

# Early Psychosis Interventions of North Carolina



**EPI-NC**

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of North Carolina

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# Clozapine for FEP

EPI-NC  
Onboarding Presentation  
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# When to Consider Clozapine

- Clozapine can be a very effective medication for patients who have not responded to other antipsychotic trials.
- Per APA practice parameter guidelines, Clozapine should be offered and discussed following **two unsuccessful trials** of other antipsychotics.
- Discussion around clozapine should be started early, we do not want to delay initiating clozapine if it is indicated.

# Discussing Clozapine with Patients and Families

- Balance discussion around benefits and risks
- Discuss rare but life-threatening side effects and share with them how you plan to monitor for the development of them
  - Neutropenia – weekly ANC for the first six months
  - Myocarditis – weekly Troponin, CRP for the first 8 weeks + review of systems weekly for myocarditis
- See this [resource](#) for additional guidance

# Step 1

- Become clozapine certified with the Clozapine REMS system
  - <https://www.newclozapinerems.com/Public/home/Prescriber>

# Baseline Evaluation:

- Vital signs: blood pressure, heart rate, height, weight, BMI
- Review history including any concern for constipation, history of seizures, history of cardiac disease/arrhythmia, smoking status, review medication list for potential drug interactions
- Labs:
  - CBC with differential
  - CMP
  - A1c and lipid panel
  - ECG – evaluate for rhythm issues and QTc
- Patient then must be registered with [Clozapine REMS system](#)

# Example Outpatient Titration Schedules

- This can vary widely based on individual patient characteristics
- Generally, it is recommended to start low and titrate slowly

Example titration schedule:

<https://www.med.unc.edu/psych/cecmh/education-and-training/north-carolina-clozapine-network-nccn/clozapine-toolkit/>

# Early Monitoring for Side Effects

- REMS requires weekly ANC monitoring for neutropenia which must be entered into the system
- In addition to ANC, consider weekly Troponin and CRP for the first 8 weeks to monitor for early signs of myocarditis. BMP can also be obtained the first 8 weeks to monitor for acute interstitial nephritis.
- Consider orthostatic vital sign monitoring, if possible, daily during early titration
- Monitor for changes to frequency of bowel movements

## [Sample monitoring schedule](#)



# Clozapine Serum Levels

- Serum levels can be very helpful during the titration process.
- Consider obtaining an initial serum level once at 100mg oral daily dosage
- The serum concentration of 350 ng/ml is considered the mean threshold at which someone would respond to clozapine
- Trough levels should be obtained 12 hours after last dose to be most accurate
- Clozapine reaches a steady state after 5-7 days following a dosage change.

# Additional Resources

- The Clozapine Handbook, [Jonathan M. Meyer](#), *University of California, San Diego*, [Stephen M. Stahl](#), *University of California, San Diego*
- [North Carolina Clozapine Network](#)
- [Leveraging Knowledge of Clozapine's Pharmacodynamics and Pharmacokinetics to Improve Outcomes, SMI Adviser](#)
- [Motivating Clozapine Use: An Aid for Prescribers, Center for Practice Innovations.](#)