Psychosis Screening & Awareness: Establishing a Protocol for Assessment & Consultation
Advancing School Mental Health Conference – October 2017

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Effective prevention requires the involvement of multiple players, working together to address complex problems.

PREVENTION COLLABORATIVE

ESTABLISHED 2012

Made up of representatives from health & human services (state), department of public health (city), advocacy groups (NAMI), researchers, psychologists, psychiatrists, mental health providers from colleges & a representative from Boston Public Schools.
Purpose & Accomplishments

**Purpose:** To make prevention of mental illness as real and vested an effort in the Commonwealth as prevention of physical illness.

**Challenging Stigma/Educating Professionals & Public about Early Warning Signs**
- In roughly 50 presentations, Brooke Katz shared her personal experience of developing schizophrenia, raising awareness that people with mental illness can be effectively treated, become professionals, and live meaningful lives.
- Students created and posted a youth-oriented anti-stigma video on YouTube.
- 5,000 “Save a Lifetime” postcards are being distributed across Greater Boston.
- Three conferences providing training and motivating service reform targeting:
  1. November, 2012: Child Psychiatrists and Youth Mental Health Clinicians
  2. May, 2013: College Mental Health Staff and Administrators
  3. February, 2014: College and University Students, Faculty, Administrators
- October, 2013: Many Faces of Mental Illness outreach to minority communities
- NAMI teamed with Urban Improv to engage families of mentally ill youth

**Screening:**
- Boston Public Schools launched universal screening of behavioral health concerns with the Comprehensive Behavioral Health Model.
- Revision of the Child and Adolescent Needs and Strengths User Guide was
Museum of Science

May 27, Memorial Day weekend, through September 2017.

Learn how mental health affects us all, with a visit to Boston’s Museum of Science:

See: 2 sculptures, 4 videos, 6 paintings, 99 portraits. Kinetic sculpture of 23 chromosomes of our unique DNA strand. Hear videos of experience and recovery.

For students of the Boston community, this is an educational opportunity to learn about mental health and recovery through art and science.

Appropriate for Middle School and up. Includes admission to all general exhibits. Mon., Tues., Wed. during June and September, and an artist talk for your class.

Contact: Diana Langberg, Director of Events and Outreach from The 99 Faces Project, dlangber@bidmc.harvard.edu or 973-356-4232 for field trip information.

Every child deserves an education. Approximately 50% of students over age 14 with mental illness drop out of school. Help all students learn about mental health.
Education Workgroup

Increase the capacity of school-based practitioners to screen students in need of further understanding of possible indicators of early signs of psychosis.
Comprehensive Behavioral Health Model: Multi-tiered Systems of Support (MTSS)
Essential Components of MTSS

- Instruction
- Assessment
- Data Based Decision Making
<table>
<thead>
<tr>
<th>WHAT</th>
<th>WHY</th>
<th>HOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>INSTRUCTION • School Wide Positive Behavioral Interventions and Supports (SWPBIS)</td>
<td>Students need to know behavioral expectations throughout the school building in order to be successful in the school environment</td>
<td>Organize the school environment to prevent problem behaviors and reinforce positive behaviors</td>
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<tr>
<td>• Social Emotional Learning (SEL) Curricula</td>
<td>Students need social and emotional skills to successfully navigate interactions with peers and adults</td>
<td>Instruction in fundamental social skills, such as empathy, relationship building, and conflict management</td>
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<tr>
<td>ASSESSMENT • Universal Screening</td>
<td>Schools need universal data from all students to understand the strengths of instructional programming, as well as areas of need.</td>
<td>Collect objective information that can be used to guide instruction at multiple levels (e.g. school, grade, class, and individual student)</td>
</tr>
<tr>
<td>DATA BASED DECISION MAKING • Problem Solving Teams &amp; Data Based Decision Making</td>
<td>School teams need to understand how to use universal assessment data to make systemic decisions about instruction</td>
<td>School teams are effectively organized to promote efficient data-based decision making.</td>
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The purpose of universal screening is to detect small problems before they become BIG problems.
Students who need additional support are matched with appropriate **INTERVENTIONS** to build skills.

**INTERVENTIONS** are monitored to make sure that students get the help that they need.
Universal screening in **ACADEMIC** content areas involves students completing various academic tasks.

Universal screening for **BEHAVIOR** involves teachers completing rating scales designed to measure how frequently students demonstrate certain behaviors at school.

