

Cost-Effectiveness of Exercise Referral Schemes

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HTA Project Team



PENINSULA
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Acknowledgements

ERS Project Team

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NIHR Health Technology
Assessment programme



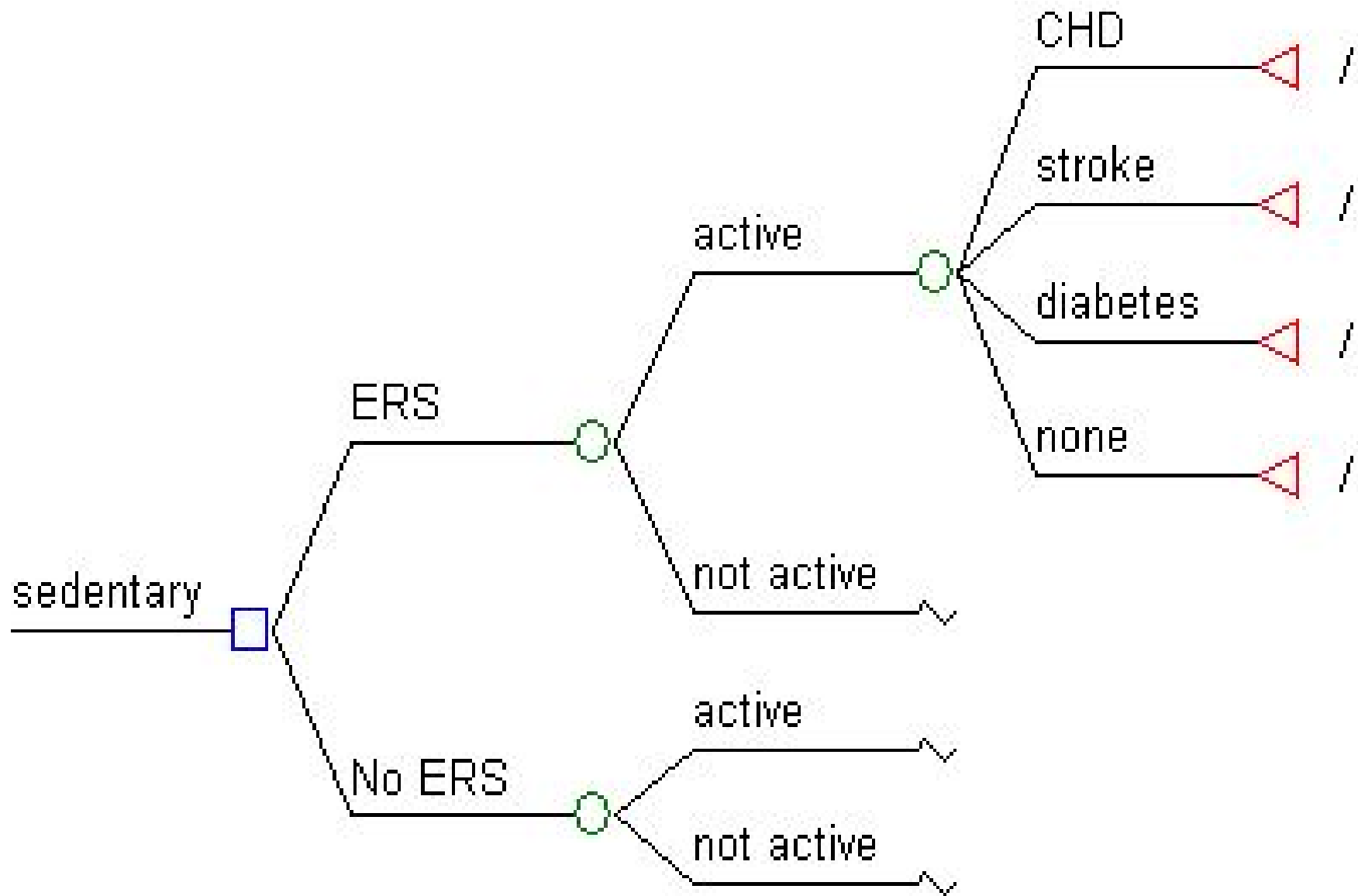
*National Institute for
Health Research*

