

Appendix A: summary of new evidence

PH16

Summary of new evidence from 10-year surveillance	Summary of new intelligence from 10-year surveillance (from topic experts or initial internal intelligence gathering)	Impact
PH16 – 01. Recommendation 1 Occupational therapy interventions evidence statements: 8 and 17		
<p>Seven studies (1 SR, 2 RCTs, 2 non-RCTs and 2 BA studies) were identified evaluating the effectiveness of occupation therapy (OT) interventions on mental health and well-being:</p> <p>A systematic review of 8 studies on re-ablement services for older community-living people reported that, compared to conventional home care, re-ablement services were associated with less use of home care, higher likelihood of living at home, improved activities of daily living skills, quality of life and physical health, increased physical activity and lower costs. [1]</p> <p>An RCT with adults aged 65 years or older randomised to a multi-component occupation-based lifestyle intervention designed to improve mental well-being based on NICE recommendations (n=136) or usual care (n=126) found a non-significant increase in mental wellbeing (SF-26 MH score) 6 months after the intervention. It should be noted that study participants were 'mentally well at baseline'. [2]</p> <p>An RCT with frail community-dwelling adults aged 65 or older (n=153) randomised to a case management intervention delivered by nurses and physiotherapists over 12 months, with 1 or more home visits per month or a control group, found no significant</p>	<p>Initial intelligence gathering identified the following:</p> <p>Older people with social care needs and multiple long-term conditions (2015) NICE guideline NG22 provides recommendations on planning and delivering social care and support for older people who have multiple long-term conditions.</p> <p>A topic expert highlighted A preventative lifestyle intervention for older adults (lifestyle matters): a randomised controlled trial [2], which was also identified in the literature search. This study indicates that an intervention based on PH16 recommendations is not effective at improving mental wellbeing in over 65s, however it also notes that the participants had high baseline levels of mental wellbeing. The expert also noted their involvement in a study that is still publishing: Lifestyle Matters trial (results of which are also reported in the RCT above).</p> <p>A topic expert noted that there is a lack of any recommendations on assessment prior to offering or involving older people in activities (no references provided and no studies identified</p>	<p>New evidence was identified that does not have an impact on the recommendation.</p> <p>Recommendation 1 recommends that older people are offered regular group and/or individual sessions to encourage them to identify, construct, rehearse and carry out daily routines and activities that help to maintain or improve their health and wellbeing; that older people's knowledge and awareness of where to get reliable information and advice on a broad range of topics such as maintaining healthcare needs, nutrition, staying active, accessing services and benefits, should be improved by providing information directly, inviting local advisers to give informal talks, or arranging trips and social activities. The recommendation also highlights the importance of involving people in their care.</p> <p>There is mixed evidence of effectiveness of occupational therapy interventions on mental health and wellbeing in older adults, but overall it appears to be in favour of occupational therapies improving the mental health and wellbeing of older people [1-7].</p> <p>Only 2 studies reported on the outcomes of information communication technology (ICT) interventions, both of which indicated that these can lead to improvements in wellbeing [5,6]. Given the</p>

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<p>differences in loneliness, life satisfaction or depressive symptoms using an ITT analysis at 6 and 12 month follow-up; significant improvements were found in a complete case analysis in favour of the intervention for loneliness and life satisfaction at 6 months follow-up and for depressive symptoms at 12 months. [3]</p> <p>A non-RCT with 'elderly' adults allocated to an in-home rehabilitation group that received a weekly physical treatment programme and basic nursing care in the home (n=100) or a control group that received basic nursing care (n=100) over 1 year, found that quality of life and activities of daily living significantly improved in the intervention group; while there was only a slight improvement in quality of life (QoL) in the control group at 9 months, with 'almost no effects' at the other time-points. [4]</p> <p>A non-RCT with adults >65 years old in an IT welfare intervention (n=100) versus a control group (n=100), found that the intervention group had better balance (stats=NR) and significantly lower levels of depression and higher social participation. [5]</p> <p>A BA study with older adults (n=13) using a home-based information communication technology (ICT) programme on an iPad trained by occupational therapists found a 'significant trend' in ICT activities across 6 months, with social connectedness activities modestly increasing. [6]</p> <p>A BA study with low-income adults aged 65 and older (n=281) in The Community Aging in Place, Advancing Better Living for Elders (CAPABLE) programme, which uses an inter-professional team, including OTs,</p>	<p>through the search). This area will be considered at the next surveillance review.</p> <p>A topic expert also requested an update highlighting where online reliable information can be found (no references provided).</p> <p>On-going research:</p> <p>The development and feasibility of a new service to promote health and well-being in older people who are starting to become frailer: The HomeHealth study</p> <p>We will monitor the progress of ongoing research and consider the results when they become available.</p>	<p>limited body of evidence on ICT interventions, it is recommended that this is not the focus of an update at this time. Older people: independence and mental wellbeing (2015) NICE guideline NG32 does recommend 'considering' the use of ICT, and it is recommended that there is a cross-reference to this guideline (see recommendation 2 below).</p>

