Aims. A rise in mental illness has inspired the UK government to increase mental health service funding by £2.3 billion/year, deepening the need for robust evidence on how to best allocate mental health resources. The STAR methodology was co-developed by the London School of Economics and the Health Economics Unit to help commissioners allocate resources by combining a value-for-money analysis with stakeholder engagement. The aim of this research was to evaluate the potential benefit of implementing the STAR methodology in the allocation of mental health resources.

Methods. The barriers and facilitators to commissioning cost-effective mental health services were systematically reviewed. The potential for STAR to overcome these barriers and promote these facilitators was then evaluated by analysing its socio-technical components and assessing its real-world implementation in the COPD pathways of five ICSs.

Results. Fragmentation and cross-sectoral responsibility for the funding and delivery of services can hinder multi-sector buy-in. STAR has overcome this barrier in the COPD pathways of five ICSs by pooling their budgets and building partnerships across sectors through decision conferencing that has facilitated shared priority setting.

Lacking community involvement impedes local stakeholders from embracing change. By championing local stakeholders, STAR's 'socio' component involves front-line workers in funding decisions and fosters a sense of ownership over service adjustments.

The value placed on each outcome varies between sectors, often resulting in conflicting incentives. By considering each sector's interests, STAR enables a consensus on which outcomes to optimise for. Furthermore, STAR's 'technical' components strengthen the objective value-for-money evaluations of the interventions that contribute to each outcome. When modelling the health gain and cost of COPD interventions, STAR discovered that CBT offers a relatively high return on investment, despite often being overlooked as a core intervention for COPD. STAR's economic evaluations are communicated in easily interpretable ways to facilitate a shared understanding on which resources are most worth funding.

Conclusion. Resource allocation decisions are fuelled by the quality of evidence supporting them. Compared with physical health services, mental health services lack evidence that reflects the qualitative and quantitative nature of their outcomes. In particular, services that rely mostly on subjective reports, such as psychotherapy, lack objective value-for-money evaluations, resulting in a hesitancy for funding. By measuring the health gain and cost of each mental health intervention in a systematic, transparent and objective way, STAR enables commissioners to improve the allocative efficiency of mental health resources, thus improving population mental health without increasing cost.

A Systematic Review of Aerobic Exercise to Improve Cognitive Function in Older People Without Known Cognitive Impairment

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Aims. There is an increasing amount of evidence to suggest that regular physical exercise supports healthy ageing. Regular physical activity provides health benefits for the cardiovascular, respiratory and musculoskeletal systems as well as many other benefits. As well as improving cardiovascular fitness, aerobic activity in particular may also have beneficial effects on cognition among older people. In this paper, we aimed to systematically review the effect of aerobic physical activity, aimed at improving cardiorespiratory fitness, on cognitive function in older people without known cognitive impairment.

Methods. We searched the Cochrane Dementia and Cognitive Improvement Group's Specialized Register, the Cochrane Controlled Trials Register (CENTRAL), MEDLINE, EMBASE, PsycINFO, LILACS, World Health Organization (WHO) International Clinical Trials Registry Platform (ICTRP) (http://apps.who.int/trialsearch), ClinicalTrials.gov with no language restrictions.

We included all published randomised controlled trials (RCTs) comparing the effect of aerobic physical activity programmes with any other active intervention or no intervention on cognitive function. Participants were ages over 55 with no known cognitive impairment. We looked at trials, which measured effects on both fitness and cognition.

We reviewed the data from trials published since August 2013 to further the research completed by Young J, Angevaren M, Rusted J, Tabet N (published in 2015). This systematic review looked at all the studies completed before August 2013.

Results. There were a few trials that met our inclusion criteria. The aerobic activity programme that participants were subjected to varied in length.

The comparison between aerobic exercise to any active intervention showed no evidence of benefit from aerobic exercise in cognition.

None of our analyses showed a cognitive benefit from aerobic exercise despite the interventions demonstrating benefits to cardiorespiratory fitness

Conclusion. The findings from the available data from the RCTs did not show any evidence that aerobic physical activities, including those which successfully improve cardiorespiratory fitness, have any cognitive benefit in cognitively healthy older adults. Larger studies with longer term interventions and longer follow up would be recommended.

Exploration Heuristics During Anxiety – an Online Study

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Aims. Every day, we may choose something new randomly (random exploration) or select something new with no prior information (de-novo exploration). The link between exploration and anxiety has only been studied using trait-like anxiety questionnaires, but an experimental manipulation of anxiety could have different results.