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Understanding the association between restricted activity and patient outcomes in older patients: A systematic review and meta-analysis

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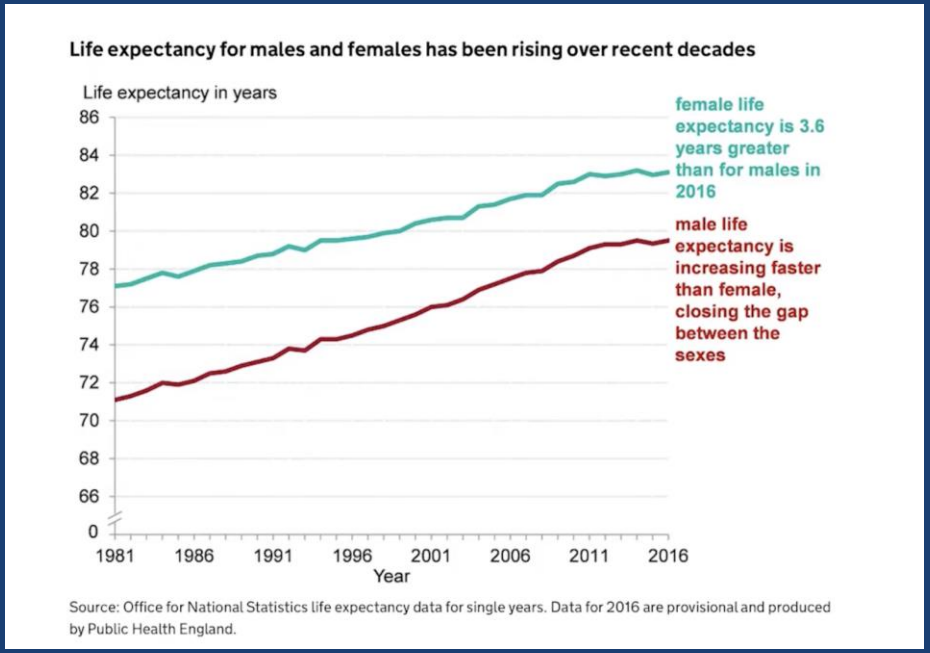

Older Adults: Life expectancy and quality of life

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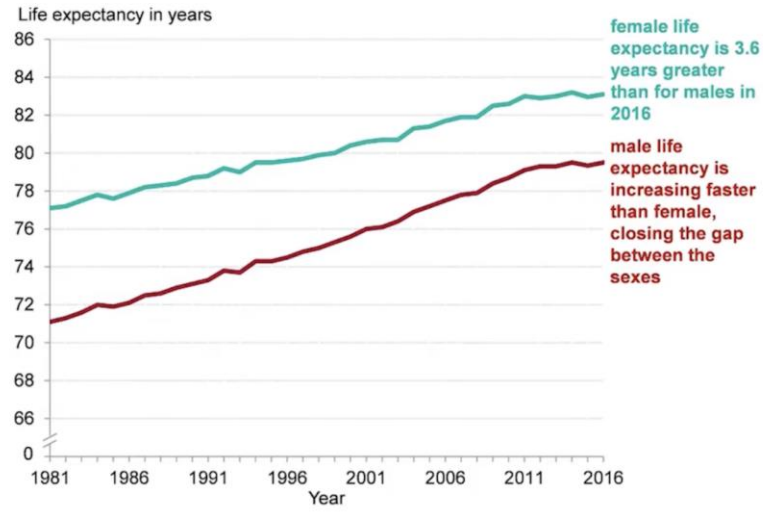
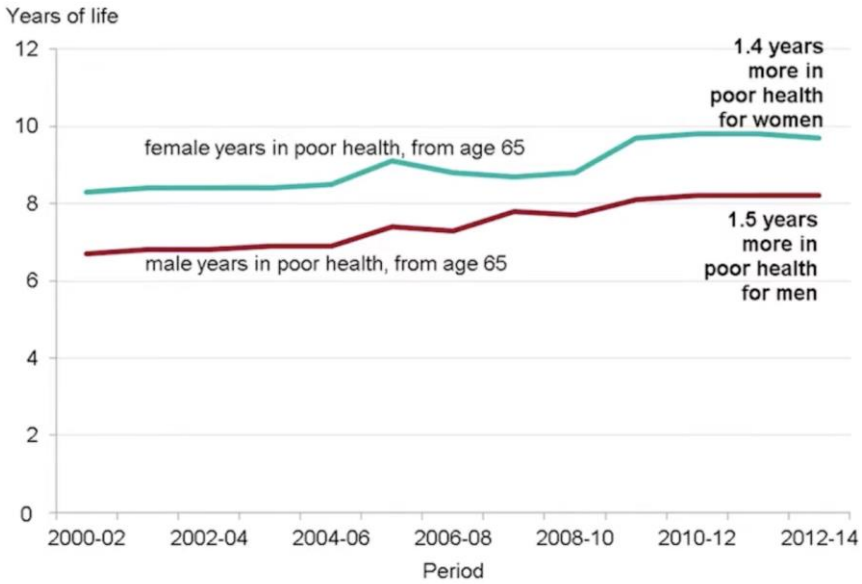
Life expectancy for males and females has been rising over recent decades



