



## A pilot randomised controlled trial of interventions to promote adoption and maintenance of physical activity in adults with mental illness

**Background:** People with mental illness have higher rates of chronic disease than the general population. *Moderate-to-vigorous physical activity (MVPA)* can prevent many of these conditions and improve mental health; however, people with mental illness tend to have low levels of MVPA. It is unclear how to best promote MVPA in people with mental illness.

**Aim:** To evaluate the impact of two interventions to promote adoption of MVPA in people with mental illness.

### Methods



#### Motivational intervention (MOT)

- 8-weeks
- One session/week
- 60-min group sessions
- Health literacy
- Goal setting
- *Garmin fitness trackers*



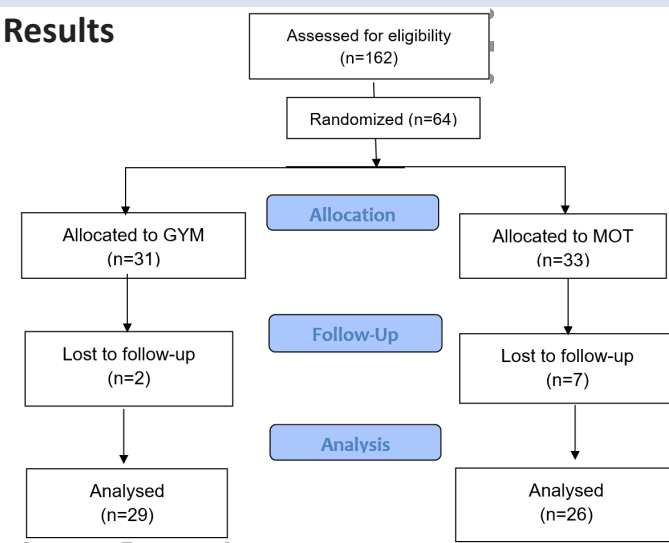
#### Exercise instruction (GYM)

- 8-weeks
- One session/week
- 60-min group sessions
- Exercise physiologist
- Gym education
- Aerobic and resistance
- *Free gym membership*

**Primary outcome:** Accelerometers worn continuously over 8-weeks to measure MVPA.

**Eligibility:** People who were receiving care from Metro North Mental Health Service, over 18 years of age, and inactive (<300 min/week of activity) were eligible.

### Results



#### Participants had:

- Mean age 35 years (SD=10)
- Most diagnosed with psychotic disorder (59%)
- High rates of obesity (85% BMI>25 kg/m<sup>2</sup>)

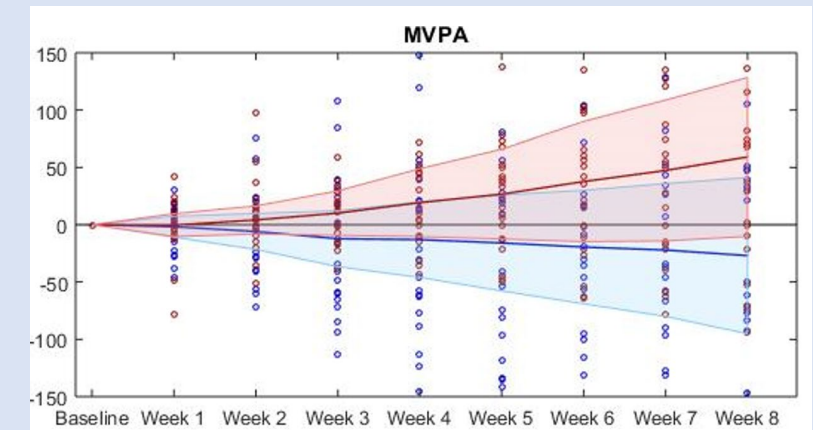
#### Attendance to interventions was similar between groups:

MOT: median 5/8 sessions (IQR= 2 to 7)

GYM: median 4/8 sessions (IQR=2 to 7)

A linear mixed effects model indicated a difference in the trend of accelerometer-measured MVPA in favour of **MOT** (red below) compared with **GYM** (blue)

**Group\*Time effect: 2.06 (0.51 – 3.61) min/week, p=0.009**



**Conclusion:** Motivational coaching was more effective than exercise instruction at promoting MVPA, which could be feasibly implemented in mental health services. Combining practical exercise instruction with motivational techniques may further increase MVPA in this group.