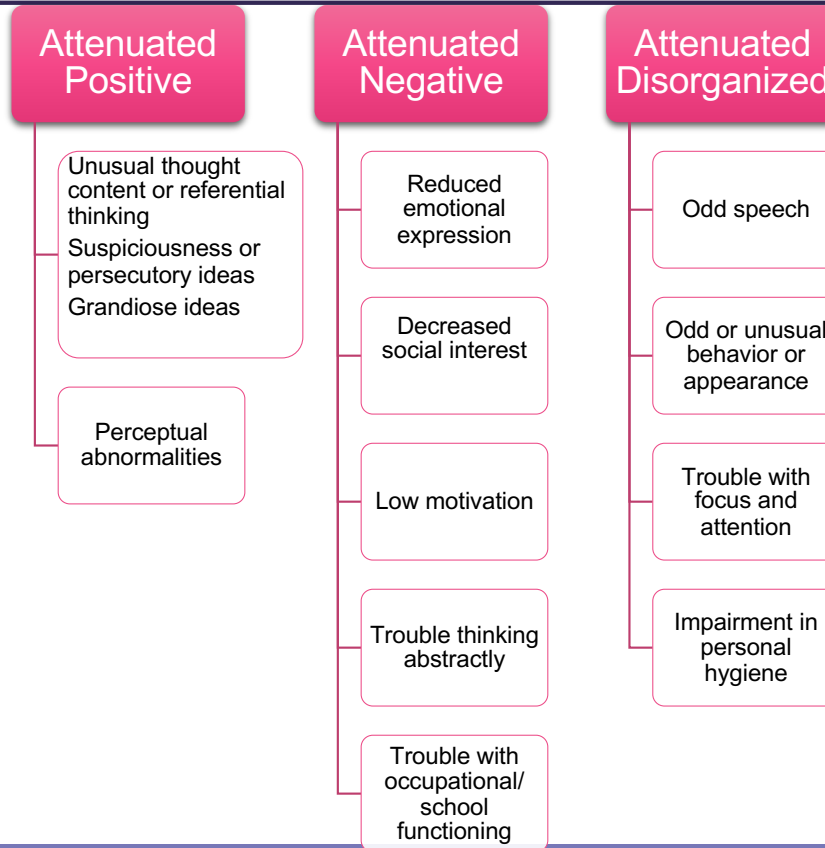
*Adapted from Knowles, 2004*

# Clinical/Ultra High Risk Strategy for Identifying, Studying and Treating Psychotic Disorders



*Adapted from Knowles, 2004*

# Clinical High Risk Stage - Subthreshold (attenuated) Psychosis Symptoms





## Features that Distinguish Subthreshold (attenuated) from Threshold Positive Symptoms

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- Degree of conviction/meaning
- Degree of distress/bother
- Degree of interference with life (acting on, talking about, impairment from)
- Frequency, Duration, (“Amount” of) Preoccupation

## Threshold v. Subthreshold Suspiciousness: Kyle

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Kyle is a 14-year-old black male who endorsed “sometimes” feeling watched or singled out “anywhere”. He explained, “If I’m outside...and its dark, I feel like people are just staring out the window, staring at me, people in the trees and stuff”. When asked if he has ever seen someone watching him, he said, “No, I just feel it...it’s like my heart starts racing, I get nervous and scared like somebody’s about to grab me or something”. He was unsure who or why somebody might want to hurt him or grab him, and isn’t sure if it is real or just his imagination. When asked if this occurs mostly when he is alone or with others, he said, “It doesn’t matter who I’m with” and that it happens during the day as well as at night.

Kyle also reported feeling watched when he is inside his home, possibly by a ghost. He was unable to provide an age of onset, indicating that he has “always” felt this way, and feels watched every day. He indicated his bother by this experience at 8/10 and said “I think so” when asked if he feels this way more so than others. He was not sure who might be watching him or why, and rated his conviction that it is real at 40%. When he feels watched inside his house, he reported, “Usually I like, try to go to my room and try to fall asleep or something...most of the time if I was scared and I fall asleep I have a bad dream”.

## Kyle: Features that Distinguish Subthreshold (attenuated) from Threshold Positive Symptoms (Suspiciousness)

- Degree of conviction/meaning
- Degree of distress/bother
- Degree of interference with life (acting on, talking about, impairment from)
- Frequency, Duration, (“Amount” of) Preoccupation

## Threshold v. Subthreshold Perceptual Experiences: Jenaya

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Jenaya is a 17-year-old white female who experiences **daily** auditory hallucinations of voices conversing with each other for **several hours**. She described the voices, which she hears both "inside her head" and through her ears as being of **people she did not know** - they were "males and females, young and old", and were mostly critical, saying things like "Jenaya is stupid and won't ever amount to anything" "I know right, why does she even bother?" Every once in a while, a voice says something positive like "You can do it Jenaya!" Though occasionally muffled or unclear, typically she can **hear them as clearly as she could hear the assessor**.

At their first onset approximately **6 months ago**, despite that the voices **bothered** Jenaya quite a bit, she was able to keep up with her school work and socialize with her friends. However, within **past two months**, the voices have been **more frequent (most of her waking hours)**. She has had days where she says she is **unable to get out of bed to go to school** due to the constant clamoring around her, and she has been **spending less and less time with her friends**.

## Jenaya: Features that Distinguish Subthreshold (attenuated) from Threshold Positive Symptoms (Perceptual Experiences)

- Degree of conviction/meaning
- Degree of distress/bother
- Degree of interference with life (acting on, talking about, impairment from)
- Frequency, Duration, (“Amount” of) Preoccupation

# Evaluating Psychosis – Getting the Description with the 5 W's

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- **What?** (usually the starting point)...
- **Who?**
- **When?**
- **Where?**
- **Why?**

# Evaluating Psychosis – Getting the Description with the 5 W's

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- **What? (usually the starting point)...**
  - Tell me about that.
  - In what way?
  - What do you mean?
  - What is that like for you?
  - What happens?
  - What did you notice? (How did you know?)
- **Why start with “What”?**
  - Confirm the basic – is the person talking about an experience that could be this symptom?

# Evaluating Psychosis – Getting the Description with the 5 W's

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- Establish the parameters and context
  - Who? (... do you know who?)
  - When? (...did it start? Is this a change from how you used to be? How often does it happen? or How much of the day? How long does it last? What is the longest time it lasted?)
  - Where? (...does it happen? Anywhere else?...At other places?)
  - Why? (...does this happen? or How do you explain it?)



# Evaluating Psychosis – Establishing the Threshold

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- Degree of conviction/meaning (delusions and hallucinations have compelling sense of reality!)
  - Do you think this is real? How convinced are you/how real does it seem on a scale of 0-100, where 100 is 100% convinced it is real, 0 is not at all convinced?
  - How do you explain it?
  - Do you ever think it could just be your imagination?
  - For perceptual experiences: Can you hear/see it as clearly as you can hear/see me? Can you make out what it is? Are you awake at the time?

# Evaluating Psychosis – Establishing the Threshold

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- Degree of interference with life (acting on, talking about, impairment from)
  - Do you ever act on this thought/experience?
  - Does having this thought/experience ever cause you to do anything differently?
- Degree of distress/bother
  - Does this bother you?
  - How much does it bother you, on a scale of 0-10 where 0 is 'no bother', and 10 is 'extremely serious bother'?

# Evaluating Psychosis: “Reality” Checks

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- **External corroboration – from a collateral, but also through probing participant:**
  - **Delusions**
    - **General:** Have you talked to anyone about this? What did they say? Do other people notice this?
    - **Somatic:** Have you talked to a doctor about this? What did s/he say?
    - **Persecutory - “bullying” at school:** Did you talk to a teacher/principal about this? What did s/he say? Did the person get in any kind of trouble for it?
    - **Persecutory - wary of surroundings/safety:** Do you think you need to be more alert/aware than others of your (age/sex/race)? Do you know other kids your age?
    - **Religious:** Were you raised with these beliefs? Do you believe them more strongly than others (family/members of religious org) of your faith? (or Are others as devout as you?)
    - **Grandiose:** Have you received any awards or special recognition for this? Are there other people out there as good as you in this?

# Evaluating Psychosis: “Reality” Checks

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- **External corroboration**

- **Hallucinations**

- Is anyone else around when you hear (see, etc) it?
      - If so, do they hear it too?
      - If not, have you told others about it? Who did you tell? What did they say?
    - Do you hear/see it now?
    - Auditory/visual – (e.g., ringing in ears, “floaters” in vision) – did you talk to a doctor?

- **No one question/answer will nail it - looking for indicators of significance**

- **Note that if current/past substance use – relationship of symptom to use should also be asked – Did this happen when you were not [high/drunk]?**

# Evaluating Psychosis: “Reality” Checks

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- **External corroboration**

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- **No one question/answer will nail it - looking for indicators of significance**

- **Note that if current/past substance use – relationship of symptom to use should also be asked – Did this happen when you were not [high/drunk]?**

# Evaluating Psychosis: Establishing the Onset

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- Onset of threshold psychosis is critical for eligibility and differential diagnosis; related to establishing the threshold...
- Determine a point of threshold, then work way backwards...
  - when did you first notice it at this level of conviction?  
Bother? interference?

# Threshold v. Subthreshold Suspiciousness: Alana

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Alana is a 22-year-old white female who endorsed feeling mistrustful or suspicious of others “a lot...all the time, every day...I just can’t trust people. There’s a lot of reasons”. She reported that she feels that people, including **people she knows and doesn’t know well**, are thinking about her negatively “**all the time, everywhere I go.**” She said she isn’t sure **what** they may be thinking, but that “for some reason when you hear mumbling or laughing you know it’s about you”. This experience began approximately **one year ago**, and bothers her “**20 out of 10**”.

Alana also reported **multiple** instances, occurring **several times a week** beginning also about **a year ago**, in which she was **convinced** someone was following her. For example, she explained that one day, she saw the same “old lady” 5 different times in **various places around the city**, and explained that she was **100% sure** that this woman was following her. When asked if it could have been a coincidence or a different person, Alana said, “No, it was her,” further explaining believing that this woman, for **whatever reason**, wanted to see where she was taking her daughter. She said, “I called my mom and everything. **I was scared. It was so upsetting** that I saw her **wherever I was going**”. She gave another example in which she saw an “old man” three different times in one day, and **knew** that he was following her.

Due to these experiences, Alana has been **staying at home** unless she absolutely needs to go out for a medical appointment for her daughter or grocery shopping.

## Alana: Features that Distinguish Subthreshold (attenuated) from Threshold Positive Symptoms (Suspiciousness)

- Degree of conviction/meaning
- Degree of distress/bother
- Degree of interference with life (acting on, talking about, impairment from)
- Frequency, Duration, (“Amount” of) Preoccupation



# Threshold v. Subthreshold Perceptual Experiences: Zuri

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Zuri is a 25-year-old, black female who works full-time as a librarian. She has been under a lot of stress at work due to understaffing and she was pulling a lot of overtime. Zuri called the clinic because she was concerned about a “vision” she had been seeing of a “translucent woman, dressed in a gauzy blue dress, wearing a tiara”, when there was nothing there. Zuri explained that **she knew the woman was not real** because it **did not appear “quite as solid”** as a real person. This started about **6 months ago**, at first only **momentarily once or twice a week**, but had recently begun happening **3-4 times a week**, lasting for **several minutes at a time**. Zuri said that it could happen **anywhere**, in her house, at work, on the train, and **at any time of the day or night**. Per Zuri, she did not know the identity of the woman, who “kind of just floats there” and “doesn’t really move or talk.” Zuri was **very frightened** by this experience, because **“it looks almost real”** and up until now was afraid to tell anyone about this experience. She was **so afraid** it might happen when with friends that over the past two weeks, she had **been avoiding them**. **Other than that, she has had no change in functioning.**

**Zuri: Features that Distinguish Subthreshold (attenuated) from Threshold Positive Symptoms (Suspiciousness)**

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- Degree of conviction/meaning
- Degree of distress/bother
- Degree of interference with life (acting on, talking about, impairment from)
- Frequency, Duration, (“Amount” of) Preoccupation

# Threshold Psychosis: Building Mutually Exclusive Disorders

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# Building Blocks of Disorders With Threshold Psychosis

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- Disorders formed by building blocks (Threshold psychosis, major depressive episode, manic episode) depend, among a few other things, on:
  - Timing of each block in relation to others
    - Temporal relationship of the ONSET of one block in relation to onset of other blocks
    - Duration over the course of illness of one block relative to others
  - Presence of substance use (not necessarily abuse or dependence)
- **CAVEAT:** This is the basic logic, but differential diagnosis is a little more complicated than this depending on disorder in question.

