

An Inpatient Review of Atypical Antipsychotic Use

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INTRODUCTION

- Antipsychotic medications are a class of medications used throughout Monash Health to treat psychotic disorders and for the relief of symptoms such as agitation and delirium.
- Second generation atypical antipsychotics are licensed by the Therapeutic Goods Administration (TGA) for the treatment of: schizophrenia and related psychoses, bipolar disorder, behavioral/disruptive disorders associated with autism, dementia or mental retardation.¹
- Post market experience with atypical antipsychotics has expanded resulting in a rapid increase in prescribing of off-label conditions such as anxiety, depression, insomnia and eating disorders.²
- This retrospective audit assessed usage of five select atypical antipsychotics in regards to the licensed or off-label indications for which they were prescribed.

AIM

To investigate off-label prescribing of atypical antipsychotics within Monash Health.

METHOD

A retrospective, single centre, cohort study of patients administered **aripiprazole, olanzapine, paliperidone, quetiapine or risperidone** between the months of October, November and December 2020.

Administration reports were drawn from electronic medical records (EMR) and analysed using Microsoft Excel. Three intern pharmacists were allocated administration data for 500-700 patients each, reviewing EMR documentation related to medication history and indication for patients administered one or more of these antipsychotics. Pivot tables were used to filter data determining the most common indications for which these medications were prescribed.

Intern pharmacists collected data against the following project outcomes:

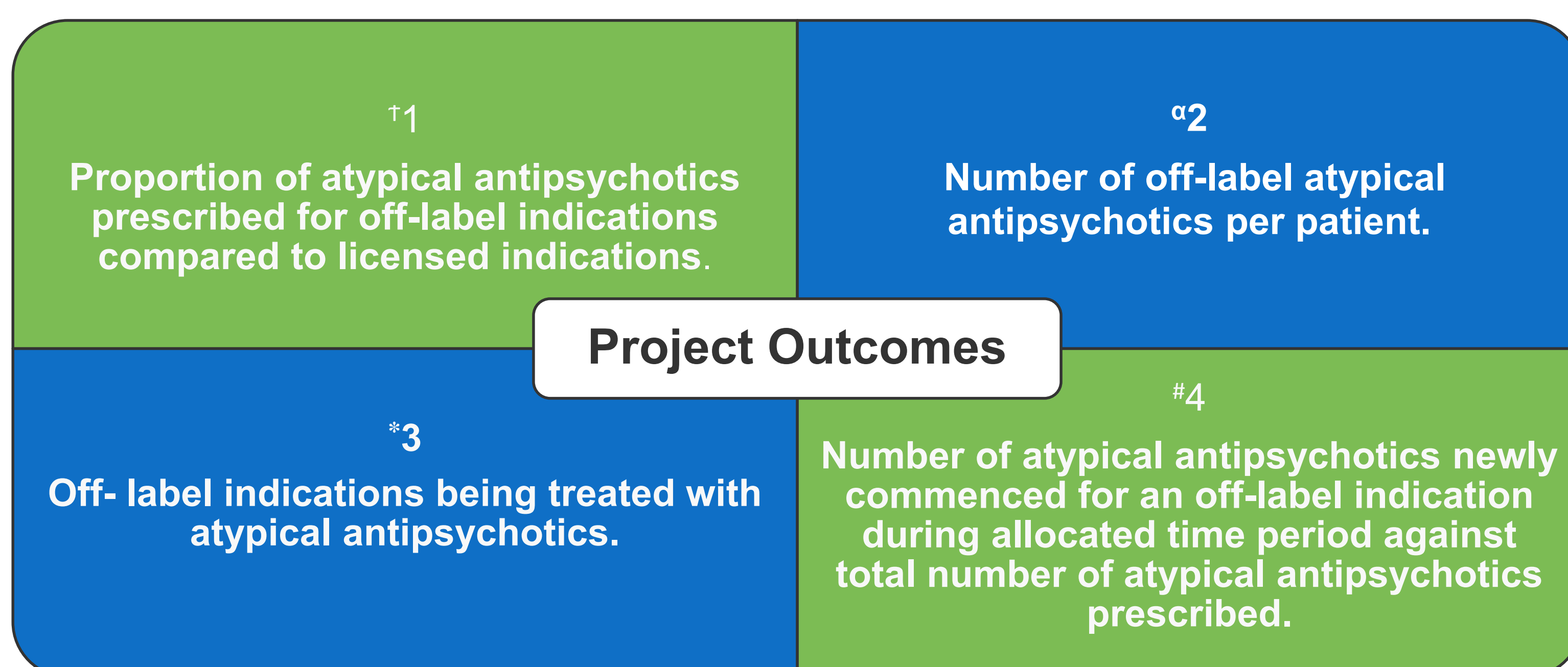


Figure 1: Research project outcomes.