Aim

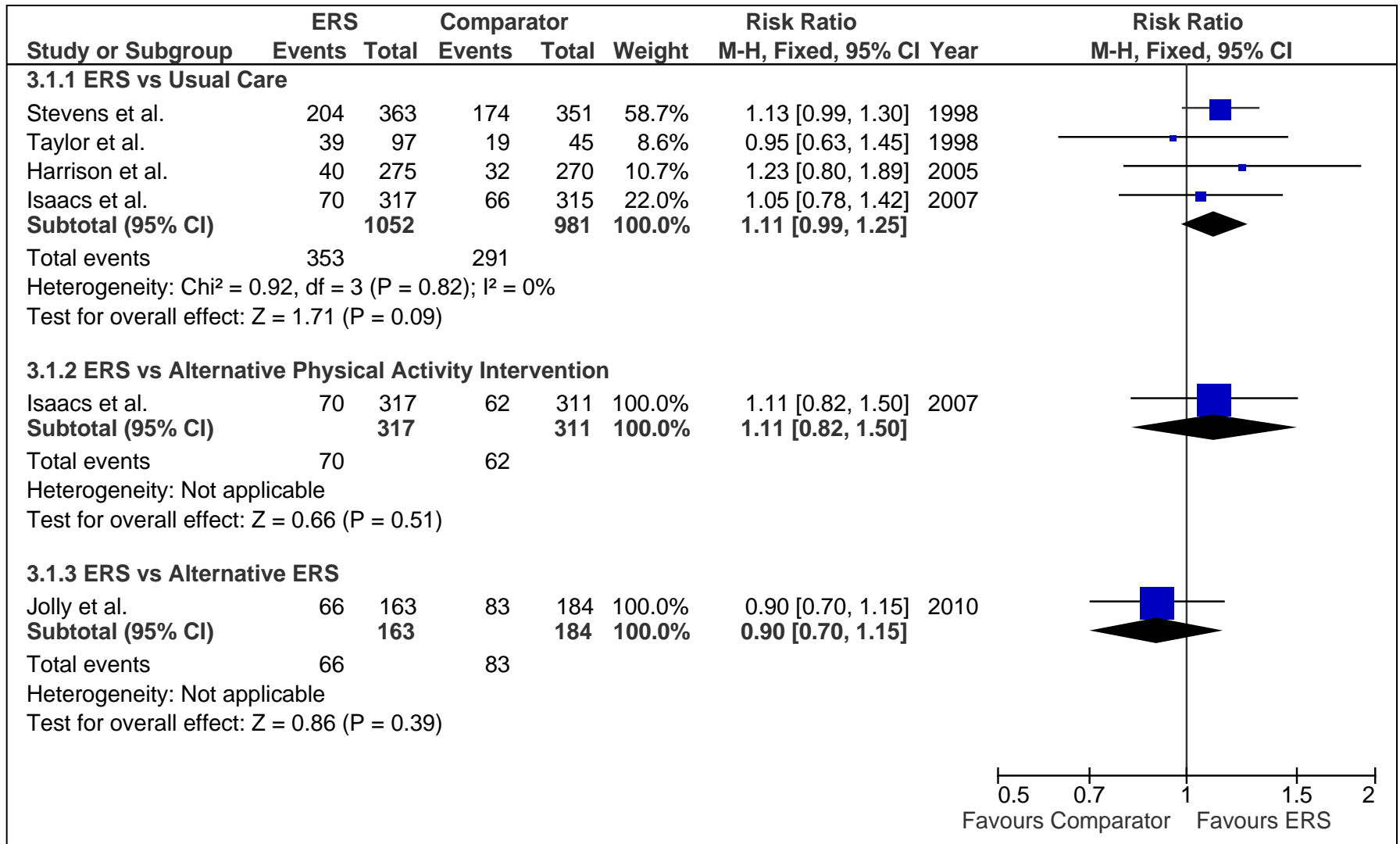
- To examine the cost-effectiveness of exercise referral schemes (ERS) in promoting physical activity compared to usual care
- In sedentary adults: (1) without a diagnosed medical condition; (2) with hypertension; (3) who are obese; (4) with depression

Methods

- Decision analytic model
 - Adapted NICE Public Health model
 - Cohort of 1000 sedentary individuals aged 40-60 yrs
- Outcome: Cost per quality adjusted life year (QALY)
- Perspective: UK National Health Service
- Time horizon: life time
- Uncertainty: probabilistic & extensive one-way sensitivity analysis



