

# Delirium Management: Let's get physical

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## Background

Multi-component, non-pharmacological delirium prevention and management strategies such as the Hospital Elder Life Program have been found to reduce the risk of delirium, prevent functional decline and reduce the risk of falls [1,2]. Inclusion of a physical training component to address the risk factor of immobilisation is recommended by experts [3,4,5].



**Our question:** To what extent is the individual component of physical training effective in preventing delirium or improving outcomes for patients with an established delirium in the hospital setting?

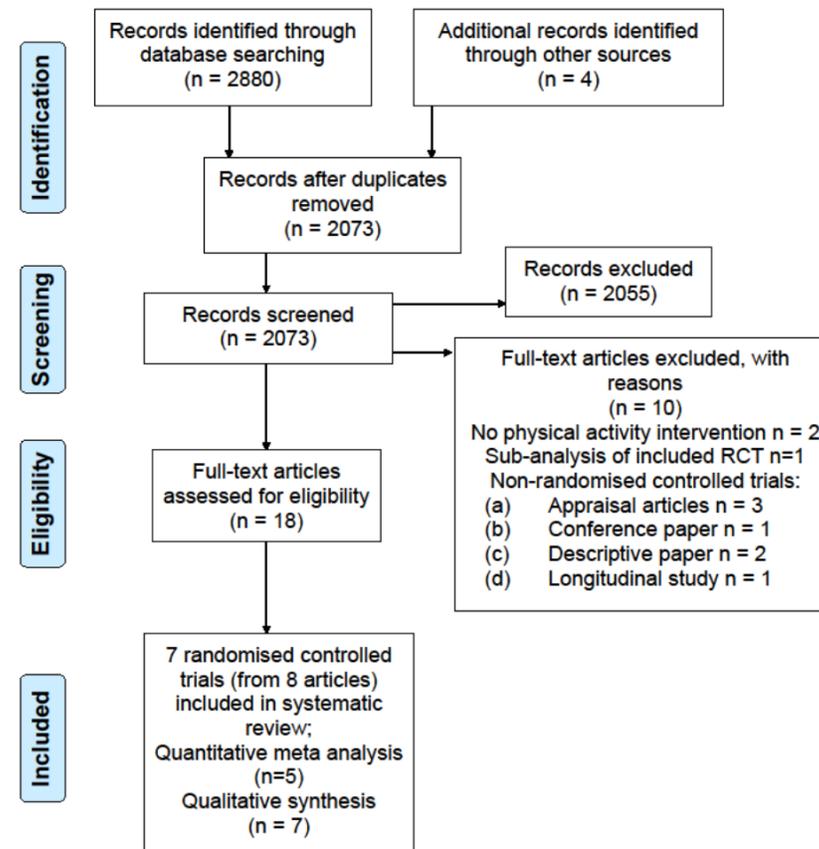
## Methods

A systematic review, qualitative synthesis and meta-analysis of randomised controlled trials was conducted. Trials were identified by searches of Medline, CINAHL, PEDro, Cochrane and Embase databases, combining key concepts of delirium and physical training.

<b>Population</b>	Adult patients in acute hospitals or inpatient rehabilitation
<b>Intervention</b>	Physical training, including as part of a multi-component intervention
<b>Control</b>	Nil control specified
<b>Outcome</b>	Prevention: Incidence of delirium Management: Duration and severity of delirium, together with hospital and health-related outcomes

## Results

### Study Selection



### My patient has a delirium... Should they “get physical”?

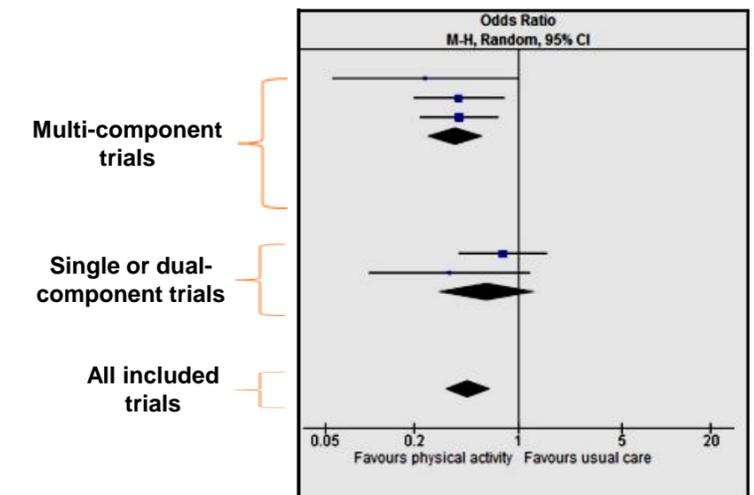
One multi-component trial found a significant reduction in duration of delirium for the intervention group compared to the control group [6]. There were no significant findings from the two other trials (one multi-component and one single component) in relation to managing an established delirium.

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### Should our patients “get physical” to prevent delirium?

The odds of developing delirium were significantly lower for those patients who received a physical training intervention compared with a control intervention [OR 0.46 (95% CI 0.32-0.65) p<0.01] (forest plot below). This did not remain the case on sub-analysis of single or dual component interventions.



### The impact for inpatient care

Physical training is recommended in the inpatient setting to help to prevent delirium. It may also reduce the duration of an established delirium. Evidence suggests physical training needs to be part of a multi-component strategy.

We still do not know what this physical training should look like (e.g. type, dosage) and the extent that physical training impacts on delirium prevention in comparison with other interventions remains unclear.

Work is underway at Eastern Health to start answering these questions. The first is a trial entitled “Up and Active” whereby the feasibility and effectiveness of group exercise in the acute general medical setting is being investigated.

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