

## Evidence-to-decision table

| <b>Problem</b><br>Is the problem a priority?  |   |   |
|---|---|---|
| JUDGEMENT   | RESEARCH EVIDENCE   | ADDITIONAL CONSIDERATIONS   |
| <input type="radio"/> No<br><input type="radio"/> Probably no<br><input type="radio"/> Probably yes<br><input checked="" type="radio"/> Yes<br><input type="radio"/> Varies<br><input type="radio"/> Don't know | <p>The ageing population means that the absolute numbers of those living with cognitive decline or dementia continue to rise, with an estimated prevalence of 75 million by 2030 and a new case of dementia diagnosed every three seconds (1) Anything that could reduce the incidence of cognitive decline or dementia would have huge importance for individual health, society and health care providers. Social engagement is an important predictor of wellbeing throughout life. Social disengagement conversely, has been shown to place older individuals at increased risk of transitioning into cognitive impairment and dementia (2)</p> | <p>A systematic review and meta-analysis of longitudinal cohort studies showed that lower social participation (RR = 1.41; 95% CI 1.13 to 1.75), less frequent social contact (RR = 1.57; 95% CI 1.32 to 1.85) and loneliness (RR = 1.57; CI 1.32 to 1.85) was associated with higher rates of incident dementia (3)</p>  |
| <b>Desirable Effects</b><br>How substantial are the desirable anticipated effects?  |   |   |
| JUDGEMENT   | RESEARCH EVIDENCE   | ADDITIONAL CONSIDERATIONS   |
| <input type="radio"/> Trivial<br><input type="radio"/> Small<br><input checked="" type="radio"/> Moderate<br><input type="radio"/> Large<br><input type="radio"/> Varies<br><input type="radio"/> Don't know    | <p><i>Desirable outcomes;</i></p> <p>For cognitive function, volume and quality of evidence is very low. No meta-analysis was conducted. Three RCTs of small to moderate sample size (n=120 to n=225) and follow-up (14 weeks to 12 months). No robust information was available on clinical significance.</p> <p>Only cognitive function reported as a critical outcome. No evidence on dementia or MCI.</p>   | <p>Kelly et al. (4) also reported that observational studies found that social activity was significantly associated with global cognition in the majority of studies both at baseline and follow-up, and that social network size and frequency of contact was associated with the majority of studies at follow-up.</p> |

| <b>Undesirable Effects</b>  |   |   |
|---|---|---|
| How substantial are the undesirable anticipated effects?  |   |   |
| <b>JUDGEMENT</b>  | <b>RESEARCH EVIDENCE</b>  | <b>ADDITIONAL CONSIDERATIONS</b>  |
| <ul style="list-style-type: none"> <li><input type="radio"/> Large</li> <li><input type="radio"/> Moderate</li> <li><input type="radio"/> Small</li> <li><input checked="" type="radio"/> Trivial</li> <li><input type="radio"/> Varies</li> <li><input type="radio"/> Don't know</li> </ul>  | <p><i>Undesirable outcomes:</i></p> <p>No evidence on undesirable outcomes i.e. quality of life, functional level (ADL, IADL), adverse events, drop outs.</p>   |   |
| <b>Certainty of evidence</b>  |   |   |
| What is the overall certainty of the evidence of effects?   |   |   |
| <b>JUDGEMENT</b>  | <b>RESEARCH EVIDENCE</b>  | <b>ADDITIONAL CONSIDERATIONS</b>  |
| <ul style="list-style-type: none"> <li><input checked="" type="radio"/> Very low</li> <li><input type="radio"/> Low</li> <li><input type="radio"/> Moderate</li> <li><input type="radio"/> High</li> <li><input type="radio"/> No included studies</li> </ul>   | <p>For cognitive function, the certainty of evidence is very low. No evidence for MCI, dementia, quality of life, functional level (ADL, IADL), adverse events, drop outs.</p>  |   |
| <b>Values</b>   |   |   |
| Is there important uncertainty about or variability in how much people value the main outcomes?   |   |   |
| <b>JUDGEMENT</b>  | <b>RESEARCH EVIDENCE</b>  | <b>ADDITIONAL CONSIDERATIONS</b>  |
| <ul style="list-style-type: none"> <li><input type="radio"/> Important uncertainty or variability</li> <li><input type="radio"/> Possibly important uncertainty or variability</li> <li><input type="radio"/> Probably no important uncertainty or variability</li> <li><input checked="" type="radio"/> No important uncertainty or variability</li> </ul> | <p>A review conducted by Anderson et al 2009 (5) on public perceptions about cognitive health in the United States revealed that a large proportion of the population were concerned about declines in cognition or memory. Further studies in Australia (6) and the United Kingdom (7) (UK) and have shown a general trend of individuals being fearful of developing dementia. Data from low- and middle-income countries is unavailable.</p> <p>There is no evidence showing that individuals would oppose dementia risk reduction or view cognitive decline favourably. Hence, there is no reason to believe there is important uncertainty about or variability in how much people value reducing the risk of cognitive decline and/or dementia.</p> | <p>Additional sources like the Saga Survey (8) and Alzheimer's Research UK (9) have reported high percentage of people in the UK fear dementia, even more so than cancer, and feel a prognosis would mean their life is over (62%).</p> |

