

The Application of Realist Synthesis Review Methods in Public Health Economics

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Aim

This realist review will be used to inform the development of a novel multidisciplinary intervention for rehabilitation after hip fracture in the elderly, as part of a larger feasibility trial.

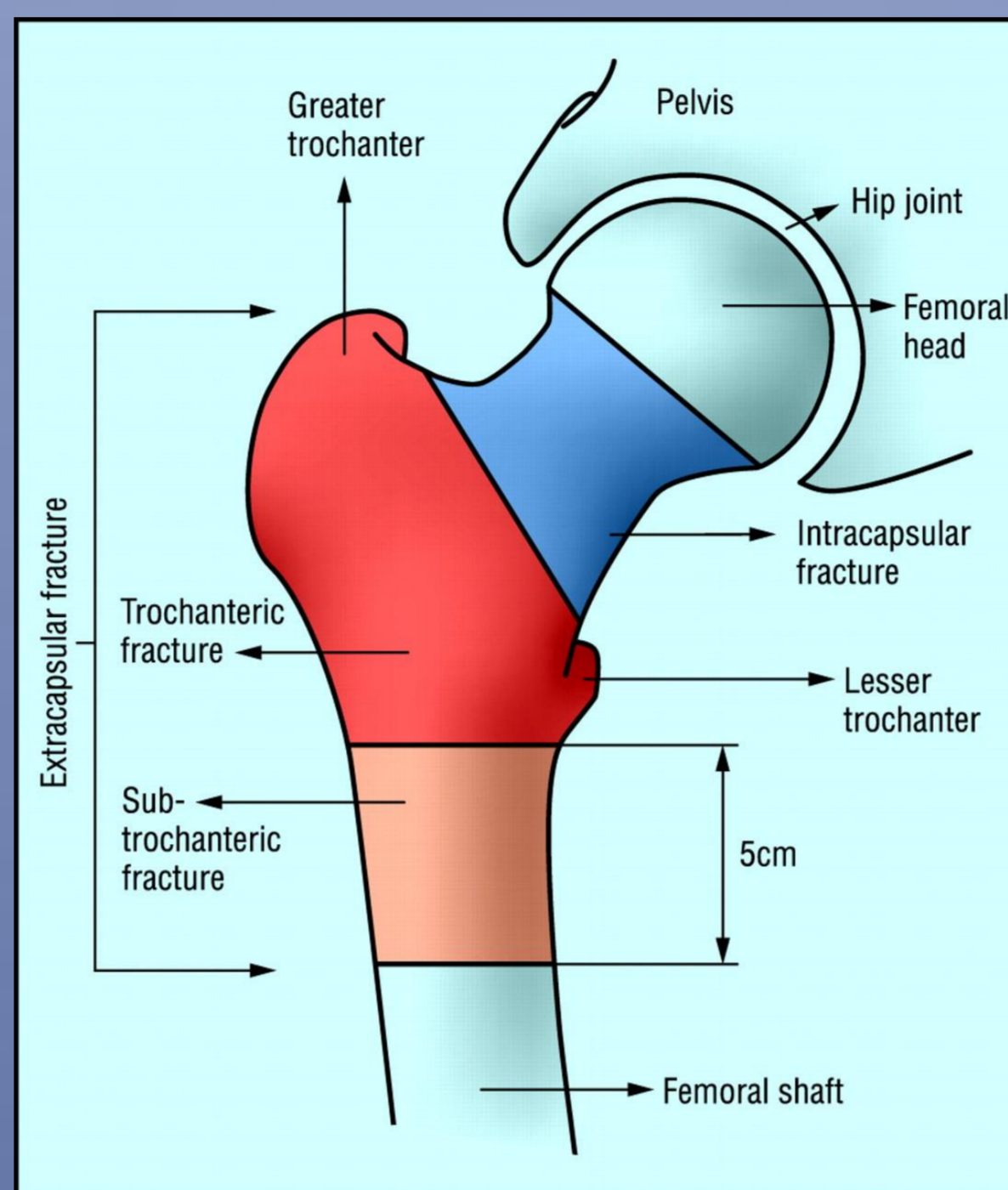
Background

Traditional systematic reviews do not provide a clear indication of why the intervention worked under a certain setting.

The realist research question is often summarised as “**What works for whom, under what circumstances, how and why?**”

Theories are developed which postulate how an intervention’s underlying causal *mechanism*, works in a defined social *context* resulting in a particular *outcome*.

Realist review methods can provide a rich, detailed understanding of complex interventions, which can be utilised during intervention planning and implementation stages.



