Understanding Early Psychosis: A Practical Guide to Clinical Care

Part 2: How to Initiate Care for Early Psychosis

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EPI-NC
Early Psychosis Interventions of North Carolina

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES

Disclosures

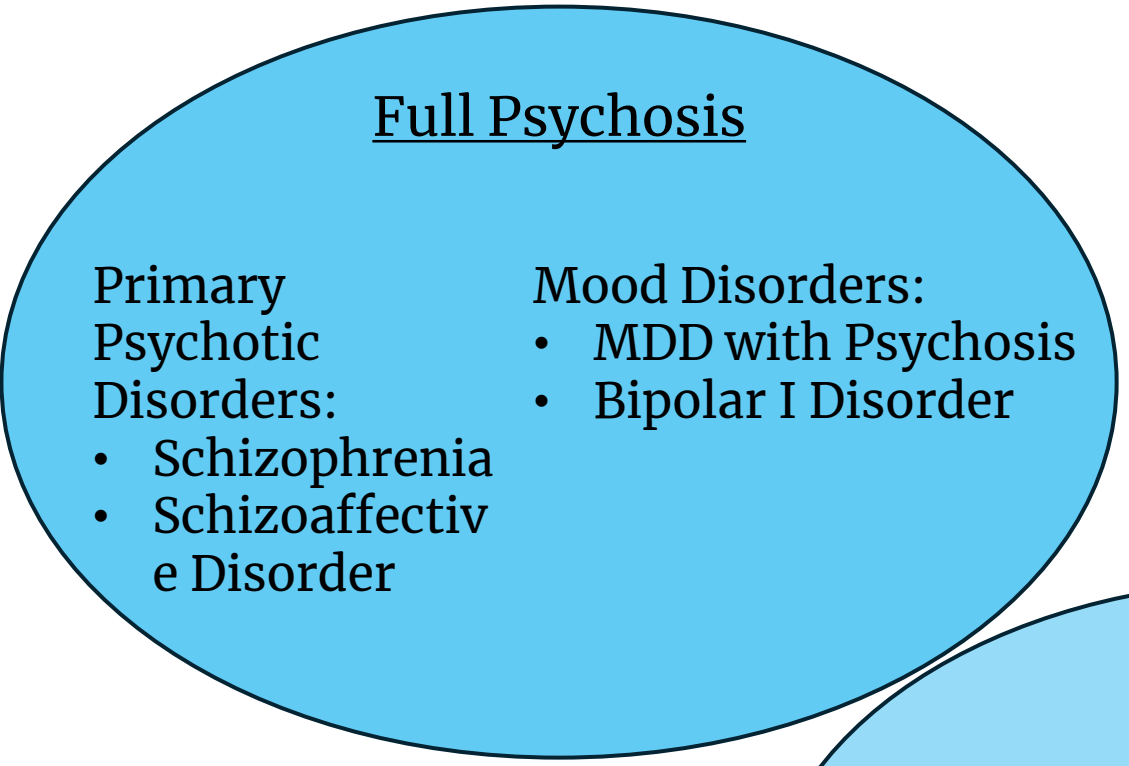
Drs. Katie Boyle and Christina Cruz do not have conflicts of interest with the materials presented today.