In **BOTH** cases, universal screeners should be:

- **brief**
- **sensitive** to change over time
- **research** based and empirically validated
Social Emotional Learning

- Self-Management
- Self-Awareness
- Social Awareness
- Responsible Decision-Making
- Relationship Skills

www.casel.org
Guidelines for Schools

**Universal Prevention**
Current method of screening in schools is NOT universal prevention.

**Selective Prevention**
Currently mostly geared toward students showing subtle non-specific indicators & those with attenuated psychotic symptoms.
Selective Prevention

Defines three groups:

① Those with known family history of psychosis.
② Those with mental health concerns already in mental health treatment (positive PSC or PHQ-9 screens)
③ Those with positive PSC or PHQ-9 screens NOT in mental health treatment.
Screening for Emerging Psychosis in Public Schools

Protocol by the Center for Early Detection, Assessment and Response to Risk (CEDAR) in conjunction with the Boston Public Schools and Boston Children’s Hospital

4 March 2016
Educating our Educators

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• Overview of Psychosis
• How Does Psychosis Begin?
• Screening Protocol
  o Tier 1: Universal Prevention
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  o Tier 3: Indicated Prevention
  o Specialized Psychosis-Risk Assessment
  o Addressing Safety, Boston Emergency Services Team (BEST)
  o Note Regarding Children Under 1019
  o Tips for Talking with Parents & Caregivers
Next Steps

- Create two year strategic implementation plan for increasing school district capacity to identify students at risk for further assessment and intervention.
- Prevention Collaborative Meetings to identify how to build the work that has been taking place.
Psychosis Screening in Boston Schools

Emily Kline, PhD
Harvard Medical School
Why screening for psychosis?

• “Serious mental illnesses” – i.e., mental health problems causing substantial impairment – are COMMON, affecting 4% of US adults
  – Disorders involving psychosis account for much of this group
• Problems appear early in life
  – 50% of adult mental disorders begin before age 14
  – 75% before age 24
  – Peak onset for psychosis occurs in late teens/early 20s
DUP is a critical factor

• Early intervention is critical
  – Shorter **Duration of Untreated Psychosis** is associated with better treatment response, more complete recovery

• Average DUP in the United States is 74 weeks (median)
  – That’s a year and a half!
What causes long DUP?

• Don’t understand what is happening
  – Should I tell someone about this?

• Shame/stigma – don’t want to be labeled as mentally ill
  – But what if they think I’m CRAZY?

• Don’t know where to turn
  – Should I talk with mom? Dad? Doctor? Counselor?

• Lack of access to mental health resources
  – Counselor is always busy… maybe next year
Where do kids in US access care?

- It’s complicated
- Less than a quarter of adolescents who need mental health treatment receive it (Knopf et al., 2008)
- Shortage of outpatient pediatric mental health providers
- Many receive treatment in SCHOOLS
School-Based Interventions

- No standard format
- Some districts employ clinicians who provide treatment in a school office
- Most schools have a psychologist who does testing and coordinated “individualized education plans” for students with emotional and learning difficulties
- Some districts have contracts with private clinicians who may rotate through a
School-Based Interventions

- Teachers and school staff see children every day – they may be the first to notice a change
- This represents an opportunity for early detection of psychosis
Case Example

Brian is an 18 year old in our FEP clinic. At age 16, he began to believe that his classmates were monitoring his actions and posting bad things about him on the internet. He also heard the voices of his neighbors telling him he was disgusting. He became withdrawn and began skipping classes. He was referred to a school counselor, and they met a couple of times. She asked him why he wasn’t attending class. Brian didn’t want to seem “crazy” – he wondered if he should talk about his suspicions, but in the end just told her that he didn’t see the point of school and couldn’t concentrate. Brian dropped out of school, and gradually stopped leaving the house. His friendships faded away. His parents were worried about him, but had no idea what to do. One day Brian saw his neighbors hanging out in front of the house and decided he’d had enough. He came out yelling at them to leave him alone. One of the neighbors called the police, who handcuffed Brian and put him in the patrol car. After realizing how confused he was, they took him to the ER instead of booking him. After waiting for 12 hours during which he was made to sit beside an officer at all times, Brian was asked by a doctor whether he was worried that people are out to get him or involved in a plot against him. He finally opened up about his thoughts, and started the process of getting some treatment.
What if Brian’s school counselor had asked about psychosis?