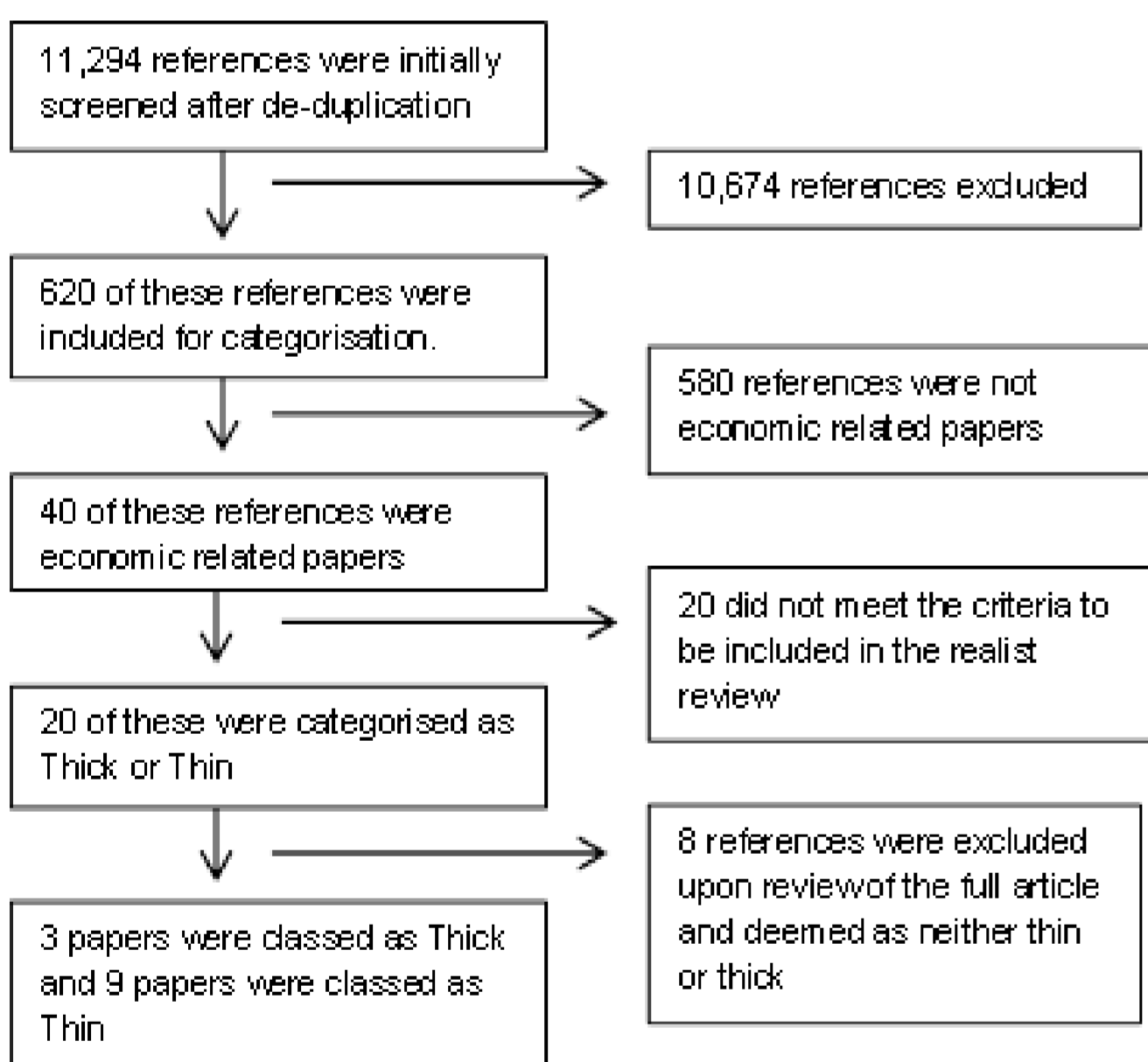
Reference: Parker, M., Johansen, A (2006) Hip fracture BMJ:333:27 doi: <http://dx.doi.org/10.1136/bmj.333.7557.27>

Method

Behavioural economic theories (e.g., welfare judgements, and choice architecture) and theories relating to additional costs (e.g., due to setting, delivery team, and additional resources) with implications for cost-effectiveness were developed as part of the Fracture in the Elderly Multidisciplinary Rehabilitation (FEMuR) realist review.

Electronic databases were searched and inclusion, exclusion criteria applied. Full articles were then categorised based on their conceptual richness into three categories: rich, thick, and thin. Data from the full articles were then extracted until a particular programme theory reached saturation, whereby further references do not add to the understanding of a theory.

Findings



Flowchart for Databases searched for theories areas from inception until 04/10/13

The search did not identify any papers that discussed behavioural economic theories (e.g., welfare judgements, and choice architecture). However, the search identified papers that discussed additional costs for hip fracture rehabilitation with regards to:

- 1. The Individual Patient** - Patients in long-term care residents such as elderly nursing homes, older hip fracture patients and patients with a number of co-morbidities including cognitive impairment and poor pre-fracture functioning accrue additional costs when receiving inpatient hospital rehabilitation.
- 2. The Team Delivering the Intervention** – Multi-disciplinary teams accrue additional hospital costs when delivering inpatient rehabilitation following hip fracture.
- 3. The Intervention Setting** - Rehabilitation in a hospital setting accrues additional costs from a hospital perspective than rehabilitation as an outpatient or rehabilitation in community setting.

Clinician travel between hospital sites can generate additional hospital costs for inpatient hospital rehabilitation.

Conclusion

The inclusion of health economic programme theories in the FEMuR realist review provides insight into economic mechanisms and contextual factors of multidisciplinary rehabilitation of hip fracture in the elderly, which have implications for cost-effectiveness and have not been previously explored. The omission of behavioural economic theory is an important issue and the FEMuR team are in an unique position, as they have the opportunity to include behavioural economic theory during intervention development.