NIHR Health Services and Delivery Research programme

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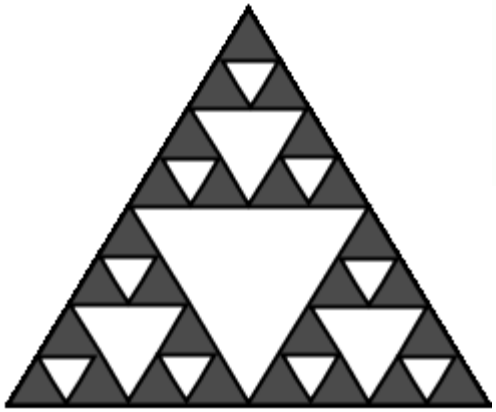
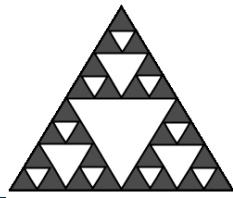


Can self-management support reduce health care utilisation without compromising patient outcomes?

Maria Panagioti and Peter Bower

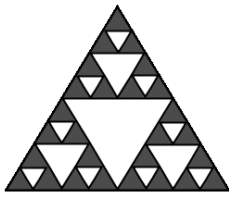
Research question:

Can self-management support reduce health care utilisation without compromising patient outcomes?



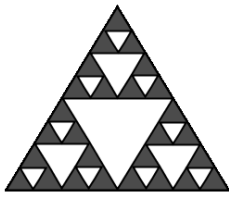
Background

- Demand in the context of financial crisis
- Focus on efficiency in care delivery
- Self-management critical?

