Behavioral Health is Essential To Health

Prevention Works

Treatment is Effective

People Recover
Measuring the Duration of Untreated Psychosis (DUP) in First Episode Psychosis Programs

Dr. Kate Hardy, Clin.Psych.D
Dr. Rachel Loewy, PhD
Dr. Tara Niendam, PhD
Disclaimer

The views, opinions, and content expressed in this presentation do not necessarily reflect the views, opinions, or policies of the Center for Mental Health Services (CMHS), the Substance Abuse and Mental Health Services Administration (SAMHSA), or the U.S. Department of Health and Human Services (HHS).
Topics

• Importance of duration of untreated psychosis (DUP)

• DUP measurement tools

• Measuring DUP in community settings
Background – Early Intervention

- Improved outcomes achieved when initial symptoms are identified, and treated, early (Mihalpoulos & Chatteron, 2015)
- First Episode Psychosis: 24 times the mortality rate of the same age peers in the 12 months after initial diagnosis (Schoenbaum et al., 2017)
- Clinical and psychosocial deterioration occur within first five years after the onset (McGorry, Killackey, & Yung, 2008).
- Cost savings associated with intervening early due to decreased need for long term care and decreased functional disability (Csillag et al., 2015)
Duration of Untreated Psychosis

- Period of time from the onset of psychotic symptoms and commencement of treatment
- Longer DUP associated with:
  - Increased positive symptoms
  - Increased negative symptoms
  - More frequent and severe global symptoms
  - Greater impairment in functioning

(Perkins, Gu, Boteva, and Lieberman, 2005)
DUP: cont

- Recommended length of DUP is 12 weeks (Bertolote and McGorry, 2005)

- RAISE study reported median DUP of 74 in the US (Addington et al., 2015)

“clearly, prolonged DUP is a matter of national importance”
DUP and Early Intervention

- RAISE study found those who received Coordinated Specialty Care (CSC) **AND** had a DUP of less than 74 weeks showed greater improvement in
  - *Total symptoms*
  - *Quality of life*
    - (Kane et al., 2016)

- DUP of five weeks associated with less severe negative symptoms
  - (Melle et al., 2008)
Barriers to Seeking Care

- Identification of psychotic symptoms
  - Stakeholders/first identifiers not trained in early identification of psychosis
  - Results in significant delay between first pathway to care and treatment initiation (Birchwood et al. 2013)

- Stigma
  - Individuals may avoid mental health services to avoid stigmatizing labels (Corrigan, 2004)
Why should we measure DUP?

- Determining eligibility for the service
  - Clinical assessment to determine timeline of symptom development
- Evaluation of outreach efforts
  - Educational outreach critical component of Early Intervention
  - Routinely assessing DUP can show impact of outreach
  - Highlight areas where additional efforts are needed
Why should we measure DUP?

- Case formulation and treatment planning
  - Opportunity for consumer to narrate their experience
  - Provide insight into help-seeking attempts and pathways into care
- Program evaluation
  - DUP is an important variable in program evaluation
  - Collecting this data at a local level can aid decisions regarding program eligibility
Defining Onset of Psychosis

- Structured interview specifically for DUP
  - Comprehensive Assessment of Symptoms and History (Andreasen, et al 1992)
  - Nottingham Onset Schedule (Singh et al., 2005)
  - Circumstances of Onset and Relapse Schedule (Norman & Malla, 2002)
  - Royal Park Multidiagnostic Instrument for Diagnosis (McGorry et al., 1990)
  - Symptom Onset in Schizophrenia Inventory (Perkins et al., 2000)
Defining Onset of Psychosis

- **Dimensional symptom measure severity**
  - First week of PANSS score 4+, specific items

- **General clinical interview**
  - Positive symptom onset on Structured Clinical Interview for DSM (SCID)

- **Structured Interview for Prodromal Syndromes (SIPS)**
  - Psychosis risk syndrome
Defining Onset of Treatment

- Date of interview
- First hospitalization
- First treatment with antipsychotic medication
- Treatment with antipsychotic medication at a certain dosage and duration
- Entry into CSC program
PhenX Clinical Services Working Group

- Tasked with identifying well-validated measures feasible for front-line clinical administration
- Available measures require extensive training, time and were not always recovery oriented
- Not feasible for routine programs, validation definition difficult to meet
- Area for future development - need brief measure that could be used in combination with existing program entry interviews/paperwork
Clinical Assessment

• A **good assessment** is a blueprint for solid CSC treatment
  • What are the primary diagnoses, symptoms and associated impairments?
  • Foundation for treatment goals
  • Want to be able to measure and demonstrate improvement

• How do you actualize a good assessment in community practice?
Training and Supervision

