MONASH University

Additional weekend allied health services reduce hospital length of stay in sub-acute rehabilitation wards but their effectiveness and cost effectiveness are unclear in acute general medical and surgical wards: a systematic review

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Background

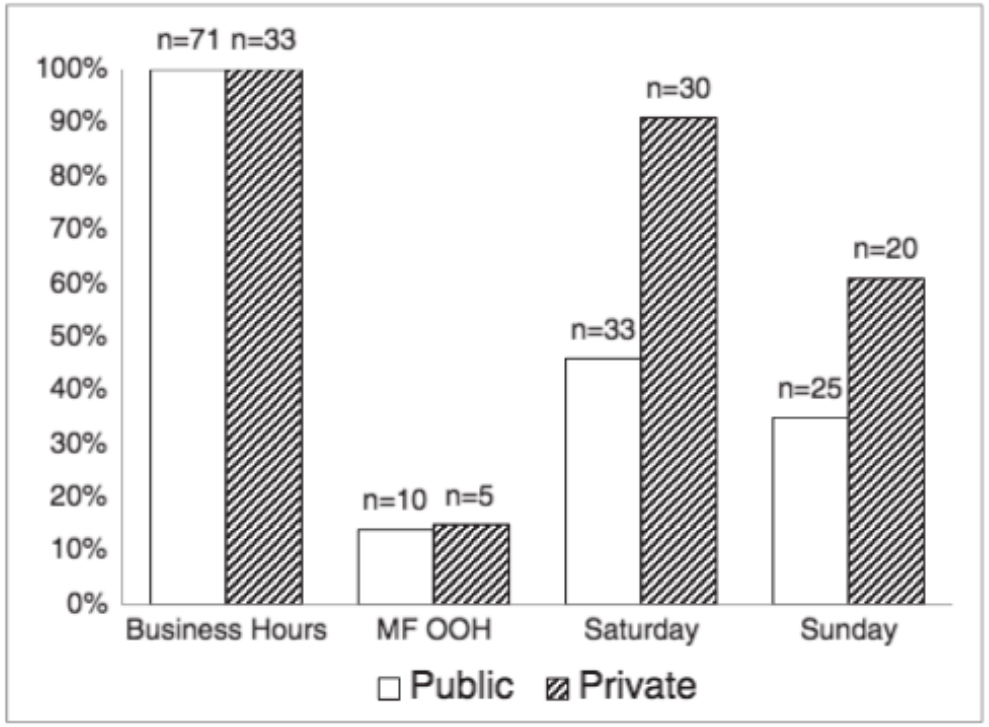


Figure 2. Public and private hospitals (%) providing physiotherapy services during business hours and outside of business hours. Hospitals could provide services in more than one category. MF OOH = Monday to Friday outside of business hours