| Threshold Psychosis Symptoms  | Major Depressive Episode | Manic Episode | Temporal Relationship/Other Notes   | Disorder                           |
|---|--------------------------|---------------|---|------------------------------------|
| Delusions<br>Hallucinations<br>(and/or other Scz Criterion A sx)<br>≥1 month                                  | Yes/No                   | Yes/No        | 6 months duration, Mood brief relative to overall duration of 6 months                        | Schizophrenia                      |
| Delusions<br>Hallucinations<br>(and/or other Scz Criterion A sx)<br>≥1 month                                  | Yes/No                   | Yes/No        | ≥1 month and <6 months<br>Mood brief relative to duration                                     | Schizophreniform                   |
| Delusions<br>Hallucinations<br>(and/or other Scz Criterion A sx)<br>≥1 month (including ≥2 weeks when no MDE) | Yes/No                   | No            | 6 months duration,<br>Mood episode present > 1/3 <sup>rd</sup><br>(never had a manic episode) | Schizoaffective,<br>Depressed Type |
| Delusions<br>Hallucinations<br>(and/or other Scz Criterion A sx)<br>1 month (including ≥2 weeks when no mood) | Yes/No                   | Yes/No        | 6 months duration,<br>Mood episode (≥1 manic ep) present > 1/3 <sup>rd</sup>                  | Schizoaffective,<br>Bipolar Type   |

Scz Criterion A: \*Delusions, \*Hallucinations, \*Disorganized speech, grossly disorganized/catatonic bx, Negative symptoms

| Threshold Psychosis Symptoms  | Major Depressive Episode | Manic Episode | Temporal Relationship/Other Notes  | Disorder                                   |
|---|--------------------------|---------------|--|--|
| Delusions<br>≥1 month   | No                       | No            | No history of Schizophrenia criterion A<br>No marked functional impairment<br>No prominent mood symptoms | Delusional Disorder                        |
| Delusions or Hallucinations or (disorg speech/ behavior/catatonia)<br>≥1 day but <1 month | No                       | No            |  | Brief Psychotic Disorder                   |
| Delusions and/or Hallucinations   | Yes                      | No            | Psychosis symptoms occur only during MDE   | MDD with psychotic features                |
| Delusions and/or Hallucinations   | Yes/No                   | Yes           | Psychosis symptoms occur only during manic episode or MDE  | Bipolar I Disorder with psychotic features |

# Subthreshold Psychosis Symptoms

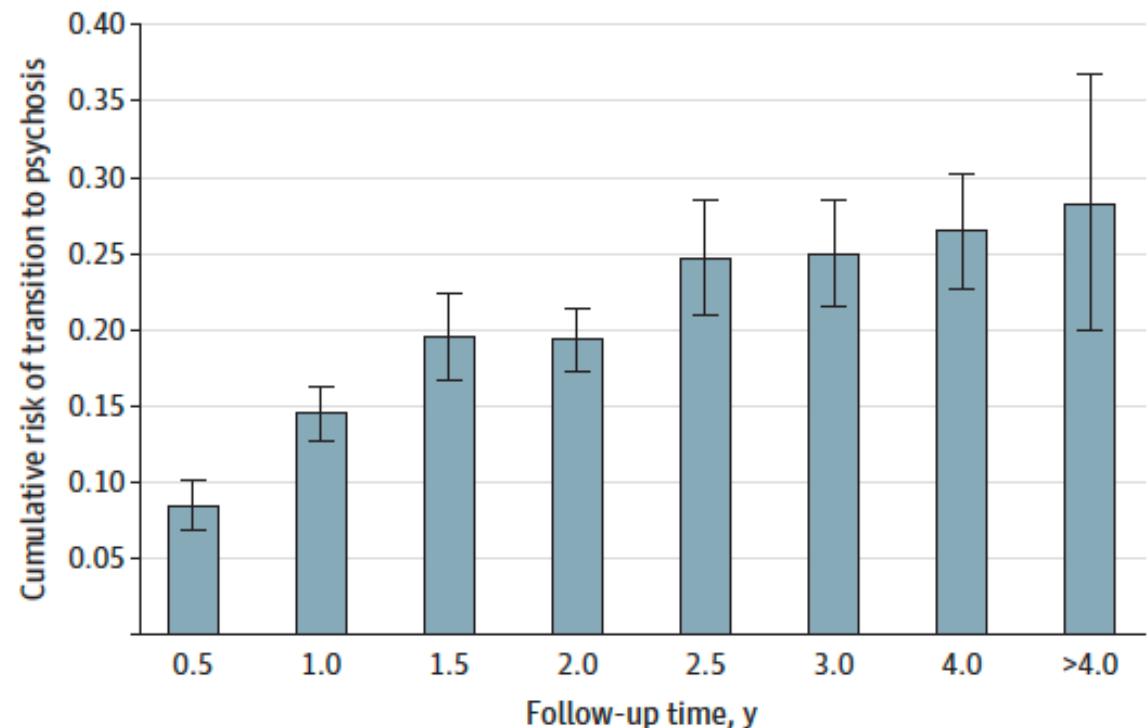
## Probability of Transition to Psychosis in Individuals at Clinical High Risk An Updated Meta-analysis

Gonzalo Salazar de Pablo, MD; Joaquim Radua, MD, PhD; Joana Pereira, MD; Ilaria Bonoldi, MD, PhD; Vincenzo Arienti, MD; Filippo Besana, MD; Livia Soardo, MD; Anna Cabras, MD; Lydia Fortea, MSc; Ana Catalan, MD, PhD; Julio Vaquerizo-Serrano, MD; Francesco Coronelli, MD; Simi Kaur, MSc; Josette Da Silva, MSc; Jae Il Shin, MD, PhD; Marco Solmi, MD, PhD; Natascia Brondino, MD, PhD; Pierluigi Politi, MD, PhD; Philip McGuire, MB ChB, MD, PhD; Paolo Fusar-Poli, MD, PhD

*JAMA Psychiatry*. 2021;78(9):970-978.

k=130 (n=9,222)

Figure 2. Meta-analytic Cumulative Risk of Transition to Psychosis in Individuals at Clinical High Risk for Psychosis



Error bars indicate 95% CIs.

# Challenges of Psychosis Spectrum (PS) Screening

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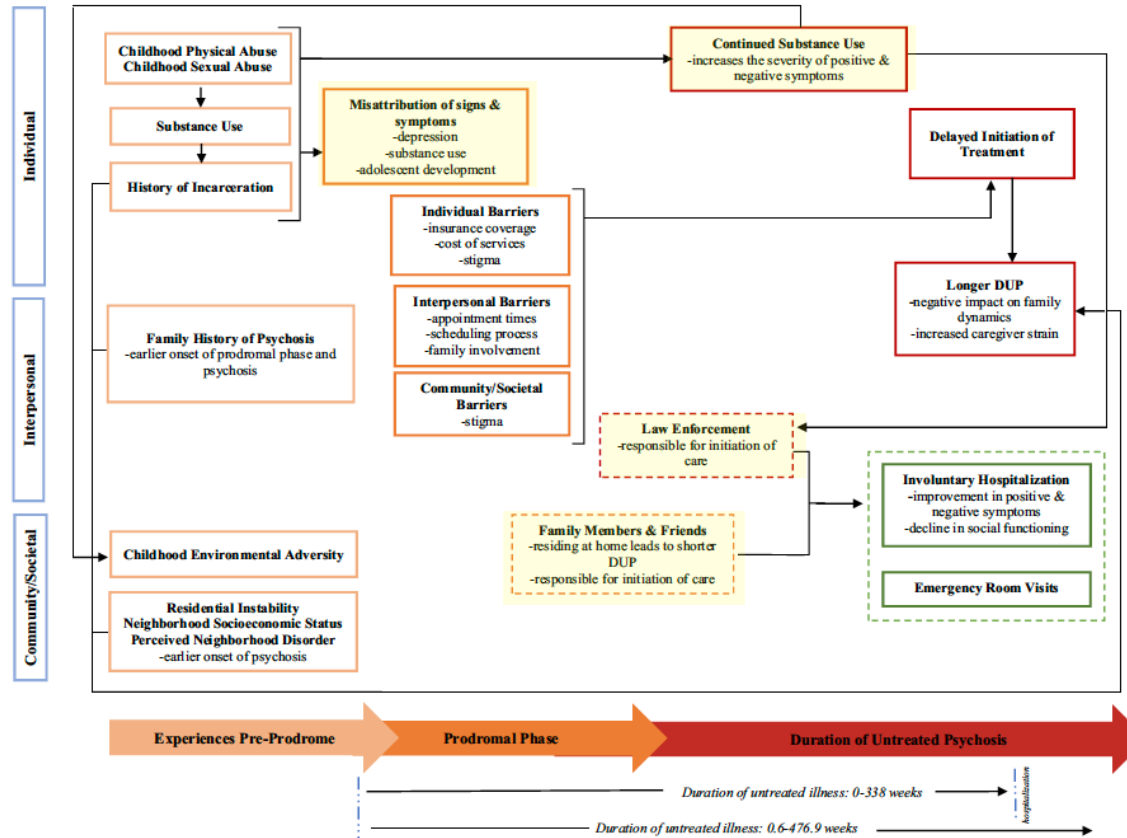
- Mental health professionals perceive barriers in screening/identifying PS symptoms in adolescents/young adults:
  - Little normative/base rate data – Is this just a “normal” experience? Is this just an “adaptive” response to circumstances?
  - Comorbidities - Is this just “due to/manifestation” of [other thing]? (esp. substances)
  - Limited collateral informant (parent) knowledge of subthreshold positive symptoms
  - Stigma and fear
- More than 65% of youth experiencing persistent PS symptoms report previously talking to a medical professional or some other professional about their thoughts, feelings or behaviors.... *But not necessarily about these symptoms.*
- Mental health professionals have access to a *critical window of opportunity* to screen for psychosis spectrum symptoms and connect a young person with appropriate clinical care
  - Especially important for individuals who have historically been underserved in traditional community care for psychosis: Black and indigenous people of color, Asian and Latinx populations, LGBTQ+



# Systematic review of pathways to care in the U.S. for Black individuals with early psychosis

*npj Schizophrenia* (2021)7:58; <https://doi.org/10.1038/s41537-021-00185-w>

Oladunni Oluwoye<sup>1</sup>, Beshawn Davis<sup>2</sup>, Francesca S. Kuhney<sup>3</sup> and Deidre M. Anglin<sup>4</sup>



**Fig. 1** Synthesis of pathways to care for Black individuals with early psychosis. Dashed boxes represent an individual or entity; light orange boxes represent the pre-prodrome phase; orange boxes represent the prodromal phase; red boxes represent experiences during the period of untreated psychosis; green boxes represent contact with services.



## FLOWCHART FOR EARLY PSYCHOSIS SCREENING FOR COMMUNITY MENTAL HEALTH PROVIDERS

AGES  
11-35\*

**\***  
**AGE CONSIDERATION:** Early psychosis screening is recommended for 11-35 year olds; outside this range new-onset primary psychotic disorders are rare and different assessment approaches and referrals may be needed.

**\*\***  
**FAMILY HISTORY:** Patients with a first/second degree relative with a psychotic disorder should receive **REGULAR SCREENING** for psychosis-like symptoms regardless of mental health status. Use the "MONITOR & EDUCATE" path in the absence of other psychosis risk indicators.

**\*\*\***  
**FUNCTIONING:** Marked decline in performance at school/work and/or typical activities, withdrawal, changes in sleep patterns.