• Training necessary in:
  • *Diagnostic measures* – semi-structured interviews can be helpful!
  • *Differential diagnosis and DSM5*
  • *Providing psychoeducational feedback*

• Ongoing supervision by experienced clinician
  • *Group or individual*
  • *Ensures consistency across the team*
Multi-step assessment

Gather information in multiple steps

1. **Referral**: Collect standard data at the first contact, can provide foundation for intake assessment.
   - What other questions need to be answered?
   - When did psychosis start? (ball park)

2. **Intake assessment**: Use a semi-structured interview, talk to collaterals/review records. Review findings with the team for feedback
   - What questions still need to be answered?
   - When did psychosis start? (ball park)
Gather information in multiple steps

3. **MD Assessment**: Answer remaining questions, address medical concerns, medication needs.
   - When did psychosis start? (ball park)

4. **Team Review**: Present the case, determine eligibility and start of psychosis
   - When did psychosis start? (make a decision!)

5. **Case Conference**: Present the case after 6 months in care, review intake materials and course of treatment. Do you still agree with psychosis start date?
# Diagnostic Timeline

## Time Frame

<table>
<thead>
<tr>
<th>Symptoms/Functioning</th>
<th>1 day mo yr ago</th>
<th>2 day mo yr ago</th>
<th>3 day mo yr ago</th>
<th>4 day mo yr ago</th>
<th>5 day mo yr ago</th>
<th>6 day mo yr ago</th>
<th>7 day mo yr ago</th>
<th>8 day mo yr ago</th>
<th>9 day mo yr ago</th>
<th>10 day mo yr ago</th>
<th>11 day mo yr ago</th>
<th>12 day mo yr ago</th>
<th>13 day mo yr ago</th>
<th>14 day mo yr ago</th>
<th>15 day mo yr ago</th>
<th>16 day mo yr ago</th>
<th>17 day mo yr ago</th>
<th>18 day mo yr ago</th>
<th>19 day mo yr ago</th>
<th>20 day mo yr ago</th>
<th>21 day mo yr ago</th>
<th>22 day mo yr ago</th>
<th>23 day mo yr ago</th>
<th>24 day mo yr ago</th>
<th>25 day mo yr ago</th>
<th>26 day mo yr ago</th>
<th>27 day mo yr ago</th>
<th>28 day mo yr ago</th>
<th>29 day mo yr ago</th>
<th>30 day mo yr ago</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychotic Symptoms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prodromal Symptoms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antipsychotic Use</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depressive Symptoms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manic Symptoms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospitalizations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residual Symptoms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Substance Use</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcohol Use</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TIMELINE INSTRUCTIONS:** Establish a temporal relationship between medication use, hospitalization(s), residual, prodromal, and psychotic symptoms. Use life milestones, e.g., graduation from HS, birthdays, holidays. If there is more than one episode, add them all to the right. If a Manic or Depressive Episode has been present, establish the temporal relationship between mood and psychotic symptoms. If substance use has been associated with the development of psychotic symptoms, establish the temporal relationship between substance ingestion and the psychotic symptoms. Be sure to write in the date of the first onset of psychotic vs prodromal symptoms on the timeline. Regarding medication use, establish dates when anti-psychotic medication was started, the length of time the medication was taken, and when the patient stopped taking medication. Please note if the patient started taking medication again and when he or she stopped.

**Initial DUP in weeks:** __________

**Cumulative DUP in weeks:** __________

(see next page for definitions)

**PLEASE NOTE:**

- **=** Periods of definite psychosis such as delusions or hallucinations, or depression and/or mania that meet the full DSM-5 criteria for an episode. Also, periods that meet criteria for moderate or severe substance use disorder.

- **=** Periods in which psychotic, depressive or manic symptoms were present, but without full delusional conviction, or hallucinations such as prodromal or residual symptoms, or did not fulfill the full criteria for depressive or manic episode, or periods of mild substance use disorder.

Developed by UCLA Aftercare Research
Common Mistakes

• Taking the easy route
  • Dating onset to first hospitalization or diagnosis

• Not using collateral information
  • Get info from consumer, family members, and medical records

• Not having a program definition for “onset of psychosis” and “onset of treatment”

• Not providing regular supervision for assessment
Conclusions

• Reduction of DUP should be included as key performance metric for all early psychosis programs.

• Clinicians should be trained, and appropriately supervised, in assessment of psychosis and differential diagnosis.

• DUP should be embedded in the intake and assessment process for all consumers entering early psychosis programs. Assessment and diagnosis is critical to the ability to reliably measure DUP and eligibility for the service.
• Information gathered in the DUP assessment should be integrated into clinical formulation and treatment planning.

• Information on DUP and pathways into care should be regularly reviewed in order to inform future targeted education efforts.

• Coordinate and standardize DUP measurement across the program if possible.