RESULTS

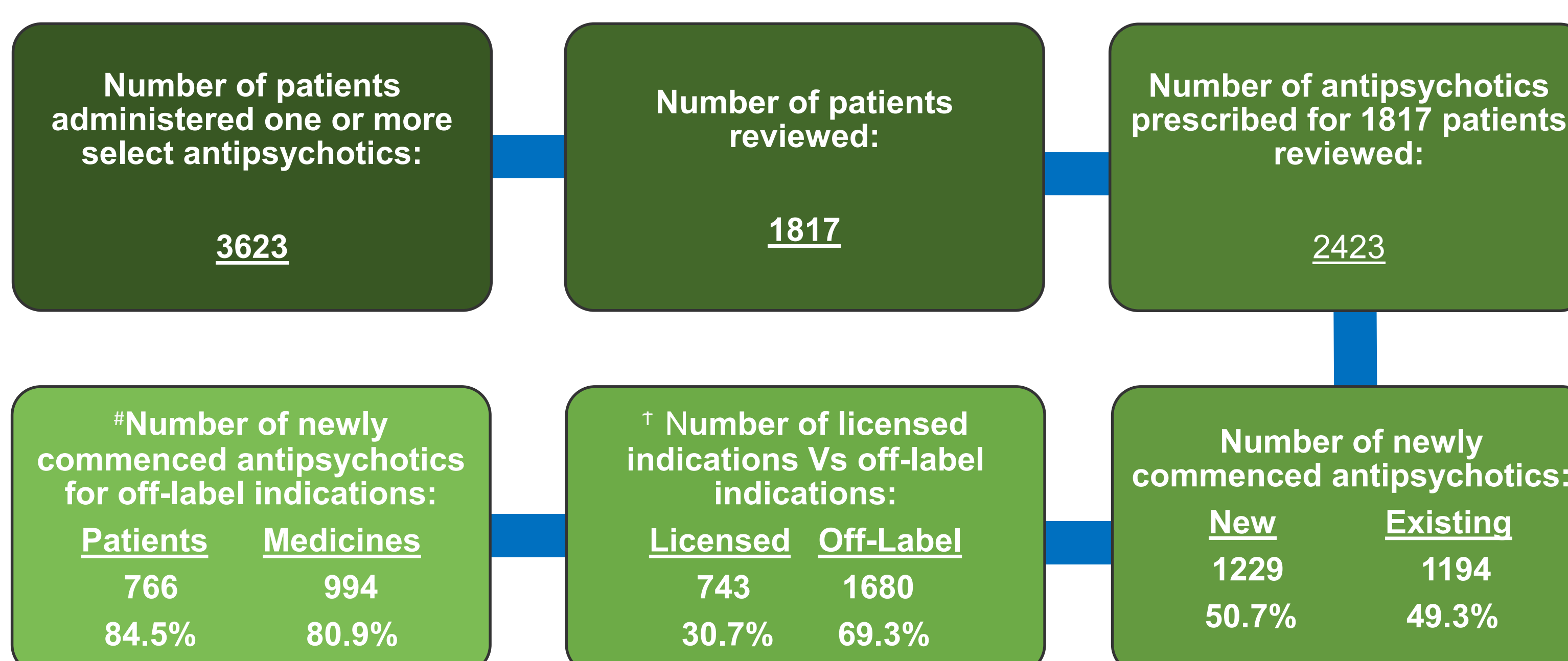


Figure 2: Summary of key findings

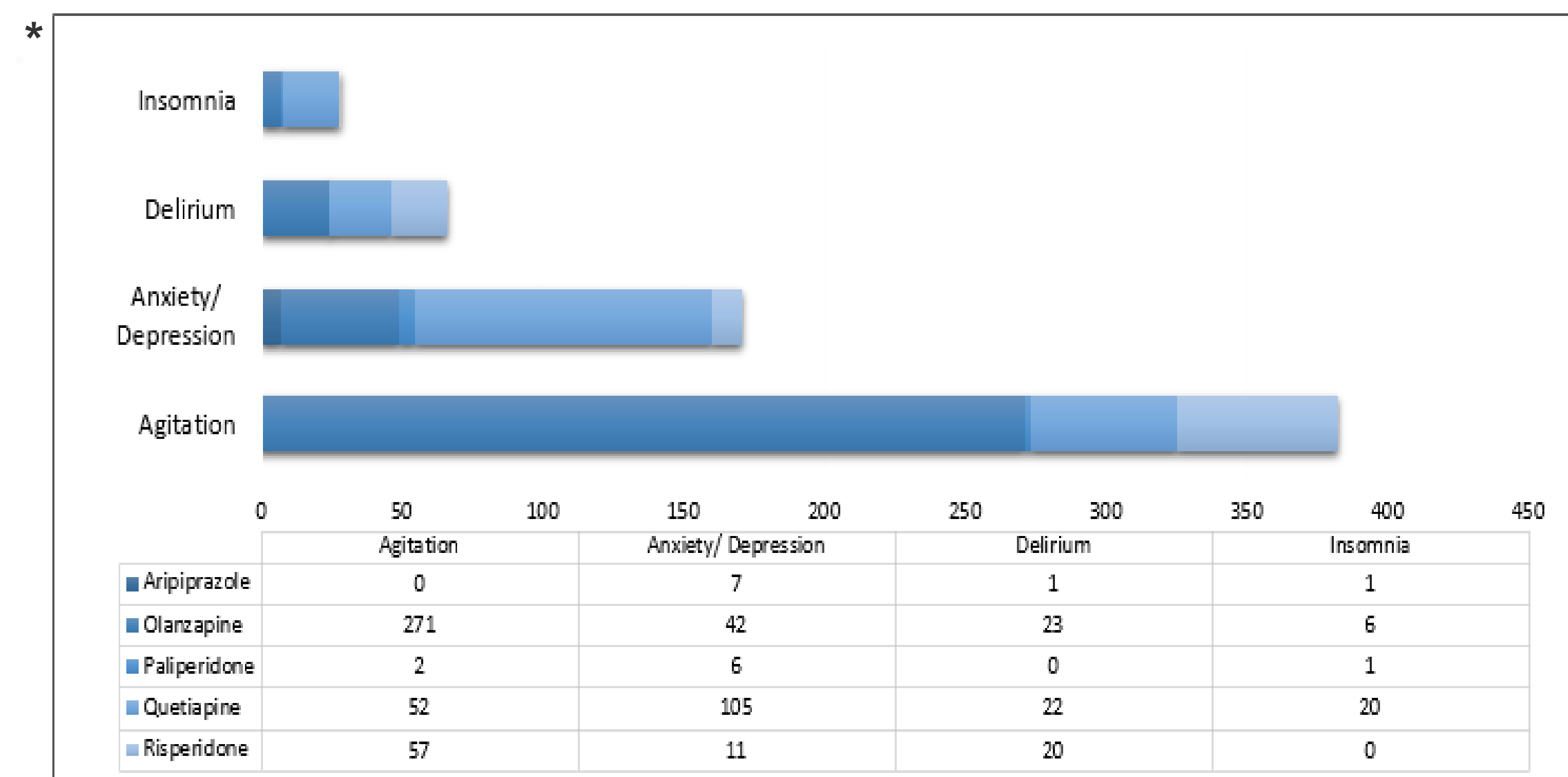


Figure 3: Most common off-label indications treated by newly commenced antipsychotics.

Half of all identified patients administered these antipsychotics were reviewed revealing patients were administered **1.33** antipsychotics per person and **0.92** off-label antipsychotics per person.⁴ Off-label indications accounted for **69.3%** of all indications while **80.9%** of newly commenced antipsychotics were for off-label indications. The five most common off-label indications included **insomnia, delirium, anxiety/depression and agitation**.

DISCUSSION

Study results revealed, of the total 994 antipsychotics newly commenced, 649 were used for the five most commonly treated off-label indications. High usage of olanzapine noted for agitation is attributed to the inclusion of olanzapine into the Monash Health Acute Behavioral Disturbance Clinical Guideline.

Study results are aligned with supporting literature. Prescribing rates of off-label indications for atypical antipsychotics may appear high, however, studies in New Zealand have quantified high rates of off-label prescribing stating 96% of prescribers have prescribed off-label atypical antipsychotics with 58% of prescribers doing so at least once a week for similar conditions.³

A large American meta-analysis estimated an increase of greater than 100% in prescribing of atypical antipsychotics for off-label indications over the space of 13 years with the study identifying varying levels of benefit and adverse effects with their use for off-label indications.