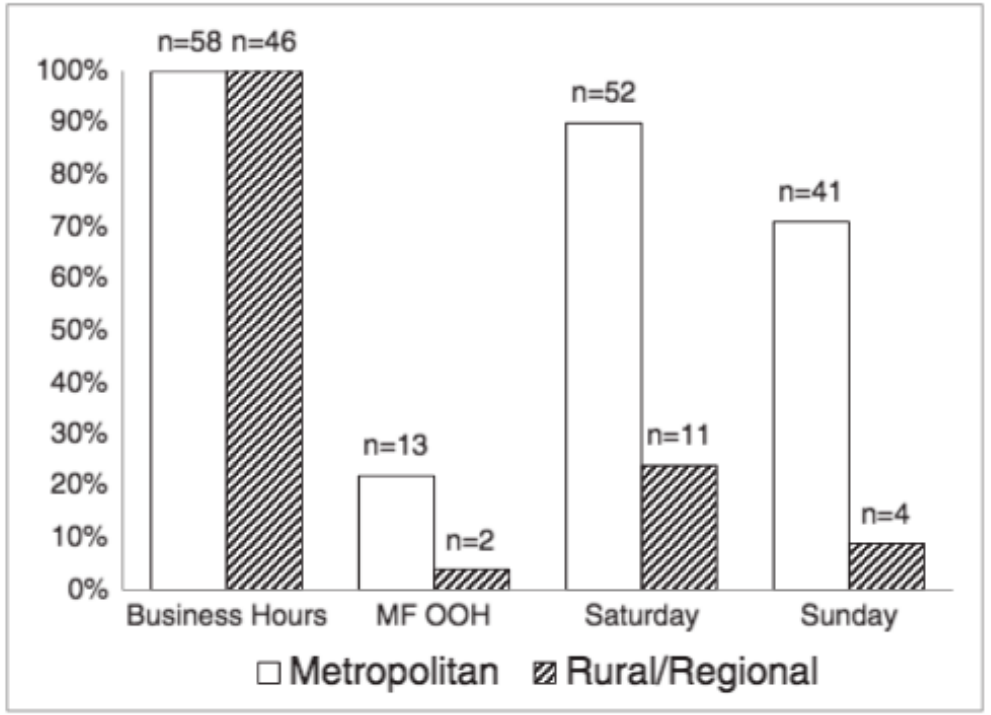


Figure 3. Metropolitan and rural/regional hospitals (%) providing physiotherapy services during business hours and outside of business hours. Hospitals could provide services in more than one category. MF OOH = Monday to Friday outside of business hours

Methods

Design

- RCT
- Non-RCT
- Observational

Participants

- Inpatients on acute general medical or surgical wards or sub-acute rehabilitation wards

