

# Health economic perspectives on reablement

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# Health economic evaluations are needed...

- In all systems, resources are limited
- Challenges with recruitment of staff
- Reablement is a potentially cost-effective approach
- Knowledge about effects is insufficient for decision making
- Health economic evaluation - both costs and health effects are considered

## Aim

To provide a summary of existing evidence on the cost-effectiveness of reablement

## Methods

Brief literature review + consultation with ReAble network

Medline, Embase, Cinahl, Web of Science

Potential references screened ( $n=80$ )

# Summary of existing evidence

- Context and setting
- Study design
- Perspective for analysis (provider or societal)
- Population (45 – 10 368)
- Intervention
- Comparator (usual home care)
- Health outcome
- Costs
- Time horizon (6 weeks-Life time)

# Costs analysis ( $n=5$ ), cost-effectiveness analysis ( $n=5$ )

Study	Study design	Costs	Health outcome	Results
Bauer et al (2019), UK	Markov model, (n=1000)	Social care, health care	N.a.	Lower cost in IG Life-time perspective
Glendinning et al (2010), UK	Prospective clinical controlled trial, (n=1015)	Social care, health care	Health-related quality of life Social-care-related QoL	Larger effects in IG Higher costs in IG 12 months
Kjerstad & Tuntland (2016), Norway	Prospective randomised controlled trial, (n=45)	Social care, health care	Self-perceived activity performance and satisfaction with performance (COPM)	Larger effects in IG Lower cost in IG 3 and 9 months
