

# Promoting Best Practice: Development and Implementation of a Clozapine Toolkit in Inpatient Psychiatry

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## Background & Objective

- Clozapine, an atypical antipsychotic, is the gold standard for treatment resistant schizophrenia.<sup>1,2,3</sup>
- Clozapine's superior efficacy over conventional neuroleptics has been demonstrated in randomized controlled trials.<sup>4,5</sup>
- Clozapine use remains limited due to its side effect profile. An estimated 1% to 2% of clozapine-treated patients develop agranulocytosis<sup>6</sup>, while rates of myocarditis range from 0.06% to 3.88% with a mortality rate of 10 - 30%.<sup>3,6,9</sup>
- Clozapine best practice standards recommend high pharmacovigilance and close monitoring systems.<sup>1,2,3</sup>
- Prior to project roll-out, clozapine utilization and monitoring were not yet standardized at Vancouver General Hospital.



Our goal is to describe the development and implementation of a clinical tool kit to promote evidence-based prescribing, monitoring, and care of individuals treated with clozapine in inpatient psychiatry.

## Methods



### Setting

The clinical tool kit (CTK) was co-developed by interdisciplinary teams at St. Paul's Hospital and Vancouver General Hospital (VGH). The CTK was implemented in the Acute Mental Health Program at VGH in 2018.

### Theoretical Framework

- Action research is a systematic process of inquiry conducted by and for those taking action, in collaboration with a researcher or group of researchers.<sup>10</sup>
- It is a methodology commonly used to promote transformative change in healthcare environments.<sup>10</sup>



### Development Strategy

1. **Planning:** Literature Review, Chart Audit, Clinical Consultations.
2. **Acting:** Stakeholder engagement, operational planning, staff training, tool implementation, and in person support.
3. **Evaluation:** Currently underway.
4. **Reflecting:** Ongoing Activity.



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## Outcomes

### 1. Literature Review

Figure 1. Monitoring Guideline Recommendation<sup>11-16</sup>

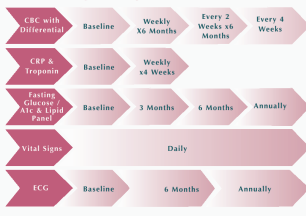


Figure 4. Bloodwork Frequency



### 2. Pre-Toolkit Chart Audit

Figure 2. Proportion of Admissions Adhering to Guideline for Baseline Orders

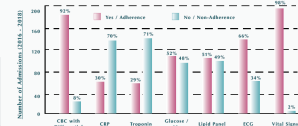
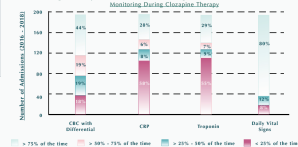
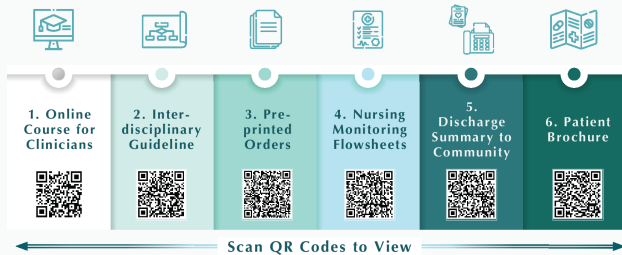


Figure 3. Proportion of Admissions Adhering to Best Practice Guidelines for Monitoring During Clozapine Therapy



### 3. Clozapine Toolkit: Six Key Components



### 4. Clozapine Toolkit Implementation



1. **Identify barriers and facilitators:** Workload, competing priorities, resources, burnout
2. **Toolkit education:** Online course, in-person training, Q&As
3. **Toolkit launch:** Communications memo, in-person practice support, ongoing monitoring

## Conclusions

1. **People Matter:** engage with clinicians at all stages – acknowledge challenges and invite input.
2. **Consider Risks:** evaluate potential risks and take steps to mitigate them.
3. **Invest in Ongoing Education:** plan to offer “refreshers” and develop a plan to educate new staff.

## References

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