Perelman School of Medicine, University of Pennsylvania

CSWE, Council on Social Work Education

Introduction to Early Identification and Classification Across the Psychosis Spectrum

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Council on Social Work Education

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HeadsUp

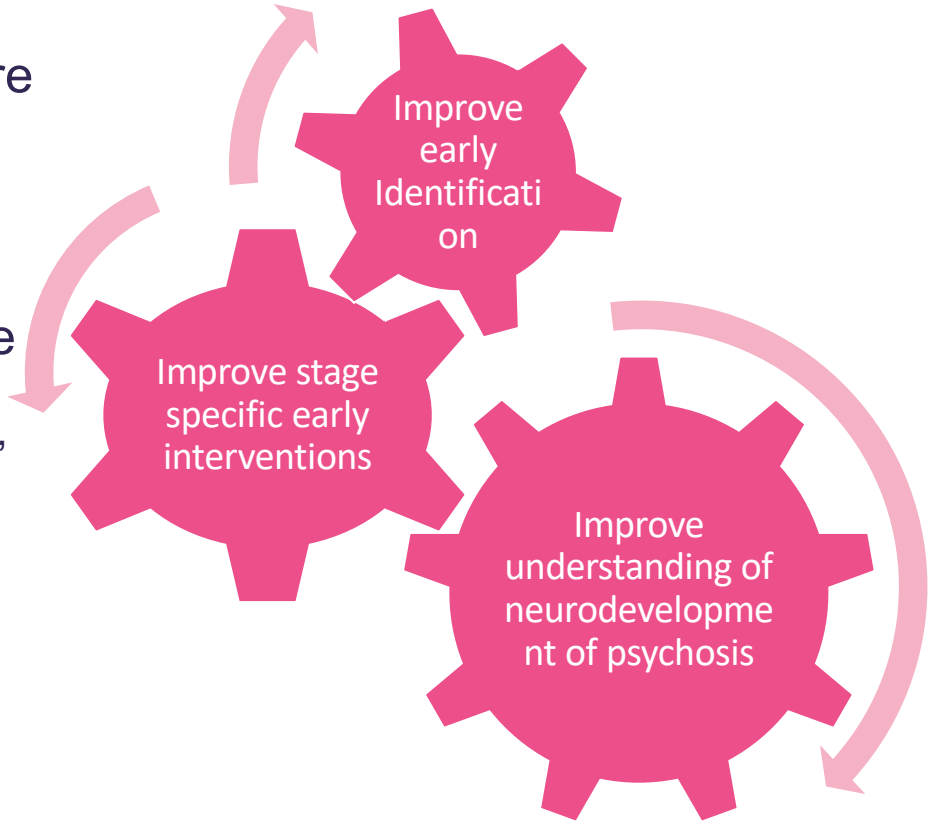
pennsylvania
DEPARTMENT OF HUMAN SERVICES
OFFICE OF MENTAL HEALTH AND SUBSTANCE ABUSE SERVICES

Learning Objectives

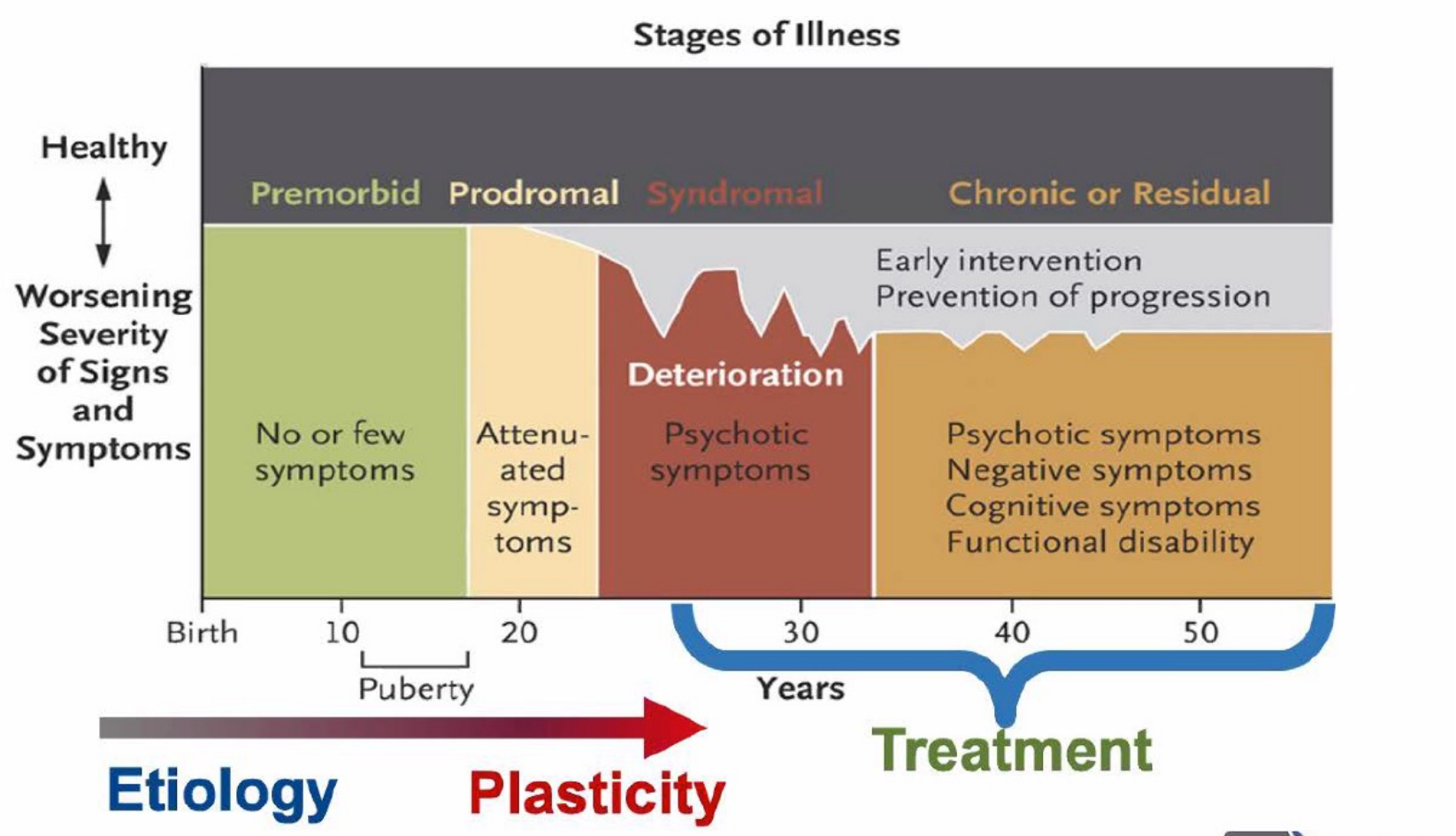
- Describe the mental health disorders in which a person can experience psychosis spectrum symptoms
- Recognize and be able to screen for early signs and symptoms of psychosis
- Consider the impact of substance use and social determinants of health on the identification, referral, and care-seeking behaviors of individuals 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



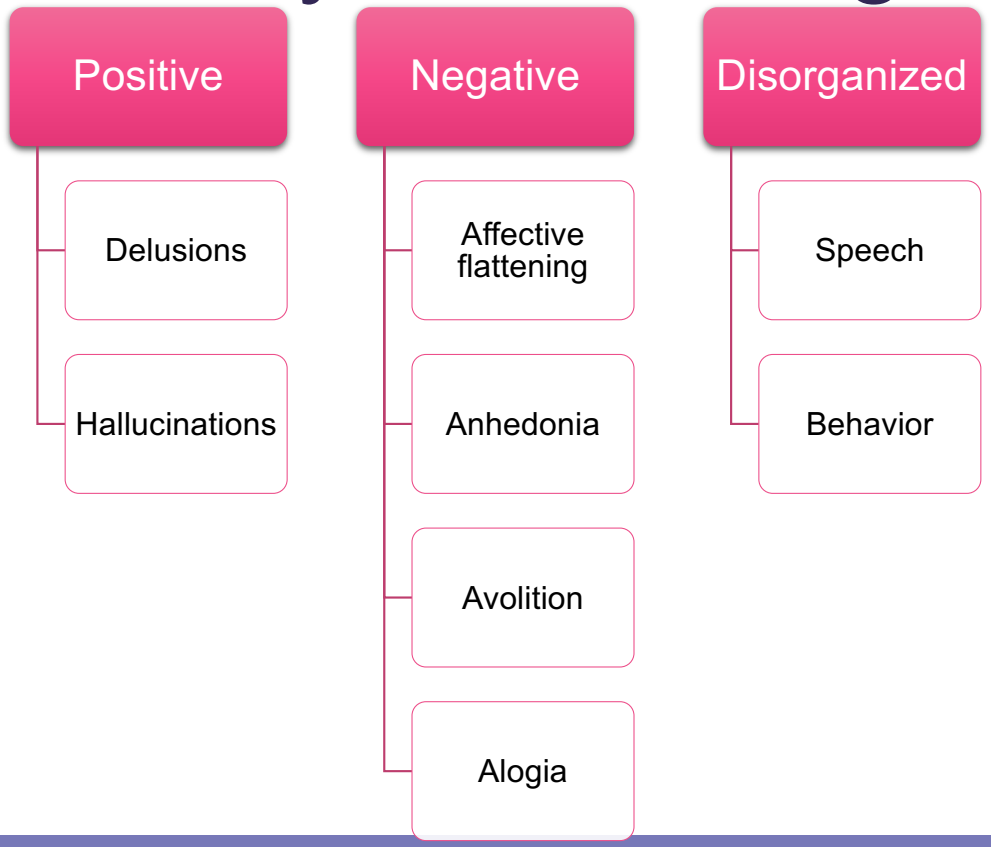
What is Psychosis?



NIH National Institute of Mental Health

Slide courtesy Bob Heinssen, NIH

Psychosis Symptoms – First Episode Psychosis Stage



Psychosis Symptoms

- Conceptually - gross impairment in reality testing and lack of insight
  - Gross impairment in reality testing:
    - delusions and hallucinations
  - Lack of insight:
    - inability to recognize or understand problem

Delusion

- Fixed belief
- Based on incorrect inference about reality
- Held strongly DESPITE
  - obvious evidence to the contrary
  - what almost everyone else believes

Some Types of Delusions

- Delusions of Reference – belief that events occur in reference to person - e.g., people talking in public refer to him/her
- Persecutory Delusions – belief that others are "out to get them”; being tormented, followed, tricked, spied on, or subjected to ridicule
- Grandiose Delusions – belief that one possesses exaggerated power, abilities, importance

Some Types of Delusions

- Somatic Delusions – belief that something is wrong or changed about one's body
- Delusions of Guilt – belief that one has done something terrible, sinful, unforgivable
- Delusion of Control – belief that actions, impulses or thoughts are controlled by outside agency (e.g., arms forced to move) (thought insertion, thought withdrawal)
- Thought Broadcasting – belief that one's thoughts are audible to others

Hallucinations

- Sensory perceptions that occur without any actual external stimulus, but have compelling sense of reality.
  - Auditory
    - Can be any sound, but voices common in schizophrenia
  - Visual
    - clearly formed images (e.g., people) or unformed images (flashes of light)
  - Tactile – bodily sensation
  - Olfactory – perception of odor
  - Gustatory – perception of taste
- Contrast to illusion

Exercise: Hallucinations

- Jot down your observations of your auditory perceptions. What do you hear?