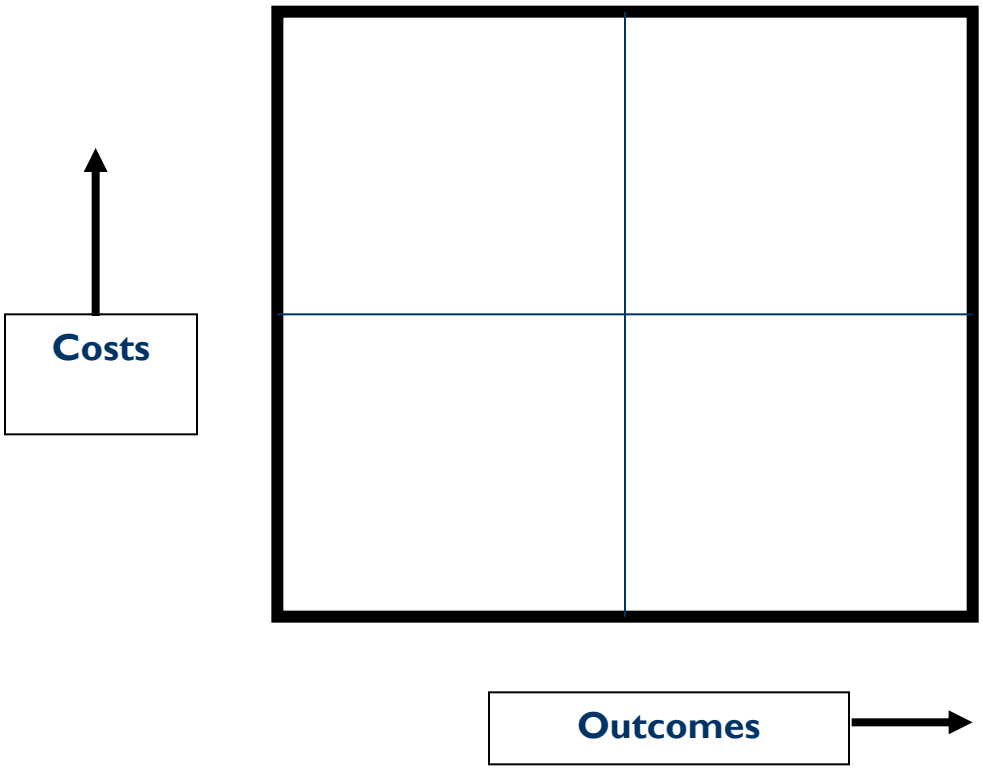


Caveats

- Magnitude and consistency of effects
- ‘Reach’
- Cost effectiveness



Cost effectiveness



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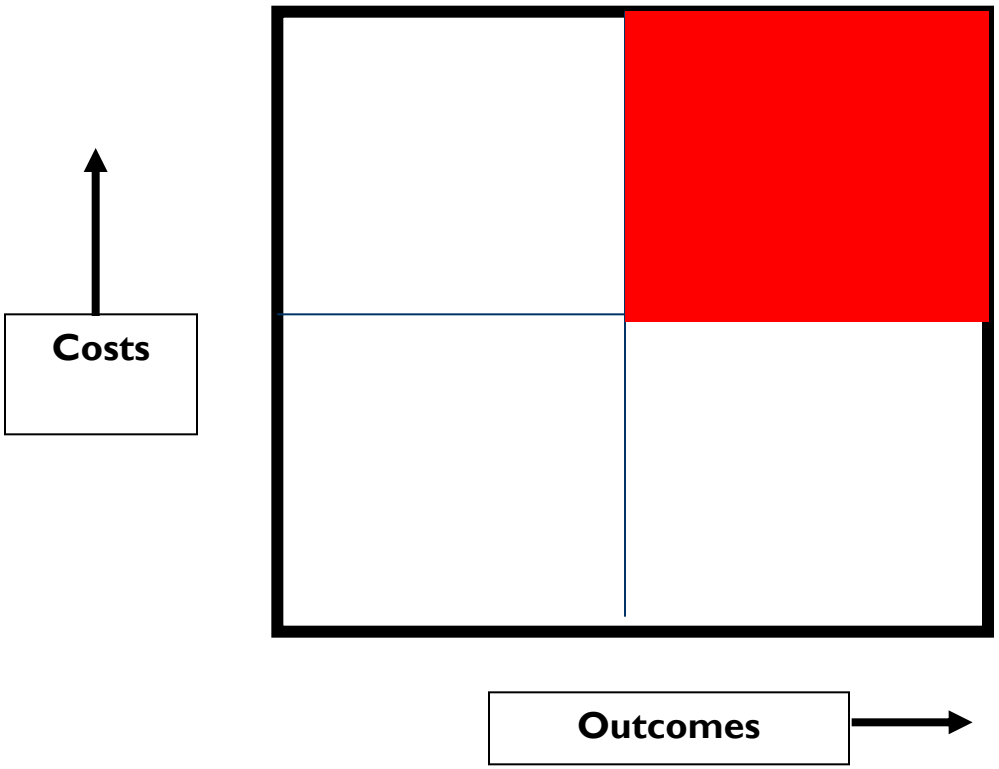
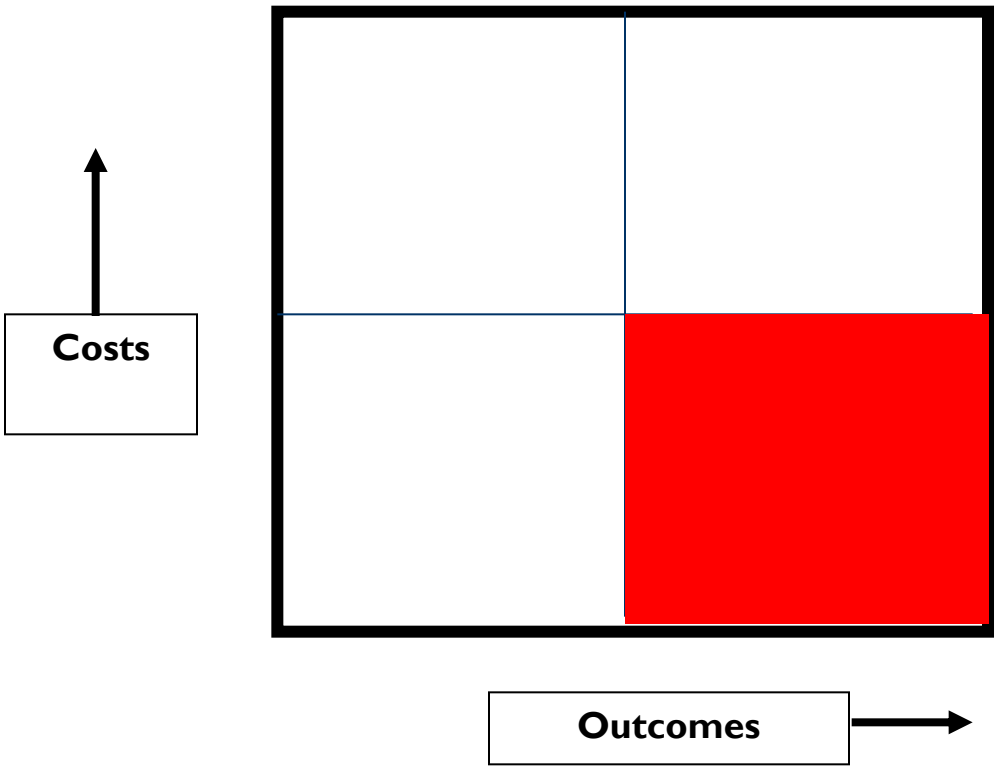