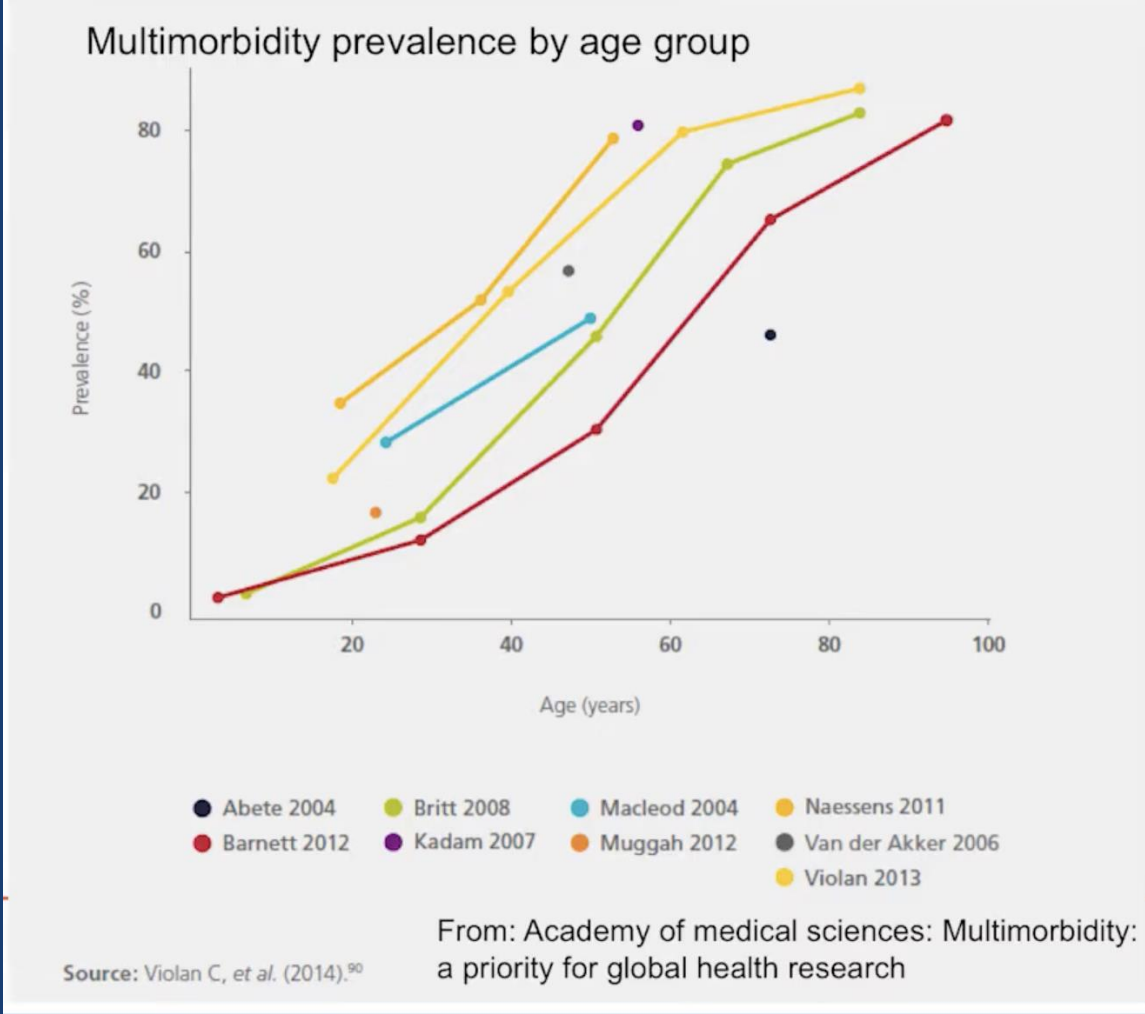
Source: Office for National Statistics life expectancy data for single years. Data for 2016 are provisional and produce by Public Health England.