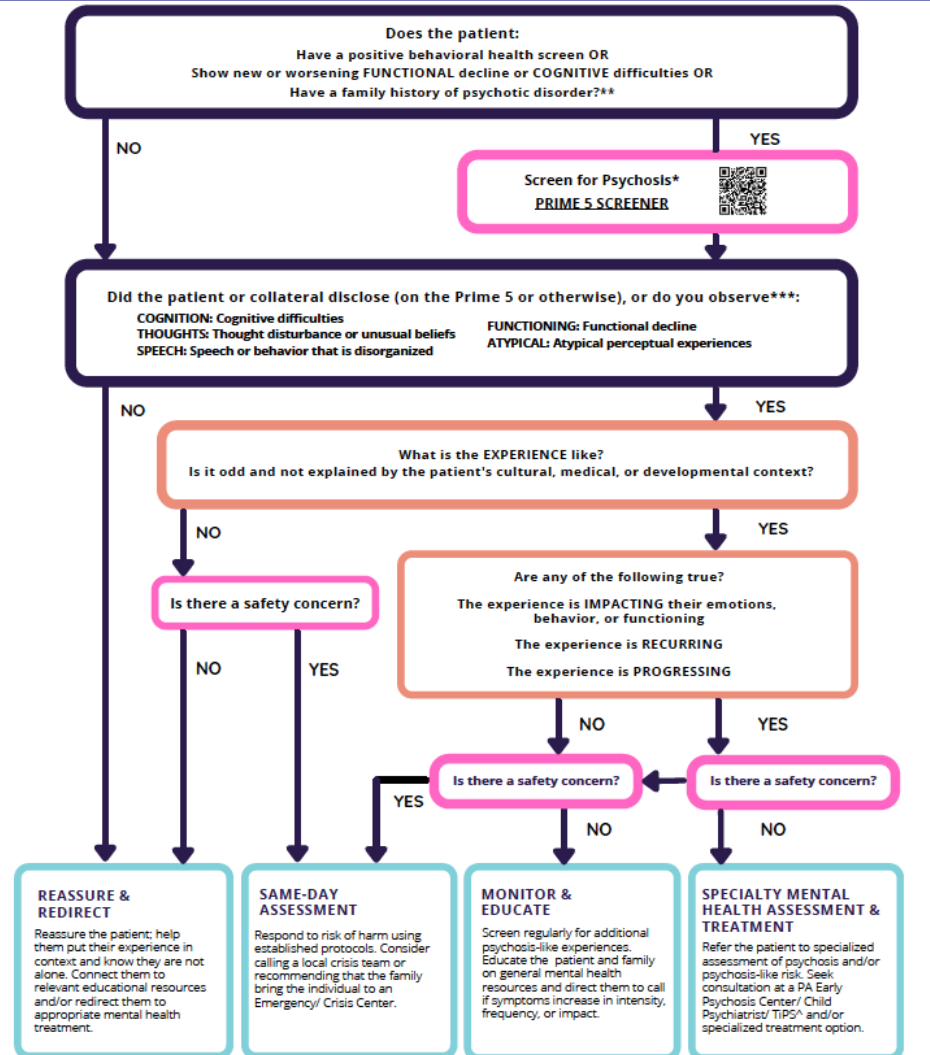
**ATYPICAL:** Seeing things not there: e.g., shadows, flashes, figures, people, or animals. Hearing things others do not: e.g., clicking, banging, wind, mumbling, or voices. Seeing or hearing everyday experiences as unfamiliar, distorted, or exaggerated.

**COGNITION:** Memory, attention, organization, processing speed. Understanding abstract concepts, social cues, complex ideas.

**THOUGHTS:** Unwarranted suspiciousness about friends, family or strangers. Unfounded concern something is wrong with their bodies. Thinking that their body or mind has been altered by an external force. Believing others can read their mind or control their thoughts.

**SPEECH:** Trouble putting thoughts into words. Speaking in jumbled or hard to follow sentences. Dressing inappropriately for the weather or behaving oddly.

**^Telephonic Psychiatric Consultation Service Program (TIPS):**  
[www.dhs.pa.gov/providers/Providers/Pages/TIPS.aspx](http://www.dhs.pa.gov/providers/Providers/Pages/TIPS.aspx)



## PRIME SCREEN-REVISED-5

to be administered by the provider

The following questions ask about your personal experiences. We ask about your sensory, psychological, emotional, and social experiences. Some of these questions may seem to relate directly to your experiences and others may not. Based on your experiences **within the past year**, please tell me how much you **agree or disagree** with the following statements. Please listen to each question carefully and tell me the answer that best describes your experiences.\*

|   |  | Definitely Agree | Somewhat Agree | Slightly Agree | Not Sure | Slightly Disagree | Somewhat Disagree | Definitely Disagree |
|---|--|------------------|----------------|----------------|----------|-------------------|-------------------|---------------------|
| 1 | I think that I have felt that there are odd or unusual things going on that I can't explain.   | 6                | 5              | 4              | 3        | 2                 | 1                 | 0                   |
| 2 | I have had the experience of doing something differently because of my superstitions.  | 6                | 5              | 4              | 3        | 2                 | 1                 | 0                   |
| 3 | I think that I may get confused at times whether something I experience or perceive may be real or may be just part of my imagination or dreams. | 6                | 5              | 4              | 3        | 2                 | 1                 | 0                   |
| 4 | I think I might feel like my mind is "playing tricks" on me.   | 6                | 5              | 4              | 3        | 2                 | 1                 | 0                   |
| 5 | I think that I may hear my own thoughts being said out loud.   | 6                | 5              | 4              | 3        | 2                 | 1                 | 0                   |

\*Note: Individuals can be shown a copy of this scale to assist in responding:

| Definitely Agree | Somewhat Agree | Slightly Agree | Not Sure | Slightly Disagree | Somewhat Disagree | Definitely Disagree |
|------------------|----------------|----------------|----------|-------------------|-------------------|---------------------|
| 6                | 5              | 4              | 3        | 2                 | 1                 | 0                   |

# Screening for Psychosis

There are two ways to score the PRIME-5. Either way suggests a fuller evaluation for subthreshold or threshold psychosis symptoms should be considered:

**1) Sum of the 5 items.** To score, sum items 1-5 to obtain a total. Find the individual's age, then look at their PRIME-5 Score. A person scoring at or above the PRIME-5 score has endorsed a level of symptoms that is 2 standard deviations higher than the mean of others his/her/their age.

| Age           | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21+ |
|---------------|----|----|----|----|----|----|----|----|----|----|-----|
| PRIME-5 Score | 19 | 18 | 17 | 16 | 15 | 15 | 15 | 15 | 13 | 15 | 13  |

**2) Traditional Criteria.**  $\geq$ One item rated 6 (Definitely Agree) OR  $\geq$ three items rated 5 (Somewhat Agree) is considered significant (i.e., warranting consideration of fuller evaluation).

Calkins ME, Ered A, Moore TM, White LK, Taylor J, Moxam AB, Ruparel K, Wolf DH, Satterthwaite TD, Kohler CG, Gur RC, Gur RE (2023) Development and Validation of a Brief Age-Normed Screening Tool for Subthreshold Psychosis Symptoms in Youth. Presented at the American Academy of Child and Adolescent Psychiatry 70th Annual Meeting, October 25th 2023, New York, New York.

[heads-up-pa.org/wp-content/uploads/2023/10/Flowchart-11-35-MHP-9.20.23.pdf](https://heads-up-pa.org/wp-content/uploads/2023/10/Flowchart-11-35-MHP-9.20.23.pdf)



This supplemental handout is intended to support the use of the HeadsUp Early Psychosis Screening Flowcharts. It expands upon assessment criteria and definitions, and provides question examples for school/university medical/mental health staff to ask during the assessment.

### Features that Distinguish Subthreshold from Threshold Positive Symptoms\*

- **Description (the 5 W's)**
- **Degree of conviction/meaning**
- **Degree of distress/bother**
- **Degree of interference with life (acting on, talking about, impairment from)**
- **Frequency, Duration, Preoccupation ("amount" of)**
- **Change over time (watch for re-occurrence!)**

### Follow-up Probing – Getting the Description with the 5 W's: What, Who, When, Where & Why?

**What** (usually the starting point to confirm the basic-is the person talking about an experience that could be a symptom)

- Tell me about that.
- In what way?
- What do you mean?
- What is that like for you?
- What happens?
- What did you notice? How did you know?

Establishing parameters & context is important

- **Who?**
  - Do you know who?
- **When?**
  - Did it start? Is this a change from how you used to be?
  - How often does it happen?
  - How much of the day?
  - How long does it last?
  - What is the longest time it lasted?
- **Where?**
  - Does it happen
  - Anywhere else?
  - At other places?
- **Why?**
  - Does this happen?
  - How do you explain it?

# Follow-Up Probing to Positive Responses

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## Interviewing for Psychosis – Establishing the Threshold

### **Degree of conviction/meaning (delusions and hallucinations have compelling sense of reality)**

- Do you think this is real? How convinced are you/how real does it seem on a scale of 0-100, where 100 is 100% convinced it is real, 0 is not at all convinced?
- How do you explain it?
- Do you ever think it could just be your imagination?
- For perceptual experiences: Can you hear/see it as clearly as you can hear/see me? Can you make out what it is? Are you awake at the time?

### **Degree of interference with life (acting on, talking about, impairment from)**

- Do you ever act on this thought/experience?
- Does having this thought/experience ever cause you to do anything differently?
- Does this bother you?
- How much does it bother you, on a scale of 0-10 where 0 is 'no bother', and 10 is 'extremely serious bother'?

# Follow-Up Probing to Positive Responses

## Interviewing for Psychosis: “Reality” Checks

External corroboration – from a collateral, but also through probing:

### Delusions

- **General:** Have you talked to anyone about this? What did they say? Do other people notice this?
- **Somatic:** Have you talked to a doctor about this? What did they say?
- **Persecutory:** “bullying” at school: Did you talk to a teacher/principal about this? What did they say? Did the person get in any kind of trouble for it?
- **Persecutory:** wary of surroundings/safety: Do you think you need to be more alert/aware than others of your (age/sex/race)? Do you know other kids your age?
- **Religious:** Were you raised with these beliefs? Do you believe them more strongly than others (family/members of religious org) of your faith? (or Are others as devout as you?)
- **Grandiose:** Have you received any awards or special recognition for this? Are there other people out there as good as you in this?

### Hallucinations

- Is anyone else around when you hear (see, etc) it?
- If so, do they hear it too? If not, have you told others about it? Who did you tell? What did they say?
- Do you hear/see it now?
- Auditory visual – (e.g., ringing in ears, “floaters” in vision) – did you talk to a doctor?

**No one question/answer will nail it - looking for indicators of significance. Note that if current/past substance use – relationship of symptom to use should also be asked – Did this happen when you were not (high/drunk)?**



# Psychosis Screening: Shawna (age 17)

---

- Shawna is a 17-year old Black Hispanic female high school student, referred to her current therapist about a year ago for depressed mood and anxiety.
- Over the past 6 months, Shawna has reported trouble “thinking clearly” and “not feeling in control of my thoughts”, and her grades have been dropping. Previously very social, she has not been reaching out to friends, instead waiting for them to reach out to her, and sometimes does not answer their texts for days. When asked why, she usually says “I don’t know, I just don’t feel like it.”
- Shawna has no known medical challenges, and denies use of substances.
- Noting Shawna’s functional decline, her therapist asks her to complete a PRIME-5

# Psychosis Screening: Shawna (age 17)

|   |  | Definitely Agree | Somewhat Agree | Slightly Agree | Not Sure | Slightly Disagree | Somewhat Disagree | Definitely Disagree |
|---|--|------------------|----------------|----------------|----------|-------------------|-------------------|---------------------|
| 1 | I think that I have felt that there are odd or unusual things going on that I can't explain.   | 6                | 5              | 4              | 3        | 2                 | 1                 | 0                   |
| 2 | I have had the experience of doing something differently because of my superstitions.  | 6                | 5              | 4              | 3        | 2                 | 1                 | 0                   |
| 3 | I think that I may get confused at times whether something I experience or perceive may be real or may be just part of my imagination or dreams. | 6                | 5              | 4              | 3        | 2                 | 1                 | 0                   |
| 4 | I think I might feel like my mind is "playing tricks" on me.   | 6                | 5              | 4              | 3        | 2                 | 1                 | 0                   |
| 5 | I think that I may hear my own thoughts being said out loud.   | 6                | 5              | 4              | 3        | 2                 | 1                 | 0                   |

There are **2 ways** to score the PRIME-5. Either way suggests a fuller evaluation for subthreshold or threshold psychosis symptoms should be considered:

**1) Sum of the 5 items.** To score, sum items 1-5 to obtain a total. Find the individual's age, then look at their PRIME-5 Score. A person scoring at or above the PRIME-5 score has endorsed a level of symptoms that is 2 standard deviations higher than the mean of others his/her/their age.

| Age           | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21+ |
|---------------|----|----|----|----|----|----|----|----|----|----|-----|
| PRIME-5 Score | 19 | 18 | 17 | 16 | 15 | 15 | 15 | 15 | 13 | 15 | 13  |

OR

**2) Traditional Criteria.**  $\geq$ One item rated 6 (Definitely Agree) OR  $\geq$ three items rated 5 (Somewhat Agree) is considered significant (i.e., warranting consideration of fuller evaluation).



Is this a significant result on the PRIME-5?



