

# Reducing risk of metabolic syndrome for persons with severe mental illness.

Shane Manton  
CNS  
Rehabilitation Service

# Why do we need to address metabolic risk factors?

## Evidence base:

- People with a psychotic illness die up to 25 years earlier than the general population (Parks et al, 2006). Two thirds of these deaths are from cardiovascular, pulmonary or infectious diseases (Brown 1997). The risk of dying prematurely is between the age of 25 and 44 years with a diagnosis of psychosis is 6.6 times the risk in the general population (Saha et al, 2007). This increase in morbidity and mortality has a number of causes, including weight gain, sedentary lifestyle, poor diet and smoking. Treatment with anti-psychotic medication has been clearly linked with weight gain and obesity, hyperlipidaemia, insulin resistance, hypertension and metabolic syndrome, which often develop within 12 weeks of commencing the medication (Curtis et al, 2015).
- People with a diagnosis of schizophrenia and who are being treated with anti-psychotic medications also have a four-fold higher prevalence of developing metabolic syndrome (Mets) than the general population (Schmitt 2018, Lee 2020). In recent years, Mets and cardiovascular disease (CVD) have become a serious concern for multidisciplinary treatment of people with schizophrenia. Metabolic syndrome (Mets) is a constellation of different identified risk factors, including central obesity, high blood pressure, high blood glucose levels and abnormal cholesterol and triglyceride levels (Dayabandara 2017), all of which are independent risk factors for developing cardiovascular disease.

# Metabolic Screening Process:

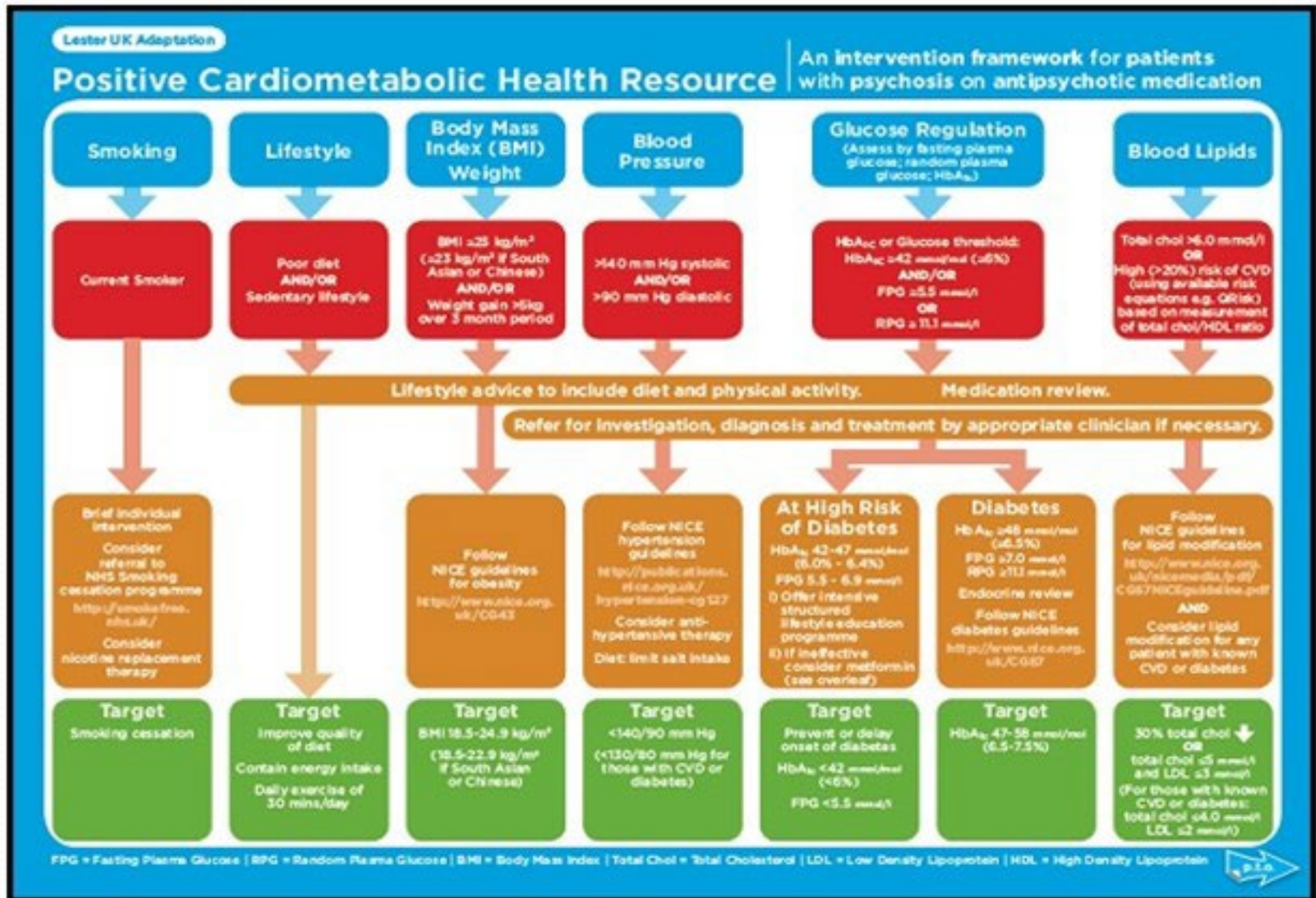
- According to the new International Diabetes Federation definition: for a person to be defined as having the **metabolic syndrome**, they must have:
- Central obesity -defined as waist circumference  $>94$  cm for men and  $>80$  for women.