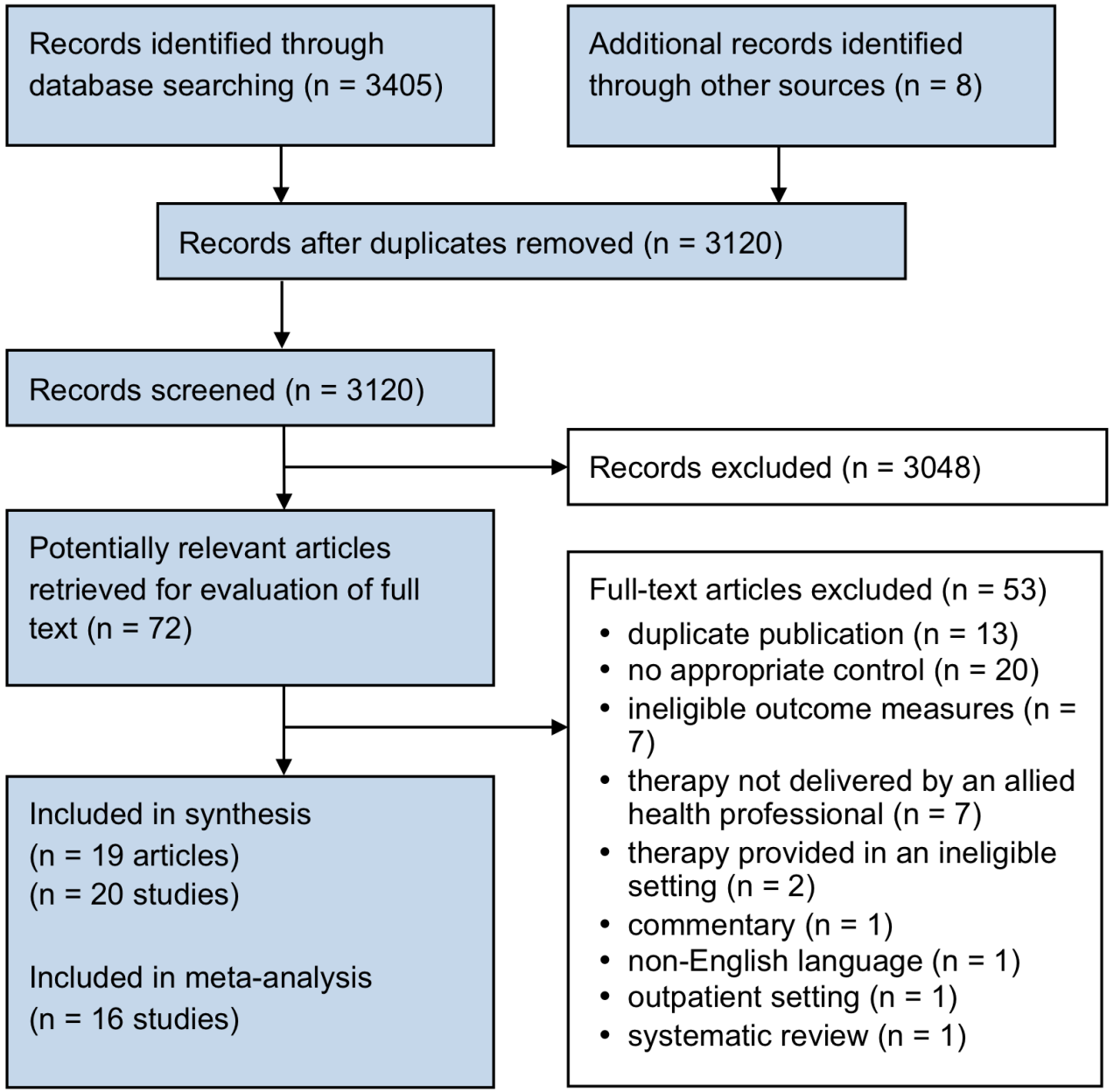
Interventions

- Additional allied health services delivered during weekends

Outcomes

- Length of stay
- Re-admission
- Adverse events (e.g. falls, pressure injuries, met calls)
- Discharge destination
- Function
- Quality of life
- Cost of hospital care

Results: flow of studies



Results: study characteristics

10 RCTs

10 Non-RCTs

9 studies in acute general medical and surgical wards

11 in sub-acute rehabilitation wards

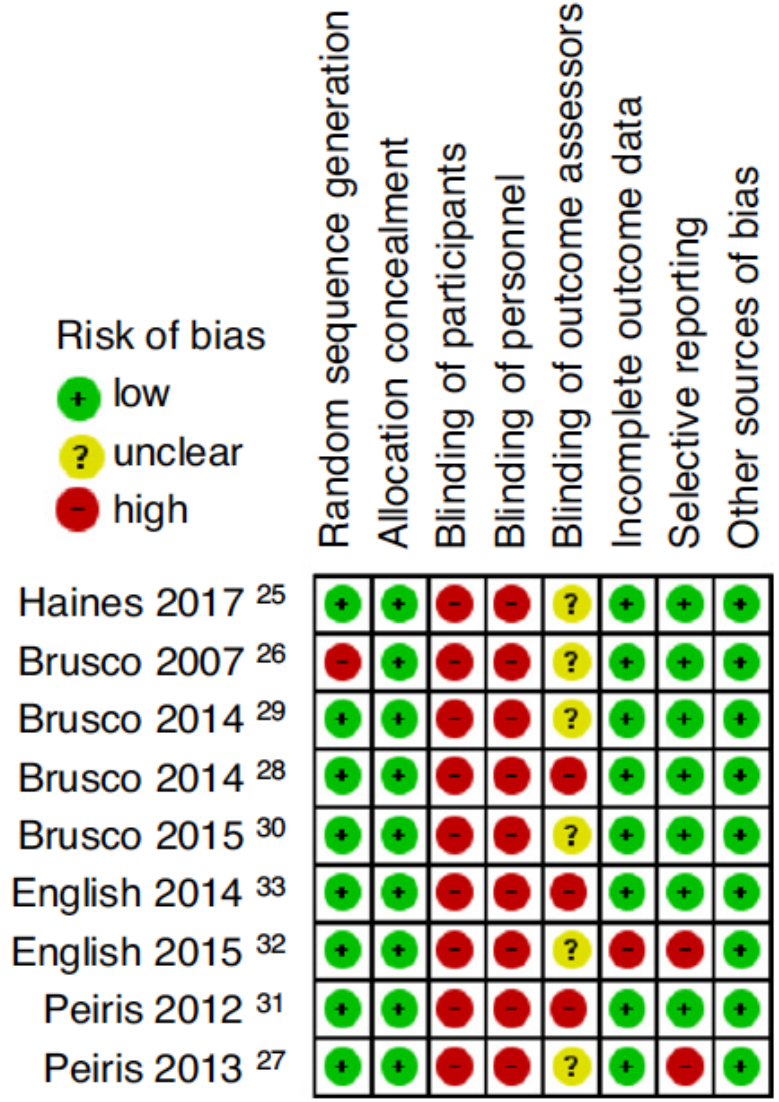
Majority of studies performed in Australia (n=14)