- Brian (and his parents) would have endured less suffering
- DUP potentially shortened by years
- Better relationships with friends and neighbors
- He may have stayed “on track” with school, jobs, college, relationships, independence
One way to address this critical issue may be through outreach

• Could we train school mental health providers to screen for psychosis?
  – No published studies describing screening for psychosis in US schools
  – Even in Boston
  – This is a novel approach
CRC outreach

• We did 76 outreach activities in 2016!
• Outreach serves multiple goals:
  – Extend the reach of early intervention services via training
  – Assist providers in identifying youth appropriate for early intervention
  – Increase public awareness early signs of psychosis, and decrease stigma
  – Establish referral ties with community agencies
Outreach to schools

• Much of our outreach is to schools and universities
• Most have some MH resource (often minimal)
• School-based clinicians conduct IEP assessments, provide counseling, and are involved in triage and referral for students with crises or special needs
• School-based counselors could be the first or only mental health clinicians
What we don’t know

• How often do school-based providers encounter cases of emerging psychosis?
• How familiar are providers with assessment and treatment of psychosis, and with psychosis resources such as CEDAR/PREP?
• Do providers routinely screen for psychosis?
• What factors are related to screening (i.e., how can we get people to screen for psychosis)?
• And finally… is our outreach effective at increasing providers’ familiarity with psychosis, resources, screening, and referrals?
Study design: Wave one

- Anonymous survey administered at CRC outreach trainings BEFORE beginning of the talk
- “Our goal is to understand what you already know and already do regarding psychosis in your schools”
- Data collected from 100 school-based MH providers between January and April 2016
Study design: Wave two

- Participants emailed at the end of the school year (June 2016) and asked to repeat survey online
- 37 provided follow-up data
  - Self-selection bias inevitable
- Pre- and post-training responses linked
  - 16 were matched
Study design

• Approved by BIDMC Institutional Review Board
Results: Wave one
Aim

• Understanding current familiarity with psychosis and current screening practices among school-based providers
Results

1. Providers do see psychosis in their schools.

2. Providers screen less often for psychosis relative to other concerns.

3. Clinicians are less confident treating psychosis than other MH problems.

4. Screening is associated with familiarity.
1. Providers do see psychosis in their schools

- 87% reported they were “involved with or aware of” at least one student with suspected psychosis in the past year
- Mean = 3.8 (Median = 2)
2. Providers screen less often for psychosis relative to other concerns.

For what percentage of students/clients/patients do you screen (ask verbally or through a form) for...

- Psychosis
- Any Mental Health Concern
3. Clinicians are less confident treating psychosis than other MH problems.

Confidence Providing Care for Mental Health Disorders

<table>
<thead>
<tr>
<th>Disorder</th>
<th>A great deal of confidence</th>
<th>Some confidence</th>
<th>A little confidence</th>
<th>No confidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychosis</td>
<td>2.08</td>
<td>2.53</td>
<td>3.24(^b)</td>
<td>3.48(^d)</td>
</tr>
<tr>
<td>Substance Abuse</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conduct Problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td></td>
<td>3.45(^c)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anxiety</td>
<td></td>
<td>3.48(^d)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(t(98) = -16.95, p < .001\)  \(t(98) = -12.53, p < .001\)  \(t(98) = -16.27, p < .001\)  \(t(98) = -16.95, p < .001\)
4. Screening is associated with familiarity and confidence

- Higher confidence regarding aspects of psychosis assessment, diagnosis, and case management correlated with more frequent screening for psychosis
# Familiarity with psychosis

Please tell us whether you agree or disagree with the following statements:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean (SD)</th>
<th>Correlation with psychosis screening</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel that I have a good understanding of psychosis.</td>
<td>3.5 (1.0)</td>
<td>0.26**</td>
</tr>
<tr>
<td>I know what questions to ask to assess youth for psychosis.</td>
<td>3.6 (1.2)</td>
<td>0.37**</td>
</tr>
<tr>
<td>I would feel comfortable talking to a student about psychosis or risk for psychosis.</td>
<td>3.5 (1.1)</td>
<td>0.29**</td>
</tr>
<tr>
<td>I would feel comfortable talking to a parent about psychosis or risk for psychosis.</td>
<td>3.4 (1.2)</td>
<td>0.35**</td>
</tr>
<tr>
<td>I would feel comfortable talking to school staff about psychosis or risk for psychosis.</td>
<td>3.7 (1.1)</td>
<td>0.24*</td>
</tr>
<tr>
<td>I am familiar with structured screening tools for psychosis.</td>
<td>2.5 (1.2)</td>
<td>0.43**</td>
</tr>
<tr>
<td>I am familiar with community resources for youth with potential psychosis.</td>
<td>2.8 (1.2)</td>
<td>0.28**</td>
</tr>
<tr>
<td>I know how to provide treatment for individuals with psychosis.</td>
<td>2.4 (1.3)</td>
<td>0.41**</td>
</tr>
</tbody>
</table>

