# Research in the Spotlight



# The quality of exercise interventions in health and disease

If Exercise is medicine, why don't we know the dose? An overview of systematic reviews assessing quality of exercise interventions in health and disease.

### The Question:

• Objective is to determine how well exercise-based interventions are being reported in clinical trials within the health and disease space

#### What We Did:

• Overview of systematic reviews: Criteria for eligibility included reviews with any health condition if the study reported the quality of the exercise intervention by utilising either of the following templates - Consensus on Exercise Reporting Template (CERT) or Template for Invention Description and Replication (TIEieR).

#### What We Found:

- Exercise trials can be subject to higher risk of bias and therefore lower quality due to the inability to blind participants and intervention personnel
- Despite introduction of templates such as CERT and TIEieR and other checklists, detailed descriptions of exercise interventions remain poorly reported across all health and disease areas
- Completeness of reporting does not appear to have improved with time and utilisation of templates, despite high quality intervention reporting being crucial for research to practice
- Adherence and adverse events which are vital for intervention reliability and validity were poorly reported upon

## **Clinical Implications:**

- Despite exercise being a well-established positive intervention for a range of health conditions, it is often poorly reported upon. For clinical research to be translated to practice, it is important to understand what the intervention was, otherwise it is difficult to replicate and deliver
- At times, research doesn't clearly describe exercise utilised (with various exercise named differently), the use of pictures could be appropriate to consider for future studies to provide clarity
- To improve understanding of the 'dose' of exercise, studies regarding exercise interventions need to include completed checklists and utilisation of CERT or TIDieR templates in order for better understanding by clinicians and policy makers