9 studies examined only physiotherapy, 11 examined physio with other professions

Most compared Monday-Friday with additional Saturday and Sunday (8 examined Sat only)

Results: methodological quality

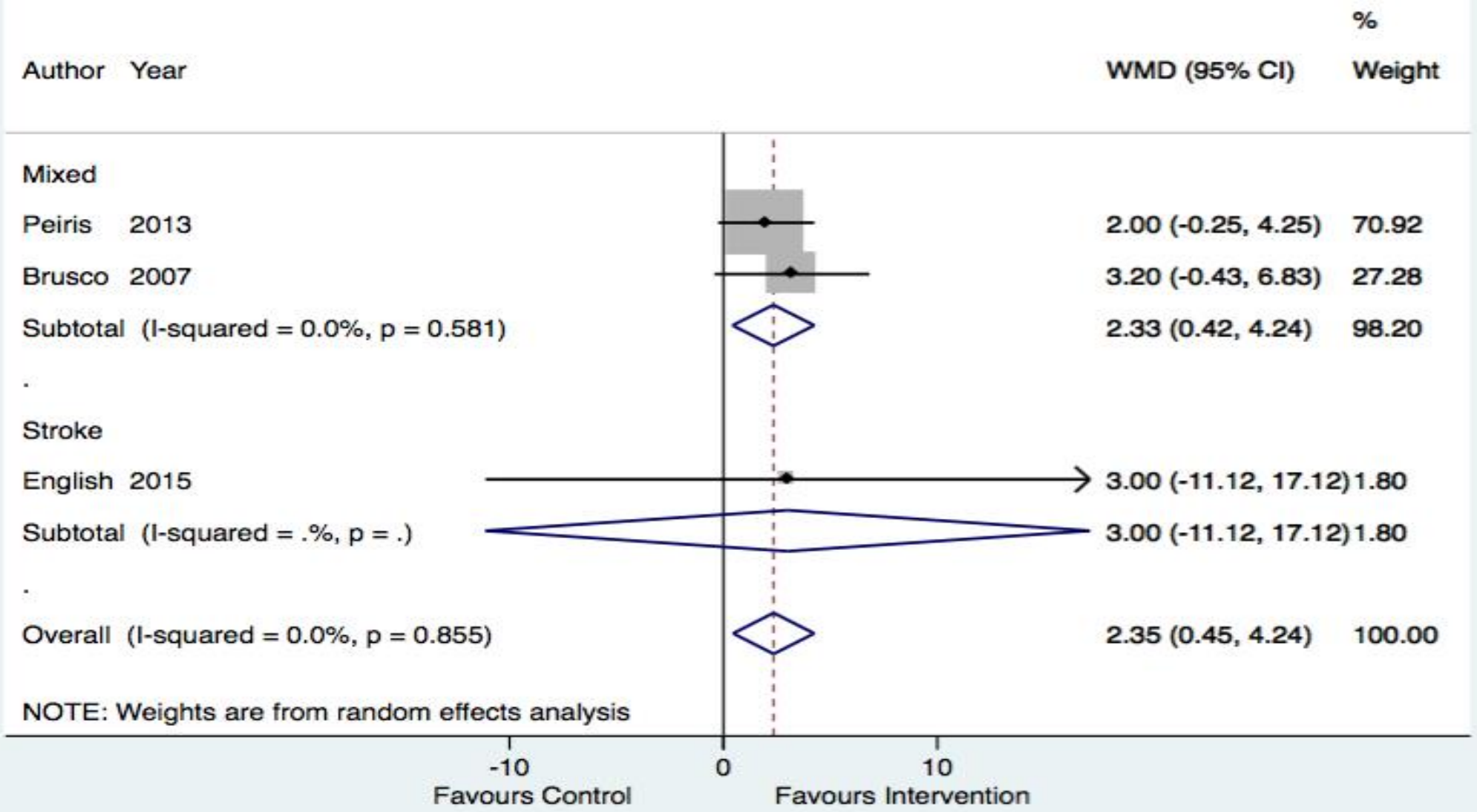
Randomised controlled trials



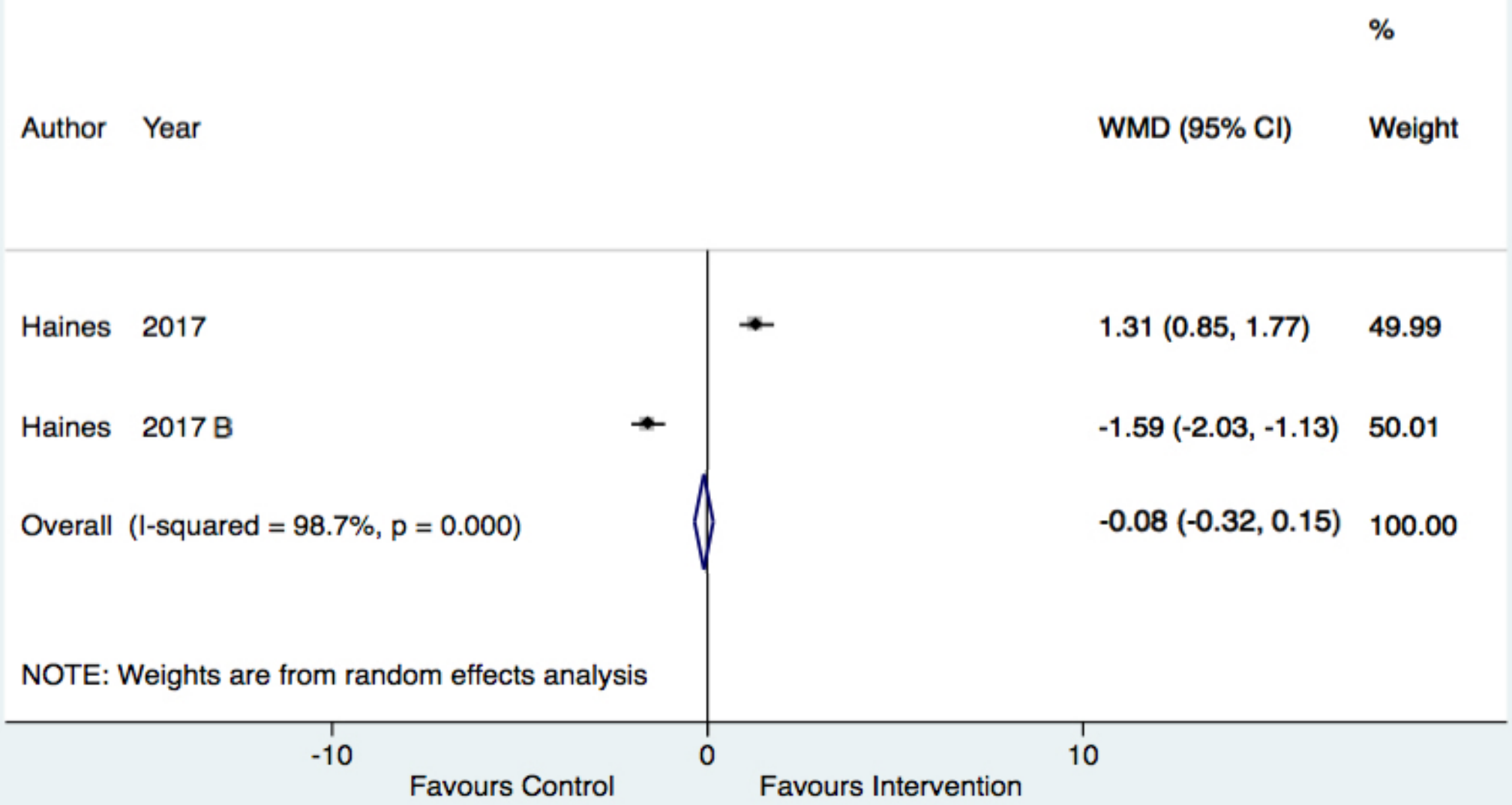
Non-randomised controlled trials

Cohort study	Selection	Comparability	Outcome
Boxall 2004 [35]	****	*	**
David 2003 [38]	****	*	***
Haas 2017 [43]	****	*	***
Kinoshita 2017 [39]	****	*	***
Maidment 2014 [34]	****	*	***
Pengus 2015 [37]	***	*	**
Pua 2011 [36]	****	*	***
Caruana 2016 [40]	***	*	**
Hakkennes 2015 [41]	****	*	***
Cross-sectional study	**Selection**	**Comparability**	**Exposure**
DiSotto-Monastero 2012 [42]	****	*	***