Responses range from 1, "Completely Disagree," to 5, "Completely Agree"
Results: Wave two
Aim

• Understanding the impact of our outreach
Results

1. Screening for psychosis INCREASED.

2. Providers’ confidence treating psychosis INCREASED.

3. Familiarity with psychosis assessment tools, case management, & community resources INCREASED.
1. Screening for psychosis
INCcreased
Screening: Pre-Training

For what percentage of students/clients/patients do you screen (ask verbally or through a form) for...

- All MH BSL
- PSY BSL

- 0%
- 1% - 5%
- 5% - 10%
- 10% - 20%
- 20% - 50%
- 50% - 75%
- 75% - 95%
- All or Nearly All

All MH BSL  PSY BSL
For what percentage of students/clients/patients do you screen (ask verbally or through a form) for...

- All MH FU
- PSY FU

Screening: Post-Training
2. Confidence treating psychosis
INCREASED
Psychosis
Substance Abuse
Conduct Disorder
Depression
Anxiety

Baseline
Follow-Up

Confidence Providing Care

(1=no confidence; 4= great deal of confidence)
3. Familiarity with psychosis assessment tools, case management, & community resources INCREASED
### Familiarity with psychosis

*Please tell us whether you agree or disagree with the following statements:*

<table>
<thead>
<tr>
<th></th>
<th>Baseline Mean</th>
<th>Follow-Up Mean</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel that I have a good understanding of psychosis.</td>
<td>3.4</td>
<td>4.1</td>
<td>-2.7</td>
<td>0.016</td>
</tr>
<tr>
<td>I know what questions to ask to assess youth for psychosis.</td>
<td>3.3</td>
<td>4.2</td>
<td>-3.8</td>
<td>0.002</td>
</tr>
<tr>
<td>I would feel comfortable talking to a student about psychosis or risk for psychosis.</td>
<td>3.4</td>
<td>4.3</td>
<td>-3.4</td>
<td>0.004</td>
</tr>
<tr>
<td>I would feel comfortable talking to a parent about psychosis or risk for psychosis.</td>
<td>3.4</td>
<td>4.1</td>
<td>-3.5</td>
<td>0.003</td>
</tr>
<tr>
<td>I would feel comfortable talking to school staff about psychosis or risk for psychosis.</td>
<td>3.9</td>
<td>4.4</td>
<td>-2.3</td>
<td>0.040</td>
</tr>
<tr>
<td>I am familiar with structured screening tools for psychosis.</td>
<td>2.4</td>
<td>3.8</td>
<td>-4.8</td>
<td>0.000</td>
</tr>
<tr>
<td>I am familiar with community resources for youth with potential psychosis.</td>
<td>2.3</td>
<td>4.0</td>
<td>-4.8</td>
<td>0.000</td>
</tr>
<tr>
<td>I know how to provide treatment for individuals with psychosis.</td>
<td>2.1</td>
<td>3.0</td>
<td>-2.9</td>
<td>0.011</td>
</tr>
</tbody>
</table>

*Responses range from 1, "Completely Disagree," to 5, "Completely Agree"*
Conclusions – Wave 1

• Most school-based providers DON’T screen students for psychosis when they ask about MH problems
• This may be due to relative lack of general confidence assessment, managing, and treating psychosis
• However, they ARE aware of psychosis in their schools – 87% encountered ≥1 instance in the past year
  – But they likely miss some as well
Conclusions – Wave 2

- Outreach works!
- Providers reported changes in both their attitudes (more familiarity, more confidence) and in their behavior (more screening)
- Outreach is a key piece of “capacity building” – building knowledge and skills for psychosis assessment and treatment throughout the state
Acknowledgments

• Commonwealth Research Center and the Massachusetts Department of Mental Health
• Kristen Woodberry, MSW, PhD
• Janine Rodenhiser-Hill, PhD
• Cole Chokran
• Boston area schools with special thanks to BPS and Dr. Mary Cohen for their interest and collaboration
1. Serious mental health problems in youth are **more common** than you might think.