Technically efficient



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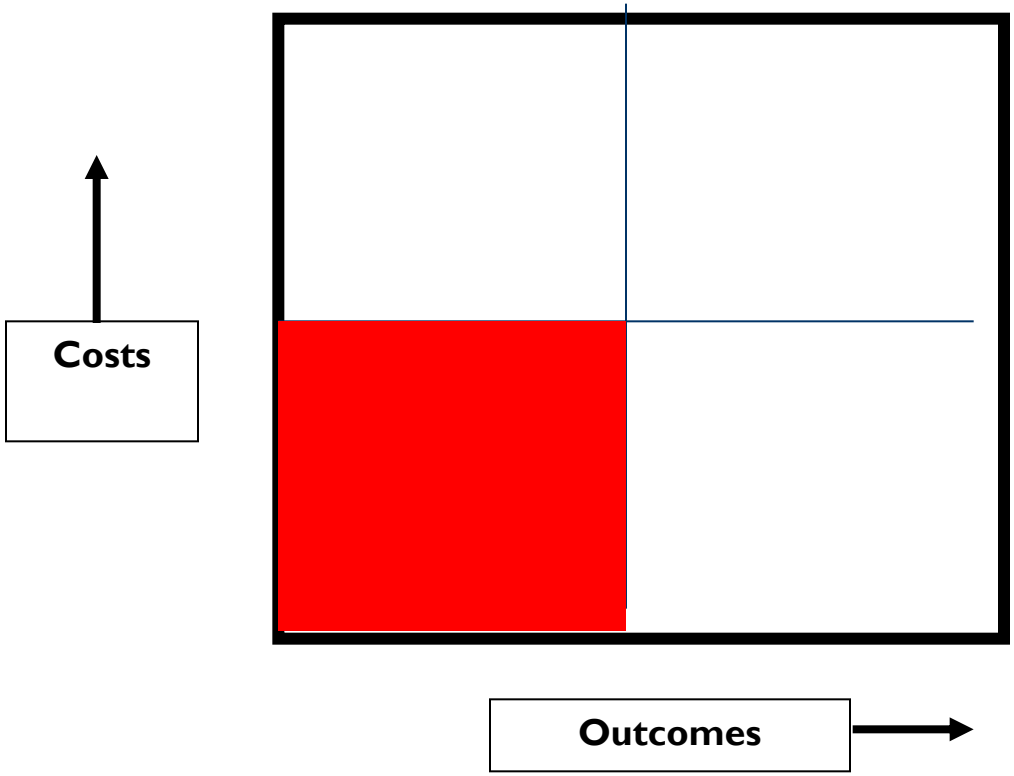

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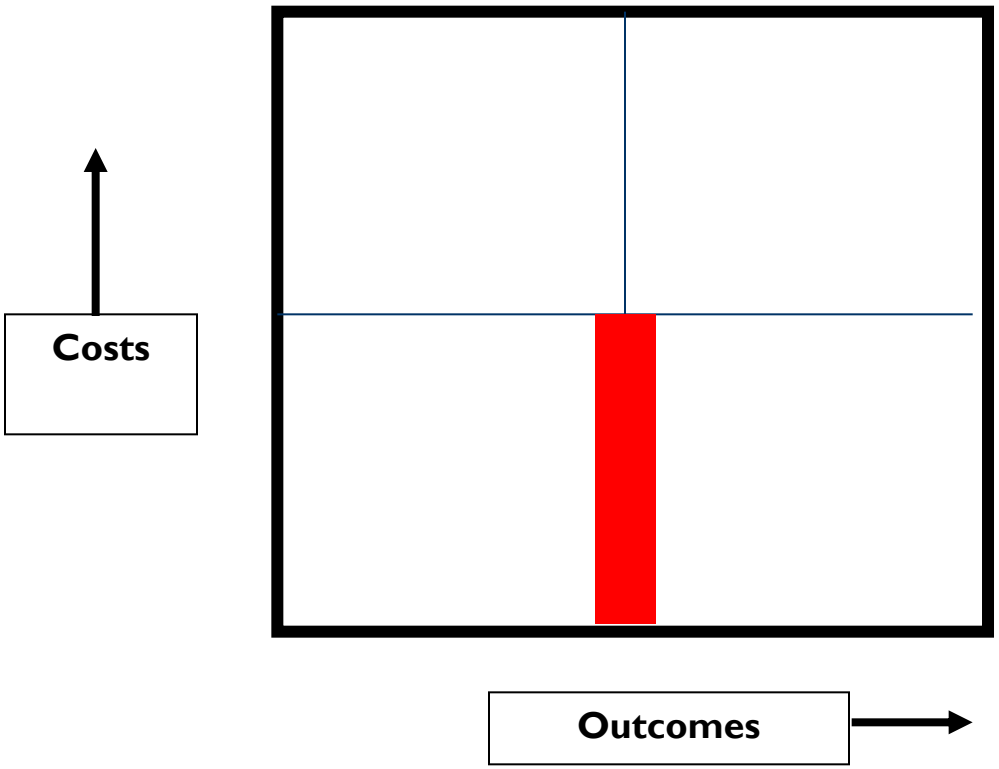
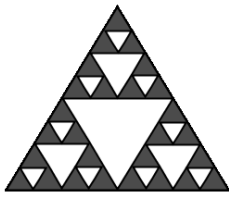


Aims

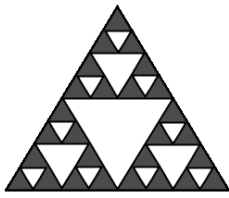
- To identify models of self-management associated with reductions in utilisation without compromising outcomes

- Make recommendations for commissioners and funders on self-management delivery and research priorities



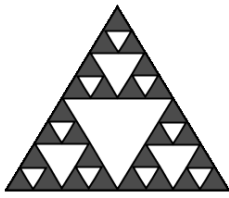
Link

- PRISMS study (Taylor et al)
- Share ideas about scope of:
  - Typology of long term conditions
  - Typology of self management support