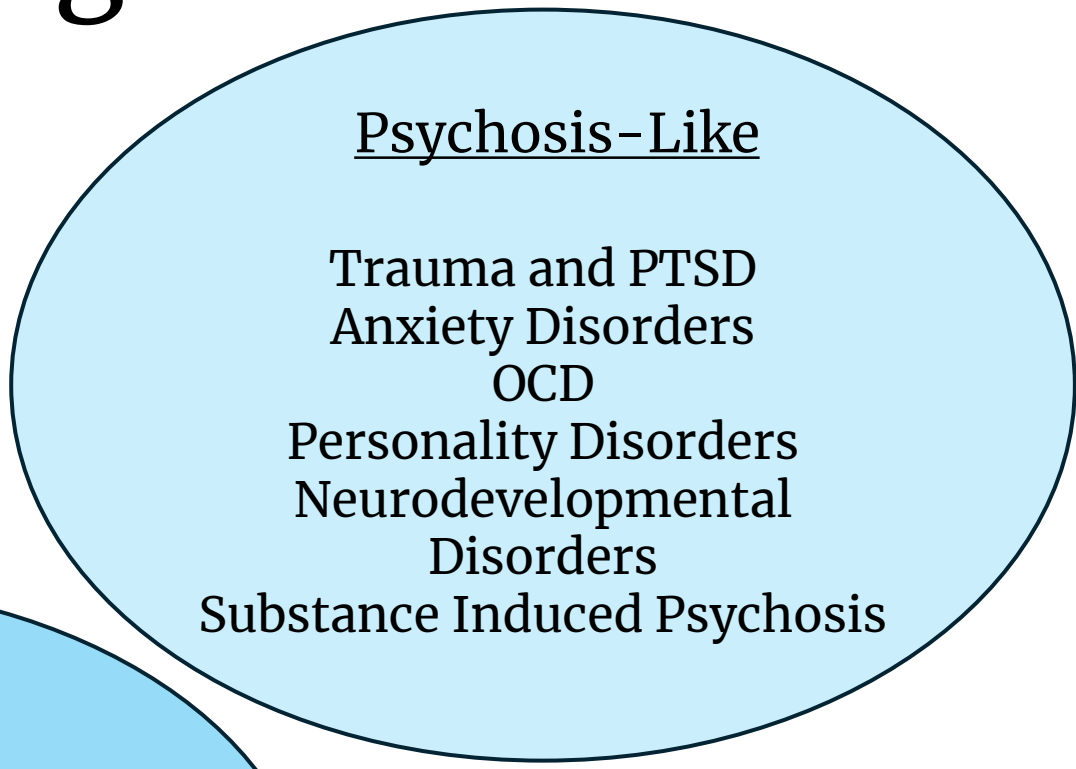
Learning Objectives

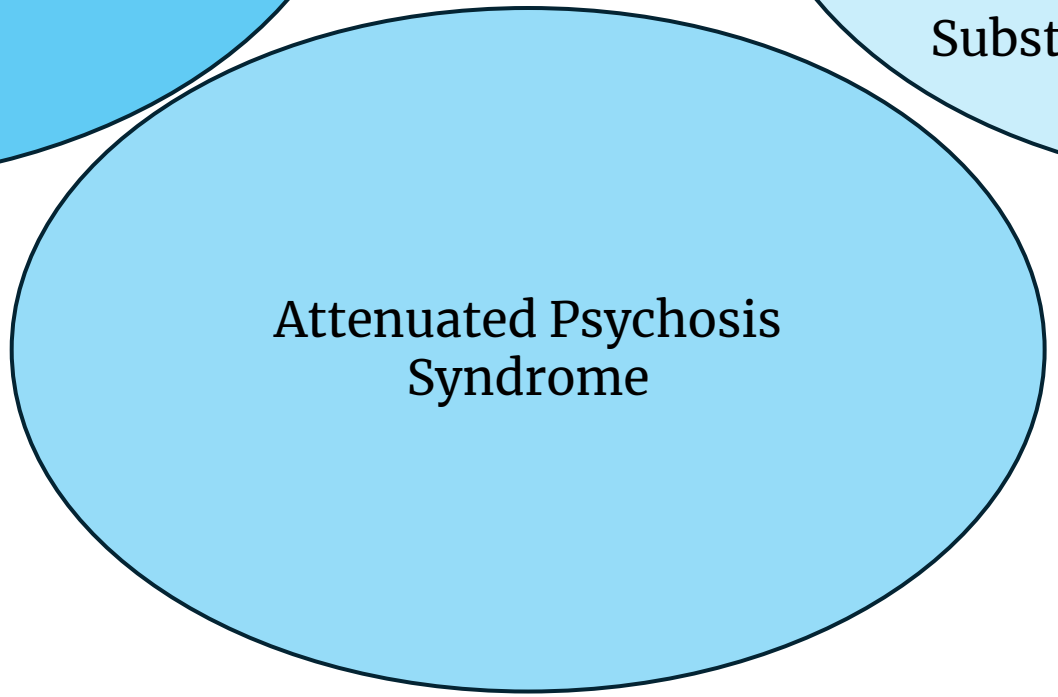
1. Become familiar with the differential diagnosis for psychosis and a clinical diagnostic tool for psychosis.
2. Understand the importance of a thorough medical evaluation to ensure an accurate diagnosis.
3. Learn the six steps to obtaining informed consent before prescribing an antipsychotic.
4. List baseline measures and frequency recommended for side effect monitoring.