Results: length of stay in sub-acute wards

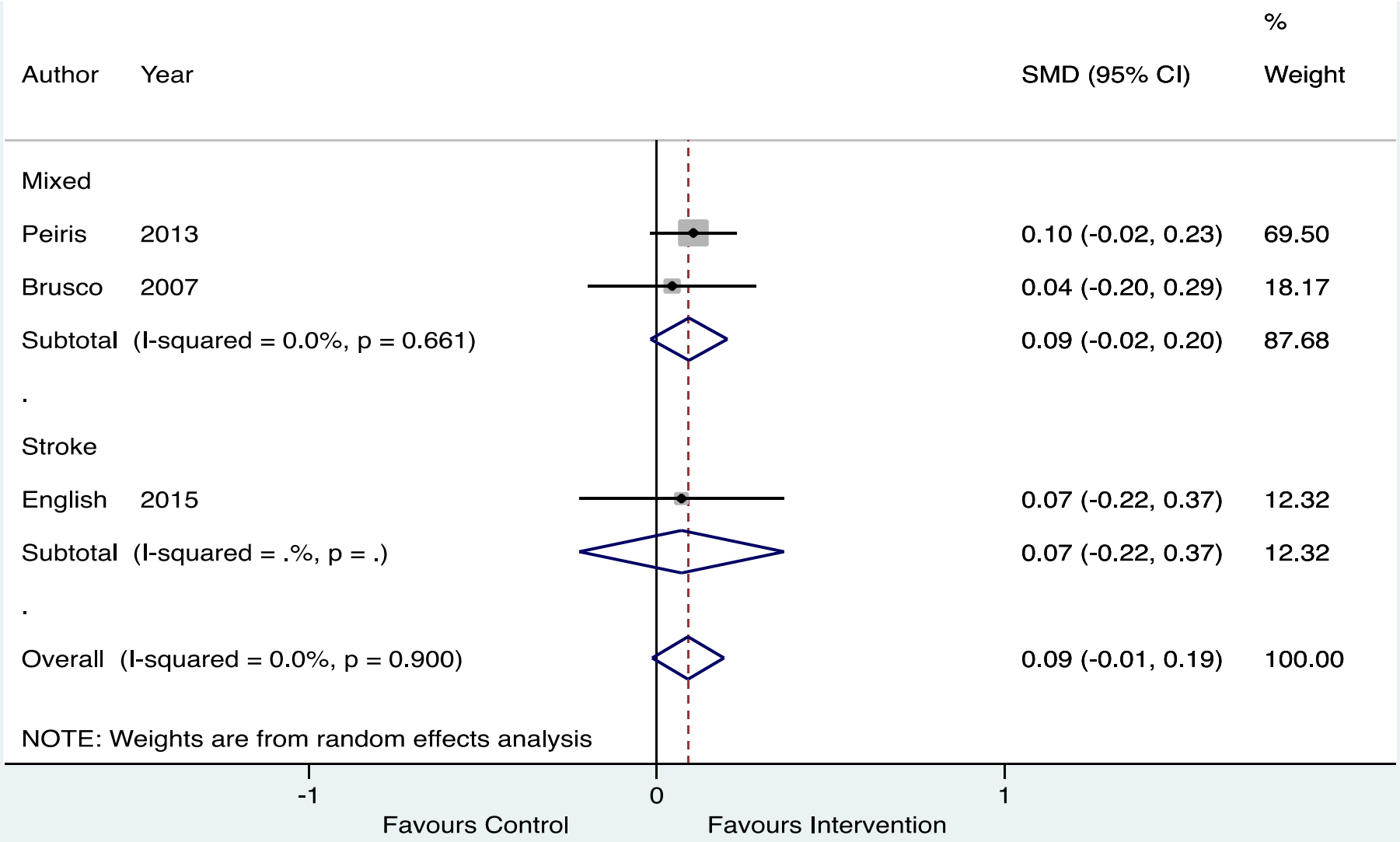


Results: length of stay in acute wards

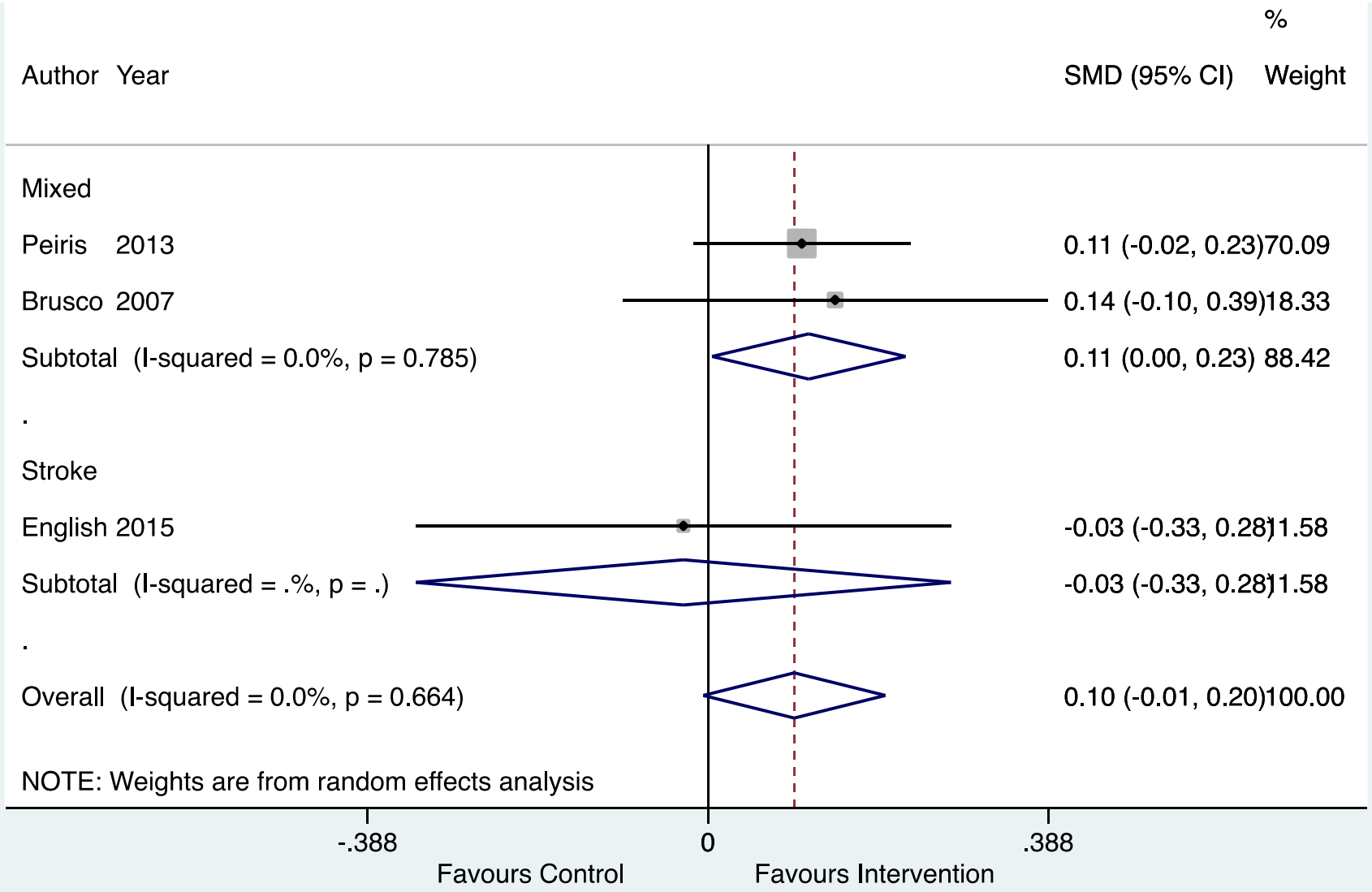


Sarkies et al. JoP (2018)

Results: function in sub-acute wards



Results: quality of life in sub-acute wards



Conclusion

Sub-acute rehabilitation wards

- Additional weekend allied health services reduce hospital length of stay
- Improved function and quality of life are likely drivers of reduction in length of stay
- Might be cost-effective in sub-acute rehabilitation wards

Acute general medical and surgical wards

- Effectiveness and cost-effectiveness is unclear in acute general medical and surgical wards

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