2. They **rarely** appear out of the blue.

3. Early intervention is **possible** and can reduce suffering and disability.

4. You can help by **recognizing early signs**.
Why Are We Here?

Charlie, I don't understand this new DSM 5!
“Mental illnesses are the chronic diseases of the young” (Insel & Fenton, 2005)

1/2 of all adult disorders start by age 14
75% by age 24
Often with mild, *easy-to-dismiss* symptoms
Schizophrenia-spectrum and Other Psychotic Disorders

Typical onset is between 15 and 35 years (median 22-23 years) Kessler, 2007

But signs and symptoms are present years earlier
If only the first signs of severe mental illness were this easy to spot.

There are many ‘red flags’ that may signal the onset of psychosis, a form of mental illness. Recognizing these signs can be hard, but it’s key to helping young people at risk. The Portland Identification and Early Referral (PIER) program is here to help. Our goal is to identify and treat those at risk through family intervention, education, and medical therapy. In many cases, early treatment can stop psychosis in its tracks.

The PIER Program

For more information, including a list of warning signs, please contact PIER at 1-877-889-3377.

Maine Medical Center

A health place like no place in Maine.
Of 1000 Middle/High School Students

140 will experience mental illness

Only 20% of those who need treatment will get it
Prevalence of Psychosis

Of 1000 High School Students

140 will experience mental illness

More than 30 will experience psychosis

Lifetime prev > 3% / (4-17.5 sub-threshold)
Why talk about psychosis?

Current Services: Too Little Too Late
Themes for Today

Psychotic symptoms typically go undetected and untreated for months to years.

Earliest signs of emerging psychosis begin years earlier.

Early intervention can make a difference IF young people are identified in time.

There are specialized services to help with early detection and intervention.

School Systems can implement a tier-based model to identify students.
What is Psychosis?

Have you worked with someone experiencing psychosis?
What is Psychosis?

Disturbance in mental state that interferes with reality testing

Causes person’s mind to “play tricks” on him/her
## Indicators Of Risk for Psychosis

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unusual Ideas/ Delusional Beliefs</td>
<td>Unanticipated mental events/ ideas of reference/ mind tricks, magical thinking, external control.</td>
</tr>
<tr>
<td>Suspiciousness/ Paranoia</td>
<td>Clear or compelling thoughts of being watched or singled out. Sense that people intend to harm. Loosely organized beliefs about danger or hostile intention.</td>
</tr>
<tr>
<td>Grandiosity/ Inflated Sense of Self</td>
<td>Notions of being unusually gifted, powerful, or special. Promotes significantly unrealistic plans.</td>
</tr>
<tr>
<td>Perceptual Abnormalities/ Hallucinations</td>
<td>Repeated unformed images, recurrent illusions or momentary hallucinations that are recognized as not real but may be worrisome, captivating, or affect thinking or behavior.</td>
</tr>
</tbody>
</table>
Case Example
Latisha’s Story

Latisha was a high school freshman. She was shy but otherwise seemed like a healthy, typical student. A few weeks into the school year, however, Latisha seemed to be withdrawing from friends, sitting alone in the cafeteria and finding reasons to avoid group activities. She had been a B-C student in middle school, but was now struggling with assignments, and her grades had fallen to the D-F range. Her English teacher thought she look depressed.

In the spring semester, Latisha’s friends started to seem imaginary to her, and she wondered why she was even talking to them. She began thinking that they could read her thoughts, and they were making fun of her in their own heads. She wrote a story for English class about a girl for whom the world became unreal. Thinking maybe she was writing about herself, the teacher pulled her aside after class to ask how she was doing. A few weeks later, Latisha told him that she heard a nondescript voice telling her she was worthless and making other negative comments.