Psychiatric Differential Diagnosis: Psychosis

Differential Diagnosis







Full vs Psychosis-Like or Attenuated Symptoms

- As we reviewed in Part 1, report of psychotic symptoms is not uncommon for the general population and higher in child and adolescent populations.

- Attenuated symptoms are defined as psychotic-like, but they remain below threshold of full psychosis. Some level of insight is maintained, and they tend to be less severe and more transient.

Symptom	Full Psychosis	Attenuated Psychosis	Not Psychotic
Delusions: Unusual thoughts, suspiciousness, grandiosity	Feels completely real and distinct from the person ; no skepticism	May seem real or imaginary; **skepticism can be induced**	May be beyond normal but within cultural bounds
Hallucinations: Auditory Visual Other	Formed perceptual abnormalities that feel completely real, distinct from the person; no skepticism	Formed/unformed; seem imaginary or real; **skepticism can be generated**	Minor perceptual or sensory changes. Within cultural norms
Disorganized Communication: Odd Speech Unfocused Speech Meandering Speech	Persistently loose, irrelevant, or blocked speech under minimal pressure	Incorrect words, circumstantial, tangential. Can redirect with prompting or on their own	Does not go off track or need to be redirected. May be vague, overelaborate, or stereotyped

DSM-5 TR: Attenuated Psychosis Syndrome (APS)

- Included as a condition for further study in DSM-5-TR
- APS can only be considered if a person has never experienced a full episode of psychosis

Diagnostic Criteria:

- At least one attenuated psychotic symptom, occurring at least once per week
- Onset or worsening in past year
- Sufficiently distressing to warrant clinical attention
- Not better accounted for by another psychiatric diagnosis

Why is it important to distinguish attenuated vs full psychosis?

- Only about **1 in 4** people with attenuated symptoms will go on to develop a full psychotic disorder and the focus of treatment is different

- It is **NOT** recommended to start antipsychotics for attenuated psychotic symptoms
  - *Instead continue to monitor attenuated symptoms closely for conversion*
  - *Focus treatment on what is present (depression, anxiety, trauma etc)*
  - *Recommend CBT and psychosocial interventions*
  - *Substance use counseling, marijuana*

Mini-SIPS:

A Clinical Assessment Tool for DSM-V Attenuated Psychosis Syndrome

- Adapted from the SIPS (a more extensive tool utilized primarily in research)
- Designed specifically to be utilized as a clinical tool
- Explores 3 main categories of symptoms (hallucinations, delusions, and disorganization)
- Provides helpful example questions
- To access a copy and participate in free online training:
  - https://campuspress.yale.edu/napls/other-resources/

Case Examples – Practice using the Mini-SIPS

Case 1

17-year-old comes to your office at the encouragement of their parents. She has noticed those around her are starring and whispering about her. Due to this, she has been skipping class and spending more time at home resulting in a decline in grades.

She’s been avoiding school for the last month because last time she was there, her teacher was manipulating her thoughts. For a while, she could ignore these ideas but the last several months she’s been focused on trying to figure out why her teacher would do this.

According to the mini-SIPS:

A. Full Psychosis
B. Attenuated psychosis
C. Not psychotic

Case 2

16-year-old is reporting seeing flashes of color distortion and shadows in the corner of their eye. They are not sure what it might be but do wonder about the possibility of paranormal activity. It occurs maybe every two weeks or so for just a few seconds. When it does happen, he'll blink a few times and it goes away. He otherwise reports doing well and is captain of his soccer team.

According to the mini-SIPS:

A. Full Psychosis
B. Attenuated psychosis
C. Not psychotic

Case 3

21 year old male presents today reporting hearing mumbling, typically when alone and no one else is around. He finds this really strange and is unsure where it might be coming from. He thinks possibly the neighbor or maybe a radio. This makes it difficult to fall asleep at night and happens most days. It started about a year ago, initially just a few times per month but it's been more frequent lately. In the moment he hears it, he will go outside and check to see if someone is around but never finds anyone. Usually, he can just shake it off and get back to what he was doing at the time except at night. He asks, "could this just be my own thoughts?".