Lampe et al (2022), Germany	Quasi-experimental, (n=872)	Social care, health care	N.a.	No significant differences in costs 21 months
Langeland et al (2016), Norway	Multi-center, prospective clinical controlled trial, (n=833)	Social care, health care	Health-related quality of life (QALY)	Larger effects in IG Higher costs in IG 6 months
Lewin et al (2013a), Australia	Retrospective cohort study, (n=10368)	Social care, health care (in municipality)	N.A	Lower cost in IG 57 months
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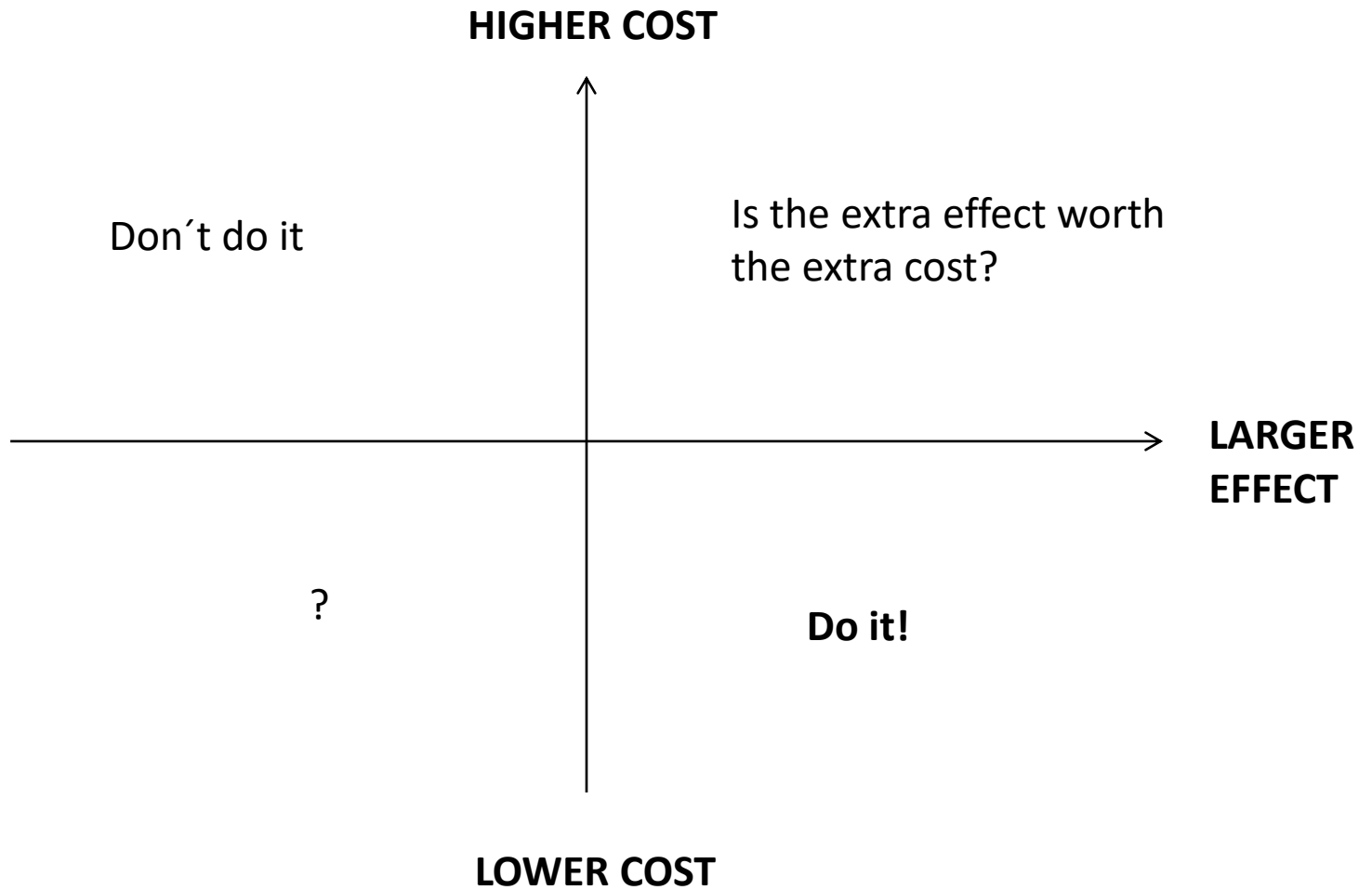
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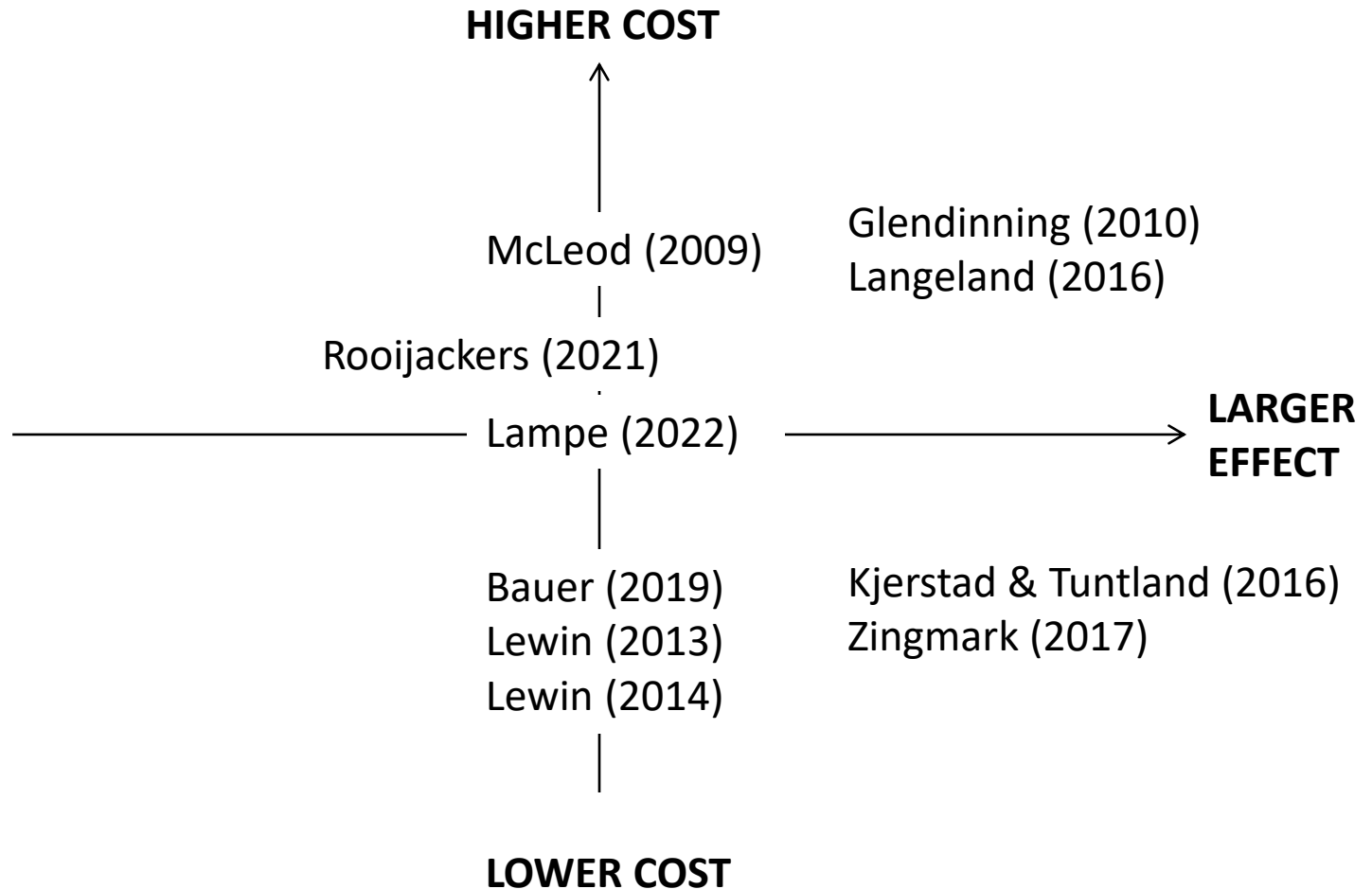
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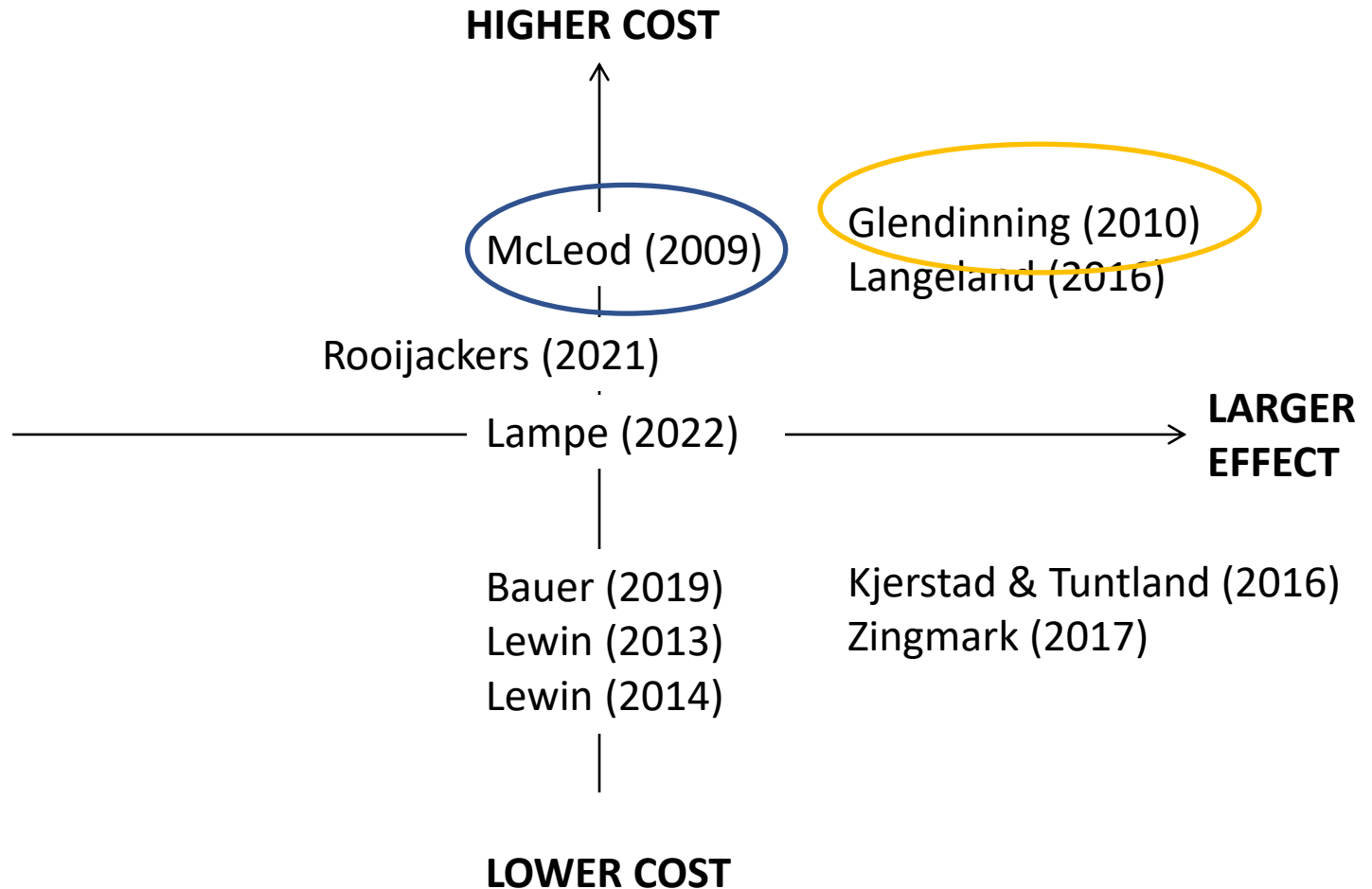
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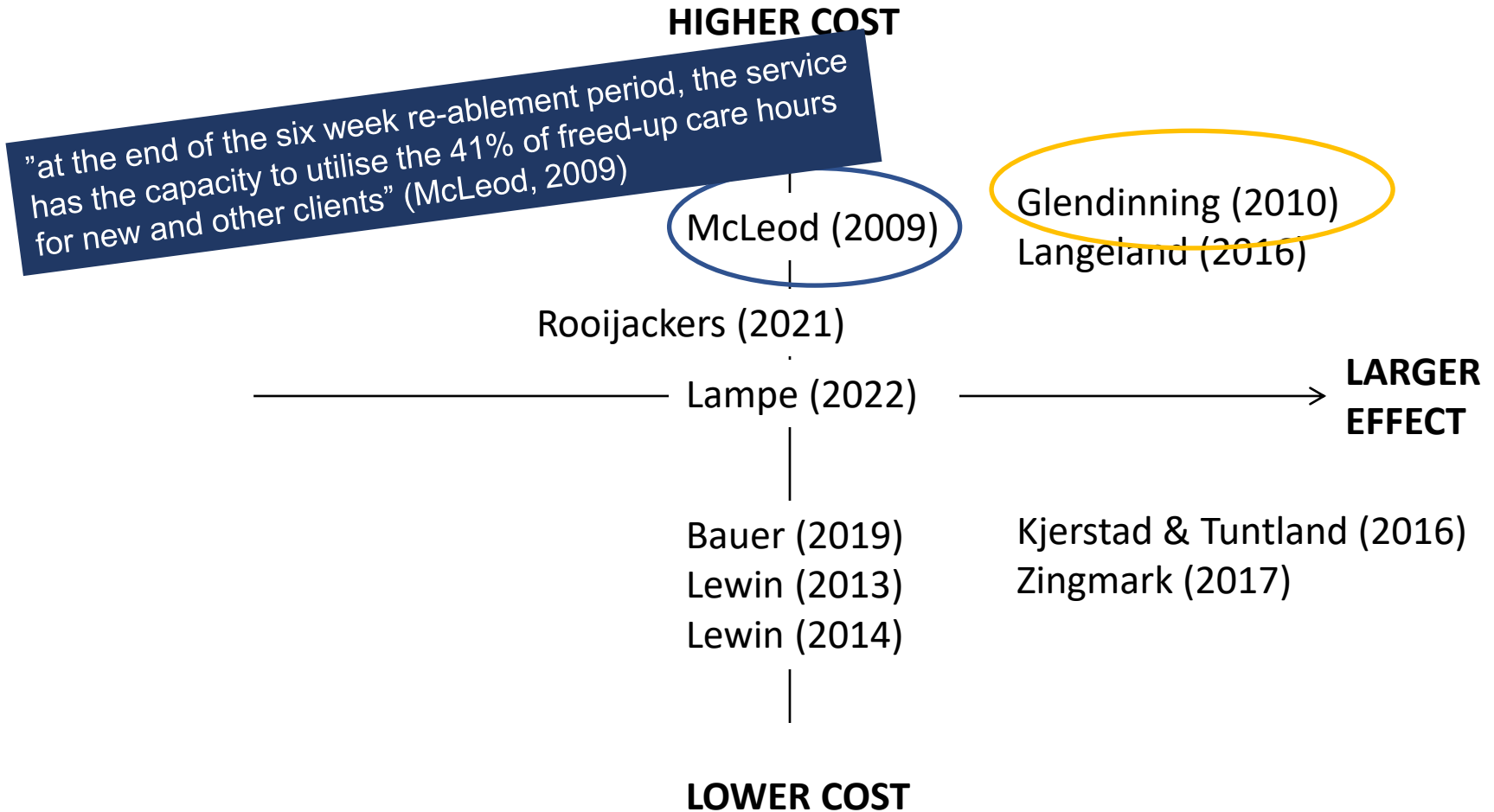
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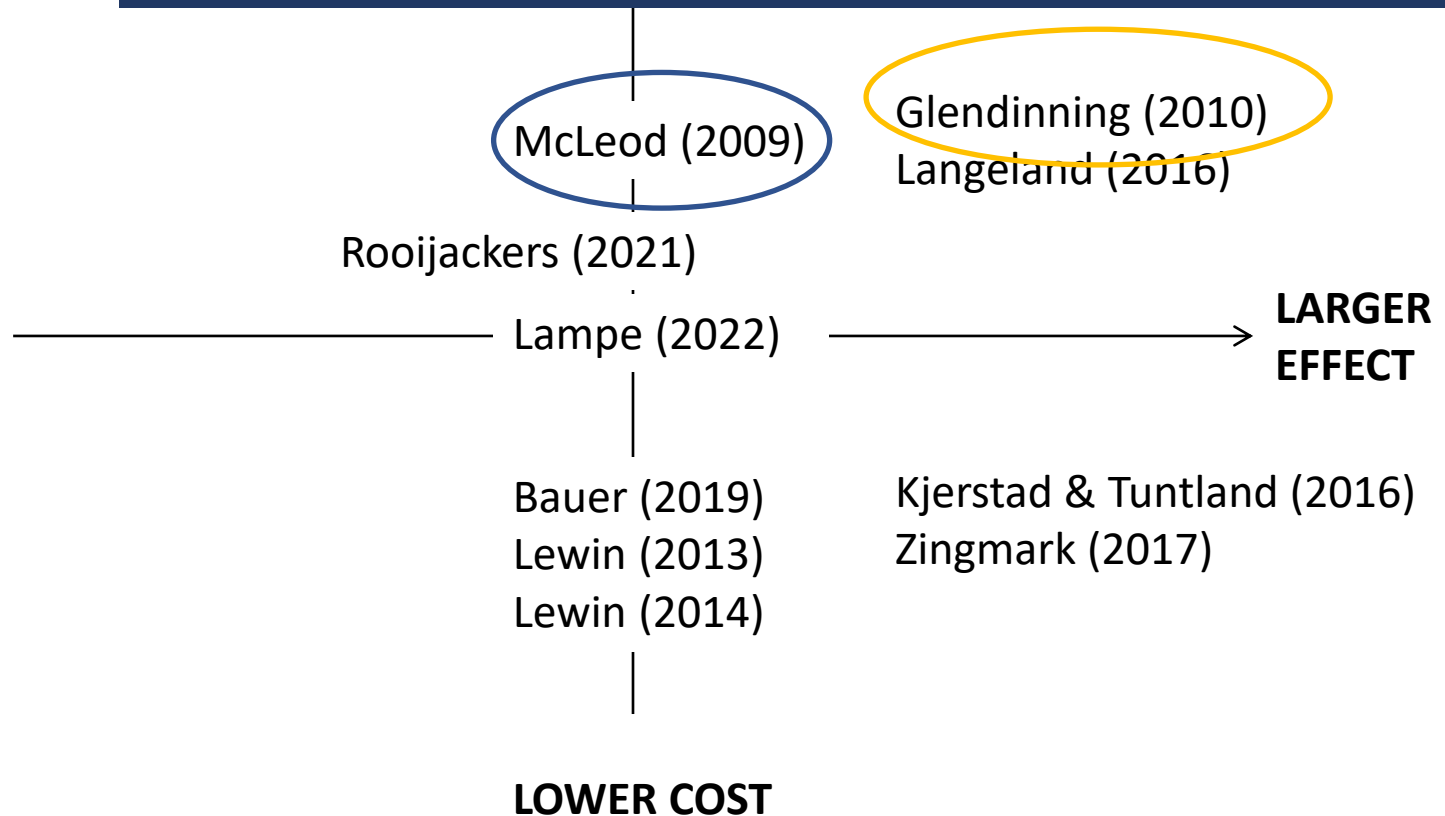


