

# Following Clozapine into the community: review of clozapine monitoring in community clinics

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## Background

Treatment in the community is a core pillar of mental health policy, with models of care increasingly developed and delivered in this setting. Over the last two years at Logan Hospital we have engaged with community stakeholders to deliver structured pharmacist reviews for community mental health clients. One area where pharmacists are involved is within a clozapine clinic.

## Aim

To assess outcomes of hospital pharmacist involvement in a community clozapine clinic.

## Methods

We developed an audit tool for clozapine monitoring based on State<sup>1</sup> and National (RANZCP)<sup>2</sup> guidelines. We then retrospectively audited the clozapine monitoring for clients at two community clinics (n = 61) over a calendar year. The first clinic had a pharmacist doing six monthly medications reviews. The second clinic did not.

We only included maintenance clients (i.e. beyond the first 6 months of clozapine therapy) and clients who remained at the clinic for the duration of the audit period.

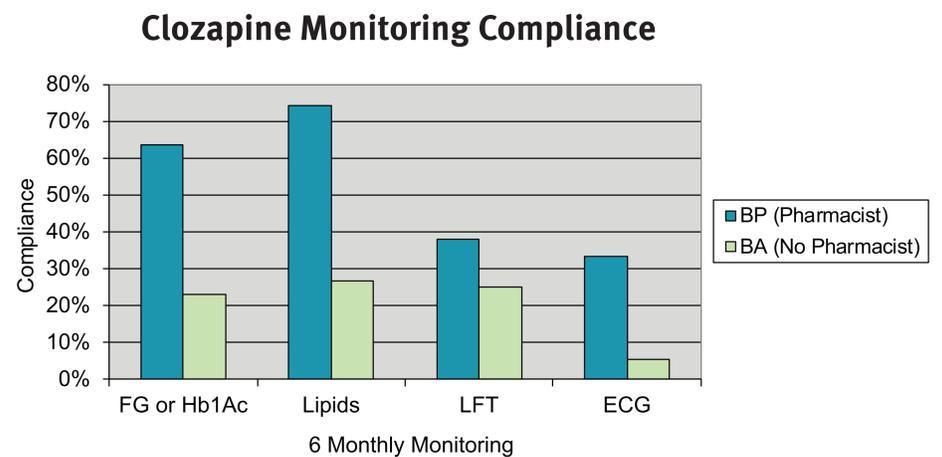
## Results

Both clinics had high rates of compliance with the physical observation monitoring parameters. The main difference between the two clinics was seen in the pathology and ECG monitoring. The clinic that did have a pharmacist had higher rates of compliance to key metabolic monitoring domains (see figure 1): fasting lipids (74% vs 27%), fasting glucose (66% vs 23%) and ECG (33% vs 5%). As expected neither clinic routinely monitored CrP and Troponin for maintenance clients as these were new recommendations replacing yearly echocardiograms.

## References

1. Safe and quality use of clozapine therapy in mental health services [Internet]. Queensland: Queensland Government; 2016 [cited 6 March 2018]. Available from: [https://www.health.qld.gov.au/\\_\\_data/assets/pdf\\_file/0025/625354/qh-gdl-437.pdf](https://www.health.qld.gov.au/__data/assets/pdf_file/0025/625354/qh-gdl-437.pdf)
2. Royal Australian and New Zealand College of Psychiatrists clinical practice guidelines for the management of schizophrenia and related disorders [Internet]. Sydney: RANZCP; 2018 [cited 6 March 2018]. Available from: [https://www.ranzcp.org/Files/Resources/Publications/CPG/Clinician/CPG\\_Clinician\\_Full\\_Schizophrenia-pdf.aspx](https://www.ranzcp.org/Files/Resources/Publications/CPG/Clinician/CPG_Clinician_Full_Schizophrenia-pdf.aspx)

Figure 1



## Case 1

43 year old female with treatment resistant schizophrenia

- Primary concern is weight gain on clozapine (based on GASS)
- Pharmacist (review 4/10/2017) suggested metformin and tailored exercise routine (walking the dog)

Weight for CR



## Conclusion

Involvement of a trained hospital pharmacist in community-based clozapine clinics improves monitoring for metabolic adverse effects. Further research should focus on whether monitoring translates into improved physical health outcomes (see example in Case 1) and whether pharmacist reviews improve medication adherence to prescribed therapy.

## Abbreviations

- FG – Fasting Glucose  
LFTs – Liver Function Tests  
ECG – electrocardiogram  
GASS – Glasgow Antipsychotic Side-effect Scale  
CrP- C-reactive Protein  
RANZCP - Royal Australian and New Zealand College of Psychiatrists