The teacher brought her to the school psychologist who asked a few more questions. It was then that Latisha reported hearing voices coming from the corners of the room, sometime giving her commands to hurt herself or others. She also disclosed seeing orbs of light flying around her and shadowy figures out of the corner of her eye.
The most well-known signs and symptoms

**Delusions**
Fixed false beliefs (not consistent with culture or subculture)

**Hallucinations**
False perceptions, e.g., eyes and ears playing tricks (voices or visions)

**Disorganization**
“Grossly” disorganized speech or behavior

Often referred to as *positive* symptoms.
Can You Identify

Delusional Thinking?
Paranoia?
Perceptual Abnormalities?
Delusions
Delusions

From Latisha’s story:
Friends started to seem imaginary to her, thinking that they could read her thoughts, and they were making fun of her in their own heads (?)

Other examples:

“I believed that someone was trying to poison me, so I wouldn’t eat anything unless my mom made it.”

“I knew that I had special mental powers that could stop missiles in their tracks. I was convinced the FBI was after me because they wanted to control these powers. I even thought the TV was talking about this.”
Hallucinations
Hallucinations

From Latisha’s Story:

“Heard a non-descript voice telling her she was worthless and making other negative comments”

“Hearing voices come from the corners of the room, sometimes giving her commands to hurt herself or other people”

“Seeing orbs of light flying around her and shadowy figures out of the corner of her eye.”
Most children who report hallucinations do not meet criteria for schizophrenia, and many do not have a psychotic illness.

Normative childhood experiences, including overactive imaginations and fantasies, can be misinterpreted as psychosis

Take into account cultural norms as well
“Are you having the same experience I am with the words jumping around the pages in our cases? I think we have to case the joint, but I don't believe in joints, but I do believe they hold your bodies together.”
Disorganization

**Behavior**
Wearing a down parka and two hats on a hot summer day
Going into garbage cans and gathering all the trash

**Affect (Emotion)**
Laughing when talking about a sad event
Other Features Commonly Associated with Psychosis

**Negative Symptoms**
Flat affect, withdrawal, low motivation
Cognitive Impairment

Decline in attention, memory, organization/planning and processing speed
Losses in Social and Role Functioning

Psychosis is associated with often severe and worsening cognitive deficits and with decline in or failure to achieve expected social, academic, or occupational gains or milestones.
Multiple conditions involving psychosis

- Severe Depression
- Medical conditions
- Psychotic Symptoms
- Bipolar Disorder
- Schizophrenia
- Substance Use
Tricky Differentials

• Is it early psychosis or…
  – OCD?
  – ADHD exacerbated by increased demands?
  – PDD spectrum?
  – Social Anxiety?
  – Drugs?
  – Non-pathological beliefs/experiences common in a person’s culture?
  – Trauma?
Stages of Illness in Schizophrenia

- **Premorbid**
- **Prodromal**
- **First Episode/Early Psychosis**
- **Chronic/Residual**

Healthy → Worsening of Signs, Symptoms & Function

Gestation/Birth → 10 → Puberty → 20 → 30 → 40 → 50 Age in Years

Adapted from Lieberman et al.
Course of Schizophrenia

Stages of Illness in Schizophrenia

Premorbid

Prodromal

First Episode/Early Psychosis

Chronic/Residual

Healthy

Worsening of Signs, Symptoms & Function

Gestation/Birth

10

Puberty

20

30

40

50

Age in Years

30-50%

25-40%

stable poor

15-50%

deteriorating

30-50%

30-40%

10-22%

Deterioration

Adapted from Lieberman et al.
Prodrome to Psychosis

- **Pre-psychotic** phase of illness
  - Early “warning” signs & symptoms before full illness onset
    - Low grade symptoms
    - Distinct deviation from typical experiences, behavior and functioning
    - Associated with increasing distress
  - Often 1-3 year period before onset of first episode

- A **retrospective** term
  - Defined by *clinical* characteristics that *imply* increased risk for onset of psychosis
    - “Clinical high-risk” or “Ultra high-risk”
    - 25-40% rate of transition to a psychotic disorder over 1-2 years
Psychosis Continuum:

**Mild**
Noticeable, but not bothersome

*Rarity testing intact*

**Moderate**
Bothersome and affects daily life.

*Able to induce doubt*

**High**
Significantly interferes with daily life

*100% Conviction*

“I’m not sure why but I don’t trust my landlord.”

“I think my landlord might be trying to poison me”

“My landlord poisoned the air and now he can read my thoughts.”
Vulnerability/Risk

What this doesn’t mean:
A diagnosis
A prognosis

What this does mean:
A warning
An opportunity
What To Look and Listen For
“Schizophrenia rolls in like a slow fog becoming imperceptibly thicker as time goes on. At first, the day is bright enough, the sky is clear, the sunlight warms your shoulders, but soon you notice a haze beginning to gather around you and the air feels not quite so warm. After awhile, the sun is a dim light bulb behind a heavy cloth. The horizon is vanished into a gray mist, and you feel a thick dampness in your lungs as you stand cold and wet in the afternoon dark.”