For both sexes years in poor health from age 65 has increased



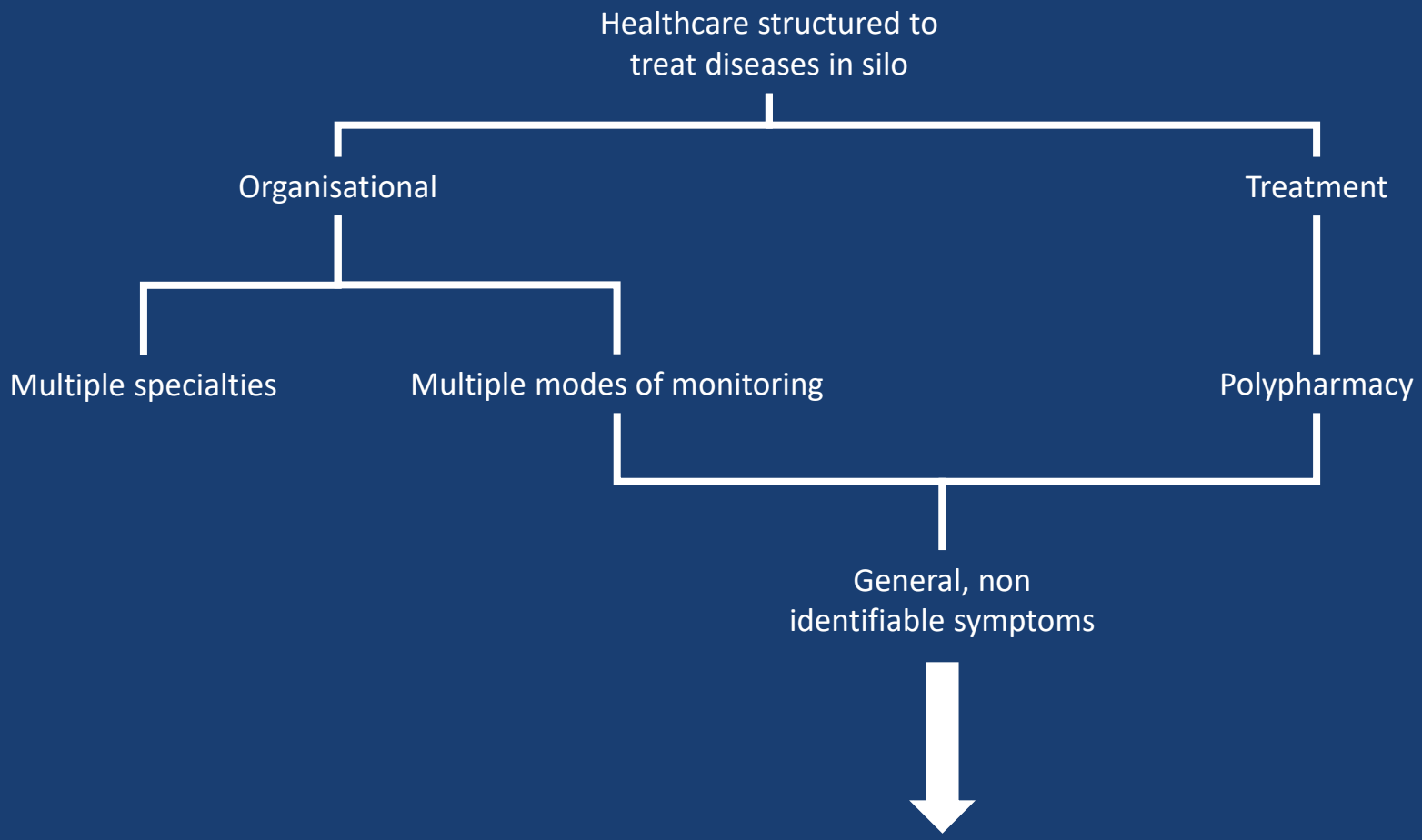
Source: Healthy life expectancies and life expectancies from ONS reports, with prevalence of good health derived from their surveys: General Household Survey/General Lifestyle Survey for years 2000 to 2002 up to 2008 to 2010, and the Annual Population Survey for years 2009 to 2011 up to 2012 to 2014.