Plus any **two** of the following:

- Raised triglycerides
- Reduced high-density lipoprotein cholesterol
- Raised blood pressure or previous treatment for hypertension
- Raised fasting plasma glucose or previous diagnosis of type 2 diabetes



# Risk Factors for Metabolic Syndrome and Intervention process- Lester tool:



# What is Making Every Contact Count? (MECC)



- MECC is a health behaviour change framework and implementation plan for health professionals in the Irish health service. The purpose of this plan is to address and support client positive lifestyle behaviour change to improve health with the aim of chronic disease prevention.
- Working in mental health our client group are at greater risk of chronic diseases such as cancer, cardiovascular disease, COPD and diabetes in comparison to the general population. Chronic disease represents 60% of deaths worldwide and 76% of deaths in Ireland.

# Health Behaviours Reviewed In MECC

**MAKING EVERY CONTACT COUNT**



- At least 42% of cancers can be prevented and healthy lifestyle behaviours can be a significant contributing factor.
- 80% of heart disease, stroke and type 2 diabetes can be prevented through a healthy diet, regular physical activity, reduction in alcohol consumption and avoidance of smoking and tobacco products.
- 23% of the population smoke, 19% smoke daily, 4% occasionally. 59% are trying to, planning to or thinking about quitting.
- 37% of drinker's binge on a typical drinking occasion with 29% not considering themselves binge drinkers but drinking 6 or more standard drinks once a month.
- 65% are aware that people should be active for a least 150 min a week.
- 56% think they undertake a sufficient level of PA
- A recent study suggests that people with psychosis spend almost 13hrs a day being sedentary, and that many patients fall within the bottom 15-35% of activity levels of the general population
- 27% of the population eat the recommended fruit and veg (at least 5 portions)
- 60% consume snack foods or sugar- sweetened drinks daily