# Psychosis Screening: Shawna (age 17)

|   |  | Definitely Agree | Somewhat Agree | Slightly Agree | Not Sure | Slightly Disagree | Somewhat Disagree | Definitely Disagree |
|---|--|------------------|----------------|----------------|----------|-------------------|-------------------|---------------------|
| 1 | I think that I have felt that there are odd or unusual things going on that I can't explain.   | 6                | 5              | 4              | 3        | 2                 | 1                 | 0                   |
| 2 | I have had the experience of doing something differently because of my superstitions.  | 6                | 5              | 4              | 3        | 2                 | 1                 | 0                   |
| 3 | I think that I may get confused at times whether something I experience or perceive may be real or may be just part of my imagination or dreams. | 6                | 5              | 4              | 3        | 2                 | 1                 | 0                   |
| 4 | I think I might feel like my mind is "playing tricks" on me.   | 6                | 5              | 4              | 3        | 2                 | 1                 | 0                   |
| 5 | I think that I may hear my own thoughts being said out loud.   | 6                | 5              | 4              | 3        | 2                 | 1                 | 0                   |

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|---------------|----|----|----|----|----|----|----|----|----|----|-----|
| PRIME-5 Score | 19 | 18 | 17 | 16 | 15 | 15 | 15 | 15 | 13 | 15 | 13  |

OR

**2) Traditional Criteria.**  $\geq$ One item rated 6 (Definitely Agree) OR  $\geq$ three items rated 5 (Somewhat Agree) is considered significant (i.e., warranting consideration of fuller evaluation).

- Shawna's total Score = 17, which is greater than 15 (the significant PRIME-5 score for her age of 17)
- One item rated 6 (Definitely Agree)
- Significant

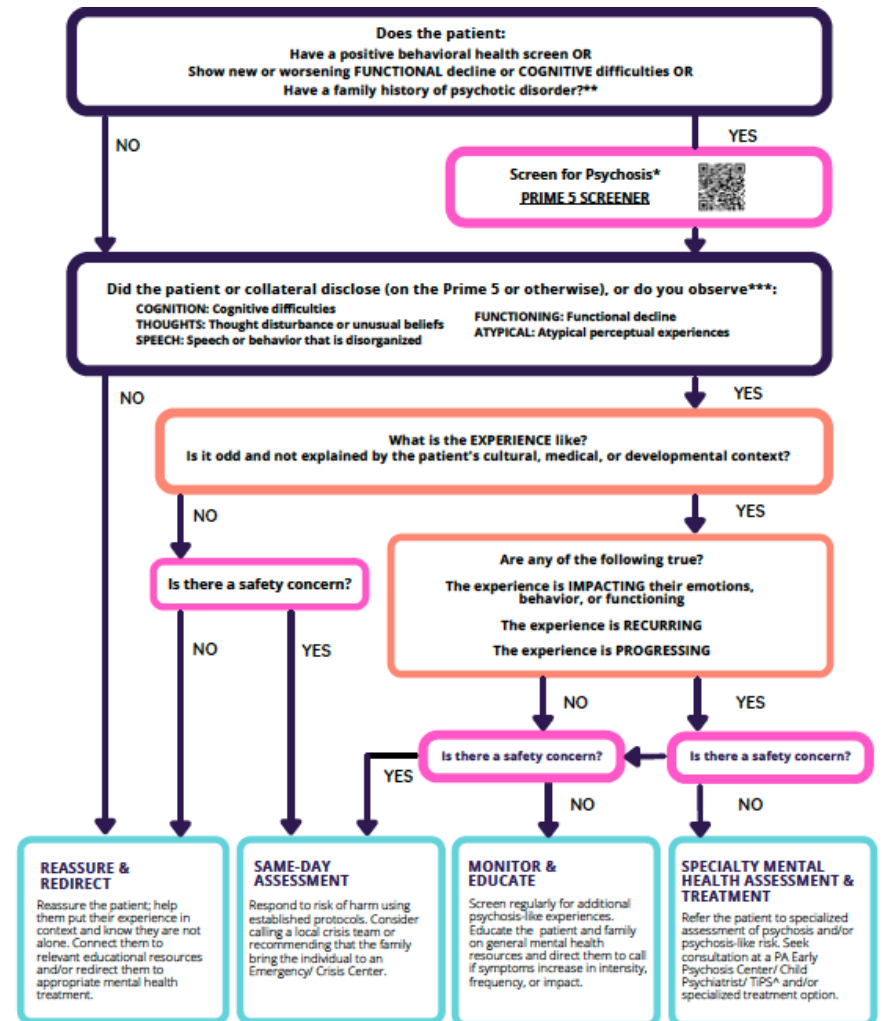
# Psychosis Screening: Shawna (age 17)

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Brief follow-up probing about Shawna's experiences revealed that **beginning about 6 months ago**, she has felt that she is not in control of her own ideas or thoughts (with **"99%" conviction**). She likened the experience to the SIMS computer game, in which the player manipulates the actions of characters. She explained that in the game, you can assign and "cancel" a character's actions, and she related this to ongoing circumstances in her own life. For example, when she is going up the stairs and then suddenly forgets why she was going up the stairs, it seems that someone or something has "cancelled" her thoughts and is controlling her mind and body. She wasn't sure **WHO** or **WHY** or **HOW**, but has "wondered" if it was aliens, who may also be watching her. Things like this, where she is feeling controlled or "cancelled", are happening **nearly every day**, and can happen any**WHERE**. It is **very frightening** for her, and she has been spending **several hours a day** trying to figure out how to keep "them" from cancelling her thoughts, **leading her to spend little time on her school work and with friends**. She says she has been afraid to talk to anyone about this, including her parents, because she thought they would think she is "crazy", and expressed relief about talking about it now. Shawna denies thoughts of hurting herself or others.

# Psychosis Screening: Shawna (age 17)

- PRIME-5 screen significant plus functional decline
- Not explained by these factors
- Impacts her emotions, behavior and functioning; Is progressing
- No safety concern
- Consider referral to specialty assessment and treatment

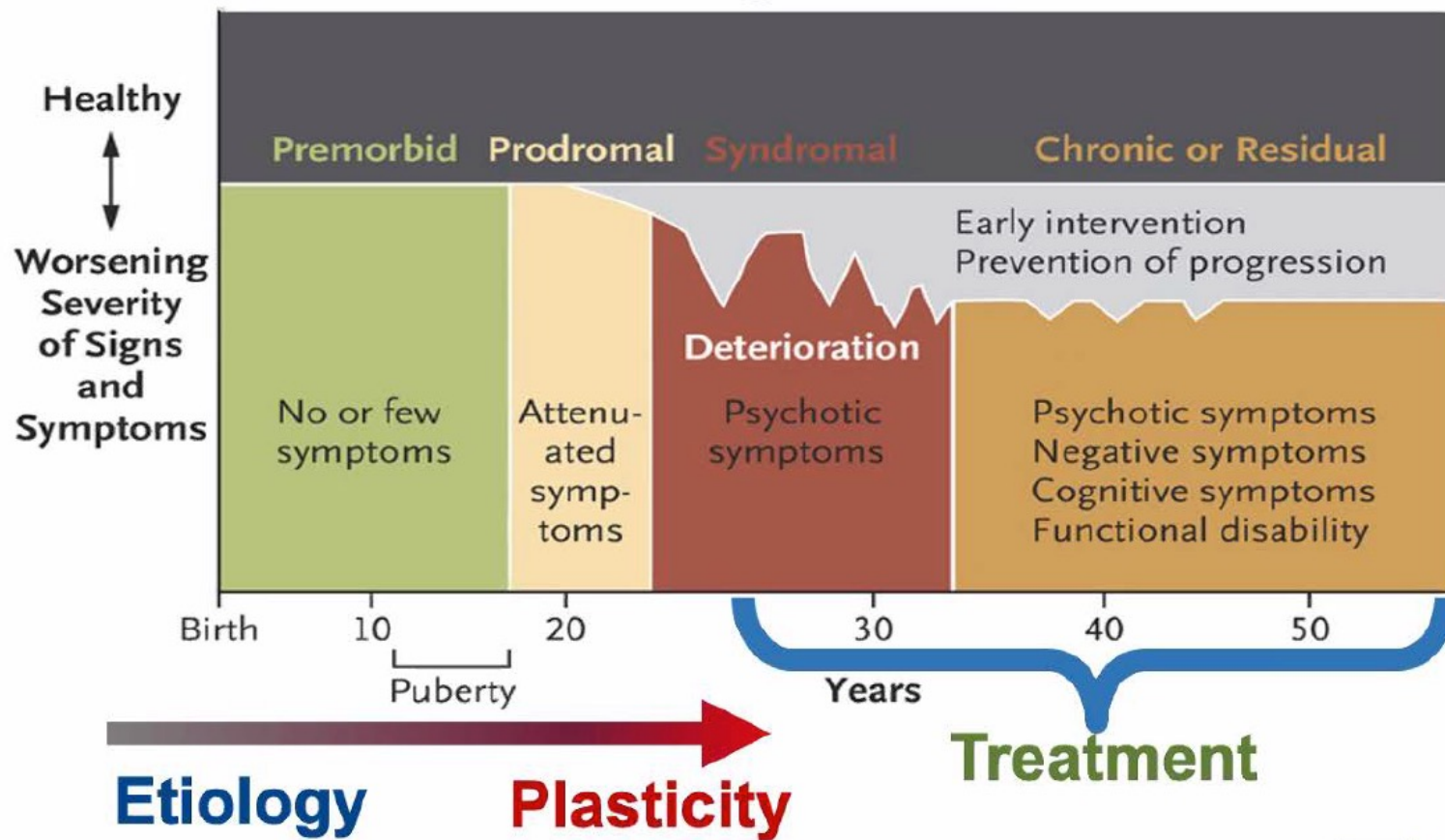


# Screening for Psychosis: Other Screening Tools

| Measure                                     | Acronym     | Authors         | Year | N Items |
|---|-------------|-----------------|------|---------|
| PROD-Screen                                 | PROD-Screen | Heidmann et al. | 2003 | 21      |
| PRIME Screen-Revised                        | PS-R        | Miller et al.   | 2004 | 12      |
| Early Recognition Inventory                 | ERIRAOS     | Hafner et al.   | 2004 | 17      |
| Youth Psychosis At-Risk Questionnaire-Brief | YPARQ-B     | Ord etl.        | 2004 | 28      |
| Prodromal Questionnaire                     | PQ          | Loewy et al.    | 2005 | 92      |
| Eppendorf Schizophrenia Inventory           | ESI         | Niessen et al.  | 2010 | 40      |
| Prodromal Questionnaire - Brief             | PQ-B        | Loewy et al.    | 2011 | 21      |
| Early Detection Primary Care Checklist      | PCCL        | French et al.   | 2012 | 20, 6   |
| Community Assessment of Psychic Experiences | CAPE        | Mossaheb et al. | 2012 | 42      |
| Prodromal Questionnaire – Brief - Child     | PQ-B-C      | Karcher et al.  | 2018 | 21      |
| Early Psychosis Screener for Internet - SR  | EPSI-SR     | Brodey et al.   | 2019 | 124     |

See also: PRIME-5 = brief 5 item, empirically derived, PRIME-SR = self-report version