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to help participants achieve their goals, reported that symptoms of depression and the ability to perform activities of daily living improved. [7]		
PH16 – 02. Recommendation 2 Physical activity evidence statements: 1, 2, 3 and 17		
<p>Twenty studies (2 SRs, 9 RCTs, 2 non-RCTs, 5 BA and 2 cross-sectional studies) were identified evaluating the effectiveness of physical activity interventions on mental health and well-being:</p> <p>A systematic review of 53 studies (n=2051 adults aged 70 years and over) on aerobic training interventions found 3 studies that reported on QoL outcomes. These reported a significant effect of aerobic training on QoL. [8]</p> <p>A systematic review of 15 studies on relaxation interventions in older adults found that these interventions often led to reductions in depression and anxiety when compared to controls, The authors reported that 'progressive muscle relaxation training, music intervention, and yoga had the strongest intervention effects on depression. Music intervention, yoga, and combined relaxation training most effectively reduced anxiety symptoms among older adults' and the effects can last for 14 to 24 weeks after the interventions. [9]</p> <p>A pilot RCT with older adults (n=47) randomised to a 12-week yoga course or control found that at 3 months follow-up, yoga led to a significant improvement in mental well-being. [10]</p>	<p>Initial intelligence gathering identified the following:</p> <p>Physical activity: brief advice for adults in primary care (2013) NICE guideline PH44, recommendation 2 provides guidance on delivering and following-up on brief advice and provides a link to current government guidance on physical activity (however it should be noted that they are being reviewed for potential update in 2018).</p> <p>Older people: independence and mental wellbeing (2015) NICE guideline NG32 provides guidance on maintaining and improving the mental wellbeing and independence of people aged 65 or older and how to identify those most at risk of a decline.</p> <p>Topic experts noted that the recommendation in PH16 to 'Advise older people and their carers how to exercise safely for 30 minutes a day (which can be broken down into 10-minute bursts) on 5 days each week or more' is not in line with the current guidelines which focus on 150 minutes per week,</p> <p>Topic experts also noted that 'balance activities are recommended for those at risk of falls' (no</p>	<p>New evidence was identified that may change the recommendation.</p> <p>Recommendation 2 recommends that older people and their carers are offered tailored exercise and physical activity programmes in the community which include moderate intensity exercises, strength and resistance, toning and stretching exercises that are in line with the person's preferences and to encourage regular attendance. The recommendation states that activity should be done for at least 30 minutes a day, 5 days a week.</p> <p>There is a body of evidence on physical activity interventions that focus on relaxation and balance (yoga, tai chi, Pilates, Qigong) that indicates these are effective at improving mental health and well-being in older adults [9-14]. While the recommendation includes toning and stretching exercises, it could be updated with the addition of relaxation and balance exercise, highlighting these specific interventions as examples.</p> <p>The remaining evidence is overall supportive of physical activity interventions leading to improvements in mental health and well-being in older adults, and is in line with the current recommendation [4, 8, 15-22]. There is also evidence</p>

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<p>An RCT with 'frail older people' (n=NR) randomised to a 14 week yoga programme, 14 week tai chi programme or usual care activity reported an improvement in quality of life in the tai chi group (stats=NR). [11]</p> <p>An RCT with older adults with osteoporosis randomised to a balance training programme or control group found that at 3 months follow-up (n=68) the mental component sum of the SF-36 improved significantly from baseline in the intervention group, and the physical component sum improved in both groups, but no statistically significant differences were found between groups. [12]</p> <p>A BA study with elderly females (n=148) participating in a 16 weeks Pilates programme reported a significant improvement in self-confidence, communication efficiency, optimistic trait, anger management and depression at the end of the programme. [13]</p> <p>A BA study with community-dwelling older adults (n=45) participating in a 1 hour long Qigong session twice a week for 8 weeks reported significant improvements in depression and spiritual wellbeing at the end of the intervention. [14]</p> <p>An RCT with adults aged 65 years and older (n=NR) randomised to a vigorous physical activity programme group (VAG) or to a postural gymnastic group (PGG) found that both groups had low baseline depressive symptoms scores (PHQ-9); at the end of the study, both groups had a higher level of QoL (SF-12) 'than the normative standardised sample'; at 12 weeks follow-up, only the VAG group 'maintained</p>	<p>references were provided), they questioned whether yoga and Pilates should be explicitly mentioned as examples of exercises that older people could use. They also said that 'Housework is no longer promoted as a form of moderate intensity physical activity, as it is increasingly not of sufficient intensity to increase heart rate. Also "shopping" isn't a physical activity. Include walking as a form of daily activity, as it is more the most accessible and prevalent physical activity for older adults.'</p> <p>A topic expert requested recommendations on the use of Apps to support physical activity (no references provided).</p>	<p>that indicates physical activity interventions that include other leisure activities such as singing, music, social activities or cognitive function activities are effective at improving wellbeing [23-26]. These types of activity are recommended in Older people: independence and mental wellbeing (2015) NICE guideline NG32. Recommendation 2 should have a cross-reference to NG32 added.</p> <p>There should also be a cross-reference to Physical activity: brief advice for adults in primary care (2013) NICE guideline PH44, recommendation 2</p> <p>The recommendation should be refreshed in line with current government guidance on the amount of physical activity undertaken each week (150 minutes per week); it is recommended that shopping and housework are removed as examples of exercise, waking is included as an example instead.</p> <p>In relation to physical activity Apps, these will be addressed in the update of Behaviour change: individual approaches (2014) NICE guideline PH49.</p>