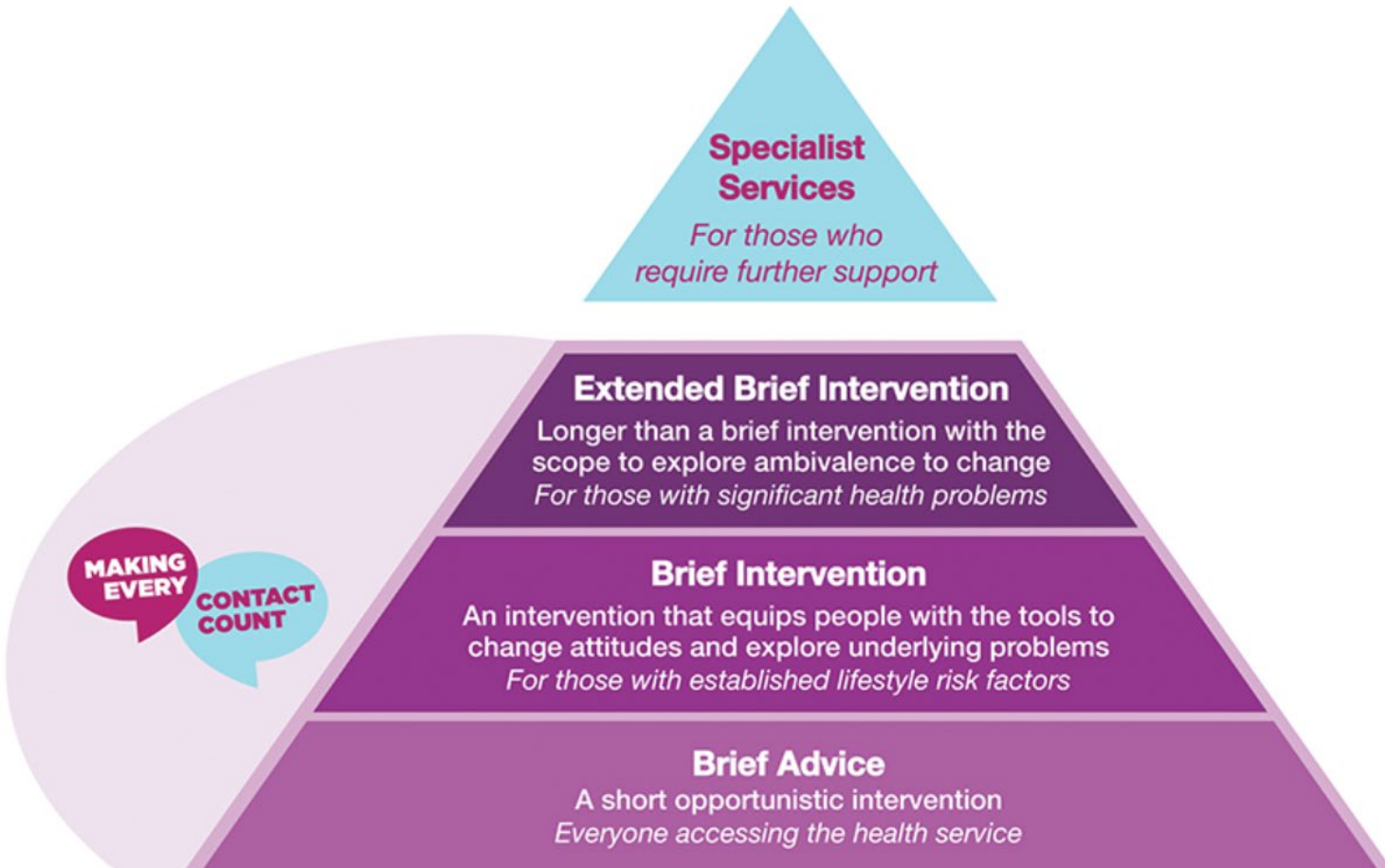
# SMOKING PREVALENCE: GEN POP V MI

**Series 1**





# Making Every Contact Count (MECC)



# A collaborative approach:



# Developing Interventions

## Launch-PAD

- 9 week health and lifestyle program.
- 1hr educational session followed by an exercise session.
- Week 1: introduction/physical assessment and goal setting.
- Week 2: Nutrition 101
- Week 3: Physical activity 1
- Week 4: Physical activity 2
- Week 5: Medical Presentation on Physical Health
- Week 6: Occupational Therapy Session
- Week 7: Psychology session on motivation
- Week 8: Community Connector. Engaging local resources.
- Week 9: Final week. Course review, goal review and presentations.

# The vision...

## Develop a pathway

- That will address the physical needs of clients at risk of metabolic syndrome within our service and create a care pathway aiming for prevention/management of Mets.
- That will become a part of routine practice within mental health and a sustainable resource.

## Person Centred Care

- Empowering clients to improve their quality of life by addressing both physical and mental health needs simultaneously with MDT support.
- Reduce barriers that inhibit clients from living a healthy lifestyle when living with mental illness.

## Collaborative partnerships

- Continue to utilise community supports to ensure sustainability and further drive service development within HSE.
- To increase the options that enable clients to engage in healthy lifestyles and physical activity in their local community.



Thank You  
For Listening