## Stages of Illness

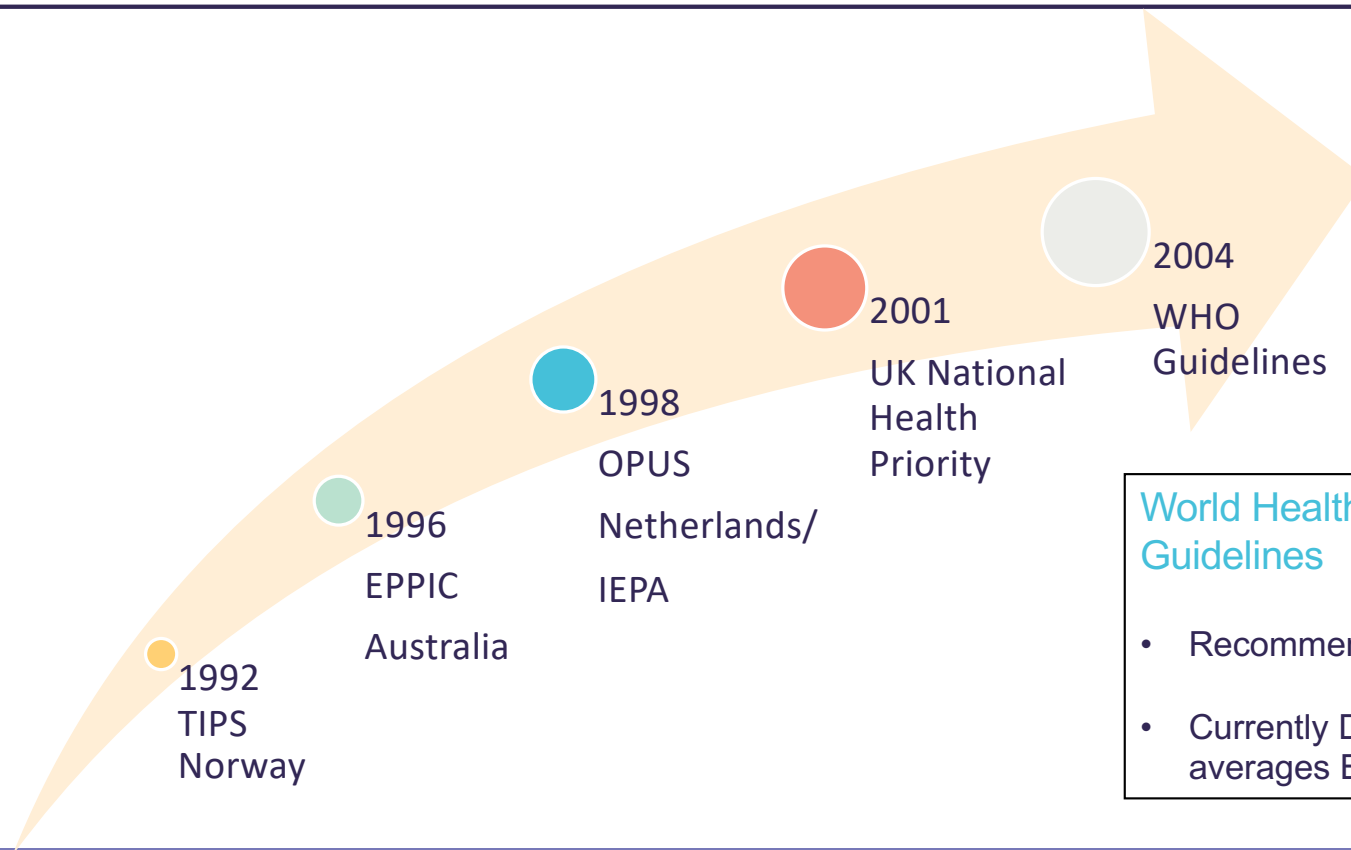


# The Rise of Early Psychosis Intervention

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- The early years following a first episode of psychosis (FEP) present unique opportunities to prevent declines in clinical and social function
- Early intervention programs target factors known to be associated with poor long-term outcomes including:
  - longer duration of untreated psychosis
  - treatment non-adherence
  - affective symptoms
  - cognitive dysfunction

# Early Psychosis Intervention Around the World



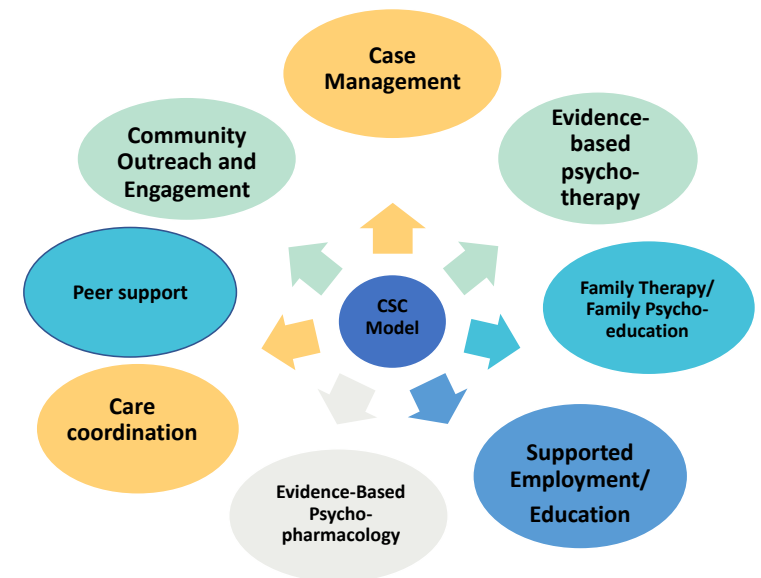
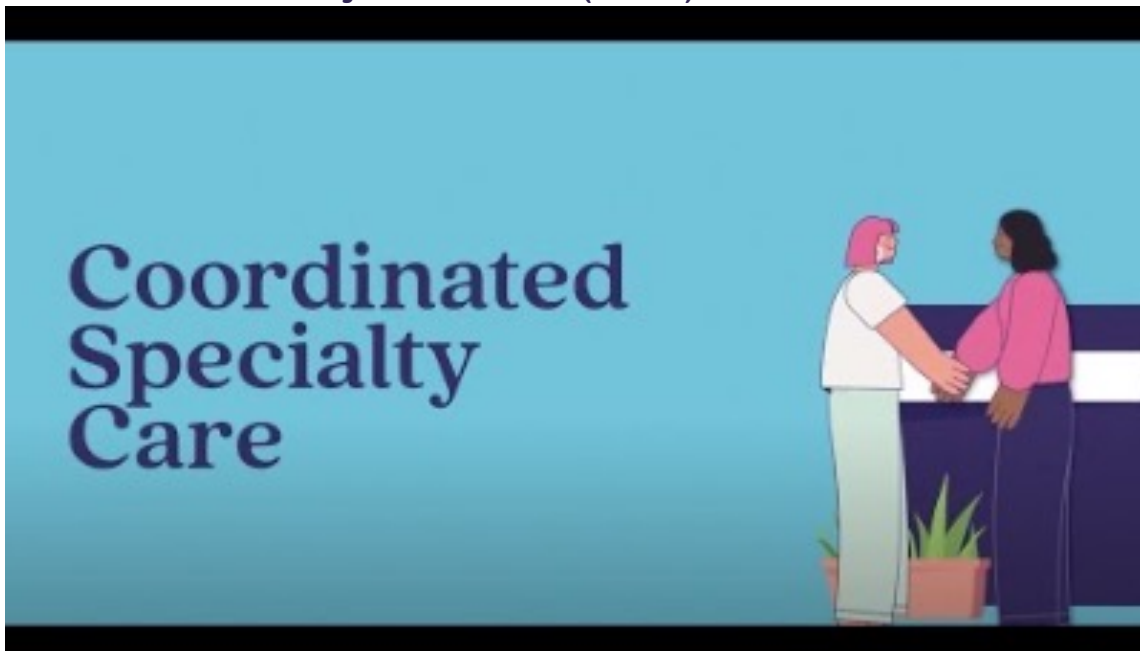
**World Health Organization (WHO) Guidelines**

- Recommend DUP less than 3 months
- Currently DUP in the United States averages Between 1 and 3 years

# Coordinated Specialty Care (CSC) Services for First-Episode Psychosis

## What is CSC?

“Recovery oriented treatment which uses a team of health professionals and specialists who work with the client to create a personal treatment plan based on the client's life goals and preferences. This may include a variety of services” (NIMH)



<https://www.youtube.com/watch?v=391SiwtRbeo>

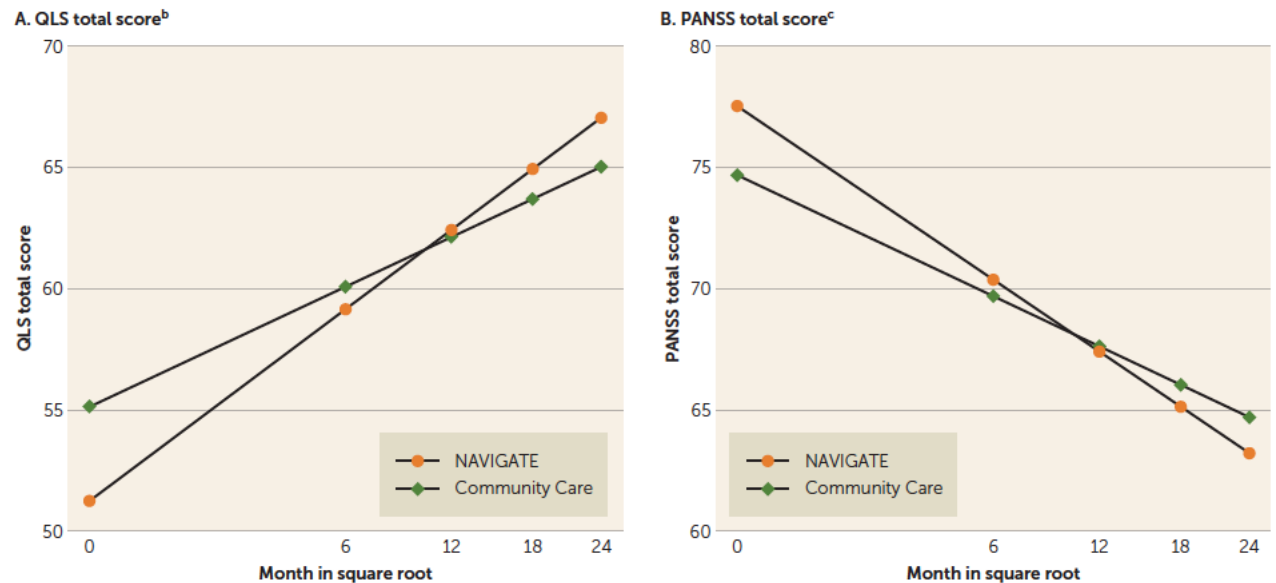


# Benefits of CSC Services for Individuals and Stakeholders

## Comprehensive Versus Usual Community Care for First-Episode Psychosis: 2-Year Outcomes From the NIMH RAISE Early Treatment Program

John M. Kane, M.D., Delbert G. Robinson, M.D., Nina R. Schooler, Ph.D., Kim T. Mueser, Ph.D., David L. Penn, Ph.D.,

FIGURE 2. Model-Based Estimates of Heinrichs-Carpenter Quality of Life (QLS) Total Score and PANSS Total Score<sup>a</sup>



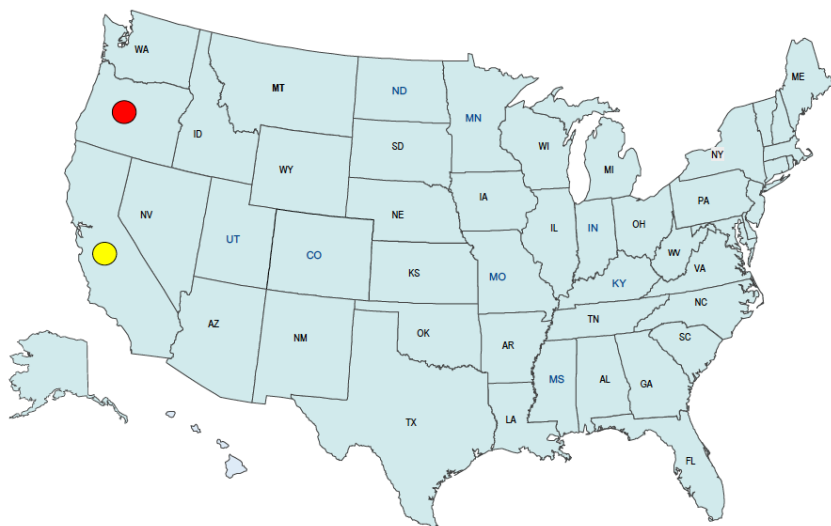
<sup>a</sup> PANSS=Positive and Negative Syndrome Scale.

<sup>b</sup> Treatment by square root of time interaction,  $p=0.015$ .