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<p>significantly-higher scores than those of the normative sample'. [15]</p> <p>An RCT with frail sedentary elderly (n=100) randomised to a supervised-facility multicomponent exercise program (MEP: proprioception, aerobic, strength, and stretching exercises for 65 minutes, 5 days per week for 24 weeks) or a control found that the intervention improved cognitive, emotional and social networking determinants, however these do not appear to be significant. [16]</p> <p>An RCT with older adults randomised to a home-based physical strength training plus nutrition intervention (PTN; n=39) or social support intervention (SOSU; n=41) only found significant differences between the groups in QoL on the past, present and future activities domain on the WHOQOL instrument in favour of PTN. Within the PTN group there was improvement in overall QoL, social relations and social participation (stats=NR); but there were no significant effects on QoL within the SOSU group. [17]</p> <p>A BA study with 31 older adults in residential care involved in a moderate-intensity aerobic and muscle-strengthening activity reported a significant improvement in anxiety, social dysfunction and severe depression.[18]</p> <p>An RCT with elderly women (n=66) randomised to a 6 week stationary walking intervention or control reported an improvement in QoL post intervention, results in the control group are not clearly reported. [19]</p>		

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<p>An RCT with older adults (n=120) randomised to an 8 week physical exercise programme or control were significantly happier after the intervention, while there were no changes in happiness in the control group. [20]</p> <p>A RCT with older people with frailty randomised to the 12 week Home-based Older People's Exercise (HOPE) programme or control, using an intention-to-treat analysis (n=40 in HOPE and 30 controls) found no difference in health-related QoL or depression. [21]</p> <p>A non-RCT with 'elderly' adults allocated to an in-home rehabilitation group that received a weekly physical treatment programme and basic nursing care in the home (n=100) or a control group that received basic nursing care (n=100) over 1 year, found that quality of life and activities of daily living significantly improved in the intervention group; while there was only a slight improvement in QoL in the control group at 9 months, with 'almost no effects' at the other time-points. [4]</p> <p>A non RCT study with older adults (n=27) allocated to a twice-weekly physical activity combined with laughter exercises versus a 12-week wait list control reported a significant improvement in mental health (SF-36) in the intervention group. [22]</p> <p>A BA study with community-dwelling older adults (n=15) taking part in sessions involving singing familiar songs, physical exercise to music and observation of historical pictures over 10 weeks, reported no significant differences in the Mini Mental State Examination or Behavioral Rating Scale for the</p>		

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<p>Elderly at the end of the intervention, but did report a significantly higher score on the physical component summary of SF-8.[23]</p> <p>A BA study with elderly adults (healthy and with mild cognitive impairment; n=50) on the Long Lasting Memories programmes (cognitive exercises with physical activity using an IT platform) found a significant improvement after the training in global cognitive function, verbal memory, attention, episodic memory and symptoms of depression. [24]</p> <p>A cross-sectional study with adults aged 65 and older (n=105) participating in either solely social groups or social groups plus physical activity reported that there were no significant differences in mental health in the physically active group, findings for the social only group not reported. [25]</p> <p>A cross-sectional study with elderly people (n=181) attending a Brazilian government programme that encourages physical and leisure activity (Academia de Cidade program) reported a significant, positive association between QoL and duration of participation in the programme. [26]</p>		
<p>PH16 – 03. Recommendation 3 Walking schemes evidence statements: 4 and 18</p>		
<p>One study on walking schemes was identified:</p> <p>A BA study with older adults with visual impairment (n=30; data for 19) attending a day centre rehab programme involving walking groups, language courses and memory games found no changes in depression at the end of 12 months in the</p>	<p>Initial intelligence gathering identified the following:</p> <p>Physical activity: walking and cycling (2012) NICE guideline PH41 provides recommendations on programmes that</p>	<p>New evidence was identified that may have an impact on the recommendation: refresh</p> <p>Recommendation 3 highlights that a range of walking schemes of low to moderate intensity with a choice of local routes to suit different abilities should be offered, older people should be encouraged and</p>

