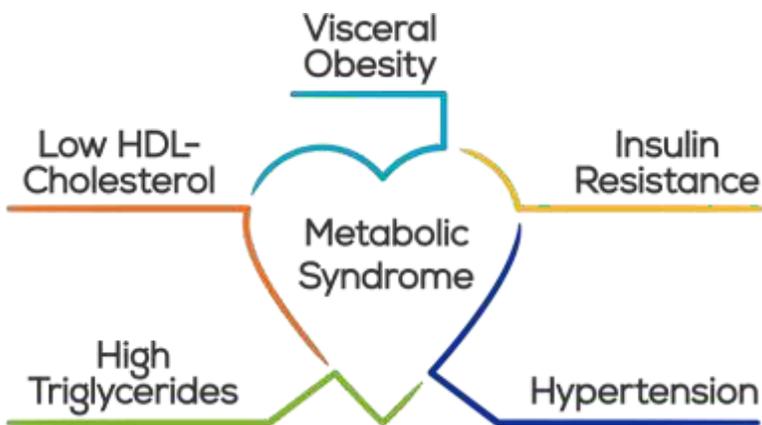


# Prevalence of Metabolic Syndrome in a Continuing Care Mental Health Unit : Completion of Audit Cycle

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## Background:

Those with severe and enduring mental illness die, on average, 20 years earlier than their peers. Death due to cardiovascular disease is a significant contributor to this excess mortality. Metabolic syndrome is an important risk factor for cardiovascular disease.

In 2018, an audit cycle was initiated to assess the prevalence of metabolic syndrome within a residential centre supporting those with severe and enduring mental illness.

Interventions after the first arm included : dietician input at an individual and center level, review of psychotropic medication and a system for recording metabolic syndrome parameters was put in place as part of 6 monthly physical reviews with collaboration with the primary care physician.

## Objectives / Aims:

To complete the audit cycle and determine whether metabolic syndrome prevalence has reduced.

## Methods:

Retrospective chart review of all residents in the facility who are on antipsychotic medication for parameters of metabolic syndrome over the last 6 months.

13 of the 18 residents originally assessed remain in the centre and 2 others have joined the cohort recently, with their parameters noted also.

Metabolic syndrome is diagnosed by the presence of 3 or more of the following as per NCEP –ATP III criteria:

1. Waist circumference > 102cm in men, > 88cm in women
2. Elevated triglycerides  $\geq 1.7$ mmol/l
3. Low HDL cholesterol < 1.03mmol/l in men, < 1.29mmol/l in women
4. Raised blood pressure  $\geq 130/85$ mmHg or treatment for previously diagnosed hypertension
5. Impaired Fasting Glucose  $\geq 6.1$ mmol/l or previously diagnosed type 2 diabetes.

## Results:

Total number of participants 15 residents, 10 males and 5 females.

Records were complete for all of them.

## Results Cont.

In the first part of the audit cycle in 2018, 5 of the current cohort were found to have metabolic syndrome.

Follow-up in 2020 show one of those residents no longer fulfil the criteria for metabolic syndrome. 2 additional residents fulfilled the criteria, by virtue of increased waist circumference in one and increased triglycerides in another.

One positive finding was an improvement in HDL and TGA scores in 4 of the second cohort yet his was not sufficient to move them from metabolic syndrome status.

## MS PARAMETERS



## Conclusions:

There is an increased focus on physical health issues within this continuing care cohort. However, interventions to date have not yielded a consistently positive impact.

Potential negative influencers include COVID-19- with restrictions and disruption of social, activity and well-being programmes. A multi-disciplinary approach likely would be important ongoing. The lack of OT availability for social, activity and well-being programme may be contributing to outcomes here.

Potential future work includes work towards more integrated and individualised physical and mental healthcare. Supporting a shift in culture to this end is important. Liaising with private / voluntary sector re accessing e.g. exercise equipment, should be considered local and possibly regionally and nationally.

One Limitation to this audit is the small number of included participants yet it remains reflective of the actual uniqueness of similar clinical settings/centres.

## References:

1. Maj M. Physical health care in persons with severe mental illness: a public health and ethical priority. *World Psychiatry* 2009; 8: 1–2.
2. Barnes TRE,Bhatti SF, Adroer R, et al. Screening for the metabolic side effects of antipsychotic medication: findings of a 6- year quality improvement programme in the UK. *BMJ Open* 2015;5:e007633. doi:10.1136/bmjopen- 2015- 007633

## Declarations:

Permission to carry out the audit and present its results was obtained from Dr.Ruth Collins ,Clinical director-NLMHS.