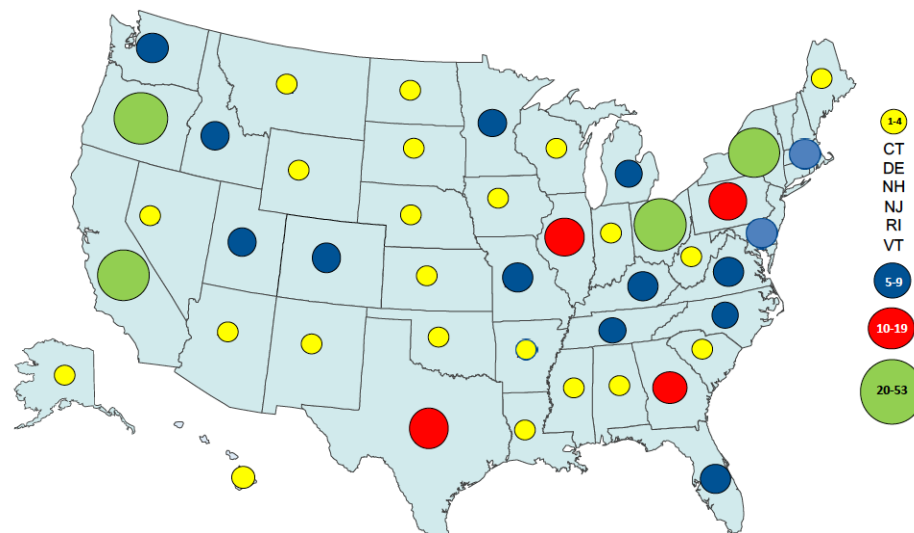
<sup>c</sup> Treatment by square root of time interaction,  $p=0.016$ .

# National Implementation of Coordinated Specialty Care for First-Episode Psychosis

- 2008 - Successful research study (RAISE Trial) launched, showed that CSC programs were beneficial
- 2014 - Congress allocated funds to be distributed through SAMHSA at the state level for “Evidence-Based Treatments for First Episode Psychosis: Components of Coordinated Specialty Care”



2008, 12 Clinics



2020

Slide courtesy Bob Heinsen, NIMH



HeadsUp is a *collaborating* organization whose mission is to help *end the stigma* around psychosis through **education, advocacy, and support**

Meet Our Staff



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Steven (Steve) Paredes  
HEADSUP ADMINISTRATIVE  
COORDINATOR

We promote *early intervention* centered around personalized, accessible, and effective care for all people in Pennsylvania



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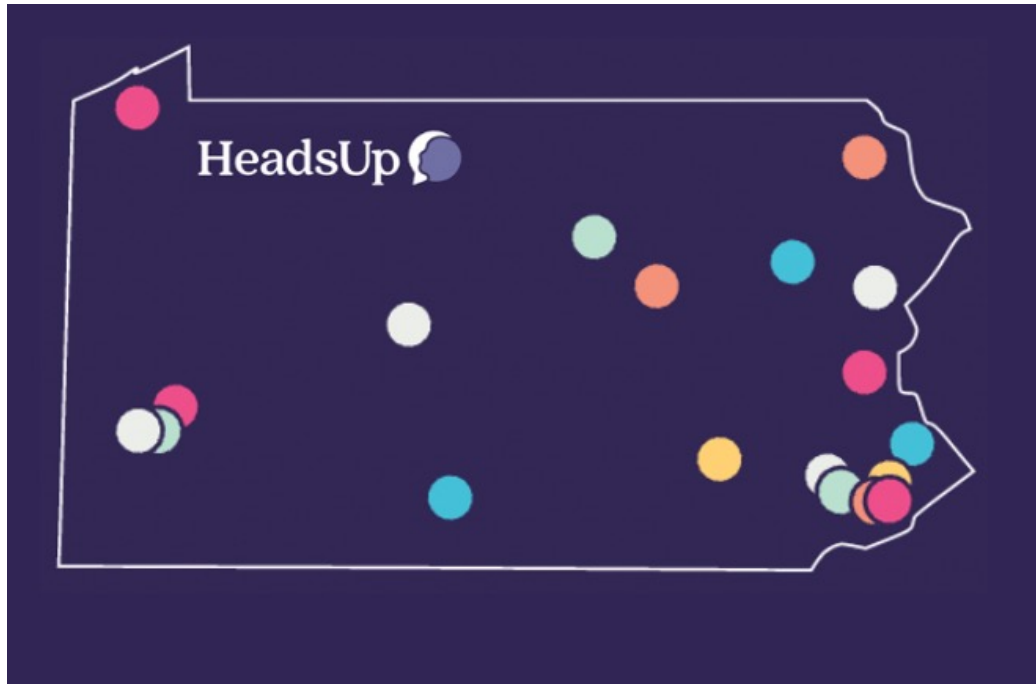
Our deliverables include:

Program Evaluation, Data Collection, and Research

Education, Training, and Clinical Care

Outreach and Cross-Systems Engagement

# PA FEP CSC Programs: 17 total



## coordinated specialty care

No two stories are exactly the same. Treatment is a collaboration between you and the team of professionals ready to help. Each individual at our centers has access to a variety of services and options.

- Your Treatment Team**
- Psychotherapy**  
learning to focus on resiliency, managing the condition, promoting wellness and developing coping skills
  - Medication Management**  
finding the best medication at the lowest possible dose
  - Supported Employment and Education**  
providing support to continue or return to school or work
  - Peer Support**  
connecting the person with others who have been through similar experiences
  - Case Management**  
working with the individual to develop problem-solving skills, manage medication and coordinate services
  - Family Support & Education**  
giving families information and skills to support their loved one's treatment and recovery



visit us online for more information or to connect to a center near you

**find a center\***

- CAPSTONE-PPI/YWCA/CMU**  
HARRISBURG
  - CHOP FEP-Children's Hospital of Philadelphia**  
PHILADELPHIA
  - CSG EPIC-Community Service Group**  
WILLIAMSPORT
  - Connect to Empower-CMSU Behavioral Health Services**  
DANVILLE
  - ENGAGE-Wesley Family Services**  
NEW KENSINGTON
  - ENGAGE-Wesley Family Services**  
WILKINSBURG
  - HOPE-Children's Services Center**  
HONESDALE
  - HOPE-Children's Services Center**  
STROUDSBURG
  - HOPE-Children's Services Center**  
WILKES-BARRE
  - InSight**  
STATE COLLEGE
  - On My Way-Child and Family Focus, Inc.**  
ALLENTOWN
  - On My Way-Child and Family Focus, Inc.**  
BROOMALL
  - On My Way-Child and Family Focus, Inc.**  
PHOENIXVILLE
  - On My Way-Child and Family Focus, Inc.**  
SOUTHAMPTON
  - PEACE-Horizon House**  
PHILADELPHIA
  - PERC-University of Pennsylvania**  
PHILADELPHIA
  - Safe Harbor-UPMC Western Behavioral Health**  
ERIE
  - Services for the Treatment of Early Psychosis (STEP) Clinic**  
PITTSBURGH
- \*We are always growing! For the most up-to-date list of centers, visit us online.

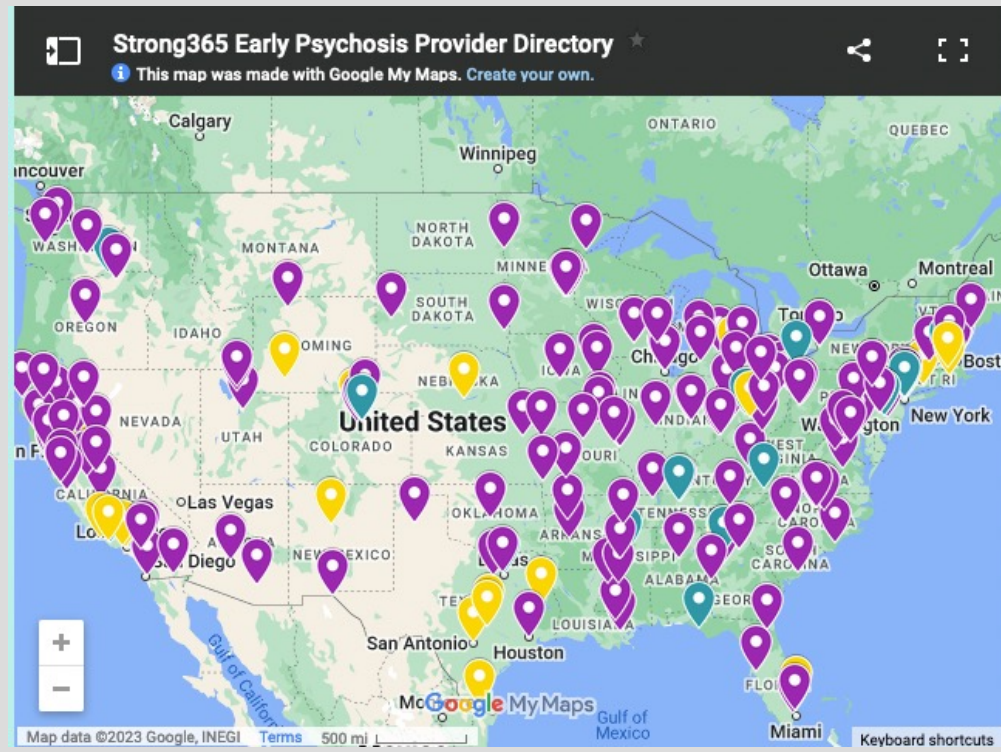
[headsup-pa.org](http://headsup-pa.org)



[www.headsup-pa.org/find-a-center/](http://www.headsup-pa.org/find-a-center/)

Funding for HeadsUp provided through Community Mental Health Services Block Grant from the Substance Abuse and Mental Health Services Administration (SAMHSA), U.S. Department of Health and Human Services (HHS)





<https://strong365.org/find-support/professional-support/psychosis-support-provider-directory>

## HOPE TEAM

HOPE TEAM Clinic is affiliated with UPMC Western Behavioral Health, Center for Children and Families (CCF). HOPE TEAM is currently funded by the Substance Abuse and Mental Health Services Administration (SAMHSA)

<https://www.hopeteam.pitt.edu/>

# EARLY SERIOUS MENTAL ILLNESS TREATMENT LOCATOR

<https://www.samhsa.gov/esmi-treatment-locator>



## Stanford MEDICINE | PEPPNET

<https://med.stanford.edu/peppnet/interactivedirectory.html>




# Coordinated Specialty Care (CSC) Services for First-Episode Psychosis in Pennsylvania

[https://www.youtube.com/watch?v=vIAKDD\\_VyJc](https://www.youtube.com/watch?v=vIAKDD_VyJc)



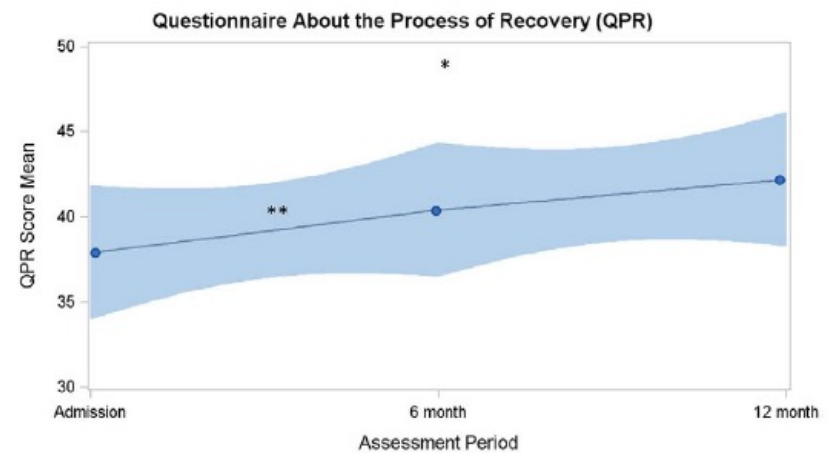
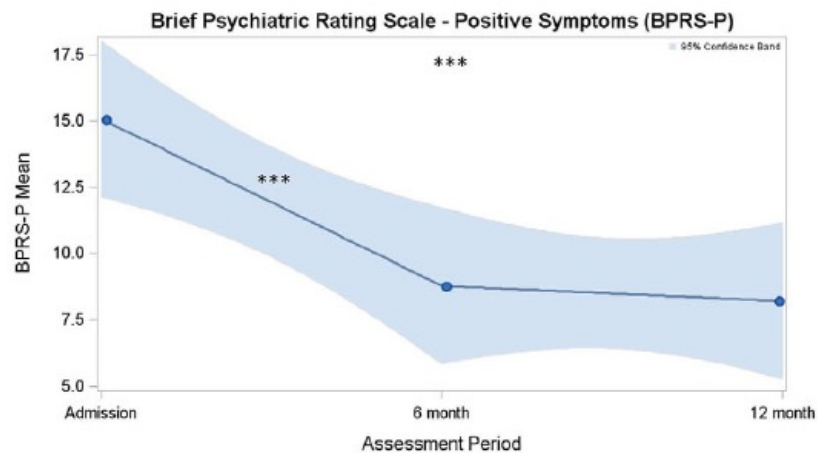
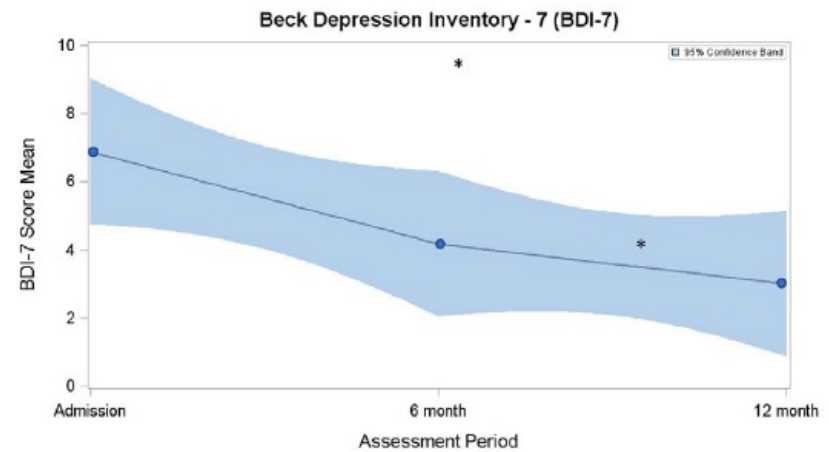
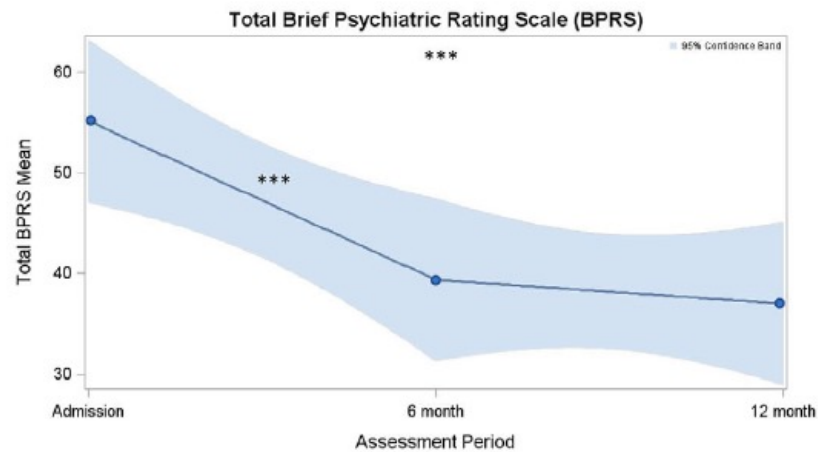
**Pennsylvania coordinated specialty care programs for first-episode psychosis: 6- and 12-month outcomes**