⁴ While evidence is still growing for some conditions, a risk/benefit assessment should be carried out by the prescriber in collaboration with the patient and/or patient's decision maker prior to treatment and should be documented appropriately.^{5,6} It is pertinent that usage of antipsychotics are supported by evidence, informed consent is obtained and a clear plan for monitoring and evaluating outcomes is determined before prescribing such medications.^{5,6}

LIMITATIONS

- Only five atypical antipsychotics were analysed in this study which may not represent an accurate depiction of overall atypical antipsychotic usage at Monash Health.
- Intern pharmacists were only allocated two weeks to collect data resulting in analysis of a smaller population size than intended. A larger population size would increase the power of the study.
- The study period may not be long enough to accurately illustrate the true usage of atypical antipsychotics at Monash Health due to the rotational nature of prescribers with differing prescribing patterns.
- Documentation of indications on EMR was not verified for accuracy and was not always clear.

CONCLUSION

The usage of atypical antipsychotics for off-label indications has become more apparent in recent years. Further research in this area can help shape prescribing patterns, direct formulary changes and provide opportunity for ongoing pharmaceutical review and collaboration with prescribers ensuring best practice antipsychotic prescribing is achieved in line with the Australian Commission on Safety and Quality in Health Care, Comprehensive Care Standard.

REFERENCES

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