



# MONITORING METABOLIC SIDE-EFFECTS OF ANTIPSYCHOTIC MEDICATION IN A HOMELESS POPULATION WITH SEVERE AND ENDURING MENTAL ILLNESS

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## BACKGROUND

Patients with serious mental illness have a two to three times higher average mortality compared to the general population. The majority of deaths in people with serious mental illness are attributable to physical health conditions. Metabolic syndrome (hypertension, obesity, raised fasting glucose and dyslipidaemia) is highly predictive of cardiovascular disease and Type 2 Diabetes. Many antipsychotics, particularly second generation, are associated with these adverse effects and the prevalence of metabolic syndrome in individuals on long-term antipsychotic treatment may be as high as >60%.

The Assertive Community Care Evaluation (ACCES) provides psychiatric care for individuals aged 18-65 experiencing homelessness with severe and enduring mental illness, with or without co-morbid substance misuse issues. THE ACCES patient cohort are a particularly vulnerable group in relation to physical health risk, as we know that homelessness is associated not only with increased mortality, morbidity, and substance use, but also presents significant barriers to accessing health care, including lack of coordination between healthcare services, lack of engagement and difficulty affording prescribed medication.

## OBJECTIVES

- To audit the degree of concordance with metabolic monitoring for patients prescribed antipsychotics by the ACCES team.
- To establish a process for performing metabolic monitoring for ACCES patients.

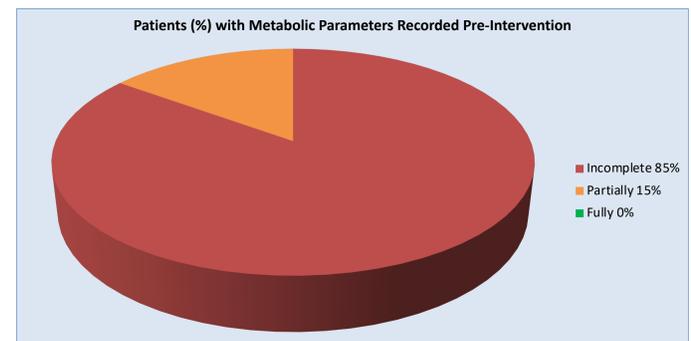
## METHODS

Standards were obtained from NICE (Psychosis and Schizophrenia in adults: prevention and management, 2014) which state that once established on antipsychotics the following parameters should be recorded annually: weight, pulse, blood pressure (BP), fasting glucose, HbA1C and fasting lipids. All ACCES team patients currently treated on antipsychotics were identified and their notes were reviewed for last recording of each metabolic parameter (May 2020). A metabolic monitoring proforma sheet and live Excel sheet of patients requiring metabolic monitoring were created.

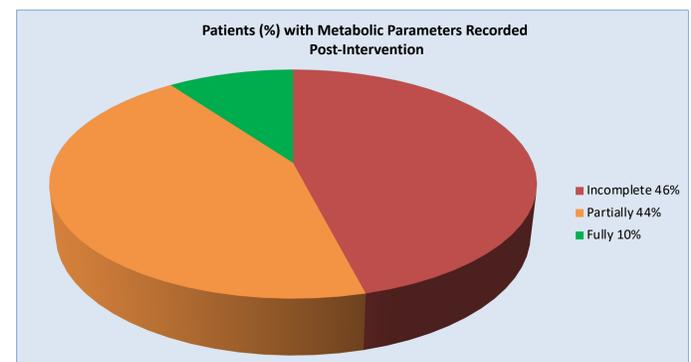
A team meeting was held to determine logistics of providing ongoing metabolic monitoring, including bloods, given our community location without direct access to phlebotomy. Opportunistic monitoring was selected as the best strategy given patients' often inconsistent attendance. Letters were sent to GPs to request results of monitoring if being carried out by GPs. The relevant necessary equipment (e.g. phlebotomy supplies, weight and height measurement devices) were ordered. Metabolic monitoring was commenced on-site during regular patient reviews carried out by registrar and nurse. Following the intervention, metabolic monitoring was re-audited (February 2021).

## RESULTS

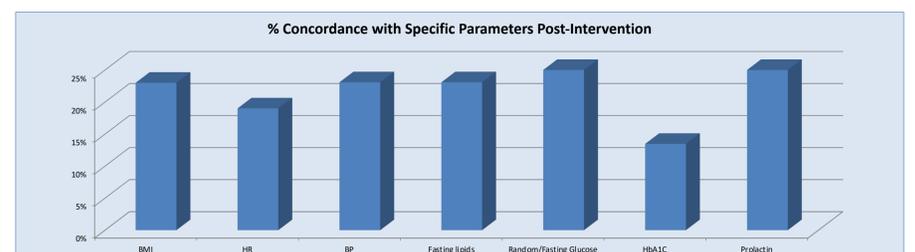
In May 2020, 47 ACCES patients were identified as being prescribed antipsychotics. 40 (85%) had had no metabolic screening in the past year recorded in their charts. 7 (15%) had had partial metabolic screening in the past year. No patients had had full metabolic screening in the past year.



In February 2021, 52 patients were identified as being prescribed antipsychotics. Following intervention, 28 patients (54%) had had full or partial metabolic screening completed.



Post-intervention, prolactin level (25%) and blood glucose (25%) were the parameters with the highest concordance (25%), followed by weight (23%), BP(23%), fasting lipids (23%), heart rate (19%) HbA1c (13%)



## CONCLUSIONS

Our patient cohort represent a particularly at-risk group due to social exclusion, oftentimes poor engagement with GP, and co-morbid alcohol and substance misuse. However, our findings show that only a minority of those prescribed antipsychotics are screened for metabolic syndrome, and therefore potentially remediable causes of poor physical health remain undetected and untreated. This audit and intervention improved our clinical practice towards best practice recommendations.