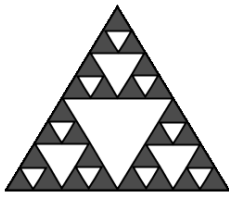
Definitions

- Long term conditions
  - ‘A condition that can not be cured but can be managed through medication and/or therapy’
- Self management support
  - A self-management support intervention is one primarily designed to develop the abilities of patients to undertake management of health conditions through education, training and support to develop knowledge, skills or psychological and social resources
- Across ‘pyramid’ of care
  - Pure self-management, guided self-management, case management



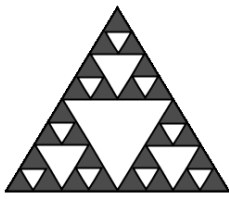
Review methods

- Search
  - Previous economic review (Richardson et al 2005), PRISMS review, Cochrane and other reviews
- Primary search for studies
  - York CRD search - 15,598 hits
- Eligibility
  - Long term condition, self management support, amenable to meta analysis



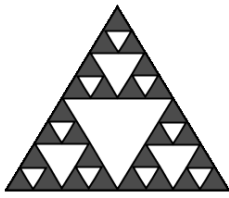
Varieties of self-management

Pure self-management	Supported self-management	Intensive self-management	Case management



Varieties of self-management

Pure self-management	Supported self-management	Intensive self-management	Case management
	<=2 hours support	> 2 hours support	> 2 hours support and multidisciplinary team



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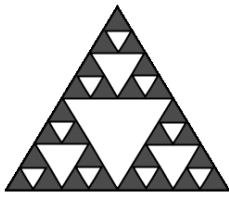
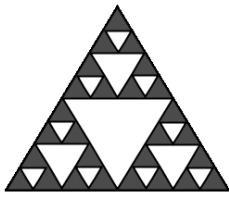


By disease group

- Conventional categories

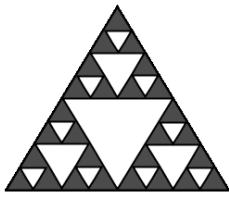
- Groupings
  - Variability over time (e.g. pain, depression, IBD)
  - Asymptomatic, management aimed at prevention (T2D, CKD)
  - Ongoing symptoms with exacerbations (COPD, CHD)
  - Ongoing symptoms with limited variability (OA, CFS)



Outcomes

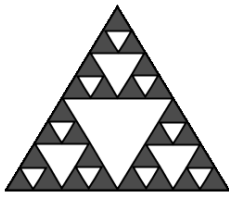
- Quality of life in broadest sense
  - Self reported
  - Disease specific, generic, depression
  - Excluded ‘clinical’ outcomes (HbA1c)