Observing and Listening For The Psychotic Experience

- Psychosis can present with varying signs and symptoms
- Diversity in clinical presentation necessitates adopting a multi-method assessment approach
The **CASES** trajectory of symptom evolution.

Adapted from work by Cornblatt and Keshavan
**Signs of Clinical Risk for Psychosis**

New or Worsening

- Drop in grades/ work performance
- Trouble concentrating
- Suspiciousness
- Decline in self-care
- Social withdrawal
- Unusual/ intense ideas

- New sensitivity to sights or sounds / mistaking noises for voices
- Having strange feelings or no feelings at all
- Feeling “like your mind is playing tricks on you”
- Disruptions of mood, thought, behavior, perception

*Especially (but not only) if the person has a close relative with mental illness or psychosis*
Something’s Not Right

- Progressive:
  - new or worsening
- Recurring:
  - at least weekly, on average
- Impact:
  - Bothersome
  - Lead to behavior change
  - Impairing
You May be the First To Notice

What to Do

Watch
Listen
ASK
## Indicators Of Risk for Psychosis

<table>
<thead>
<tr>
<th><strong>Unusual Ideas/ Delusional Beliefs</strong></th>
<th>Unanticipated mental events/ ideas of reference/ mind tricks, magical thinking, external control.</th>
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<tr>
<td><strong>Suspiciousness/ Paranoia</strong></td>
<td>Clear or compelling thoughts of being watched or singled out. Sense that people intend to harm. Loosely organized beliefs about danger or hostile intention.</td>
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<td><strong>Grandiosity/ Inflated Sense of Self</strong></td>
<td>Notions of being unusually gifted, powerful, or special. Promotes significantly unrealistic plans.</td>
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<td><strong>Perceptual Abnormalities/ Hallucinations</strong></td>
<td>Repeated unformed images, recurrent illusions or momentary hallucinations that are recognized as not real but may be worrisome, captivating, or affect thinking or behavior.</td>
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<td><strong>Disorganized Communication</strong></td>
<td>Occasional incorrect words, irrelevant topics. Frequently going off track. Circumstantial. Tangential. Loosening of associations under pressure.</td>
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How to ASK about Unusual Thought Content:

• Have you had the feeling that something odd is going on or something is wrong that you can’t explain?

• Have you ever been confused at times whether something you have experienced is real or imaginary?

• Do you ever feel that your mind is playing tricks on you?

• Have you ever felt that you are not in control of your own ideas or thoughts?

Taken from the SIPS (McGlashan, Miller, Woods)
How To ASK about Suspiciousness/ Persecutory Ideas:

• Have you ever found yourself feeling mistrustful or suspicious of other people?
• Do you ever feel like you are being singled out or watched?
• Do you ever feel like you have to pay close attention to what’s going on around you in order to feel safe?
How to ASK about Perceptual Abnormalities/ Hallucinations:

• Do you ever hear unusual sounds or a voice and then realize that there is probably nothing there?
• Do you ever hear your own thoughts as if they are being spoken outside your head?
• Do things you see ever appear different in color, brightness or dullness; or appear changed in some way?
• Do you ever see flashes, flames, vague figures or shadows out of the corner of your eyes? Or see people, animals, or things and then realize they are not really there?
What to Look For
New or Worsening Disorganization

Odd Speech, Odd Behavior, Odd Affect

Communication Difficulties:
Confused, muddled, using the wrong words, going off track
Loosening of association making speech unintelligible
Do’s and Don’ts for Helping a Student at Clinical Risk

DON’T:
• Ignore warning signs
• Assume that clinical risk = death sentence
• Assume that someone is/ is not having psychotic symptoms without carefully assessing

DO:
• Assess for psychotic/ attenuated symptoms
• Let the person know they are not alone and there is help
• Seek appropriate consultation/ referral
Take Safety Seriously

- Assess for suicidal ideation and intent at every session
- Young people with early psychotic symptoms are a high risk group for suicide
- Psychotic Youth are 12 times more likely to commit suicide than the general population
Assess for Risk to others (family, friends, community)
If needed, formulate a safety plan and contingencies
Critical Period for Intervention:

- Greatest deterioration first 2 years of psychosis
  - Possible brain deterioration
  - Losses in social and role functioning
- Early treatment potential
  - relieve suffering
  - prevent disability
  - prevent psychosis
  - prevent suicide
Early Interventions:
% Transitioned at 12 months

“the experimental condition significantly reduced the conversion risk on average by 56.0%.” Schmidt et al., 2015
Treatment delay may predict poorer outcome

Mean Duration of Untreated Psychosis

Average duration of untreated Psychosis (DUP) about 18 months

Keshavan et al
Schizophrenia Bulletin 2003

Partial r = -.39; p = .001
Psychosocial Strategies

• Psychoeducation
• Cognitive-Behavioral Therapy
• Family and Multifamily Therapies
• Supported Employment or Education
• Group Skills Training
• Cognitive Remediation
• HOPE
Strategies to help a student at risk

- Assist with organization
- Provide low stimulation environment
- Provide strategies to help with motivation
- Provide help with comprehending and remembering information
- Anticipate and problem-solve change and stress
School-Based Models
Screening Protocol For Schools

• **Early Detection** - Provide opportunities for students experiencing the initial signs and symptoms to get help as soon as possible.

• **Minimize Harm** - Students experiencing new and unusual thoughts and behaviors are likely scared about what’s happening to them. A secondary goal of screening for psychosis is to minimize worry and stigma by providing accurate information and timely consultation.
TIER I: Universal Prevention

• Most students are NOT at risk for psychosis, but ALL benefit when clinicians are knowledgeable about the mental health challenges youth face.

• One of the most important tools for Universal Prevention in mental illness is Education.

• Although the earliest symptoms are often kept private and we do not have sufficient knowledge or tools to screen all students, we can provide information on:
  – Early warning signs of psychosis in the context of broader mental health education
  – Availability of promising treatments
  – Hope and potential of early intervention and recovery
Latisha: Tier I Options

If Latisha knew it was *not uncommon* to experience changes in mood and thinking and that *people were trained to help her with these concerns*, maybe she would have gone to the school’s guidance counselor earlier.

*If there were brochures or posters that mentioned her symptoms, she might not have felt so alone or reluctant to disclose what was going on.*
TIER II: Selective Prevention

- Some students may be at heightened risk for mental health problems, either because of genetic risk or a change in behavior or functioning.

- When you see NEW or INCREASING changes that are observed and not easily and fully explained by other disorders (e.g., developmental, anxiety, substance use) or specific situations (e.g., breakup with significant other, family stressor, medical disorder) then screen for specific psychosis risk.
Latisha: Tier II Options

When Latisha’s teacher began noticing she was withdrawing and struggling to concentrate and keep up, maybe referral for a mental health screening with the school psychologist would have benefitted her.

The psychologist could then have asked a few screening questions or given Latisha a psychosis screening questionnaire in the context of a broader mental health assessment.
TIER III: Indicated Prevention

Some students will present with symptoms that should trigger a referral for psychosis-specific assessment and treatment.

When a student discloses PSYCHOTIC-LIKE EXPERIENCES —
- Suspiciousness (e.g., feeling increasingly uneasy around others without sufficient reason)
- Odd beliefs or magical thinking (e.g., feeling confused whether a dream actually happened, wondering whether others can read his mind)
- Unusual perceptual experiences (e.g., sounds seeming louder than usual; hearing whispering or one’s name being called when no one there; seeing shadows or vague figures)
- Tangential/circumstantial speech (e.g., going off track when speaking, using odd combination of words)

then seek Specialized Assessment Options
Once Latisha disclosed that she experienced people as unreal or heard a voice telling her she was worthless, a specialized assessment was warranted.

A specialist will obtain a full history and discern whether psychosis or risk is present. If so, Latisha may be referred to a clinical team that can help her cope these changes. They could also reach out to Latisha’s parents to offer support and help the family be better equipped to help Latisha.
HOW CEDAR Works: From Recognition to Care

Something’s not quite right

Initial Call to CEDAR

CEDAR Assessment

Psychoeducation

CBT

CLUES

Consult to School

Consult to School

Psychiatric Consult

Resumed Functioning
CEDAR is Here To Help

We at CEDAR are here to help you in knowing how to judge a response, -- but don’t let uncertainty stop you from asking the questions.
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