Other Schizophrenia Spectrum Symptoms

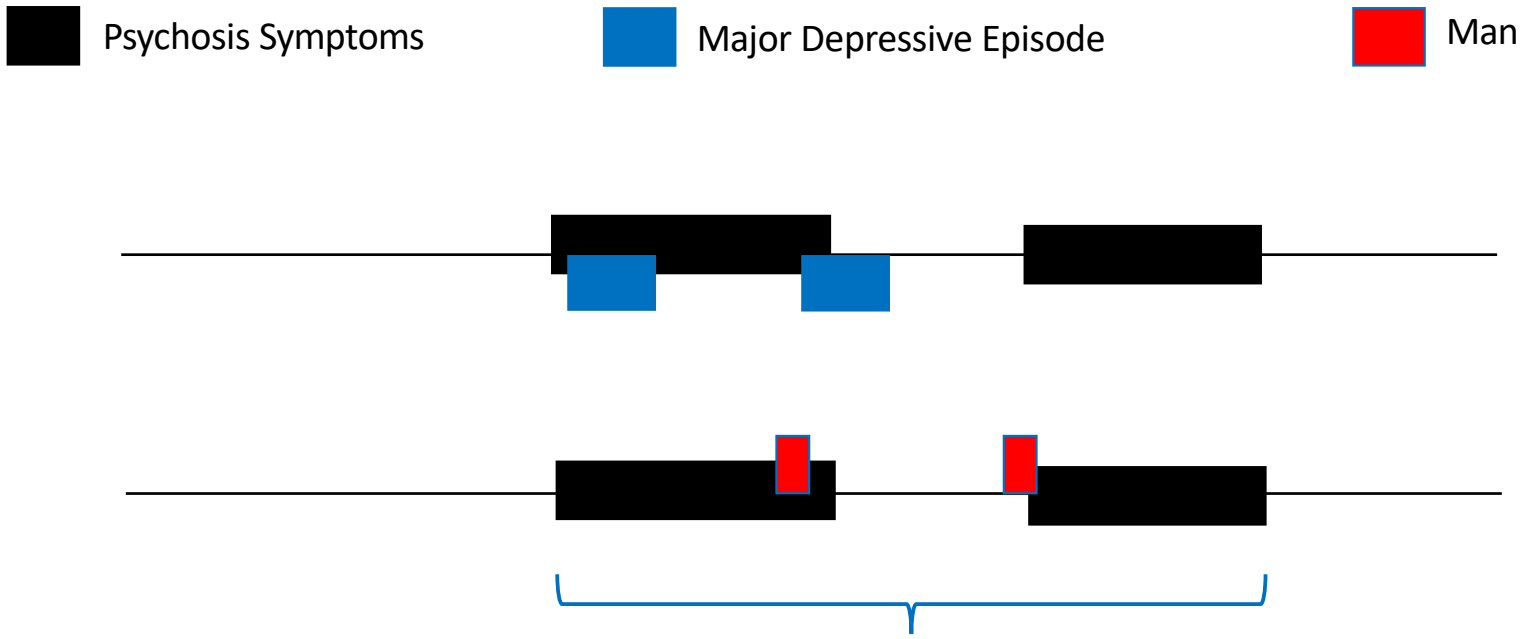
- Disorganized speech
- Grossly Disorganized Behavior
- Catatonic Behavior
- Negative Symptoms

DSM-5 Mutually Exclusive Disorders* With Psychosis Symptoms

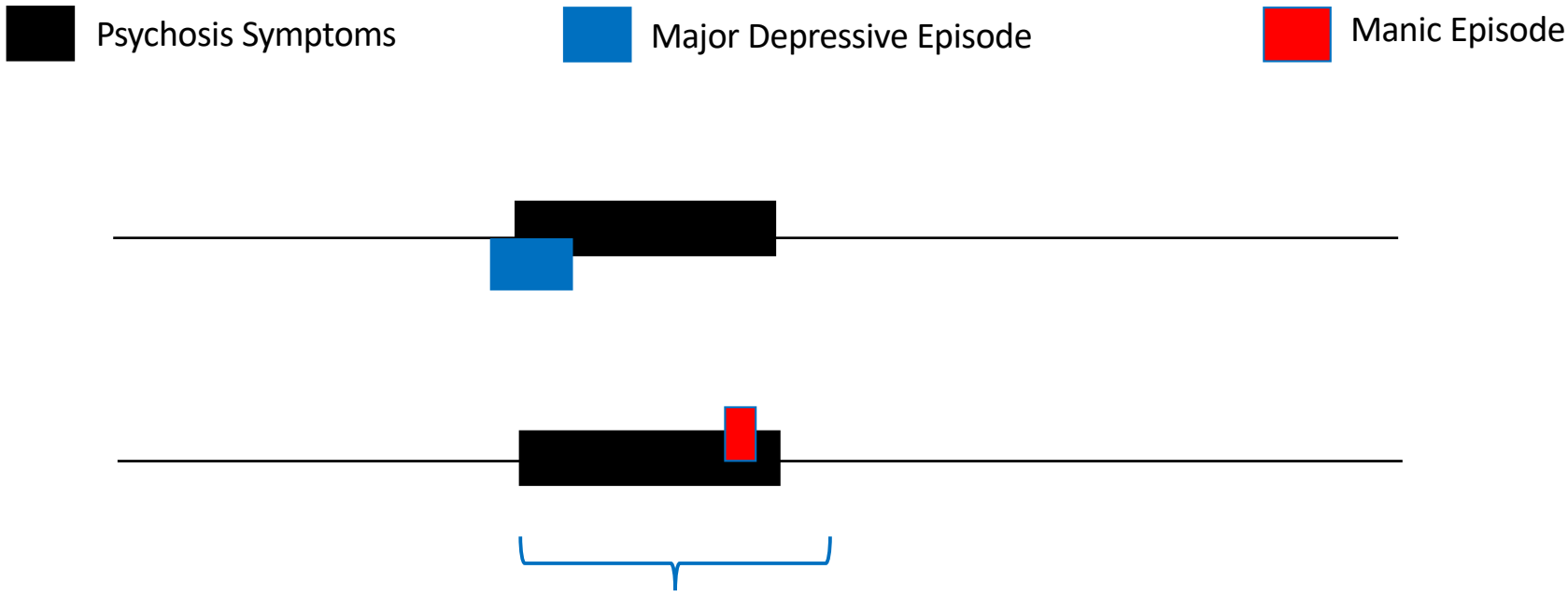
- Schizophrenia Spectrum and Other Psychotic Disorders
  - Schizophrenia
  - Schizophreniform
  - Schizoaffective
  - Delusional Disorder
  - Brief Psychotic Disorder
  - Psychotic Disorder due to Another Medical Condition (AMC)
  - Substance/Medication Induced Psychotic Disorder
  - Other Specified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

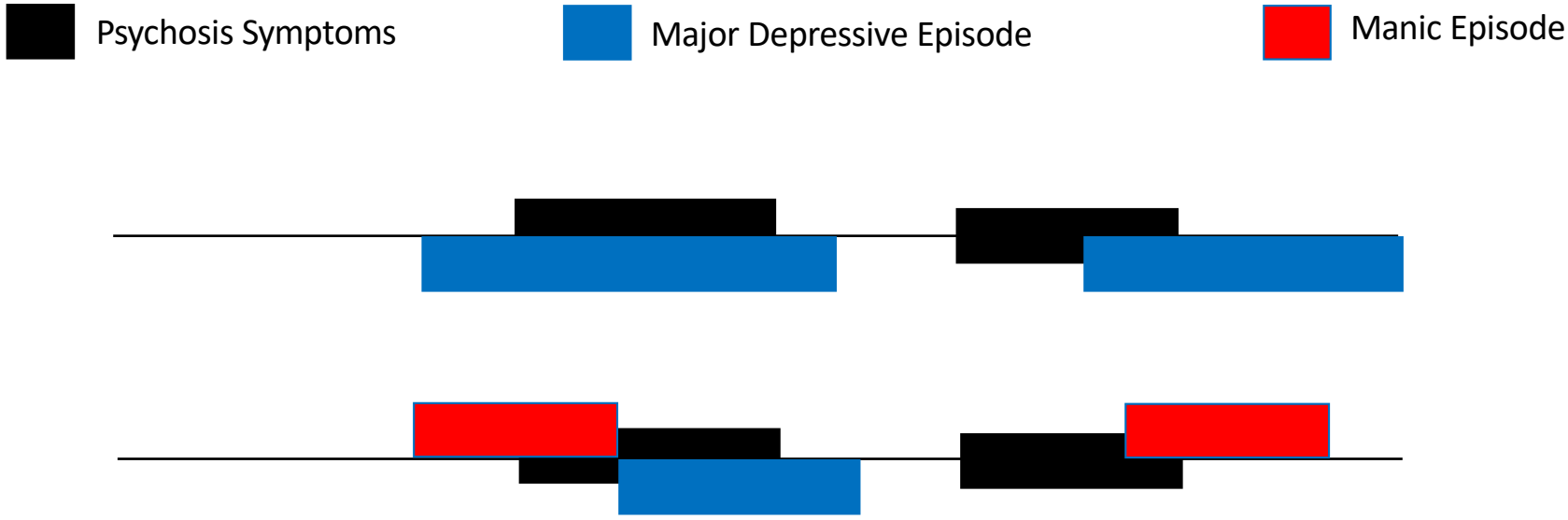
Schizophrenia



Schizophreniform

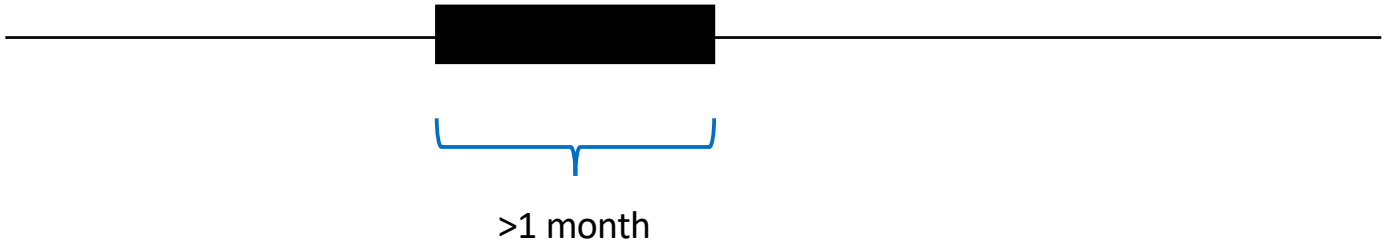


Schizoaffective Disorder

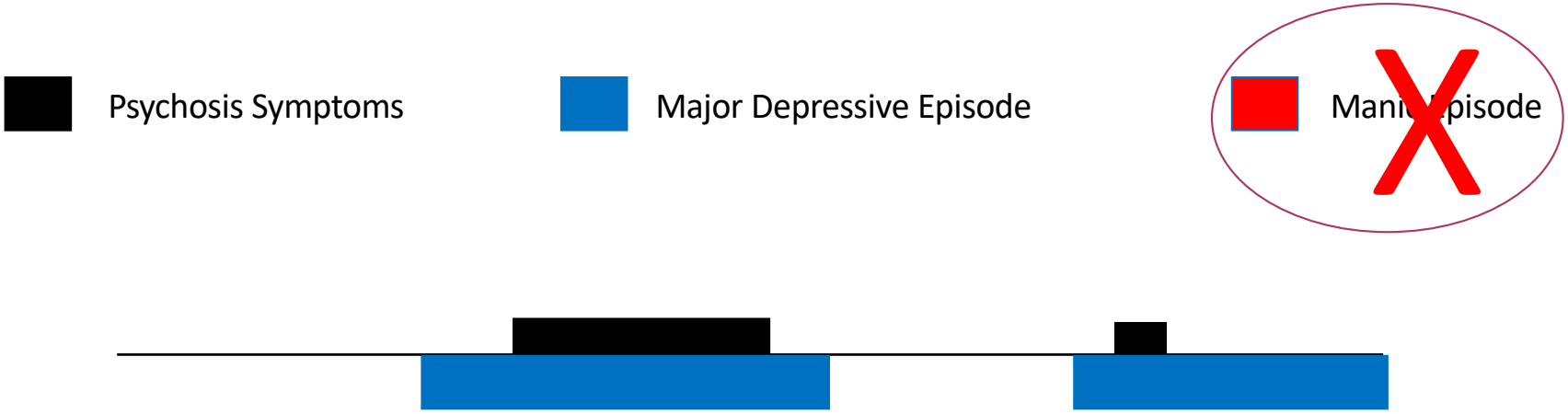


Delusional Disorder

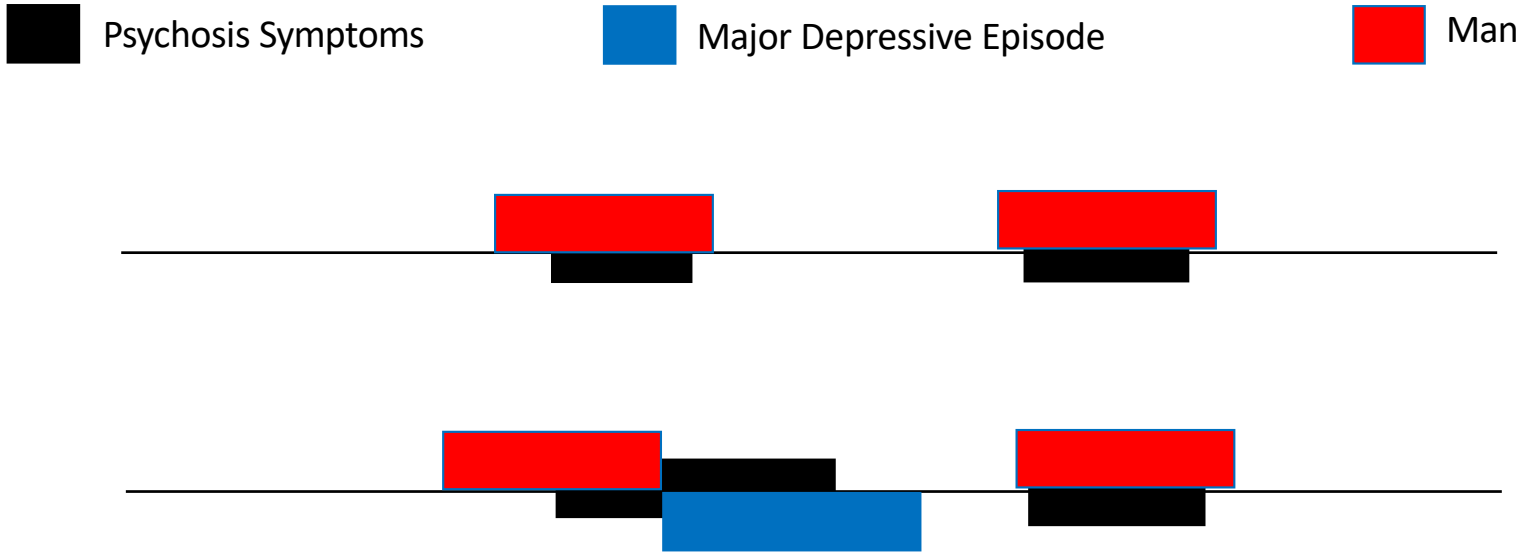
Delusions ONLY



MDD with Psychotic Features



Bipolar Disorder with Psychotic Features



“Other Specified” or “Other Unspecified” Schizophrenia Spectrum and Other Psychotic Disorder