- Costs
  - Total costs
  - Hospital costs

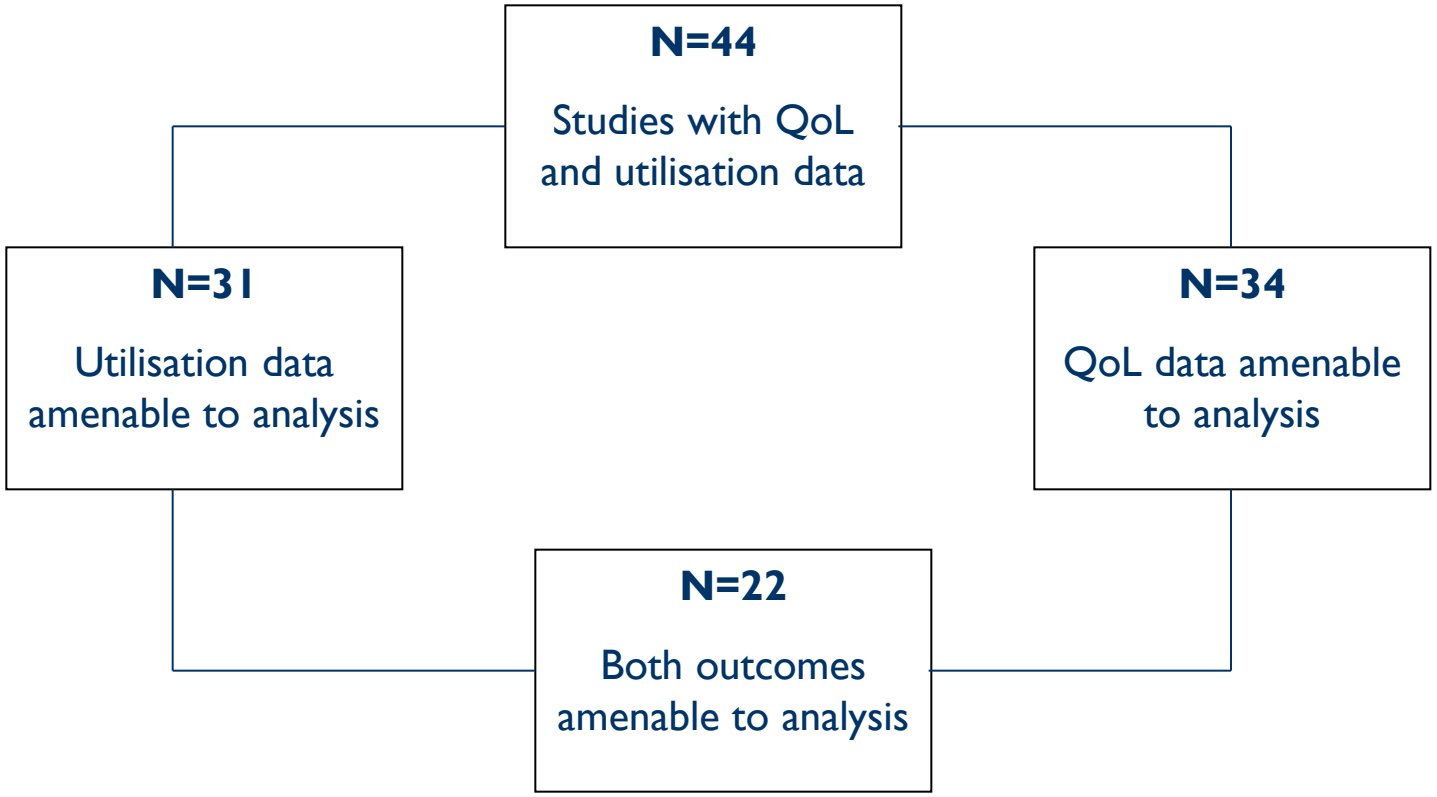


Analysis

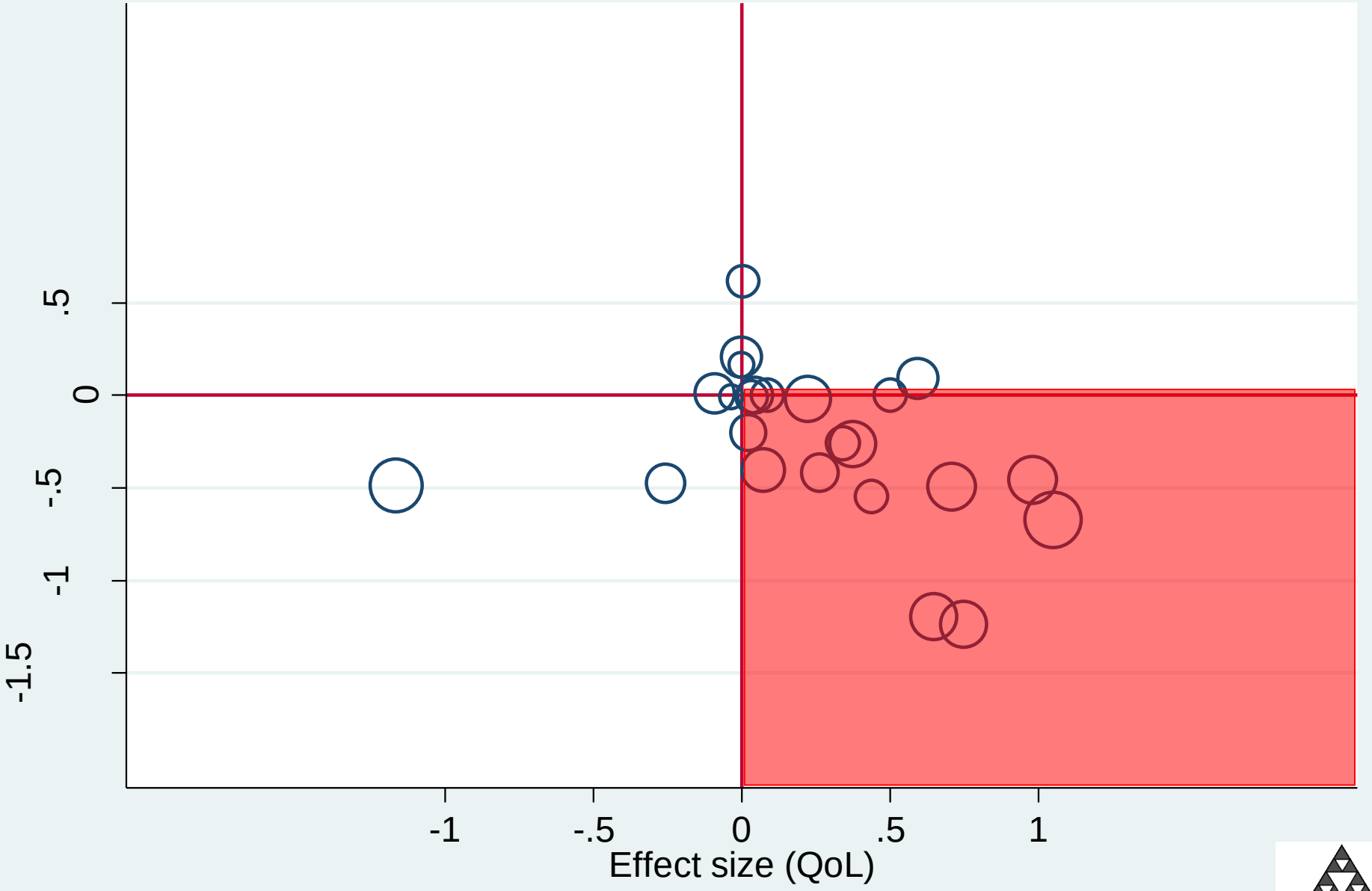
- For each disease category
  - Calculate impact on quality of life and utilisation
  - Explore relationships between these outcomes
    - QoL and hospital costs, total costs
  - Explore effects by type of self-management