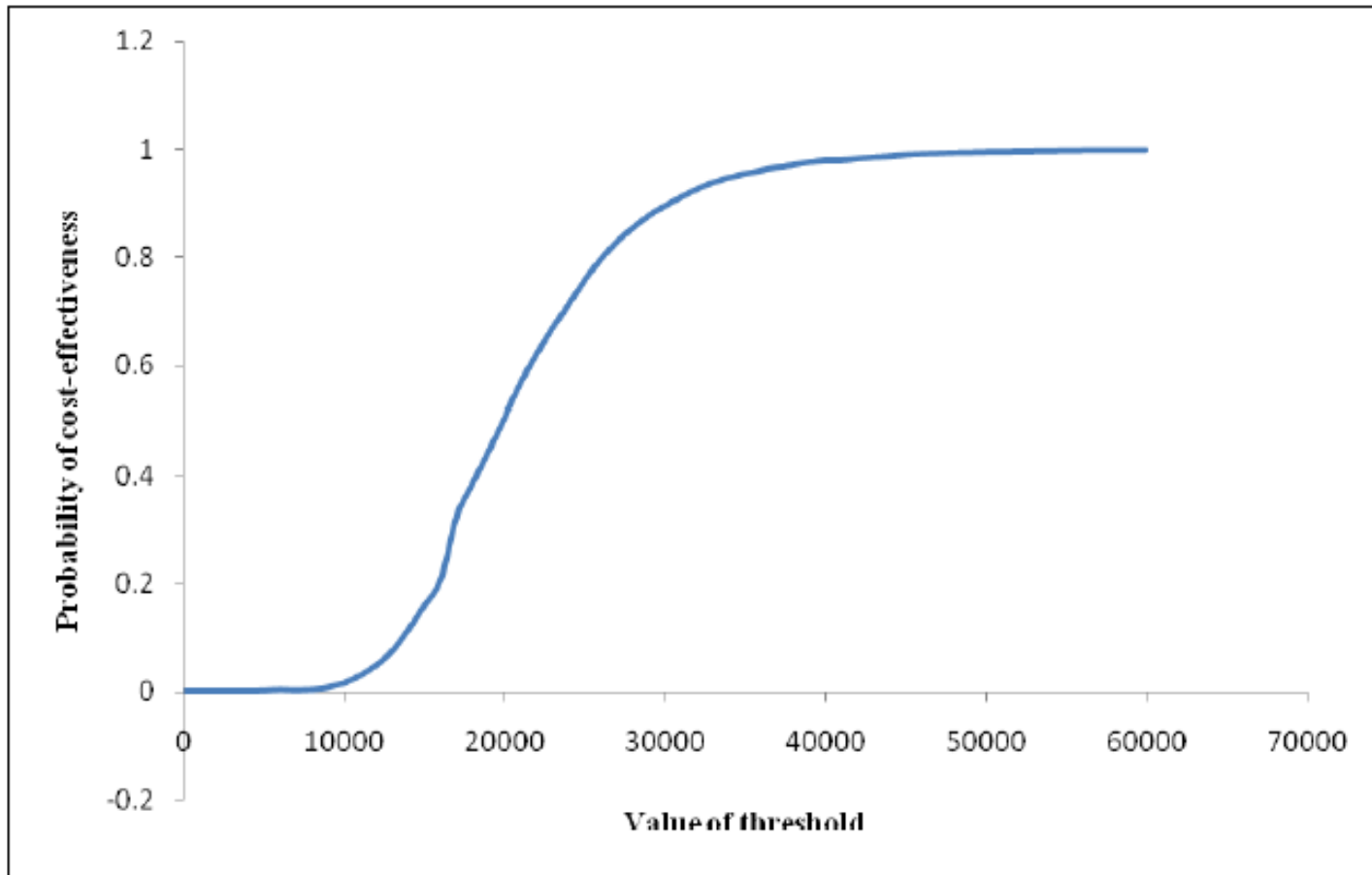
Effectiveness – Meta-Analysis of RCTs



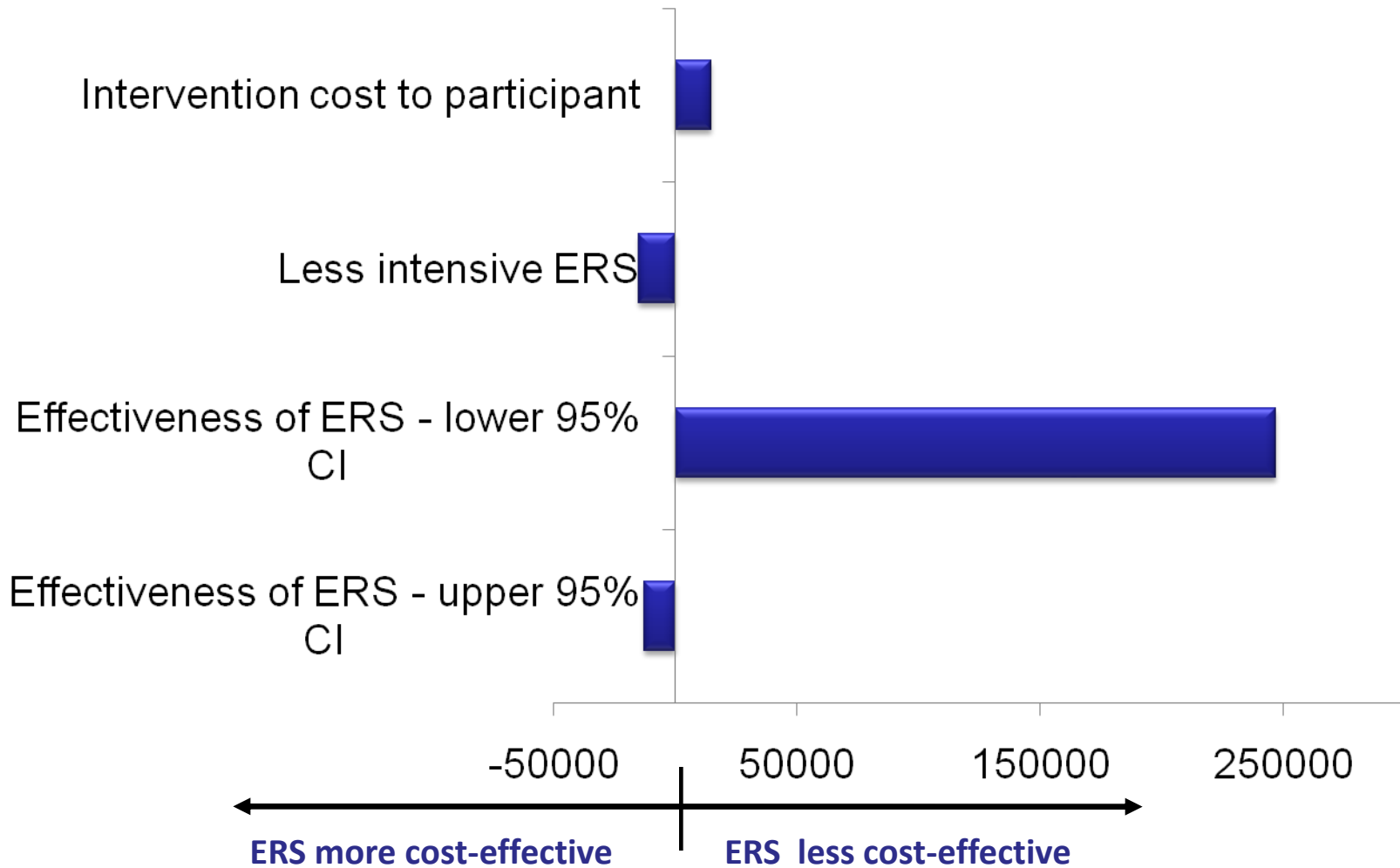
Results – Primary prevention

	ERS	Usual care	Difference	ICER
Total healthcare costs per person*	£2,492	£2,322	£170	£20,876 /QALY
Total QALYs per person	16.745	16.735	0.008	
*At 2010 prices				

Probabilistic sensitivity analysis



One-way Sensitivity Analyses



Secondary Prevention

	Incremental cost per person	Incremental QALY per person	ICER
Obese	£167	0.011	£14,618
Hypertensive	£168	0.013	£12,834
Depressive	£147	0.017	£8,414

Strengths & Limitations of Study

- Physical activity impact of ERS sourced from systematic review/meta-analysis of RCT evidence
- Results highly sensitivity to uncertainty in pooled effectiveness estimate
- (strong) assumptions: (1) effects of ERS in sedentary individuals can be directly applied to those with specific medical conditions; (2) short-term physical activity benefits of ERS continue into the long-term

Conclusions

- Results suggest ERS may be cost-effective (relative to no intervention) in non-disease cohorts and likely to be more cost-effective in disease-specific cohorts
- Uncertainty of findings because of limitations and gaps in the clinical effectiveness evidence base

Muito obrigado!

Many thanks!

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