| <b>Balance of effects</b>  |   |  |
|--|---|--|
| Does the balance between desirable and undesirable effects favour the intervention or the comparison?  |   |  |
| <b>JUDGEMENT</b>   | <b>RESEARCH EVIDENCE</b>  | <b>ADDITIONAL CONSIDERATIONS</b>                                 |
| <ul style="list-style-type: none"> <li><input type="radio"/> Favours the comparison</li> <li><input type="radio"/> Probably favours the comparison</li> <li><input type="radio"/> Does not favour either the intervention or the comparison</li> <li><input checked="" type="radio"/> Probably favours the intervention</li> <li><input type="radio"/> Favours the intervention</li> <li><input type="radio"/> Varies</li> <li><input type="radio"/> Don't know</li> </ul> | Probably favours the intervention. No data on adverse effect available.   |  |
| <b>Resources required</b>  |   |  |
| How large are the resource requirements (costs)?   |   |  |
| <b>JUDGEMENT</b>   | <b>RESEARCH EVIDENCE</b>  | <b>ADDITIONAL CONSIDERATIONS</b>                                 |
| <ul style="list-style-type: none"> <li><input type="radio"/> Large costs</li> <li><input type="radio"/> Moderate costs</li> <li><input type="radio"/> Negligible costs and savings</li> <li><input type="radio"/> Moderate savings</li> <li><input type="radio"/> Large savings</li> <li><input checked="" type="radio"/> Varies</li> <li><input type="radio"/> Don't know</li> </ul>  | Wide variety of interventions used and no data favouring one over another. Resources required are inestimable at this stage. Further research is required to determine the type, form, and duration of social activity intervention which would be efficacious for the target outcomes. Issues of adherence is another factor to consider in resource requirements, whereby more oversight may be required to ensure compliance. With respect to resources required, the data is scarce and inconclusive. | Depends on the type of social activity intervention in question. |
| <b>Certainty of evidence of required resources</b>   |   |  |
| What is the certainty of the evidence of resource requirements (costs)?  |   |  |
| <b>JUDGEMENT</b>   | <b>RESEARCH EVIDENCE</b>  | <b>ADDITIONAL CONSIDERATIONS</b>                                 |
| <ul style="list-style-type: none"> <li><input type="radio"/> Very low</li> <li><input type="radio"/> Low</li> <li><input checked="" type="radio"/> Moderate</li> <li><input type="radio"/> High</li> </ul>   | Uncertain as evidence is limited and inconclusive, and due to lack of data on costing in the included studies. Also, the resource costs are variable depending upon type of intervention.   |  |

| <ul style="list-style-type: none"> <li>○ No included studies</li> </ul>  |   |                           |
|--|---|---------------------------|
| <b>Cost effectiveness</b><br>Does the cost-effectiveness of the intervention favor the intervention or the comparison?   |   |                           |
| JUDGEMENT  | RESEARCH EVIDENCE   | ADDITIONAL CONSIDERATIONS |
| <ul style="list-style-type: none"> <li>○ Favours the comparison</li> <li>○ Probably favours the comparison</li> <li>○ Does not favour either the intervention or the comparison</li> <li>○ Probably favours the intervention</li> <li>○ Favours the intervention</li> <li>○ Varies</li> <li>● No included studies</li> </ul> | <p>No evidence available on cost effectiveness of social interventions.</p>   |                           |
| <b>Equity</b><br>What would be the impact on health equity?  |   |                           |
| JUDGEMENT  | RESEARCH EVIDENCE   | ADDITIONAL CONSIDERATIONS |
| <ul style="list-style-type: none"> <li>○ Reduced</li> <li>○ Probably reduced</li> <li>○ Probably no impact</li> <li>● Probably increased</li> <li>○ Increased</li> <li>○ Varies</li> <li>○ Don't know</li> </ul>   | <p>A report from the Institute of Health on inequalities in cognitive impairment and dementia among older persons (10) studies health equities in England, they found that individuals with lower socioeconomic status (SES) were at increased risk of earlier onset of dementia, cognitive dysfunction at earlier stages of cognitive decline and impairment and tend to have fewer resources to cope with symptoms, as compared to higher SES groups. Further, lower SES groups are likely to live and age in environments that are physically and economically less supportive of social connection physical activity or mental stimulation, which can increase the risk of cognitive impairment and dementia in later life.</p> <p>Based on this it is likely that interventions to reduce risk of cognitive decline and dementia will increase equity in health.</p> |                           |

| <b>Acceptability</b>  |  |  |
|---|--|--|
| Is the intervention acceptable to key stakeholders?   |  |  |
| <b>JUDGEMENT</b>  | <b>RESEARCH EVIDENCE</b>   | <b>ADDITIONAL CONSIDERATIONS</b>   |
| <input type="radio"/> No<br><input type="radio"/> Probably no<br><input type="radio"/> Probably yes<br><input checked="" type="radio"/> Yes<br><input type="radio"/> Varies<br><input type="radio"/> Don't know | There are no apparent reasons for which the intervention would not be acceptable to key stakeholders.  | Acceptability could be determined via focus groups at a later stage when there is greater clarity on the type of social activity intervention required for efficacious outcomes. |
| <b>Feasibility</b>  |  |  |
| Is the intervention feasible to implement?  |  |  |
| <b>JUDGEMENT</b>  | <b>RESEARCH EVIDENCE</b>   | <b>ADDITIONAL CONSIDERATIONS</b>   |
| <input type="radio"/> No<br><input type="radio"/> Probably no<br><input checked="" type="radio"/> Probably yes<br><input type="radio"/> Yes<br><input type="radio"/> Varies<br><input type="radio"/> Don't know | Insufficient evidence to make a determination. Feasibility is depending on the social activity intervention required for efficacious outcomes, for which further research is required. |  |

## REFERENCES SUMMARY

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