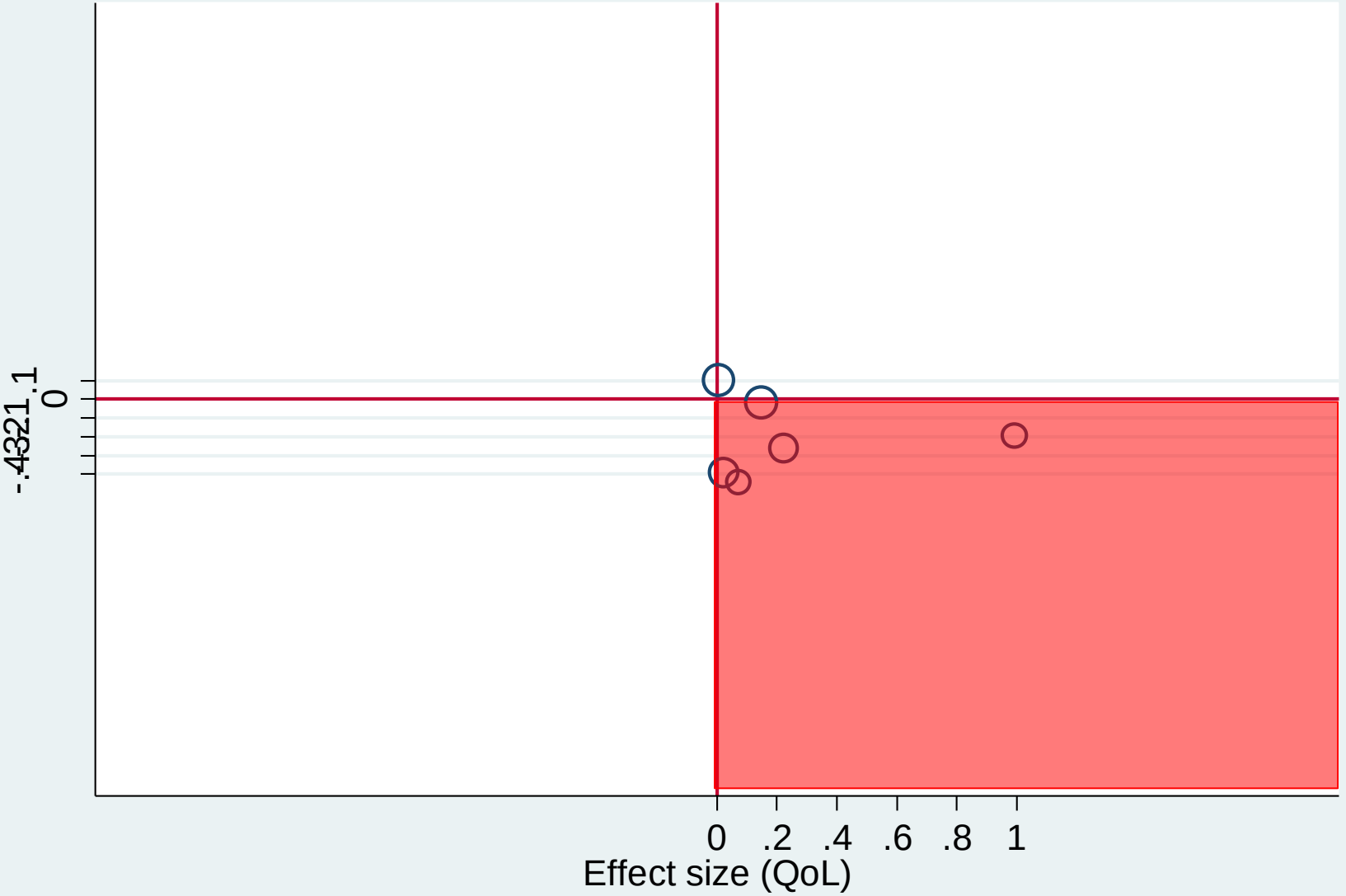
Exemplar analysis – respiratory



Permutation plot - respiratory trials



Permutation plot - respiratory trials total costs



Included studies	Outcome	ES	95% CI	N
All trials	QoL	0.27	0.16 to 0.37	34
	Hospital use	-0.21	-0.32 to -0.09	31

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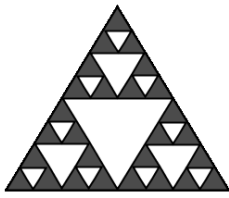
Trials reporting both outcomes	QoL	0.28	0.14 to 0.43	22
	Hospital use	-0.26	-0.41 to -0.11	22



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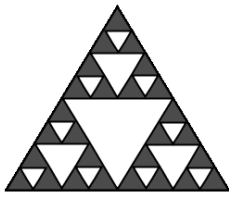
'Case management' reporting both outcomes	QoL	0.19	0.02 to 0.36	7
	Hospital use	-0.26	-0.42 to -0.10	6