Multimorbidity Prevalence

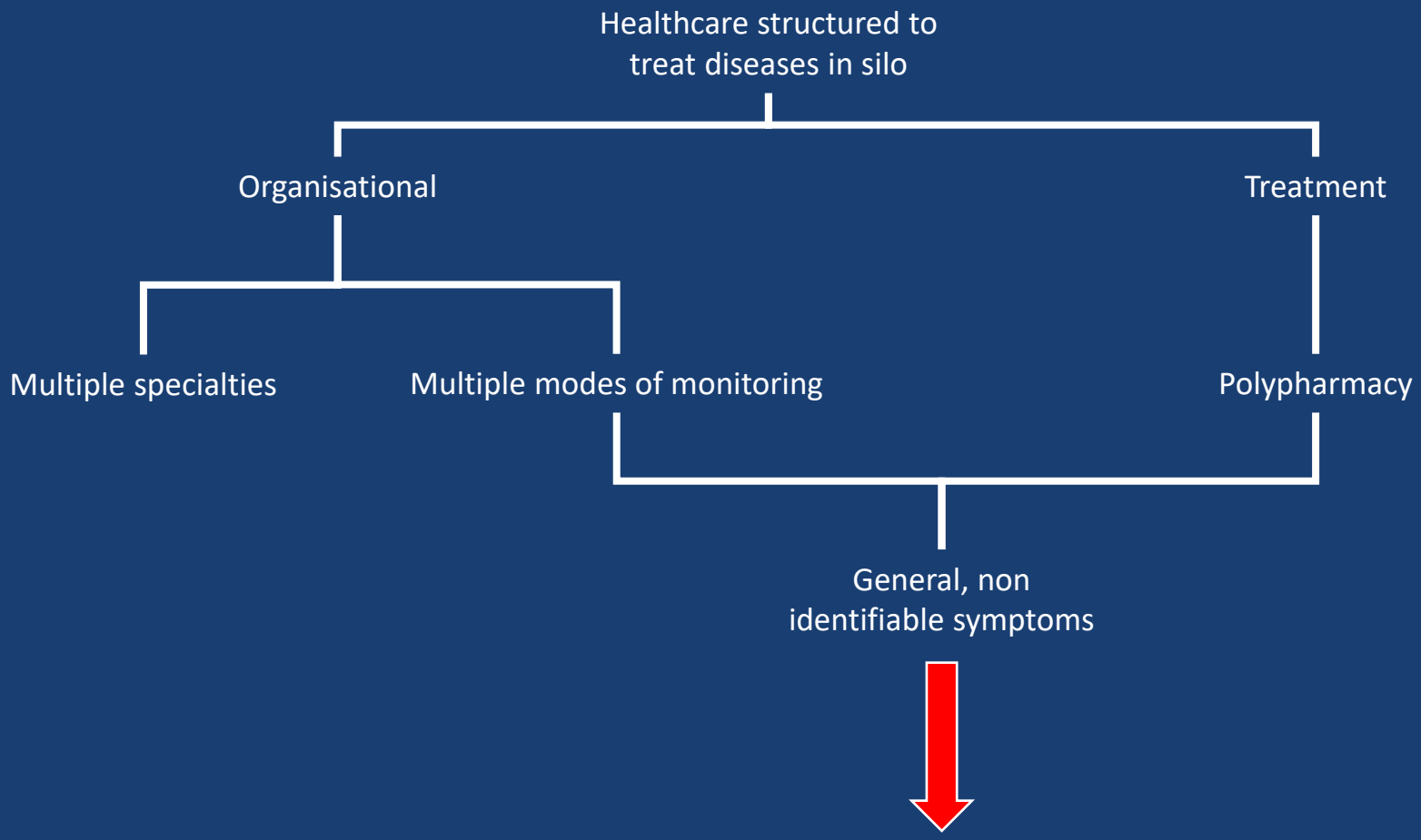


From: Academy of medical sciences: Multimorbidity: a priority for global health research