- Anything psychotic that does not meet full criteria for other disorders, causes significant distress/impairment
- Other Specified: Clinician chooses to specify the reason
  - Example: Persistent auditory hallucinations but no other symptoms
- Other Unspecified: used when clinician chooses not to specify the reason the criteria are not met
  - Examples: not enough information or contradictory information

Other *Non-Mutually* Exclusive Disorders

- Autism Spectrum Disorders
- Post-traumatic Stress Disorder
- Obsessive Compulsive Disorder
- Borderline Personality Disorder
- Schizotypal Personality Disorder (or Schizoid, Paranoid)
- Substance Related Disorders

Psychosis as a Continuum in the General Population

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

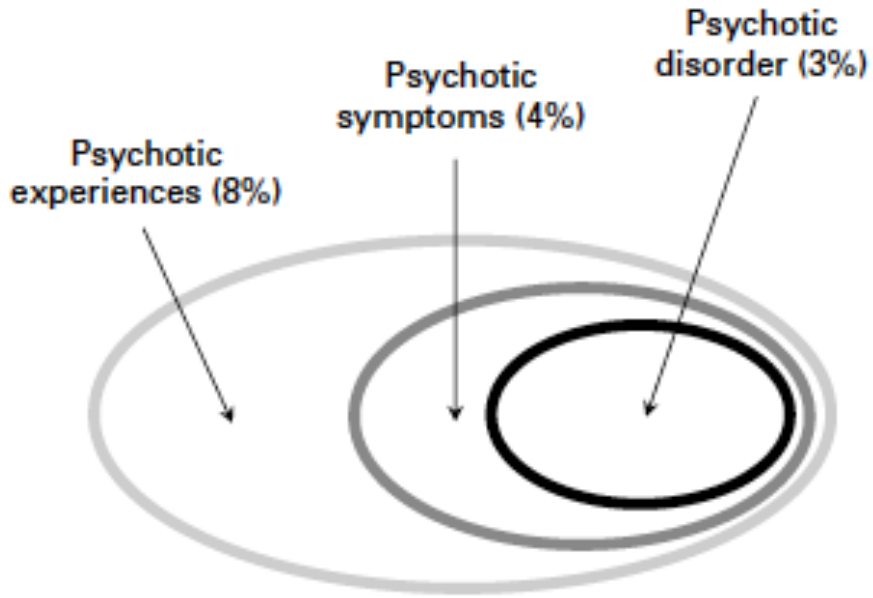
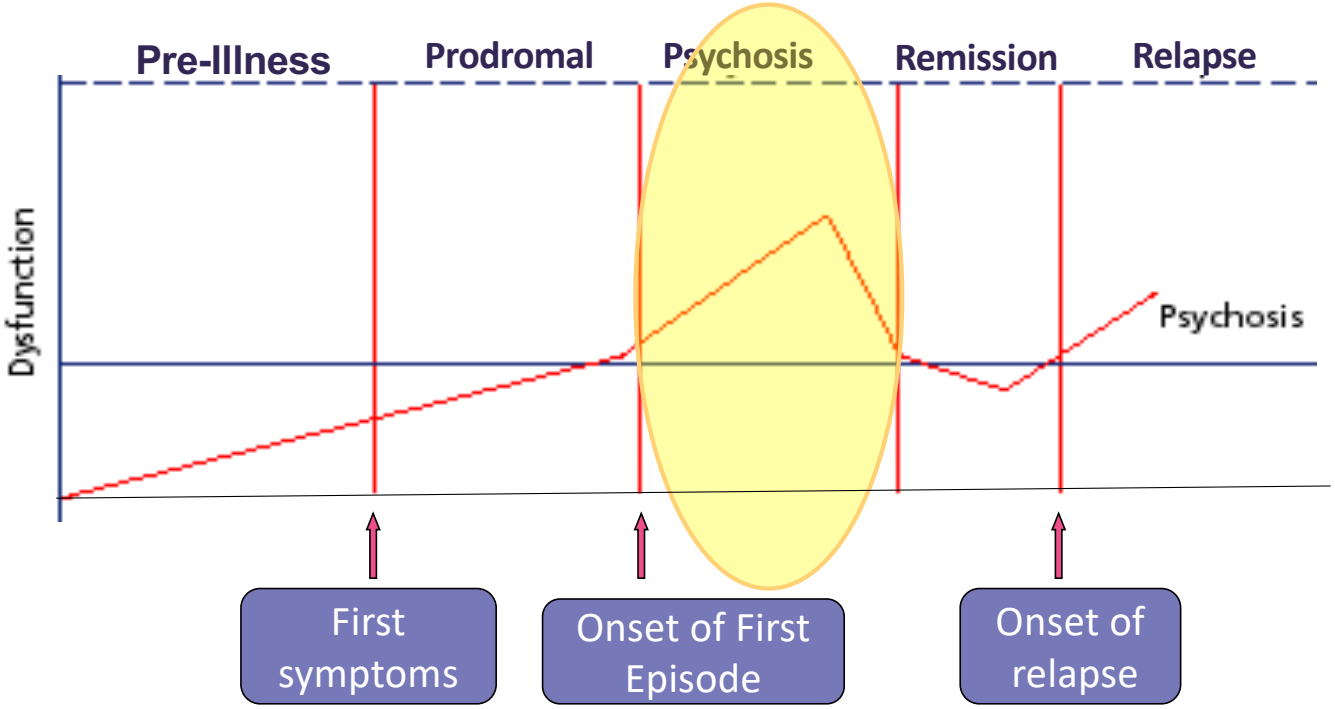


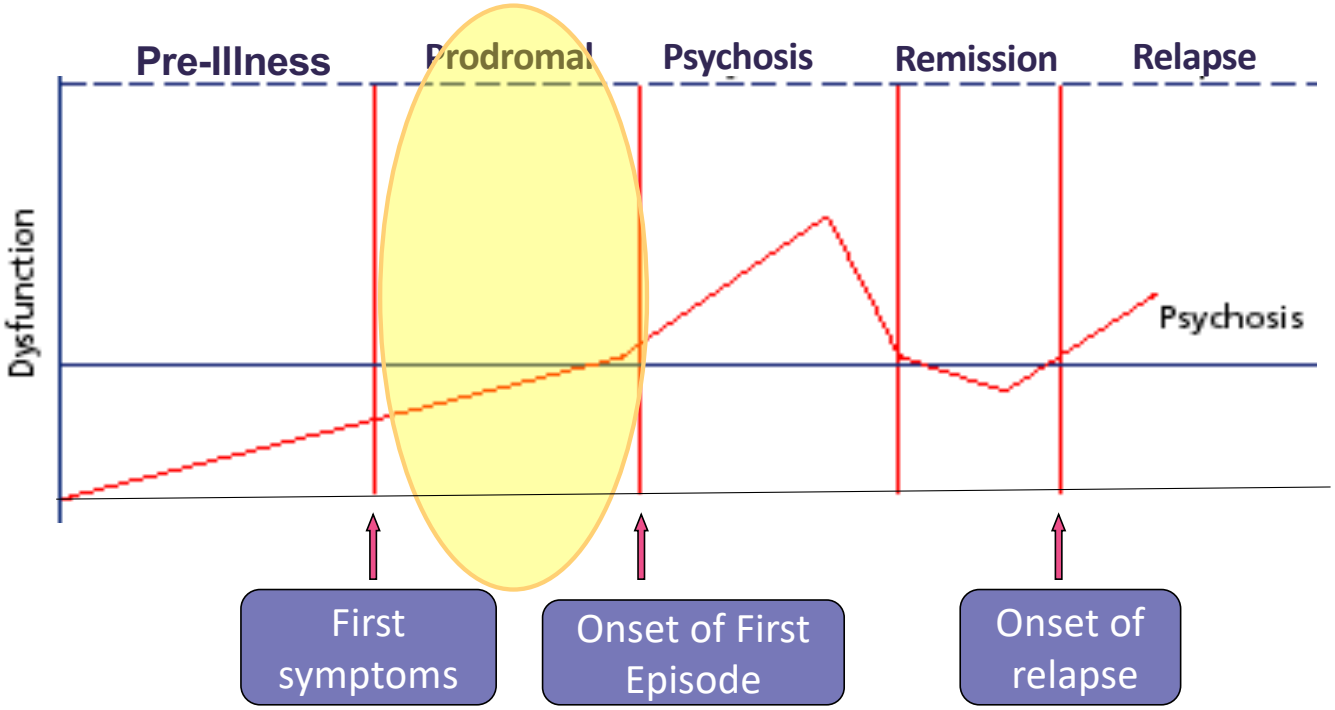
Fig. 4. Psychosis: variation along a continuum.

Traditional Strategy for Identifying, Studying and Treating Psychotic Disorders



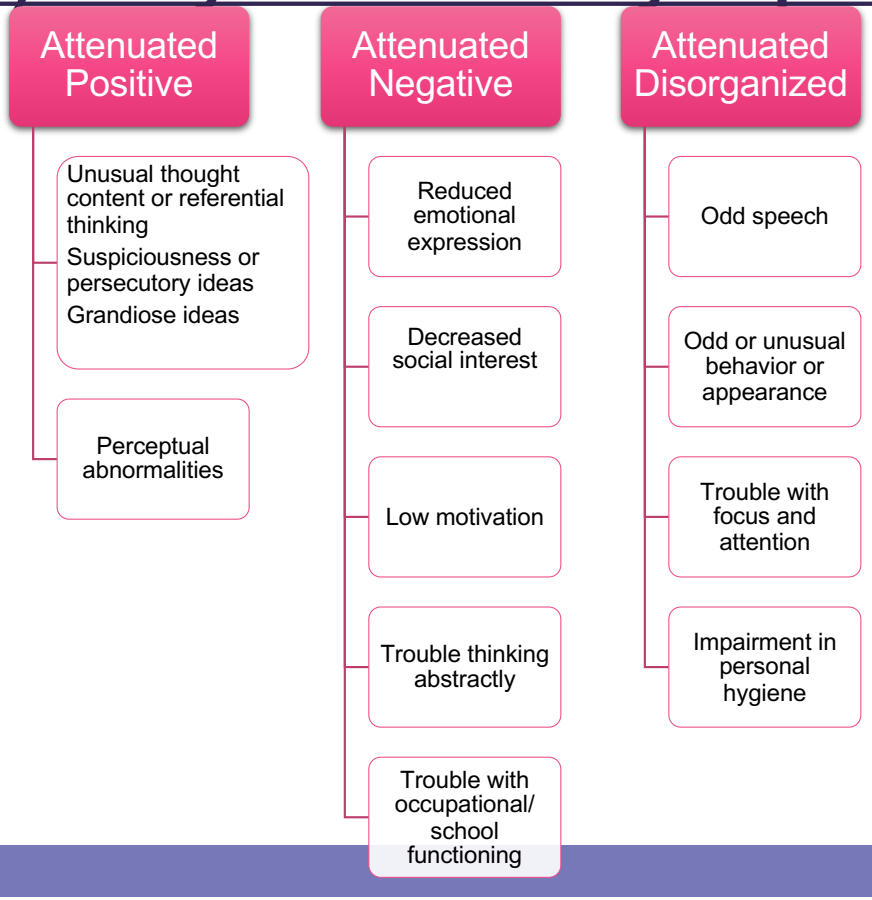
Adapted from Knowles, 2004

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

- 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: Troy

Troy is a 22-year-old, white male. Troy indicated that he experiences a “tugging” in his brain, which he described as a “force” that controls his thoughts. He had difficulty describing what the tugging sensation felt like but reported, “You know when magnets repel, it feels like that, that same kind of thing where they are slipping around. Convert that into my head.” He said he is not sure what or who ”the force” is, or where it came from, but he reported full conviction in the force, and that it really bothers him when it forces him to behave inappropriately. He gave an example of an incident when his mother was being nice to him but then “I felt [the tugging]…and I got overwhelmed, its such a struggle to speak. It creates a tension, and I needed to get out and I screamed at my mom and had to run upstairs.” He rated his impairment for this sensation as a 9/10 because “I had to quit my job because of it”.