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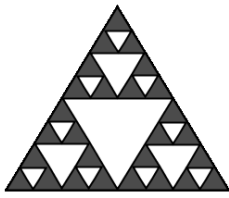
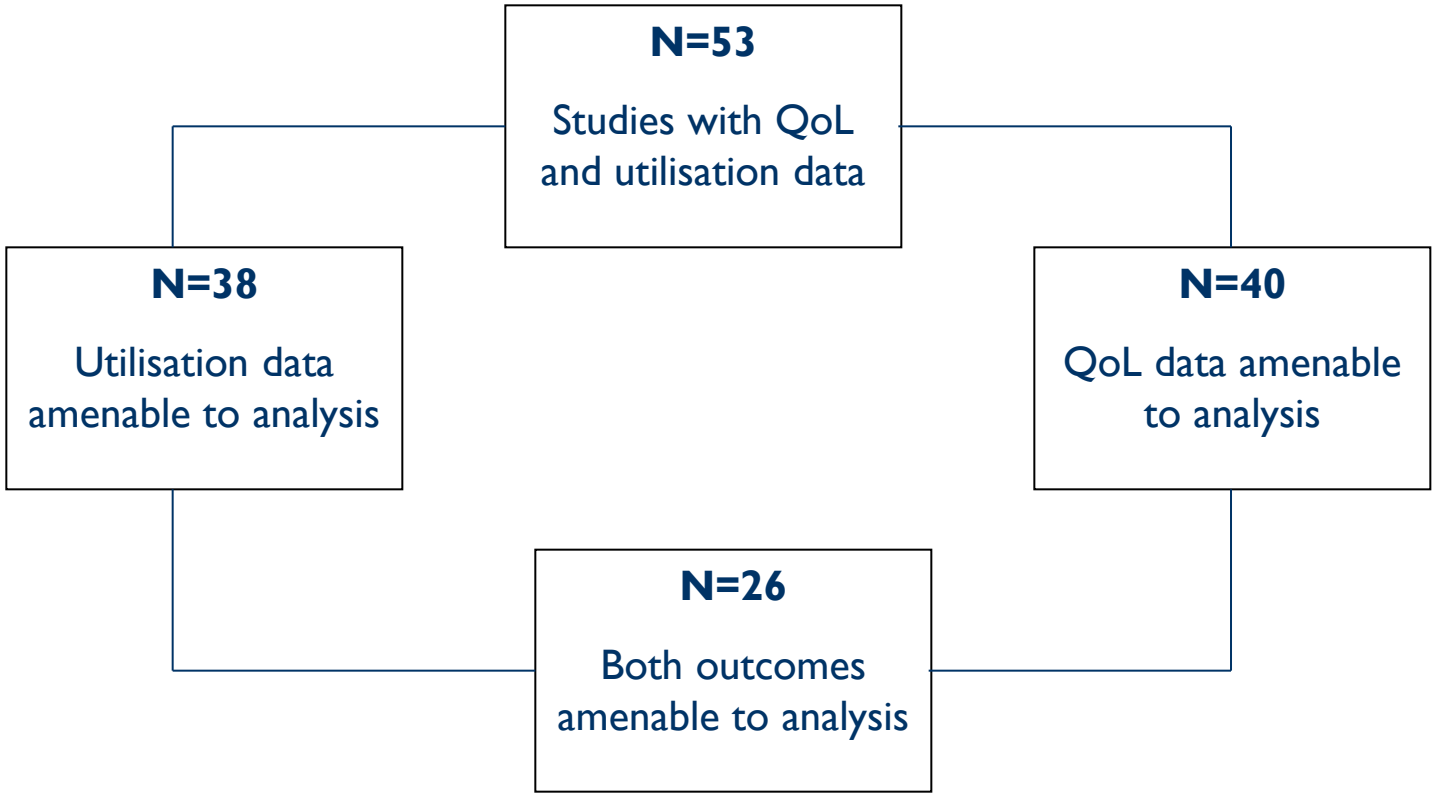
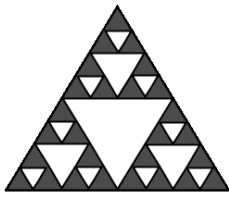
'Case management'	QoL	0.19	0.02 to 0.39	7
	Hospital use	-0.26	-0.42 to -0.10	6
'Self-management'	QoL	0.28	0.16 to 0.41	27
	Hospital use	-0.19	-0.33 to -0.05	25



Exemplar analysis – cardiac



Included studies	Outcome	ES	95% CI	N
All trials	QoL	0.21	0.14 to 0.28	40
	Hospital use	-0.23	-0.34 to -0.13	38



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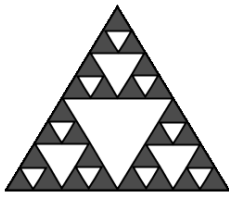
All trials	QoL	0.21	0.14 to 0.28	40
	Hospital use	-0.23	-0.34 to -0.13	38
Trials reporting both outcomes	QoL	0.17	0.08 to 0.26	26
	Hospital use	-0.23	-0.38 to -0.08	26



