Implementing monitoring of patients on antipsychotic medication in primary care- a quality improvement project

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Aim : By April 2024, 50% of patients at Gillbrae Medical Practice will have all physical health parameters (BMI, BP, HR, HbA1c, serum lipids, U&Es, FBC, and LFTs) checked within the preceding 12-month period, in line with NICE, MPG, and SIGN guidelines.

Background

Atypical antipsychotics act on serotonin and dopamine receptors to treat severe psychiatric disorders like schizophrenia or bipolar disorder (BPD). Adverse effects, however, include weight gain, hypercholesterolemia, and increased risk of CVD[1].

Current guidance from NICE [2], SIGN [3], and the MPG [4] suggest annual monitoring of patients' physical health whilst on these medications.

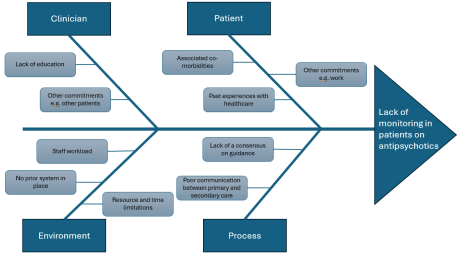

Figure 1- fishbone diagram for a lack of primary care antipsychotic monitoring

Methods

Patients included had a diagnosis of schizophrenia or BPD and were taking atypical antipsychotics. Parameters measured were BMI, BP, HR, FBC, U&Es, LFTs, and FBC.

A variety of QI tools including a fishbone diagram (fig. 1) were used.

Change ideas

Template
A template containing tests for monitoring added to EMIS

Summary
Document summarizing guidance and suggested structure

Alert
Alerts on patient records to prompt opportunistic testing

Clinics
Patients invited via text to attend clinics for monitoring

Results

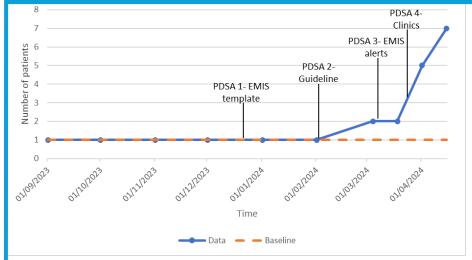

Figure 2- run chart showing the number of patients who had received monitoring for all parameters in the preceding 12-month period with change ideas labeled.

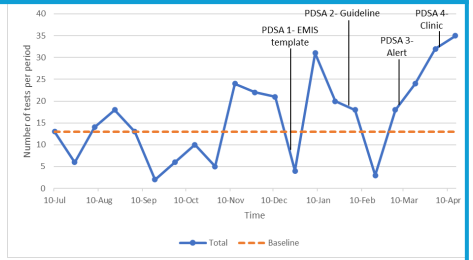

Figure 3- run chart showing the total number of tests for all parameters measured in the patient population per two-week period with change ideas labeled.

The number of patients who received all 8 parameters checked in the preceding 12-month period increased from 1/37 (2.7%) to 7/37 (18.9%) (fig. 2). The total number of tests per 2-week period increased from the baseline of 13 to 35 at the conclusion of the project (fig.3).

Of 9 patients that attended clinics, 4 required further intervention e.g. antihypertensive medication.

Conclusion and recommendations

Although the aim was not achieved, annual complete monitoring more than doubled over the test period. Implementation of monitoring in primary care is achievable.

1. Improving communication between primary and secondary care, especially when handing over care of patients.
2. Running dedicated clinics instead of opportunistic testing of patients in primary care.

References: [1] De Hert, M., Detraux, J., van Winkel, R., Yu, W., & Correll, C. U. (2011). Nature reviews. Endocrinology, 8(2), 114–126. https://doi.org/10.1038/nrendo.2011.156
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[3] Scottish Intercollegiate Guidelines Network [SIGN] (2013) SIGN 131. Available at: https://www.sign.ac.uk/assets/sign131.pdf (Accessed: 03/05/2024)
[4] Taylor, D. M. et al (2018). n Taylor, D. M. et al The Maudsley Prescribing Guidelines in Psychiatry. Hoboken, NJ: Wiley, pp: 37-38

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