Threshold v. Subthreshold: Jennifer

Jennifer is a 16-year old black female reporting that she hears her name being called about four times/month. She said this experience began in the past year, and can happen anywhere. She said she is unsure why it is happening, saying she "doesn't know what to make of it." She denied that it bothers her, but that it is "weird" – when she hears her name being called she often turns to look or asks someone if they heard it too (which they did not). She denied hearing any other words or sounds.

Adapted from McGlashan et al. (2010)

Signs of Possible Psychosis

- Often family and friends are the first to notice when the young person exhibits:
  - behavioral change
  - decline in school or work
  - social withdrawal or isolation
  - neglect of appearance or hygiene
  - odd behavior or appearance
  - reduced activity level
  - confusion or puzzlement
  - odd or disorganized speech

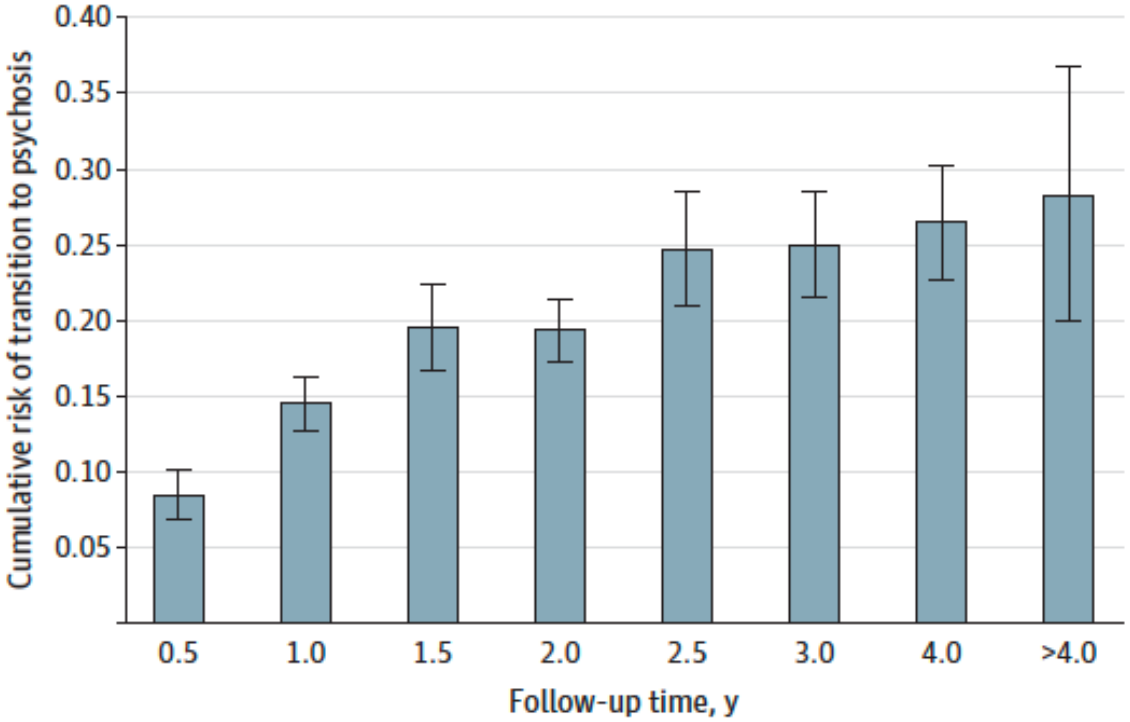
Probability of Transition to Psychosis in Individuals at Clinical High Risk
An Updated Meta-analysis

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.

Psychosis Spectrum Symptoms in Adolescents

- Population based studies of children and adolescents
  - Rates of psychotic-like experiences (Kelleher et al. 2012 meta-analysis)
    - 17% of children age 9-12 years
    - 7.5% of adolescents age 13-18
  - Symptoms may be transient in most children
  - Evolution into persistent or worsening symptoms appear influenced or moderated by:
    - Severity of symptoms
    - Comorbid depression, anxiety, substance use
    - Traumatic or stressful experiences
    - Socio-economic disadvantages
    - Race
    - Genetic family history of psychotic disorders
- Emphasizes importance of early screening and intervention

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

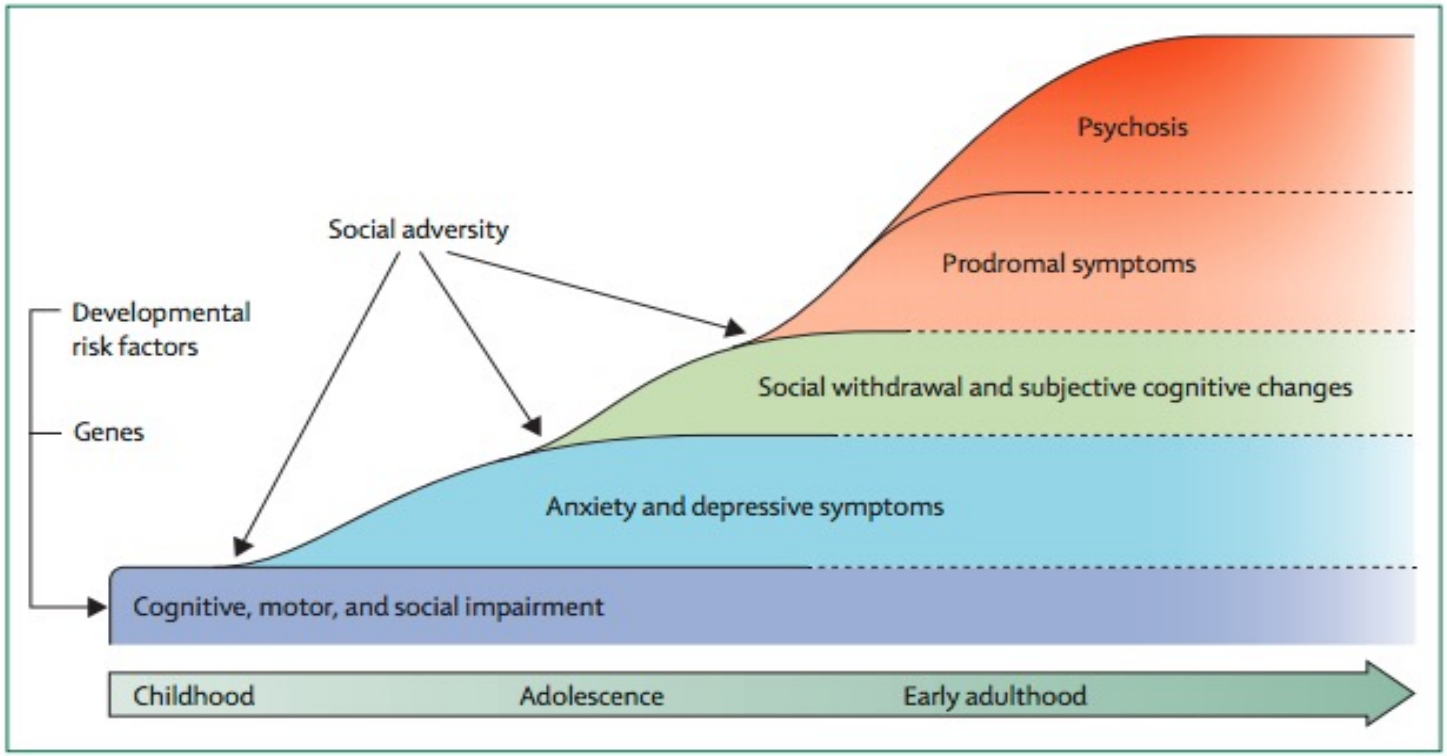


Figure 1: **The trajectory to schizophrenia showing the evolution of symptoms and the main risk factors**

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

Common Challenges Associated With Early Psychosis For Students

Symptoms	Academic, Interpersonal and/or Environmental Challenges
Disorganized thinking	Difficulty following lectures, tracking conversations, completing reading assignments
Perceptual experiences (e.g., hearing voices, seeing images)	Distraction while trying to concentrate during tests, exams, presentations
Suspicious or unusual thoughts	Anxiety or fear of others; challenges or withdrawal from relationships with friends, classmates, family, instructors
Cognitive problems	Trouble with memory, attention, planning
Depression and/or negative symptoms	Low motivation for self-care, exercise, low self-esteem, demoralization, internalized stigma, fatigue or trouble sleeping, feeling overwhelmed or low stress tolerance, suicide or self-harm thoughts

Adapted from: Jones, Bower, & Furuzawa *www.nashmpd.org*

Fact Sheet: Cannabis and Psychosis

The growing legalization of cannabis across the United States, in addition to the frequent use of cannabis by individuals with psychosis, has led to many questions and concerns about the impacts. The following is a summary of the latest research findings regarding the link between cannabis and psychosis.

- THC in cannabis can cause brief psychosis
- Individuals exposed to cannabis in adolescence are 2-4 X more likely to develop PS disorder than non-exposed
  - OFC not everyone exposed develops psychosis and not everyone with psychosis was exposed
- RECOMMENDATION – consider avoiding or delaying cannabis use until after age of typical psychosis expression/onset (at least 25 y.o.)
- Greater frequency and duration, earlier first use, higher potency THC = increased psychosis risk
- Risk for scz spectrum disorders greatest with cannabis, though other substances (amphetamines, hallucinogens, opioids, sedatives) also increase risk

What is Your Marijuana IQ?

How much do you really want to know about the risks of marijuana? You might be surprised.

Take the Quiz

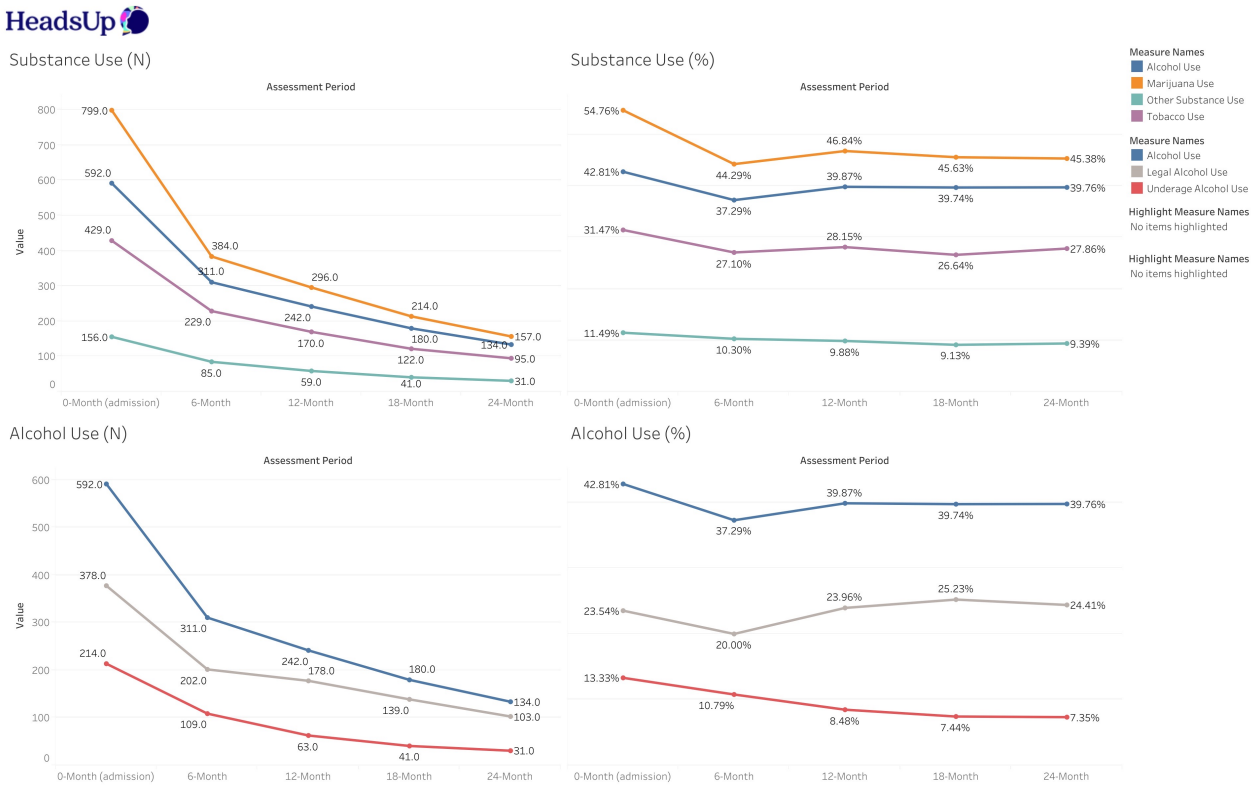
www.samhsa.gov/marijuana

Cannabis use after the onset of psychosis is associated with:

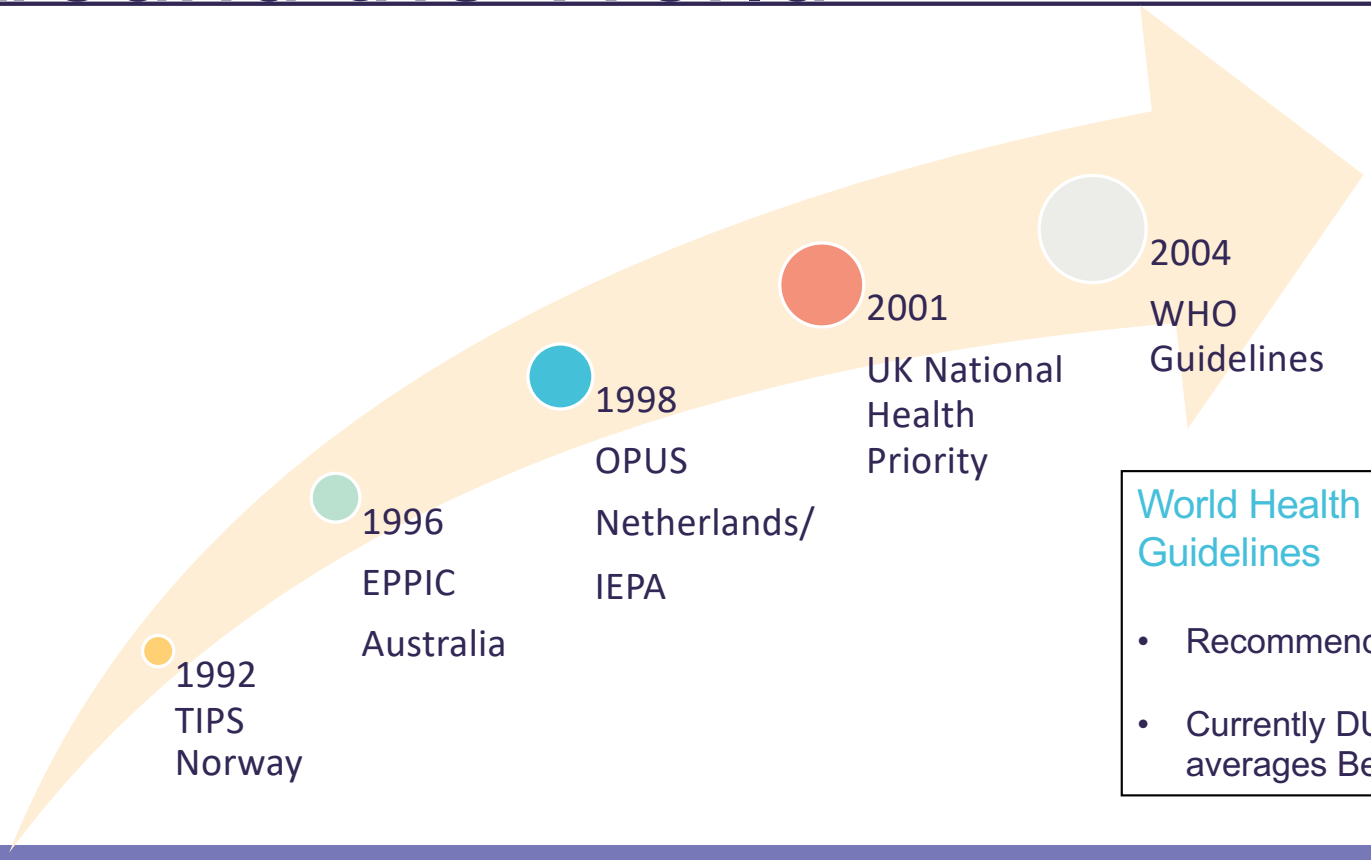
- More non-adherence to treatment
- More relapses
- More hospitalizations
- More legal problems
- More ER visits
- More homelessness

- In regard to the self-medication hypothesis, cannabis use may result in a very temporary reduction in distress associated with psychotic symptoms, however, cannabis use makes symptoms of psychosis worse in the moment and over the long-term

Pennsylvania Early Psychosis Experiences with Substance Use - Current



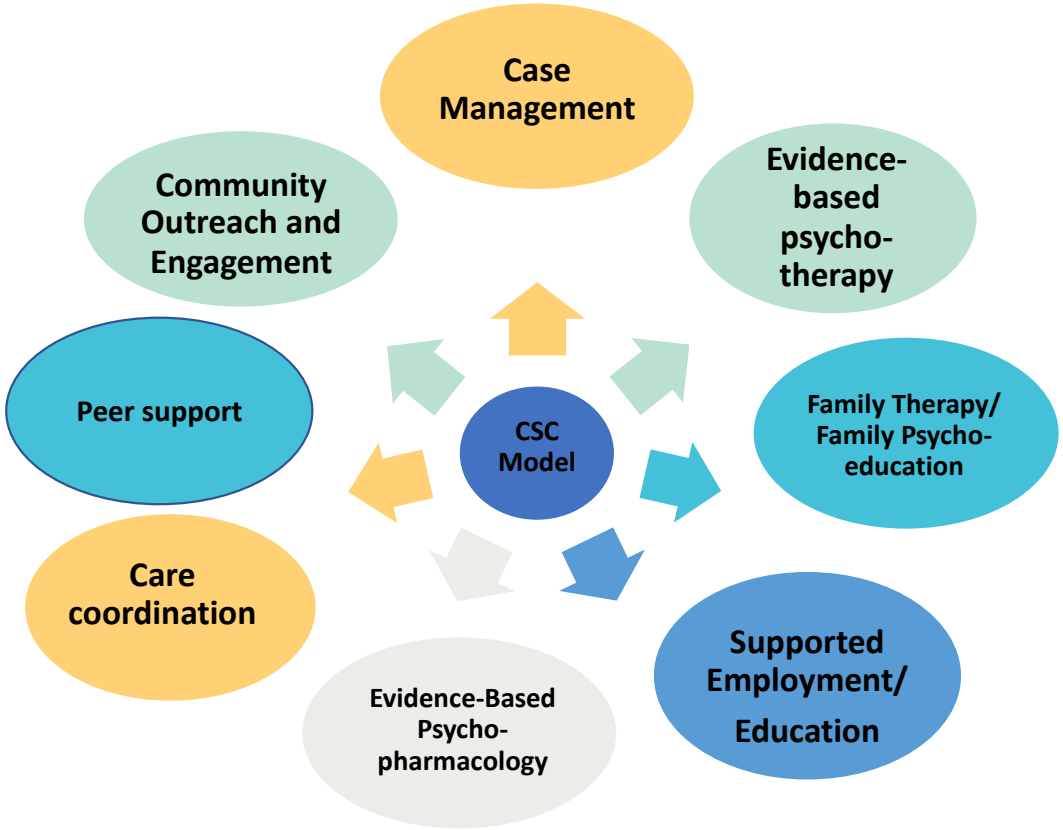
Early Psychosis Intervention Around the World



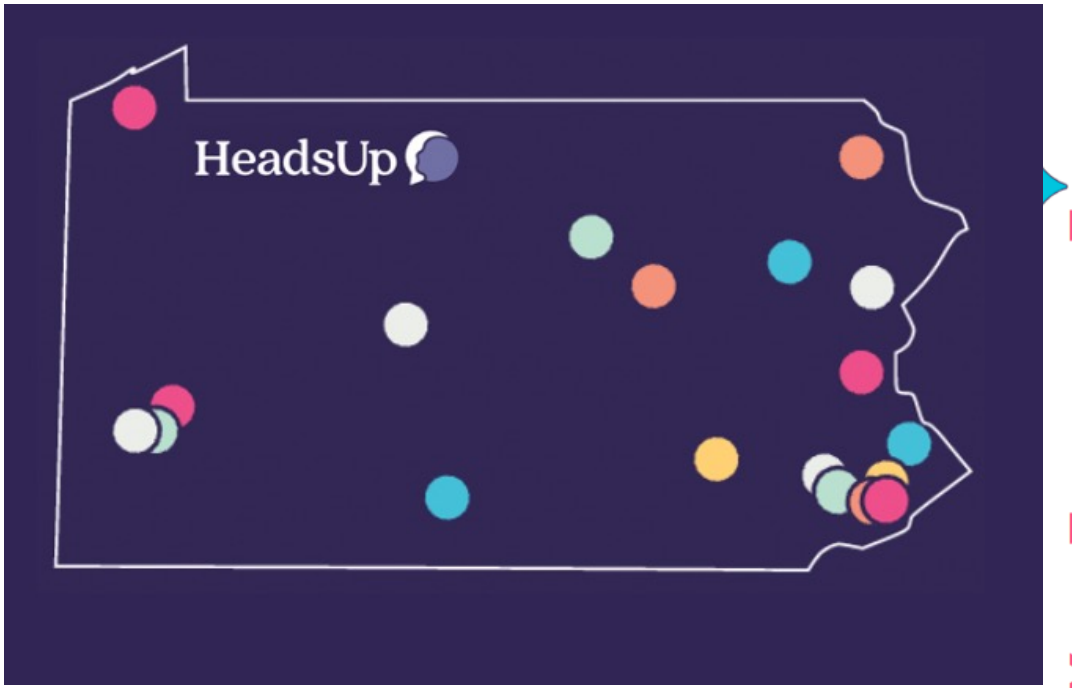
World Health Organization (WHO) Guidelines

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

Coordinated Specialty Care Components



PA FEP CSC Programs: 17 total



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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

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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.

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)

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

https://www.youtube.com/watch?v=vIAKDD_VyJc

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Department of Human Services
Office of Mental Health and Substance Abuse Services

HeadsUp
Changing Minds, Empowering Lives

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

Meet Our Staff

Visit and follow us online!

headsup-pa.org

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

@HeadsUpPA
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Our deliverables include:

Program Evaluation, Data Collection, and Research

Education, Training, and Clinical Care

Outreach and Cross-Systems Engagement

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

SAMHSA
Substance Abuse and Mental Health Services Administration

EARLY SERIOUS MENTAL ILLNESS TREATMENT LOCATOR

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

HOPE TEAM

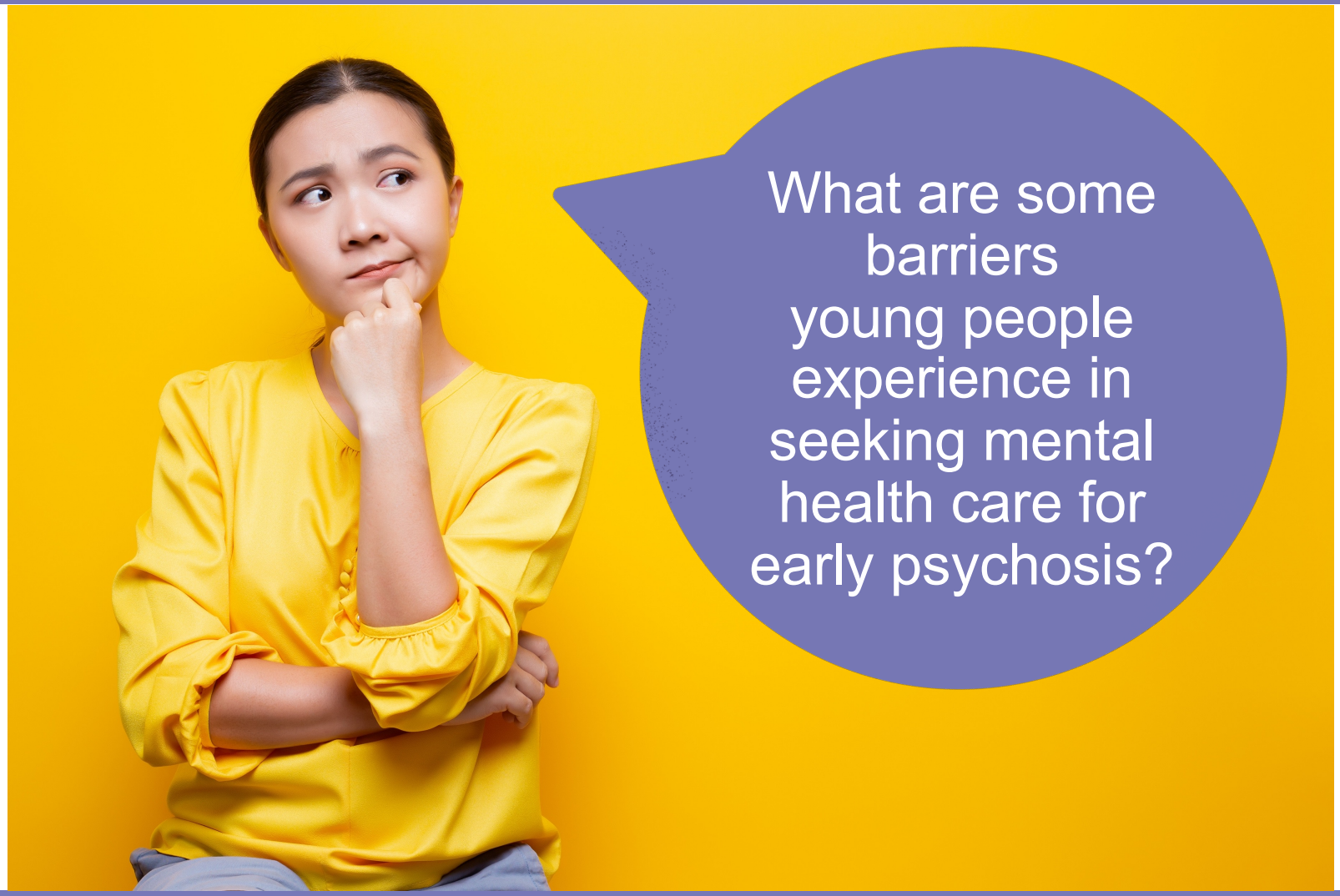
HOPE TEAM Clinic is affiliated with UPMC Western Behavioral Health, Center for Children and Families (CCF). HOPE TEAM is currently funded by the Substance Abuse and Mental Health Services Administration (SAMHSA)

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

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

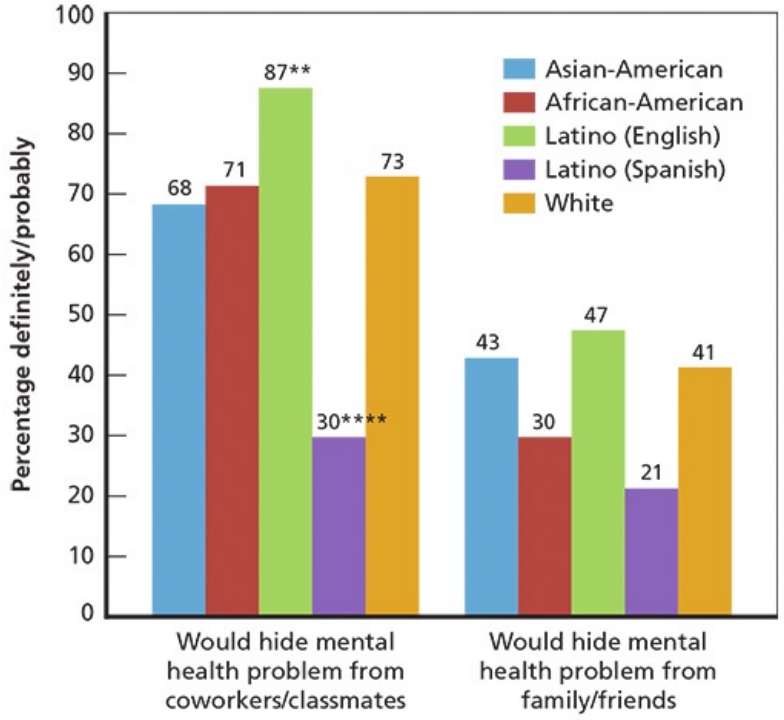
MYTH	FACT
Individuals Who Have SMI Cannot Reach and Maintain Recovery	Historically, recovery from SMI was not considered likely or even possible. However, a range of evidence over the last two decades indicates that around 65% of people with SMI experience partial to full recovery over time.[1] Recovery does not necessarily mean the absence of symptoms. Recovery from SMI is defined in both objective and subjective ways.[2,3,4,5] 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.[6,7,8,9] 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.[10,11] ✔ 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	FACT
People Who Have SMI Cannot Obtain Competitive Employment or Complete Education	Employment and education provide a sense of purpose that is a critical aspect of life in recovery.[10] In fact, most people who have SMI do want to work and see work as an essential part of their recovery.[6,7] Between 40% and 60% of people who enroll in supported employment obtain competitive employment.[12] There is ample evidence that employment is not "too stressful" for individuals who have SMI.[13] The benefits of employment and education for people with SMI are well documented.[8] 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.[9] These are often overlooked. Supported employment programs can improve outcomes for individuals who have SMI.[14] 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.[15] 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.


What are some barriers young people experience in seeking mental health care for early psychosis?

Some Barriers to Help Seeking

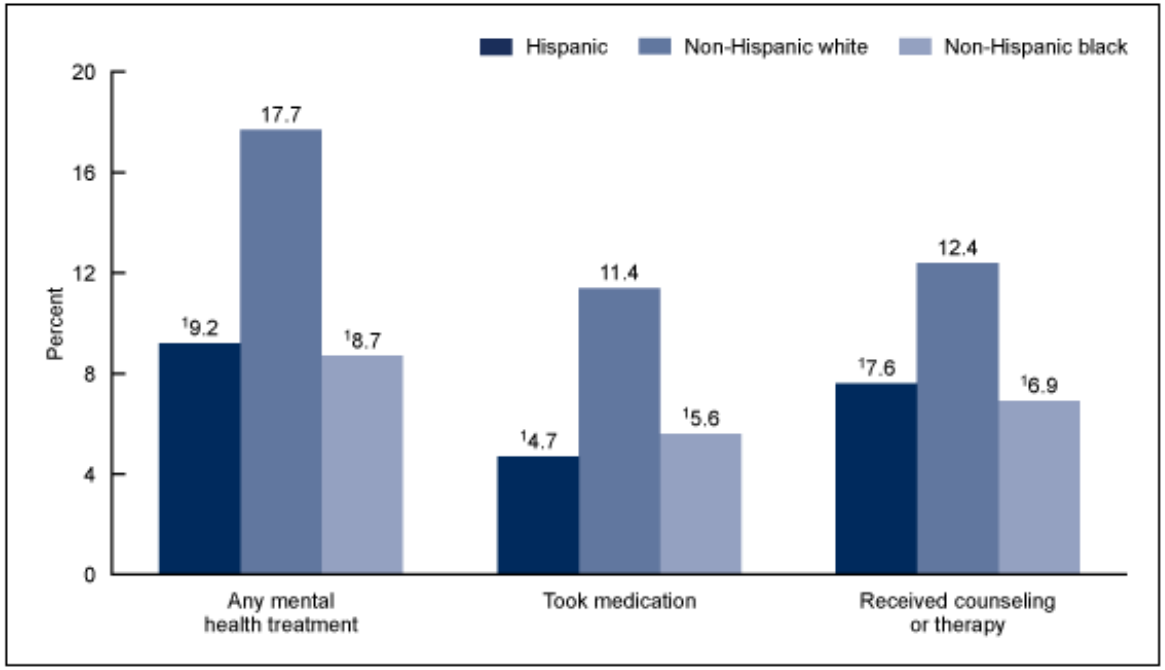
- Access to accurate information - about psychosis symptoms and treatment
- Stigma and cultural factors=> Fear/shame
  - Parents/Family
  - Peers
- Financial factors
- Lack of universal screening…



NOTE: Significant differences relative to whites are indicated by ** $p < 0.01$; **** $p < 0.0001$.

RAND Health Quarterly, 2016; 6(2):6

Figure 3. Percentage of children aged 5–17 years who had received any mental health treatment, taken medication for their mental health, or received counseling or therapy from a mental health professional in the past 12 months, by race and Hispanic origin: United States, 2019

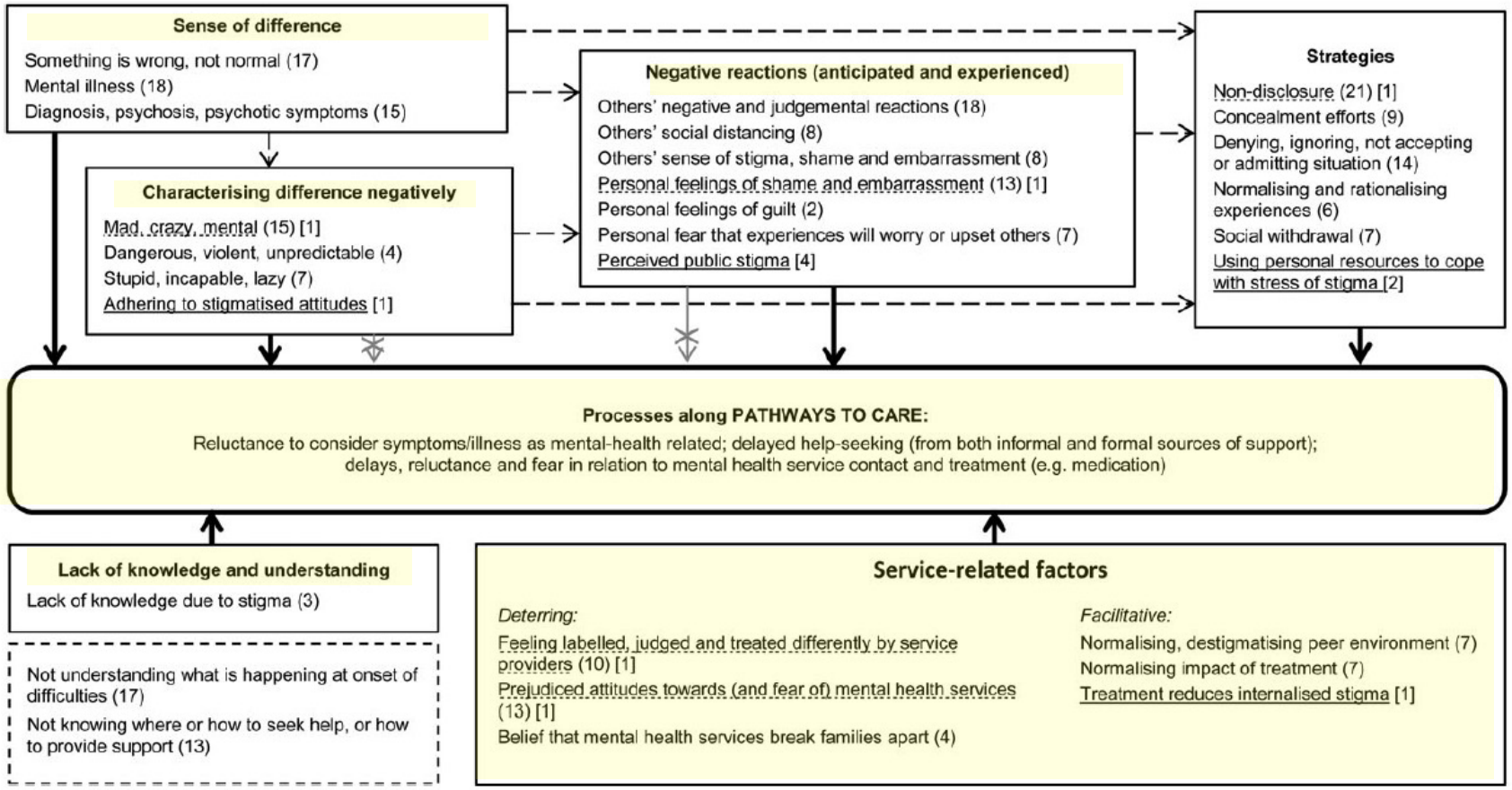


SOURCE: National Center for Health Statistics, National Health Interview Survey, 2019.