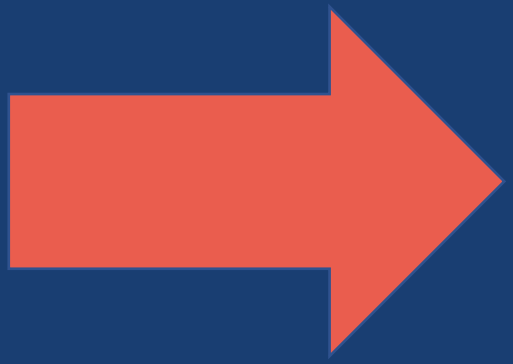
Multimorbidity care: The big problem



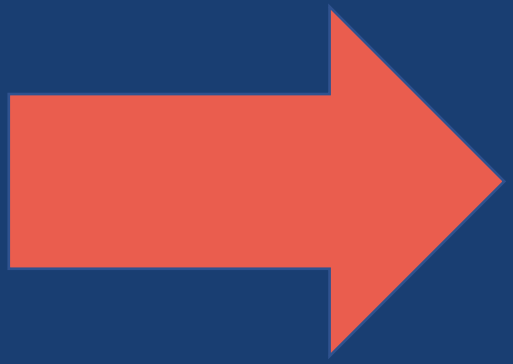
Multimorbidity care: The big problem



General measure of health

Stable  Unstable

General measure of health

Stable  Unstable

Restricted Activity

Systematic review
& Meta-analysis

Question

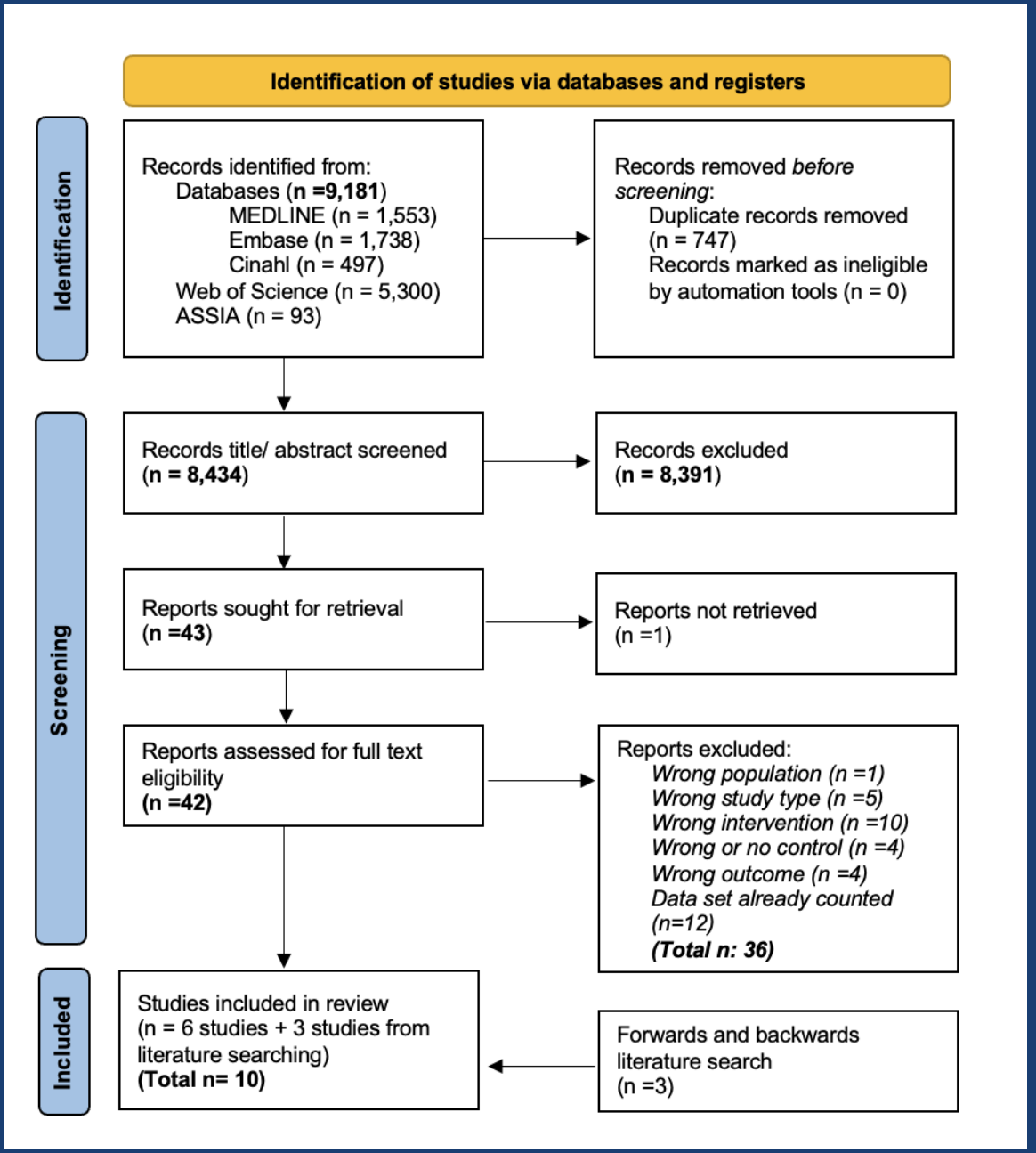
- What association does **restricted activity** have on patient outcomes, in older adults? Primarily looking at **hospitalisations**, with secondary outcomes of **cognitive decline** and **mortality**

- What **measures** of restricted activity have been used in the literature?

Search

*search was kept wide as no agreed definition of restricted activity

A total of **10** studies were taken forward



Results: Restricted activity definition

Reduced mobility

Bed rest

Dependency for activities of daily living

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Reduced mobility

Bed rest

Dependency for activities of daily living

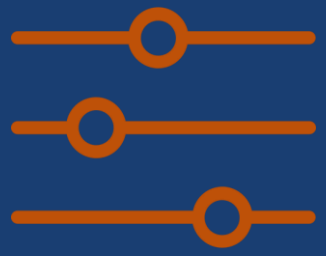
What the results mean

Preliminary evidence that the different measures are associated with **mortality**, and possibly **hospital admissions.**

Limitations

Lack of adjusted data

Raw data often not reported



Heterogeneity in control measures

Studies had to be excluded

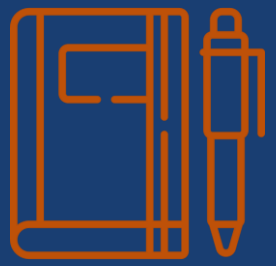
Limited studies / data on this

Lack of patient perspectives

Next steps

- Can this information be incorporated into an early warning system for declining health?

- If so, how would this be delivered?



Acknowledgments

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