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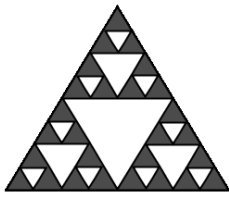
	Hospital use	-0.23	-0.38 to -0.08	26
'Case management'	QoL	0.26	0.12 to 0.39	13
	Hospital use	-0.29	-0.47 to -0.11	13



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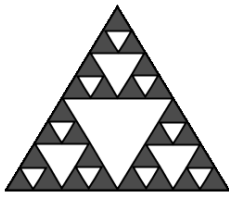
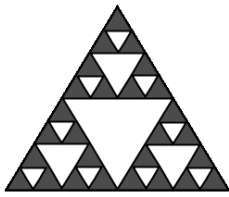
	Hospital use	-0.20	-0.33 to -0.07	25



Statistically significant benefits of at least ‘small’ magnitude

	Combined QoL	SM QoL	CM QoL	Combined hospitalisation	SM hospitalisation	CM hospitalisation
Respiratory	■	■		■		■
Cardiac	■		■	■	■	■
Arthritis						■
Pain						
Diabetes	■	■				
Mental health	■		■			
Mixed						



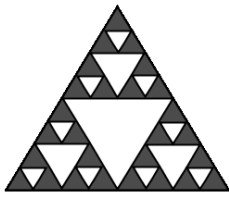
Groupings

- Variability over time (e.g. pain, depression, IBD)
  - QoL 0.16 (0.10 to 0.23)
  - Hospital -0.04 (-0.12 to 0.03)

- Ongoing with exacerbations (COPD, CHD)
  - QoL 0.27 (0.19 to 0.35)
  - Hospital -0.20 (-0.30 to -0.11)

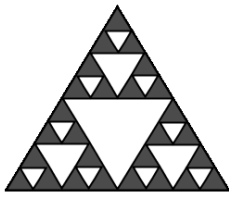
Conclusions

- Self-management generally did not compromise QoL
- Could lead to small but significant reductions in utilisation
- Interventions in respiratory and cardiac group most consistent



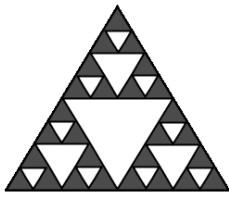
Caveats

- Large numbers of eligible studies
- No clear ‘limit’ to self-management
- Unknown sensitivity of search
- Lots of ‘wastage’



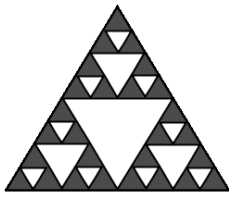
Caveats

- Nature of self-management variable by condition
  - Modest effects may reflect differing aims
- Caution with partial cost outcomes (EPP, WSD)
- Design
  - Impact smaller in better quality studies
  - Impact different in UK studies (smaller QoL, larger impact on hospital use, smaller impact on costs)



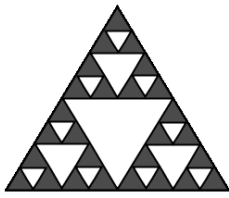
Caveats

- Little account of multimorbidity
- Much self-management involves significant ‘initial’ input
- ‘Discrete’ view of self-management as ‘intervention’



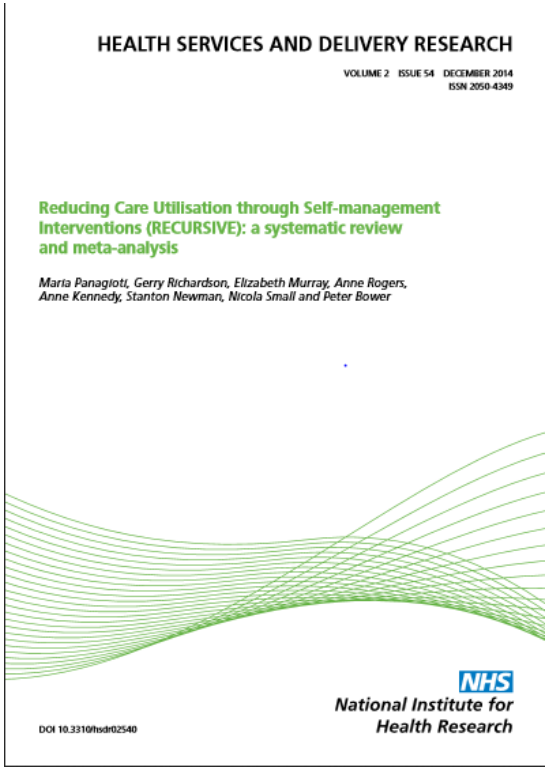
Context

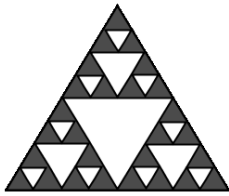
- Assumes reduction is appropriate
- Usual design versus usual care NOT a good test?
- Supplier induced demand



Full report

- http://www.journalslibrary.nihr.ac.uk/hsdr/volume-2/issue-54#abstract





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- Gerry Richardson (York)
- Elizabeth Murray (UCL)
- Anne Rogers, Anne Kennedy (Southampton)
- Stan Newman (City)
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- Kris Mackay (Public health)

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