Mental health-related stigma and pathways to care for people at risk of psychotic disorders or experiencing first-episode psychosis: a systematic review

P. C. Gronholm[1]*, G. Thornicroft[1,2,3], K. R. Laurens[4,5,6,7] and S. Evans-Lacko[1,2,8]

Psychological Medicine (2017), **47**, 1867–1879.
doi:10.1017/S0033291717000344



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[1]✉, Beshaun Davis[2], Franchesca S. Kuhney[3] and Deidre M. Anglin[4]

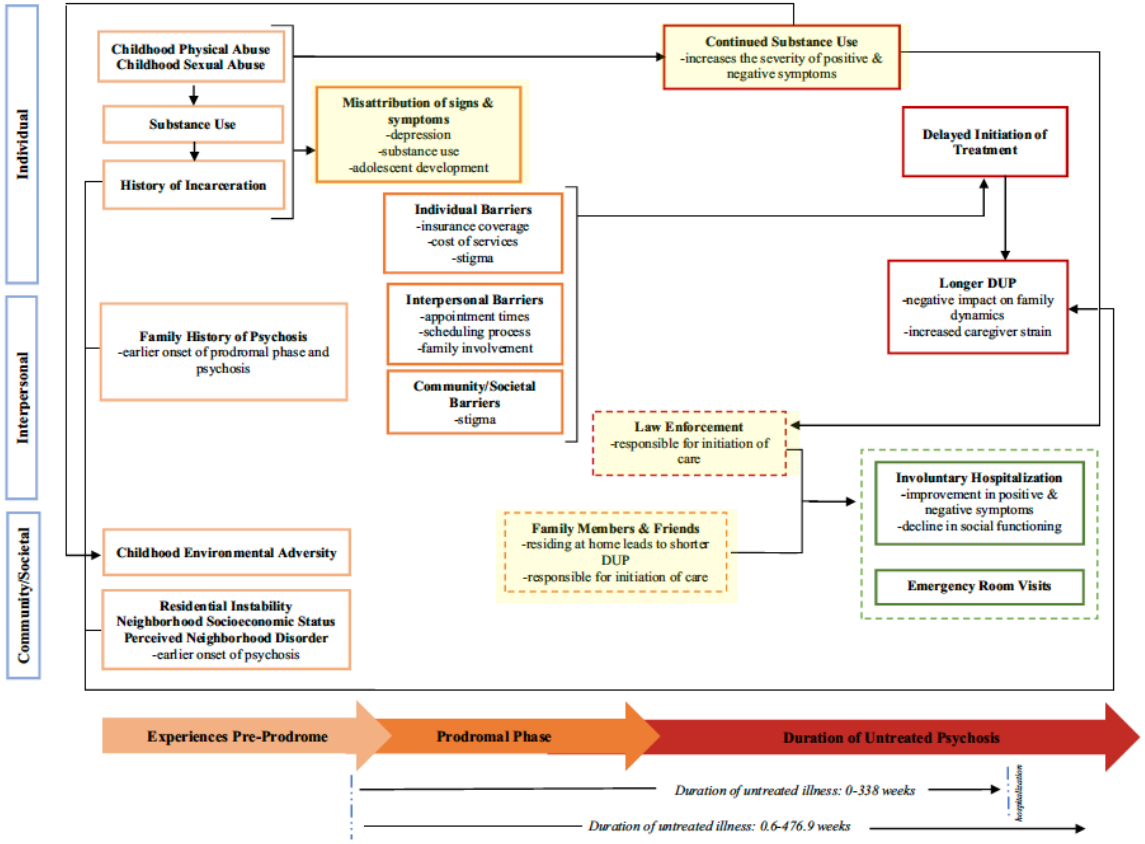
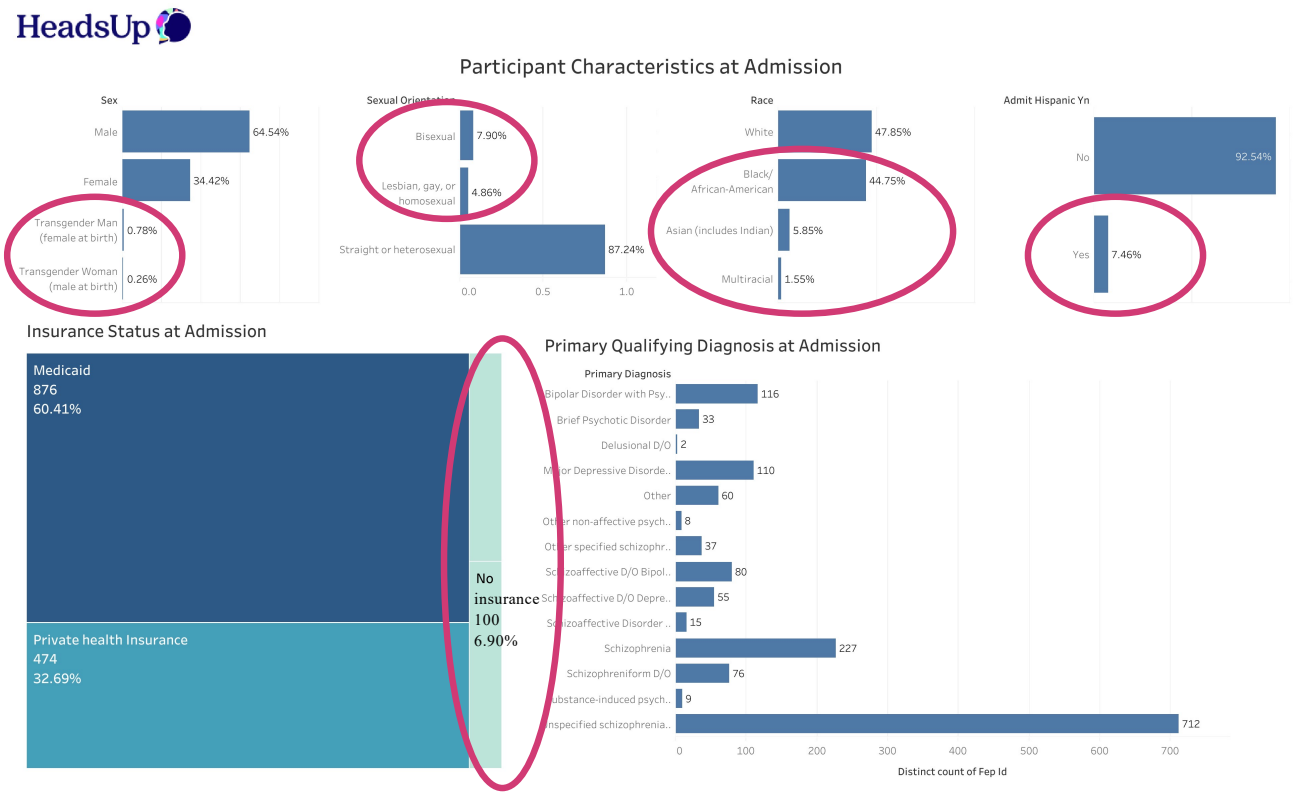


Fig. 1 Synthesis of pathways to care for Black individuals with early psychosis. Dashed boxes represent an individual or entity; light orange boxes represent the pre-prodrome phase; orange boxes represent the prodromal phase; red boxes represent experiences during the period of untreated psychosis; green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

Challenges of Psychosis Spectrum (PS) Screening

- 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+

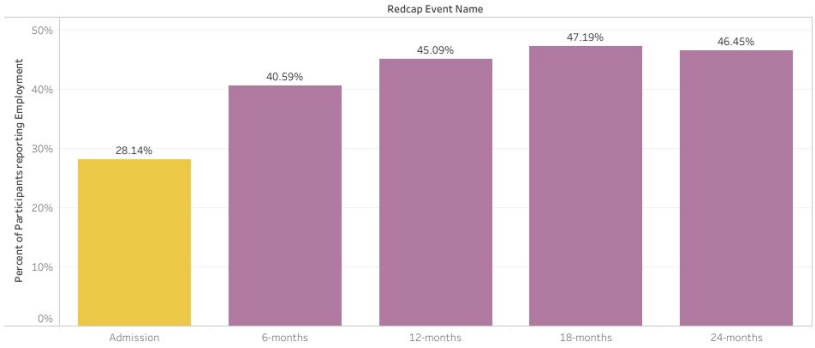
Pennsylvania Early Psychosis Admission Social Determinants of Health - Current



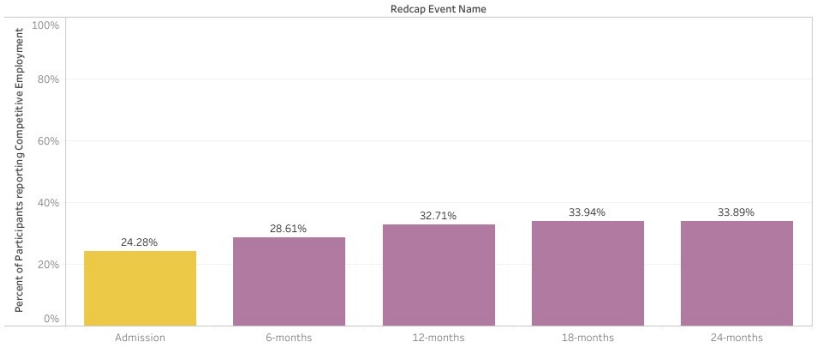
Pennsylvania Early Psychosis Admission Social Determinants of Health – Current, cont.

HeadsUp

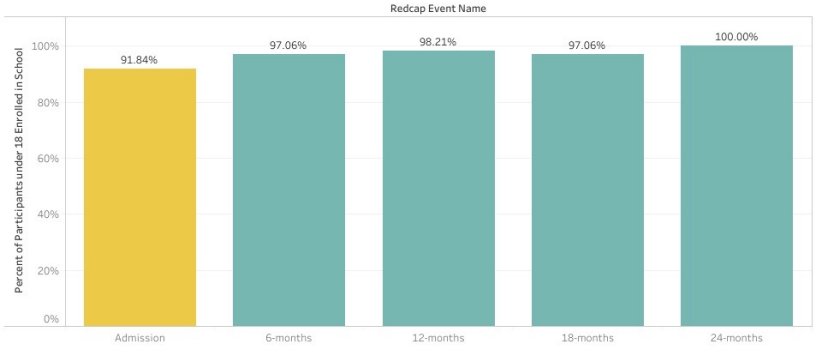
Participant Employment



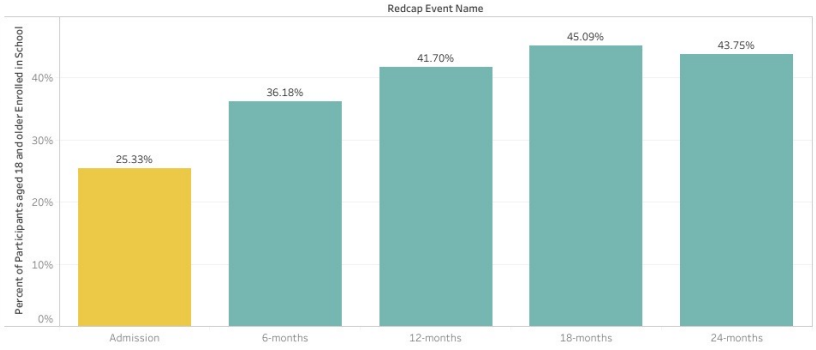
Participant Competitive Employment



School Enrollment - Under 18*



School Enrollment - 18 and older*



Pennsylvania Early Psychosis Admission Social Determinants of Health – Current, cont.

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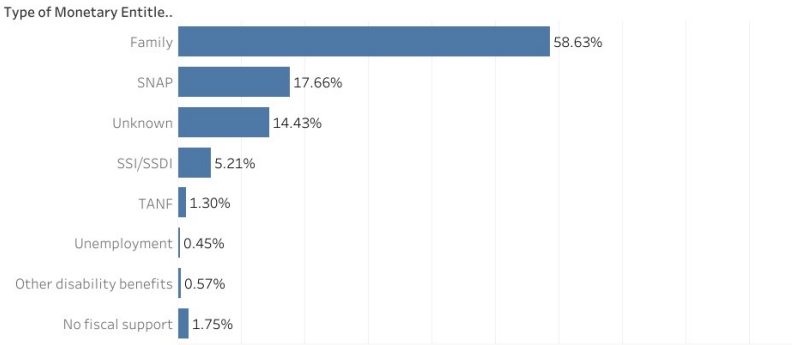
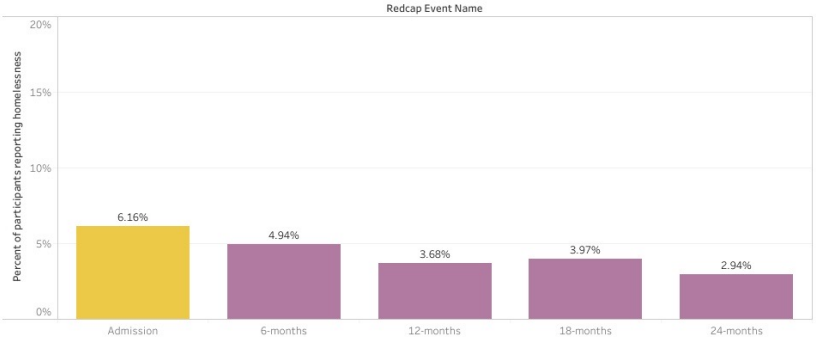
Familial Support and Involvement

Participants Reporting Fiscal Support



Participant Homelessness



Preference of Family Involvement

Frequency of family contact	Prefers no family involvement	Prefers family be involved with some restrictions	Prefers family be involved with no restrictions	Grand Total
About daily	44	160	298	502
About monthly	2	6	2	10
About weekly	13	27	13	53
Less than monthly	4	5	1	10
Never	6	1		7
Grand Total	69	199	314	582

Pennsylvania Early Psychosis Admission Social Determinants of Health – Current, cont.