According to the mini-SIPS:

A. Full Psychosis

B. Attenuated psychosis

C. Not psychotic

Medical Work-up: First Episode Psychosis

Reasons for Medical Evaluation

Assess General Health

Assess for Secondary Causes of Psychosis

Obtain Baseline Metabolic Monitoring Parameters

Assess General Health

- General physical exam including neurological exam
- Basic vital signs including height and weight
- Lab studies:
  - CBC- infection, anemia
  - CMP – kidney and liver function
  - Pregnancy test if applicable
  - Urine Toxicology Screen

Baseline Metabolic Parameters

- Fasting lipid panel
- HgbA1c
- Height, weight, BP

Assess for Secondary Causes

- No consensus for what should be obtained for all first episode patients

- Most will be driven by information collected via history and physical exam

  Extensive work-up typically is not pursued if presentation and onset of symptoms matches what we would typically see for developing schizophrenia

- Lab studies that are generally suggested for most patients as initial screen:
  - TSH + Free T4
  - HIV, Syphilis Screen
  - Vit D, Folate, B12
  - ANA

- You could also consider:
  - *Ceruloplasmin*
  - *Urine Heavy Metals*
  - *ESR/CRP*

Head Imaging

- Not recommended as a universal screen, however, many patients and families will request this

- MRI brain with and without contrast should be obtained when focal neurological signs are present, concern for seizure etc.

When to consider additional work-up?

- Additional work-up should be guided by findings in history, assessment, and physical exam

- Some examples:
  - Very young (<13) → genetic testing Chromosomal microarray (CNV), Karyotype; Fragile X testing
  - Focal neurological deficits → MRI Brain
  - Abdominal pain, peripheral neuropathy → urine porphyrins, heavy metal screening
  - Starring, loss of consciousness → EEG
  - Acute onset, new neurological findings → consider autoimmune encephalitis work-up

Recommended Resources and References:

- APA Practice Guideline for the Treatment of Patients with Schizophrenia
  - https://psychiatryonline.org/doi/book/10.1176/appi.books.9780890424841

- A reference text from Ballon and colleagues titled: Intervening Early in Psychosis: A Team Approach
  - https://www.appi.org/Products/Schizophrenia/Intervening-Early-in-Psychosis

- Article by Skikic and colleagues from 2020, First Episode Psychosis Medical Workup: Evidence-Informed Recommendations and Introduction to a Clinically Guided Approach

Initiating Care for Recent Onset Psychosis

The CSC Model

Multidisciplinary Approach

- Individual psychotherapy
- Family education and therapy
- Peer support services
- Supported Education and Employment Services
- Medical management

There is Hope in Recovery

- When psychosis is identified early and appropriate treatment is initiated, long term outcomes improve

- The goal of recent onset psychosis care is to aim for full remission of psychotic symptoms and meaningful functional recovery
  - A chronic disorder with disability is NOT the expected long-term prognosis

- Medication is very important for psychosis treatment and recovery, and we also know that medication alone is **not enough** to provide the best chance for a full recovery

Psychosocial Treatments for Early Psychosis

Individual, group, and family psychological treatments play a key role in recovery from a first episode of psychosis.

- Can help individuals and their families better understand the disorder and how to prevent relapse (e.g., NAVIGATE family psychoeducation, Individual Resiliency Training)
- Can increase motivation to engage in treatment and live productive life (e.g., Motivational Enhancement)
- Can reduce stress (e.g., Mindfulness-based Stress Reduction)
- Can teach social and life skills (e.g., Social Skills Training)

Common elements of these therapies include education, skills training, and a focus on personally meaningful goals.

Wright, Browne, Mueser, & Cather, 2020

Evidence-Based Practices for Treating Early Psychosis

Psychotic and other symptoms	Cognitive impairments	Comorbid issues	Social/functional impairments
• CBT for psychosis • Family Therapy • Assertive Community Treatment	• Cognitive restructuring*	• Integrated or adjunctive treatments targeting co-occurring issues (e.g., SUD, OCD)	• Social skills training • Supported Employment

Peer Support Specialists

- Peer Support Specialists are individuals in recovery with lived experience
- Peers play a vital role on the CSC team as a source of connection, support, and community to the clients
- See here for information on the North Carolina's Certified Peer Support Specialist Program and to learn more about the peer support role – https://pss.unc.edu/