*Early Intervention in Psychiatry*. 2020;1-14.

Megan B. E. Westfall<sup>1</sup> | Christian G. Kohler<sup>1,9</sup> | Irene Hurford<sup>1</sup> |  
Courtney Abegunde<sup>2</sup> | Dominick Agosti<sup>3</sup> | Aaron Brinen<sup>8</sup> | Mary Lyn Cadman<sup>3</sup> |  
Catherine Conroy<sup>1</sup> | Arielle Ered<sup>9,11</sup> | Amanda Fooks<sup>4</sup> | Olivia Franco<sup>9</sup> |  
Zeeshan M. Huque<sup>9</sup> | Denise Namowicz<sup>10</sup> | Seamus O'Connor<sup>5</sup> | Molly Oross<sup>6</sup> |  
Elisa Payne<sup>9</sup> | Deepak K. Sarpal<sup>2</sup> | Lyndsay R. Schmidt<sup>9</sup> | Alison Swigart<sup>4</sup> |  
R. Marie Wenzel<sup>7</sup> | Monica E. Calkins<sup>1,9</sup> 

- Nine (now 17) SAMHSA funded CSC programs (2+ years) across Pennsylvania
- Participants (n=697) completed the core battery at admission, 6- and 12-month (n=230) follow-up (and every 6 months thereafter).
- Currently n=858 individuals have been enrolled.
- All data are collected in an online system (REDCap) by clinical program staff.
- Annual training (video recorded), manual, monthly PE meetings, central repository for PE forms and information, dedicated Senior PE Coordinator/Analyst (Westfall) and data coordinator (Miao).

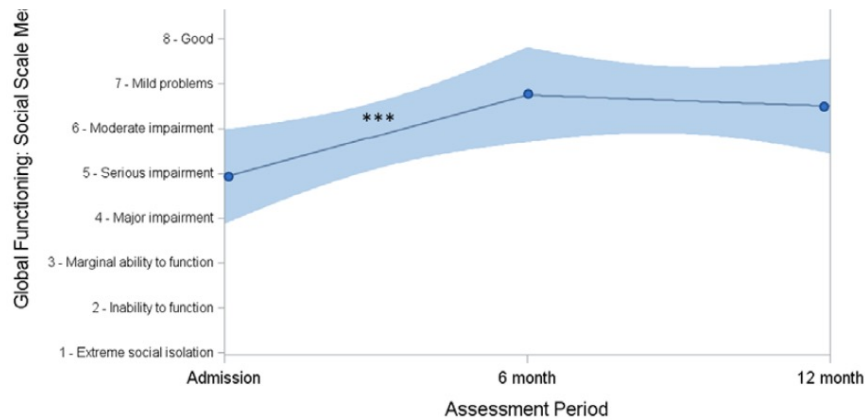
# PA-FEP-PE: Clinical Symptom Outcomes



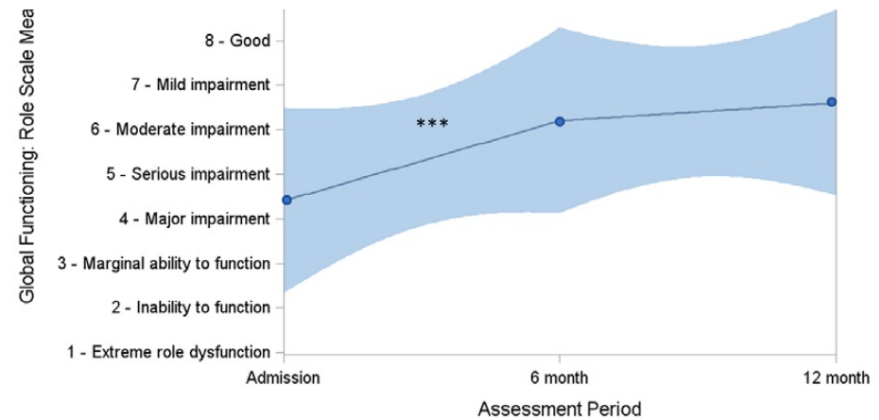


# PA-FEP-PE: Role and Social Function

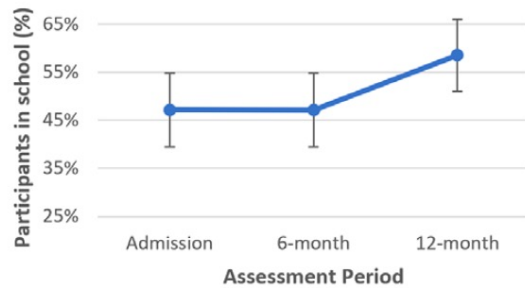
Cornblatt Global Function - Social



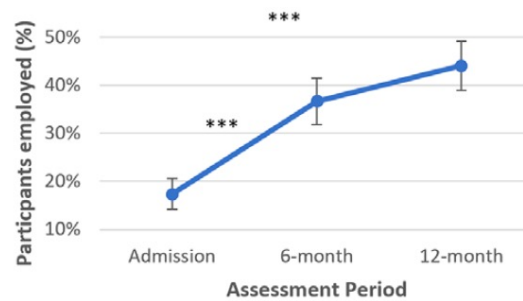
Cornblatt Global Function - Role



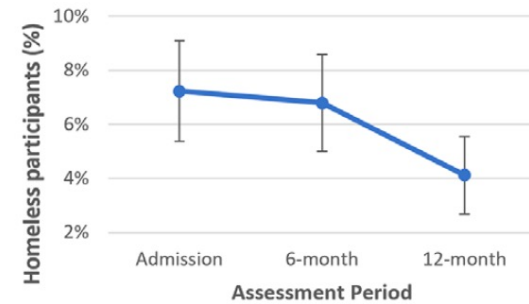
School Enrollment



Employment



Homelessness



## MYTH

### **Individuals Who Have SMI Cannot Reach and Maintain Recovery**

## FACT

Historically, recovery from SMI was not considered likely or even possible. However, a range of evidence over the last two decades indicates that around 65% of people with SMI experience partial to full recovery over time.<sup>1</sup>

Recovery does not necessarily mean the absence of symptoms. Recovery from SMI is defined in both objective and subjective ways.<sup>2,3,4,5</sup> This incorporates concepts that go beyond just having stable symptoms. It includes well-being, quality of life, functioning, and a sense of hope and optimism.<sup>6,7,8,9</sup>

Recovery is a process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential. The four major dimensions that support recovery are health, home, purpose, and community.<sup>10,11</sup>

- ✓ Health – overcome or manage one’s disease(s) or symptoms, and make informed, healthy choices that support physical and emotional well-being
- ✓ Home – have a stable and safe place to live
- ✓ Purpose – conduct meaningful daily activities, such as a job, school, volunteerism, family caretaking, or creative endeavors, and the independence, income, and resources to participate in society
- ✓ Community – have relationships and social networks that provide support, friendship, love, and hope

Individuals should identify their recovery goals and receive support for them in their treatment plans.

## MYTH

### **People Who Have SMI Cannot Obtain Competitive Employment or Complete Education**

## FACT

Employment and education provide a sense of purpose that is a critical aspect of life in recovery.<sup>20</sup> In fact, most people who have SMI do want to work and see work as an essential part of their recovery.<sup>6,7</sup> Between 40% and 60% of people who enroll in supported employment obtain competitive employment.<sup>22</sup>

There is ample evidence that employment is not “too stressful” for individuals who have SMI.<sup>23</sup> The benefits of employment and education for people with SMI are well documented.<sup>8</sup> They include improved economic status, increased self-esteem, and symptom reduction. In fact, the detrimental effect of unemployment creates clinical risks for people who have SMI.<sup>9</sup> These are often overlooked.

Supported employment programs can improve outcomes for individuals who have SMI.<sup>24</sup> This includes a higher likelihood that they obtain competitive employment, work more hours per week, maintain employment for a longer period, and have a higher income. In turn, supported education programs can reduce burdens for people who have SMI and want to finish or go back to school.<sup>25</sup> It offers specialized, one-on-one support to help navigate academic settings and link to mental health services.

Individuals should receive encouragement if their recovery goals include employment or education. There are supportive and effective programs to reach these goals and they have considerable benefits.

## MYTH

### **There Is Little Evidence That Measurement-Based Care Impacts Recovery From SMI**

## FACTS

A great deal of research shows that Measurement-Based Care (MBC) has a favorable impact on recovery from SMI.<sup>22,23</sup> The cornerstone of MBC is a treatment team approach that fosters routine, objective assessment. Interpretation and communication follows that, if when adjustments are needed to the intervention plan to improve outcomes. Assessments should include symptoms and functioning and interventions to be adjusted may include therapy or medications. One of the basic principles of MBC is: Things that get measured get better, and get better faster.

- ✔ MBC increases the likelihood for improvement and even recovery
- ✔ MBC provides expert guidance for a care team's treatment choices
- ✔ MBC can detect early if a treatment is not helping so adjustments can be made
- ✔ MBC bolsters an individual's participation in treatment

# Discussing Referrals for Specialty Care

---

- Discussing referrals for specialty care with an individual
  - Approach as would any other specialty care referral but assume that the person has been exposed to societal stigma about psychosis and schizophrenia; consider cultural or sub-cultural factors that may influence
  - Collaborate: provide psychoeducation and supportive dialogue to address stigma/myths:
    - Symptoms/associated features- their significance and meaning for the individual, their life, their family (e.g., “crazy”, ”doomed”, will become homeless/violent, unable to achieve)
    - Treatment
      - Debunk myths/stereotype
      - Emphasize recovery orientation/approach – team of specialists who can evaluate what is going on and assist the person to achieve their goals in life
  - Find out whether there is a support person (parent, significant other, close friend) whom you can engage
  - Offer to make the call/email together
  - May be an ongoing conversation
- Referring organizations can (but are not required to) do a pre-screen using structured screening tools
  - PA CSC clinics have an intake screen in place according to agency needs/preferences
  - HeadsUp can help guide triage and referral to the appropriate program (or alternate referrals as indicated).

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**NOW AVAILABLE!**



**A Professional Consultative Service for Clinicians in PA**

First Episode Psychosis (FEP) centers are not always conveniently located to people who need them. If you are working with a client who may be experiencing early psychosis, our experts are here to provide educational resources tailored to your clinical care questions.