# The cost-effectiveness plane



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"The costs of the social care services used by people in the reablement group during the 12 months of the study were 60 per cent less than the costs of the social care services used by people using conventional home care services" (Glendinning, 2010)



# Conclusion

- Seven studies show promising results from a health economic perspective
- In general, social care costs were reduced

## Future perspectives

- Which resources should be included, e.g. informal care?
- For how long time should costs and effects be considered?

# References

1. Bauer et al. (2019). Cost-minimisation analysis of home care reablement for older people in England: A modelling study.
2. Glendinning et al (2010). Home Care Re-ablement Services: Investigating the longer-term impacts (prospective longitudinal study).
3. Kjerstad & Tuntland (2016). Reablement in community-dwelling older adults: A cost-effectiveness study analysis alongside a randomized controlled trial.
4. Langeland et al (2016). Models of reablement. A study in Norwegian municipalities. Effects for users and gains for municipalities.
5. McLeod & Mair (2009). Evaluation of City of Edinburgh Council Home Care Re-Ablement Service.
6. Lampe et al (2022) Health economic perspective on a community-based intervention for older people at risk of care dependency—results of a prospective quasi-experimental study.
7. Lewin et al (2013a). Evidence for the long-term cost effectiveness of home care reablement programs.
8. Lewin et al (2014). A comparison of the homecare and healthcare service use and costs of older Australians randomised to receive a restorative or a conventional home-care service.
9. Rooijackers et al (2021). Economic Evaluation of a Reablement Training Program for Homecare Staff Targeting Sedentary Behavior in Community-Dwelling Older Adults Compared to Usual Care: A Cluster Randomized Controlled Trial.
10. Zingmark et al (2017). Cost effectiveness of an intervention focused on reducing bathing disability.