Supported Education and Employment

- CSC teams fully support individuals returning to meaningful activities such as school and/or work

- Supported Education and Employment specialists are important members of the treatment team that focus specifically on these goals. The services offered are evidence based
  - https://ipsworks.org/index.php/what-is-ips/

- This type of service and support exist outside of CSC as well – in the form of Individual Placement and Support (IPS) and Vocational Rehab (VR)
  - Availability Across NC - UNC Center for Excellence in Community Mental Health
  - NC DHHS: Employment and Independence for People with Disabilities

Medication Management for Recent Onset Psychosis

- The primary medications used to treat psychosis are the class of antipsychotic medications
- How clients and their families view and understand their medications can have a large impact on recovery as medications are important for reduction/remission of symptoms and sustained recovery.
- Without medication, the risk of relapse of schizophrenia is high
- There is risk with relapse:
  - Relapse can result in more treatment resistant symptoms as well as a less robust recovery than the initial episode [7]
  - Relapse is associated with risk of hospitalization, violent behavior/suicide, loss of jobs, and disruption in recovery[6]

General Approach to Medication

- Options should be explored collaboratively with a client (+/– family) considering things like side effect profiles, routes of administration, reviewed past medication trials, contraindications etc.
- A discussion around risks and benefits (informed consent) is very important.
- Many early psychosis clients will have a good response and require lower doses of medication.
- The goal is to always find the lowest effective dose.

How to Start a Patient on Antipsychotic Medication

How to Start an Antipsychotic

- Informed consent is required and ethical before starting a patient on an antipsychotic
  - Benefits are great and risks are also significant
  - Side effects are significant and can even be lethal, monitoring and management of side effects is important.

- General rule – start low, be conservative, and titrate slowly
  - Both youth and those with a first onset of psychosis are known to be particularly sensitive to side effects
  - They also tend to have higher rates of response than patients with more than 1 psychotic episode
  - Doses that are 50-60% of what is used chronic patient are often sufficient in this population

- Generally, second generation antipsychotics are better tolerated than first generation antipsychotics (such as haloperidol)

- Aripiprazole and risperidone are common antipsychotics to use in first episode psychosis
  - They are second generation antipsychotics that generally have more tolerable side effect profiles than other antipsychotics, including other second-generation agents
  - They have different formulations, including long acting injectables (LAIs), that can be useful to improve adherence, including in first episode patients

Example Aripiprazole and Risperidone Initiation Schedules for First Episode Psychosis

Medication	Week 1	Week 2	Week 3	Week 4
Aripiprazole (10-15mg typical daily range)	2.5mg	5mg	7.5mg	10mg
Risperidone (2-6mg typical daily range)	0.5mg	1mg	1.5mg	2mg

Exacerbation and Relapse of Psychosis

- There are many factors that can lead to exacerbation of psychosis including:
  - Stress, substance use, poor sleep, etc.
- Poor adherence or discontinuation of antipsychotic medication is also a big risk factor for relapse of psychosis
- With each episode of psychosis, symptoms can become more difficult to treat and functional recovery may not be as robust
- It is important to talk with patients and families about the risks/benefits of medication adjustment and discontinuation including the risk for relapse.

Antipsychotic Side Effect Monitoring & Management

Side Effects

- Side effects can be one of the main reasons clients will stop their medication.
- We try to minimize side effects by starting with low doses, titrating slowly, and choosing medications with preferable side effect profiles.
- If side effects do occur, we try our best to manage them and/or offer alternatives if the side effects are intolerable.
- Some side effects can mimic negative symptoms and cognitive symptoms that are inherent to their psychosis diagnosis.

Side effects to monitor

- Weight gain and related metabolic effects such as dyslipidemia & diabetes
- Hypotension
- Sedation
- Anticholinergic symptoms
- Hyperprolactinemia
- Extrapyramidal symptoms (EPS)
  - Tardive dyskinesia (TD), Akathisia, and Parkinsonism
  - Acute dystonia (medical emergency!)
- Seizure (medical emergency!)
- Cardiac effects (QT prolongation) and/or cardiomyopathies
- Sexual dysfunction
- Falls
- Neuroleptic Malignant Syndrome (medical emergency!)