For more information or to submit your first question visit the [Early Psychosis Mentor](#) page of our website: [headsup-pa.org](https://headsup-pa.org)



HeadsUp is a collaborating organization whose mission is to help end the stigma around psychosis through education, advocacy, and support. We promote early intervention centered around personalized, accessible, and effective care for all people in Pennsylvania.



Funding for HeadsUp provided through Community Mental Health Services Block Grant from the Substance Abuse and Mental Health Services Administration (SAMHSA), U.S. Department of Health and Human Services (HHS) Grant Award Number: 5H063411-01

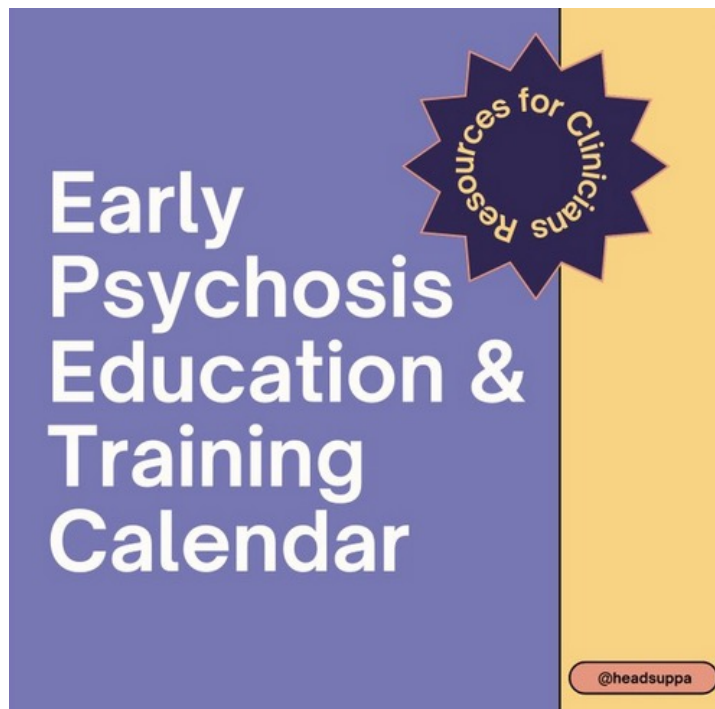
Check out and spread the word about our FREE HeadsUp Early Psychosis Mentor

[headsup-pa.org/headsup-mentor/](https://headsup-pa.org/headsup-mentor/)

1-833-933-2816



# Training and Employment Opportunities

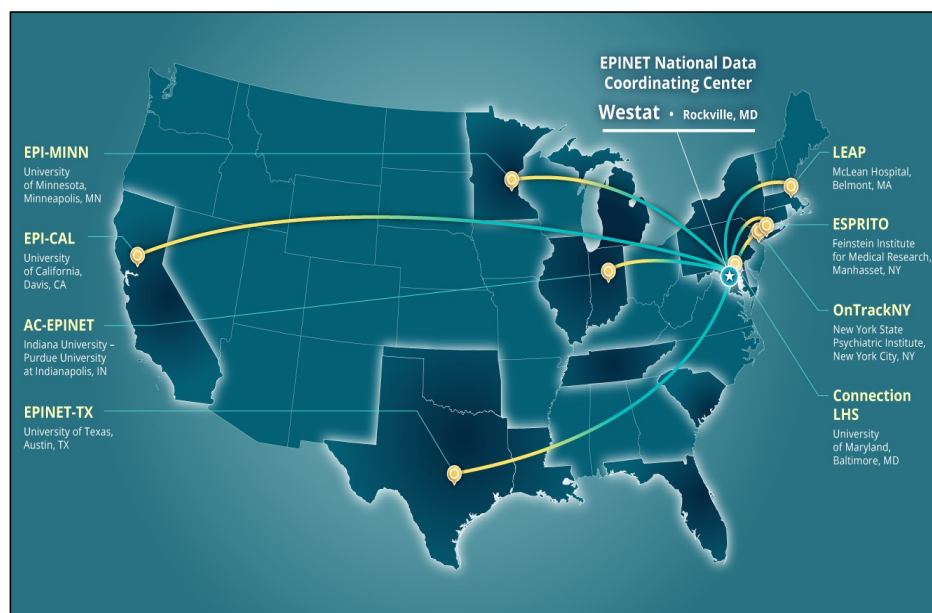


<https://headsup-pa.org/for-clinicians/education-and-training/>

# Early Psychosis Intervention Network: A National Learning Health Care System for Early Psychosis



- <https://nationalepinet.org/>
- EPINET links early psychosis clinics through standard clinical measures, uniform data collection and integration methods.
- Clients and families, clinicians, health care administrators, and researchers collaborate to improve early psychosis care and conduct practice-based research.



- Initiated in 2019
- Sponsored by the NIMH
- 8 Regional Hubs
- 101 early psychosis clinics across 16 states
- EPINET National Data Coordinating Center

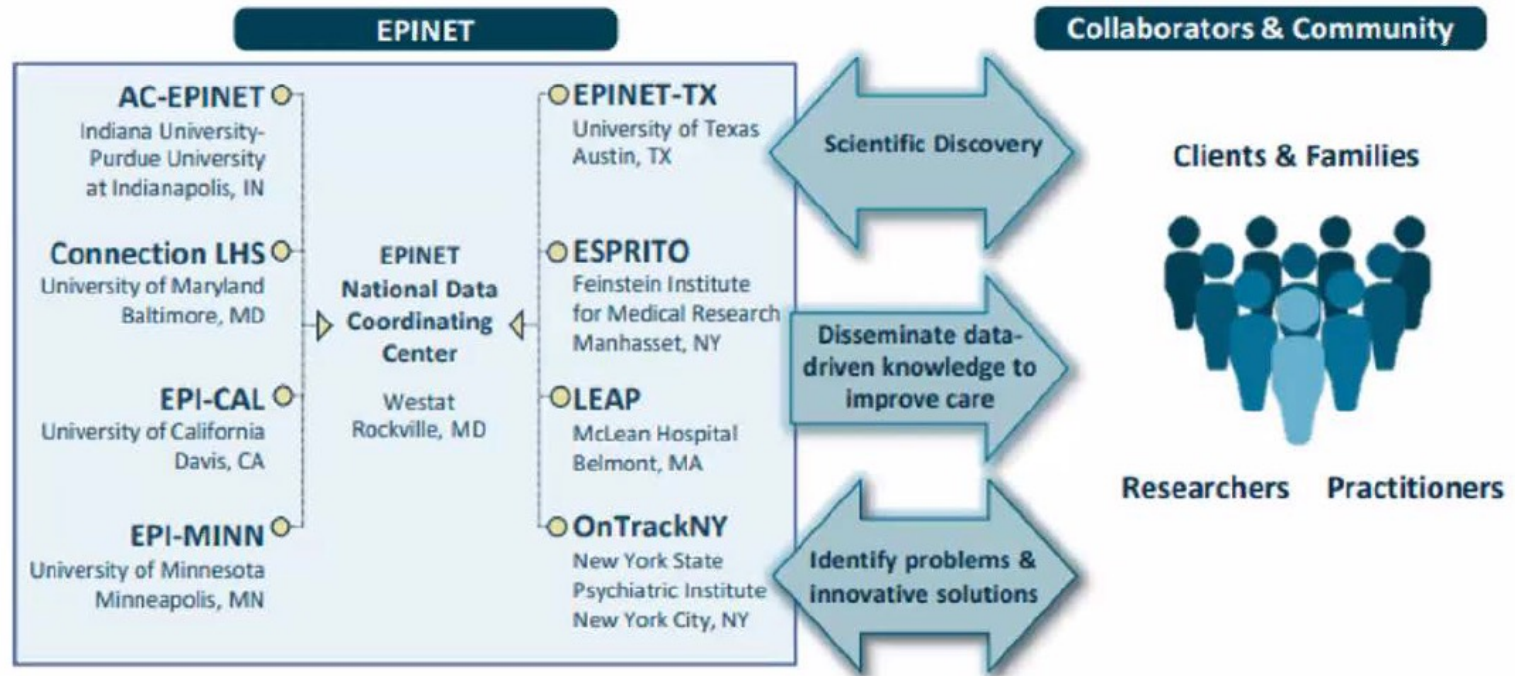
*Slide courtesy Melanie Bennett, Ph.D., University of Maryland*





**Connection LHS**

- 24 CSC programs in Maryland and Pennsylvania
- 4 academic institutions, 5 hospital systems, 2 state behavioral health systems



<https://www.cmhnetwork.org/news/nimh-launches-the-early-psychosis-intervention-network-epinet-a-national-learning-health-care-system/>

# Accelerating Medicines Partnership: AMP SCZ

Research strategy and planning involved 58 scientists from NIMH, FDA, 16 private-sector partners, and leading academic research institutions

**Overall goal:** Provide tools to improve our ability to develop treatments (medications) for youth experiencing clinical high risk symptoms

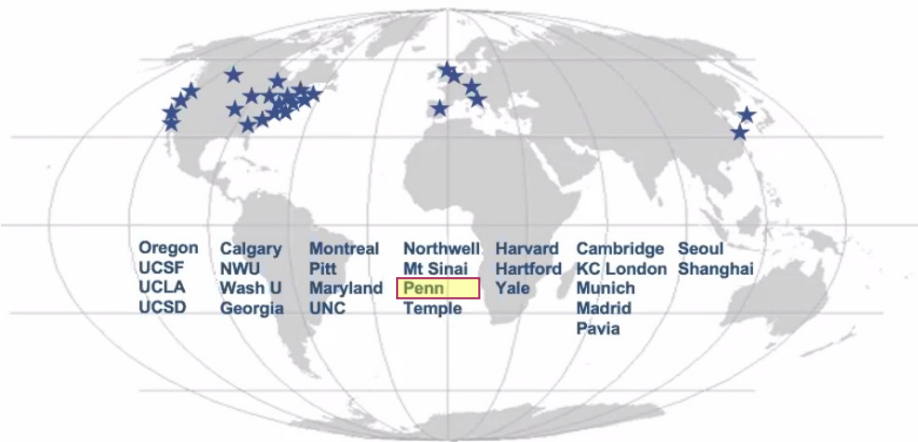


[www.nih.gov/research-training/accelerating-medicines-partnership-amp/schizophrenia](http://www.nih.gov/research-training/accelerating-medicines-partnership-amp/schizophrenia)

Images courtesy FNIIH

# AMP SCZ

## PRESCIENT



**30 Sites**

Calkins/Wolf Penn Site MPI's

**Research Participation:** Will undergo research evaluation and participant/clinician can request feedback.



**16 sites**

# Conclusions

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- Because schizophrenia spectrum disorders are relatively common, affecting approximately 4% of young people, nearly all mental health care providers will encounter individuals experiencing psychosis or its early warning signs
- The sooner individuals are identified and receive care, such as at a Coordinated Specialty Care clinic, following the first onset of psychosis spectrum symptoms, the better their functional and personal outcomes are likely to be
- This webinar provided advanced strategies for recognizing, comprehensively screening for, and responding to psychosis spectrum symptoms



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[LiBIresearch.com](http://LiBIresearch.com)

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PRONET

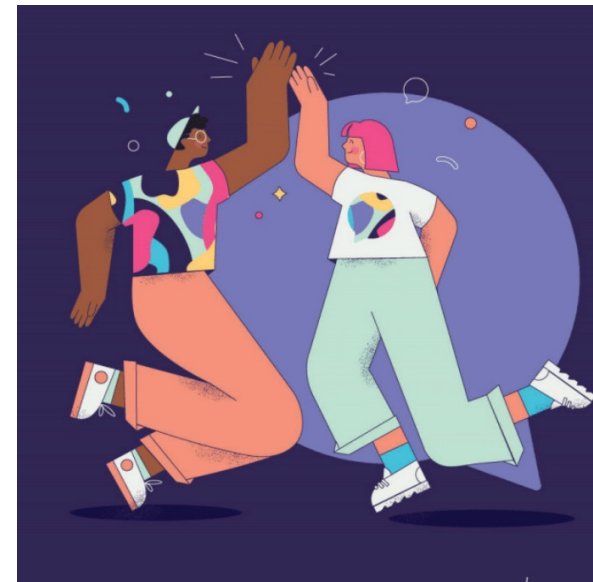
[heads-up-pa.org](http://heads-up-pa.org)



headsuppa



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# Q & A

## Open Discussion