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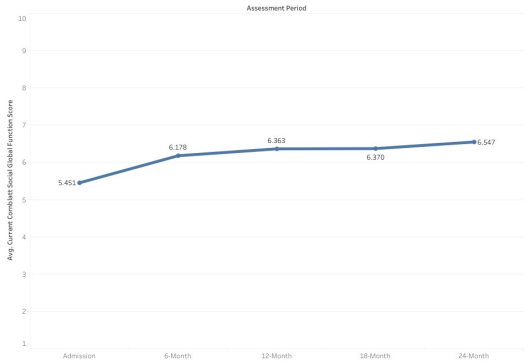
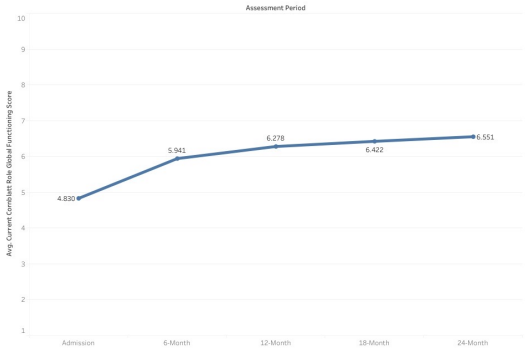
Global Function - Social

Cornblatt Social Scale (Clinician-Rated). Higher scores indicate greater social/interpersonal functioning.



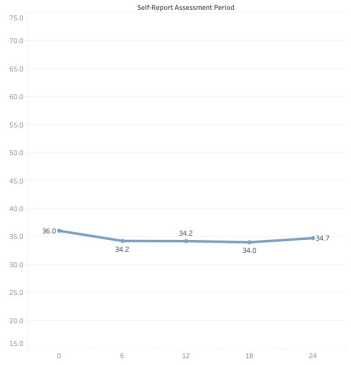
Global Function - Role

Cornblatt Role Scale (Clinician-Rated). Higher scores indicate greater role functioning.



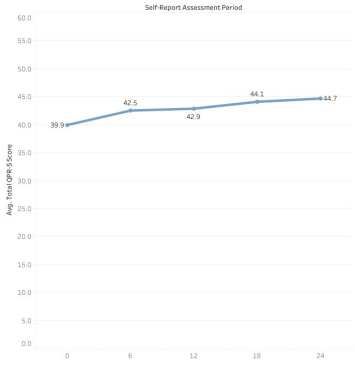
Family Functioning

SCORE-15 (Self-report). Higher scores indicate *worse* family functioning.



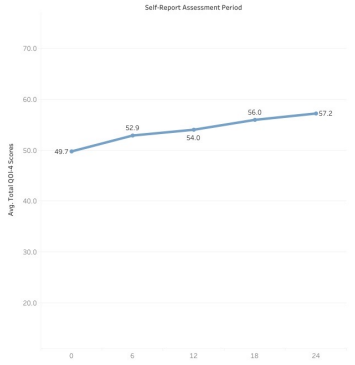
Process of Recovery

QPR (Self-report). Higher scores indicate greater perceived recovery.

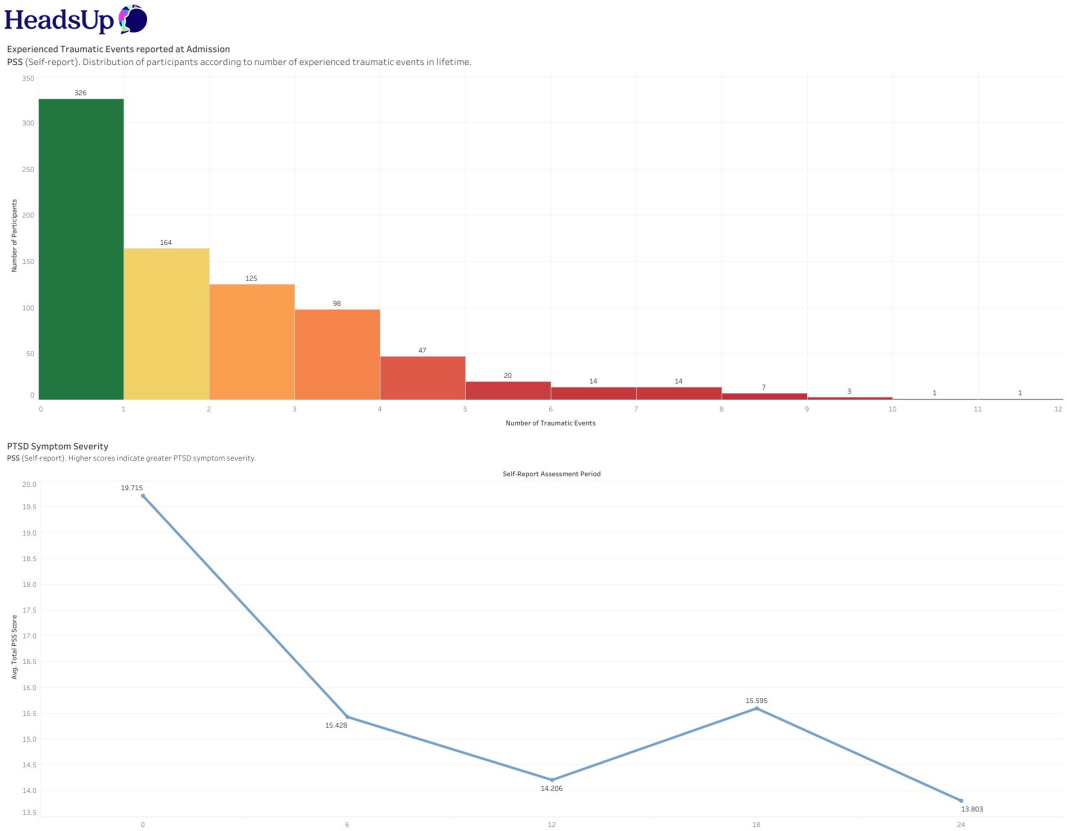


Quality of Life

QOL (Self-report). Higher scores indicate greater quality of life.



Pennsylvania Early Psychosis Admission Social Determinants of Health – Current, cont.



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FLOWCHART FOR EARLY PSYCHOSIS SCREENING FOR 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.

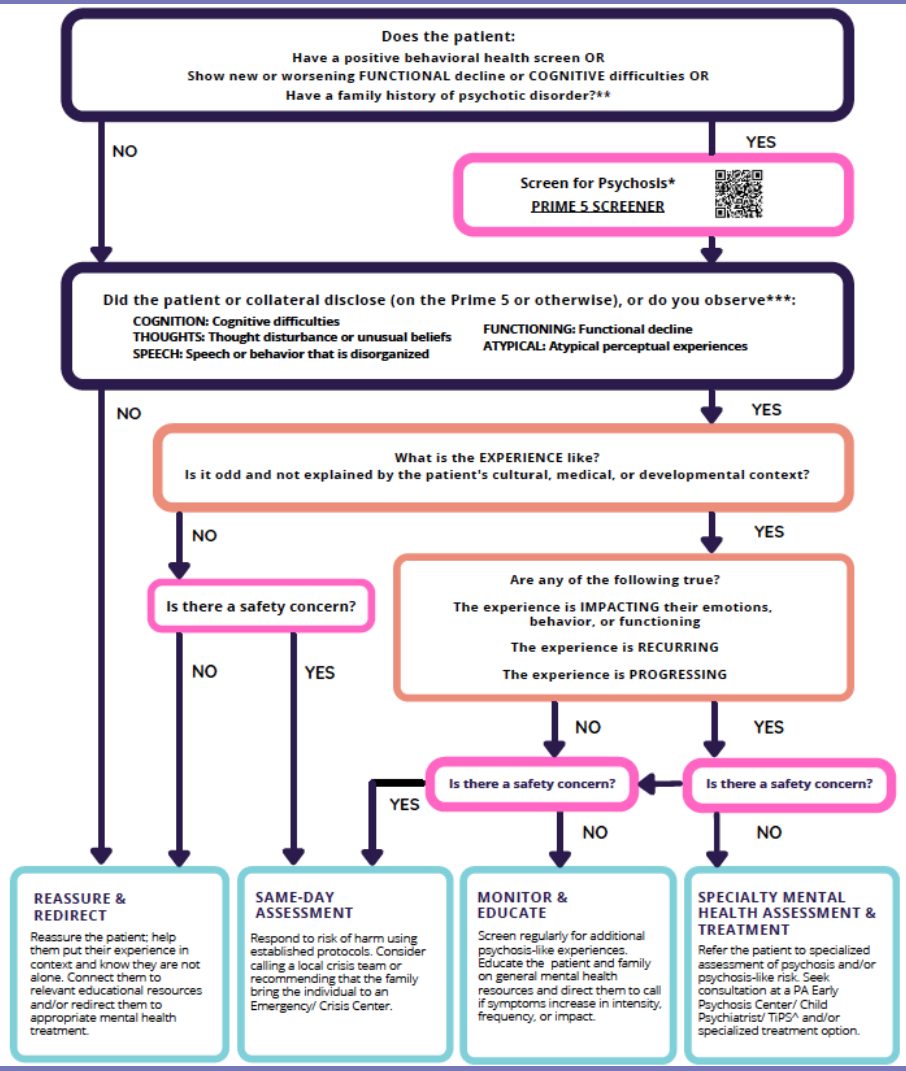
ATYPICAL: Seeing things not there: e.g., shadows, flashes, figures, people, or animals. Hearing things others do not: e.g., clicking, banging, wind, mumbling, or voices. Seeing or hearing everyday experiences as unfamiliar, distorted, or exaggerated.

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



headsup-pa.org/wp-content/uploads/2023/10/Flowchart-11-35-MHP-9.20.23.pdf

Screening for Psychosis

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

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. >=One item rated 6 (Definitely Agree) OR >=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.

headsup-pa.org/wp-content/uploads/2023/10/Flowchart-11-35-MHP-9.20.23.pdf

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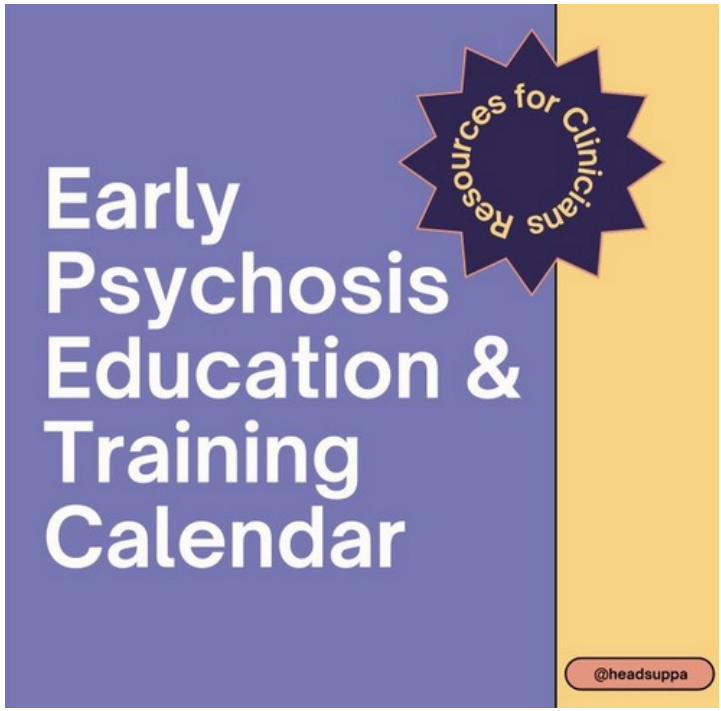
Training and Employment Opportunities



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

Conclusions

- 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 following the first onset of psychosis spectrum symptoms, the better their functional and personal outcomes are likely to be
- This webinar provided an introductory overview of early psychosis symptoms across the spectrum from risk symptoms to threshold psychosis disorders
- Collective strategies for recognizing, assessing and responding to psychosis spectrum symptoms are critically important, especially in the context of social determinants of health that may impact the recognition and referral pathway

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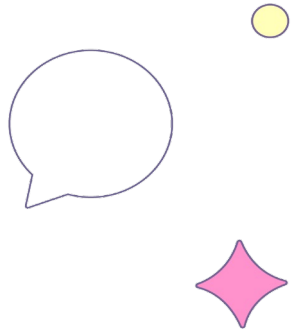
Q & A

Open Discussion



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pennsylvania, Department of Human Services, Office of Mental Health and Substance Abuse Services