Side effect emergencies

- **Neuroleptic Malignant Syndrome** is a life-threatening medical emergency.
  - Patients with NMS should be sent to the emergency department immediately.
  - Patients should immediately stop taking anti-psychotic medication.
  - A careful switch to a different anti-psychotic medication is necessary.
- **Acute dystonia** is a life-threatening medical emergency.
  - Patients should be sent to the emergency department immediately.
  - Patients should immediately stop taking anti-psychotic medication.
  - A careful switch to a different anti-psychotic medication is necessary.
- **Seizures** may be life-threatening and are a medical emergency.
  - 911 should be called; they can take measures to break seizures or bring the patient to the emergency department for further care
  - Patients should immediately stop taking anti-psychotic medication
  - A careful switch to a different anti-psychotic medication is necessary.

Example side effect monitoring schedule*

Side Effect	**Initial**				**Maintenance**	
EPS and TD	Weekly until dose is stable for 2 weeks				If at elevated risk of developing movement disorder – every 3 months All others – at least every 12 months	
Metabolic Monitoring	*Baseline*	*6 weeks*	*3 months*	*12 months*	*Every 3 months*	*Every 12 months*
Personal and family history of diabetes, hypertension, cardiovascular disease	x					x
Smoking status, physical activity, diet	X	X	X		X	
Weight and BMI	X	X	X		x	
Blood Pressure	X	X	X		x	
Fasting glucose or HbA1C	X	X	X	X		X
Lipid profile (fasting or non-fasting)	X		X	X		x
EKG for QT prolongation	X		X	X		x

*from uptodate.com

AIMS- Abnormal Involuntary Movement Scale

- Structured instrument to monitor for the developing of tardive dyskinesia

- There should be a baseline assessment and then repeated every 6-12 months

- Easily accessible online and easy to administer
  - ABNORMAL INVOLUNTARY MOVEMENT SCALE (AIMS) (aacap.org)

Side Effects

- Thankfully, the more severe side effects are quite rare, especially when we are starting with low doses and titrating slowly. It is important to be aware of them, but they should also not be barriers to recommending treatment

- With the more common side effects, they can occur but by starting low and titrating slowly we can hopefully minimize the occurrence. There are also low risk and effective strategies to treat/manage side effects if they do occur

- By having a good monitoring schedule in place, you can reassure your client that we are watching for these and will address them when they do occur

Obtaining Informed Consent for Antipsychotic Medication

Informed consent for antipsychotic use

- Informed consent should be pursued with any medication

- With antipsychotics, a detailed informed consent process is particularly crucial as there are serious side effects
  - Side effects can be life-altering or even lethal.

Informed consent steps 1–2

1. **Introduction to Antipsychotic Treatment**
   - Goals: Describe the goals of treatment, such as symptom reduction, improved quality of life, and prevention of relapse.

2. **Potential Side Effects**
   - Common (such as): Weight gain, akathisia, sedation, dry mouth, and constipation.
   - Serious (such as): Increased risk of metabolic syndrome, tardive dyskinesia, acute dystonia (emergency), and neuroleptic malignant syndrome (emergency).

Informed consent steps 3-4

3. **Duration of Treatment**
   - Acute Phase
   - Maintenance Phase

4. **Risks of Not Taking Antipsychotics**
   - Relapse: Increased risk of relapse and hospitalization.
   - Symptom Worsening: More severe and uncontrolled symptoms.
   - Impact on Life: Discuss how untreated symptoms can affect relationships, work, and overall quality of life.

Informed consent steps 5-6

5. **Informed Consent Process**
   - Discussion: Ensure that the patient understands the purpose, benefits, and potential risks of treatment.
   - Questions: Encourage the patient to ask questions and express any concerns they may have.
   - Decision: Reinforce that the decision to start, continue, or stop medication should be made collaboratively, respecting the patient's autonomy and preferences.

6. **Support and Resources**
   - Provide information on additional resources, such as support groups (NAMI) and educational materials to help the patient and their family make an informed decision and manage their condition effectively.

More Information and Resources on Early Psychosis Education

- For more information and resources, visit our website: https://www.med.unc.edu/psych/epi-nc/scope-nc/

- These lectures will also be available on-demand on AHEC soon!

- Contact E-PROMPT for further education and resources

E-PROMPT

Early Psychosis Resources: One-on-One Mentoring and Professional Training

E-PROMPT

Early Psychosis Resources: One-on-One Mentoring and Professional Training

- What is E-PROMPT?
  - A free education and mentoring resource available to any clinician in North Carolina interested in early psychosis care education.
- How does E-PROMPT work?
  - Submit a question via the online submission form
  - An expert will respond within 3-5 business days with education and resources
  - You may also be prompted to sign up for virtual office hours for more extended conversation and mentoring depending on the question.

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E-PROMPT

Early Psychosis Resources: One-on-One Mentoring and Professional Training

- What can I ask?
  - Anything related to caring for the early psychosis population! Examples are:
    - What is coordinated specialty care and how do I refer?
    - Guidance on the medical work-up for early psychosis
    - Information on the differential diagnoses of causes of early psychosis
    - Guidance on recommended screening and monitoring tools
    - Guidance on therapy resources for early psychosis

- Can I discuss a specific case with E-PROMPT?
  - E-PROMPT cannot accept HIPAA protected information or comment directly on patient care.
  - E-PROMPT is not a consult service.
  - Instead, callers can learn through discussing how one would work-up and treat theoretical cases reflective of their real-world experiences

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Looking for More Information?

Ready to ask a question? Visit
https://go.unc.edu/EPROMPTQS
Or scan this QR code

For more information, visit our website:
go.unc.edu/E-Prompt

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Or email us at: scopenc@med.unc.edu

References

1. Conditions for Further Study. (2024). Diagnostic and Statistical Manual of Mental Disorders. https://doi.org/10.5555/appi.books.9780890425787.Conditions_for_Further_Study
2. Keepers GA, Fochtmann LJ, Anzia JM, Benjamin S, Lyness JM, Mojtabai R, Servis M, Walaszek A, Buckley P, Lenzenweger MF, Young AS, Degenhardt A, Hong SH; (Systematic Review). The American Psychiatric Association Practice Guideline for the Treatment of Patients With Schizophrenia. Am J Psychiatry. 2020 Sep 1;177(9):868-872. doi: 10.1176/appi.ajp.2020.177901. PMID: 32867516.
3. Kalinowski A, Ballon J. “Medical Workup for First-Episode Psychosis” In Intervening Early in Psychosis: A Team Approach, edited by Kate Hardy, Jacob Ballon, Douglas Noordsy, Steven Adelsheim, p133-149. Washington, DC: American Psychiatric Association Publishing, 2019
4. Skikic M, Arriola JA. First Episode Psychosis Medical Workup: Evidence-Informed Recommendations and Introduction to a Clinically Guided Approach. Child Adolesc Psychiatr Clin N Am. 2020 Jan;29(1):15-28. doi: 10.1016/j.chc.2019.08.010. PMID: 31708044.
5. Robinson DG, Schooler NR, Correll CU, et al. Psychopharmacological Treatment in the RAISE-ETP Study: Outcomes of a Manual and Computer Decision Support System Based Intervention. Am J Psychiatry. 2018;175(2):169-179. doi:10.1176/appi.ajp.2017.16080919
6. Kane J. M. (2007). Treatment strategies to prevent relapse and encourage remission. *The Journal of clinical psychiatry*, *68 Suppl 14*, 27–30.
7. Lieberman, J. A., Alvir, J. M., Koreen, A., Geisler, S., Chakos, M., Sheitman, B., & Woerner, M. (1996). Psychobiologic correlates of treatment response in schizophrenia. *Neuropsychopharmacology : official publication of the American College of Neuropsychopharmacology*, *14*(3 Suppl), 13S–21S. https://doi.org/10.1016/0893-133X(95)00200-W
8. Wright, A., Browne, J., Mueser, K. T., & Cather, C. (2020). Evidence-Based Psychosocial Treatment for Individuals with Early Psychosis. *Child and adolescent psychiatric clinics of North America*, *29*(1), 211–223. https://doi.org/10.1016/j.chc.2019.08.013
9. Zipursky, R. B., Odejayi, G., Agid, O., & Remington, G. (2020). You say "schizophrenia" and I say "psychosis": Just tell me when I can come off this medication. *Schizophrenia research*, *225*, 39–46. https://doi.org/10.1016/j.schres.2020.02.009