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<p>programme, the only significant change was an improvement in cognitive scores.[27]</p>	<p>encourage people to increase the amount they walk or cycle for travel or recreation.</p> <p>Previous surveillance review in 2015 identified that 'Walking the way to health initiative' was no longer a prominent initiative.</p>	<p>supported to attend regularly. Recommendations on the content of the walking schemes are provided, including that these have a trained person leading walks, there is flexibility in the timing and location of walks to meet the participants needs, walks should last 1 hour, with at least 30–40 minutes of walking plus stretching and warm-up/cool-down exercises.</p> <p>While Physical activity: walking and cycling (2012) NICE guideline PH41 is not specific to over 65s, it does provide far more details on walking programmes (recommendations 6 and 7) than is provided in recommendation 3, it is therefore recommended to add a cross-reference to PH41 to this recommendation.</p> <p>Reference to 'Walking the way to health initiative' walk leaders should be changed to 'walking group organisers'.</p> <p>Only one study was identified assessing the effect of a multi-component walking-based intervention, while this indicated that there were no improvements in mental health after 12 months of the programme, this on its own, does not indicate that the current recommendation is incorrect.</p>
<p>PH16 – 04. Recommendation 4 Training evidence statements: IDE (inference derived from the evidence)</p>		
<p>No studies were identified.</p>	<p>No evidence.</p>	<p>No new evidence was identified, no changes</p> <p>Recommendation 4 recommends that occupational therapists are involved in the design and development of training schemes for those working with older people, and that these schemes should</p>

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		include: knowledge and application of the principles and methods of occupational therapy and health and wellbeing promotion, communication skills, information on how to monitor and redesign services to meet the needs of older people. Recommended skills practitioners should have include good communication skills and the ability to encourage older people to undertake daily routines and activities that help to maintain/improve health and wellbeing.
Research recommendations		
RR – 01 How can older people who might benefit most from interventions to promote mental wellbeing be identified?		
No studies were identified.	No evidence.	No new evidence was identified, no changes
RR – 02 How is the effectiveness of interventions to promote the mental wellbeing of older people affected by place of residence, advanced age, mobility or physical health, income, ethnicity, cultural background, sexual orientation, social networks and language or learning disabilities?		
No studies were identified.	No evidence.	No new evidence was identified, no changes
RR – 03 What measures of the mental wellbeing of older people and changes over time could be used consistently across studies? What is the association between standardised measures of emotional and social wellbeing and quality of life and self-reported outcomes, and how could such measures be used in economic appraisals?		
No studies were identified.	No evidence.	No new evidence was identified, no changes
RR – 04 What are the most effective and cost-effective ways of improving the mental wellbeing of the most vulnerable and disadvantaged older people? This includes those with physical or learning disabilities, those on very low incomes or living in social or rural isolation (including older people from minority ethnic groups).		
No studies were identified.	No evidence.	No new evidence was identified, no changes

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RR – 05 How does the effectiveness of interventions depend on the characteristics of those delivering the intervention, the involvement of older people in their design and delivery or the involvement of family members and/or carers?		
No studies were identified.	No evidence.	No new evidence was identified, no changes
Gaps in the evidence (additional to recommendations for research)		
There were few evaluations that determined which interventions were most effective; or whether interventions that focused directly on mental wellbeing (for example, maintaining quality of life or self-esteem) were more effective than those that focused on improving independence and ability to do day-to-day tasks.		
No studies were identified.	No evidence.	No new evidence was identified, no changes
No evaluations were found of the effect on mental wellbeing of environmental interventions (for example, adaptive equipment or assistive technologies).		
<p>A non-RCT with adults >65 years old in an IT welfare intervention (n=100) versus a control group (n=100), found that the intervention group had better balance (stats=NR) and significantly lower levels of depression and higher social participation. [5]</p> <p>A BA study with older adults (n=13) using a home-based information communication technology (ICT) programme on an iPad trained by occupational therapists found a 'significant trend' in ICT activities across 6 months, with social connectedness activities modestly increasing. [6]</p> <p>A BA study with elderly adults (healthy and with mild cognitive impairment; n=50) on the Long Lasting Memories programmes (cognitive exercises with physical activity using an IT platform) found a significant improvement after the training in global cognitive function, verbal memory, attention, episodic memory and symptoms of depression. [24]</p>	No evidence.	<p>New evidence was identified that does not have an impact.</p> <p>Three studies reported on the outcomes of information communication technology (ICT) interventions. [5, 6, 24] While they all indicated that these can lead to improvements in mental health and wellbeing, there remains a limited body of evidence on ICT interventions.</p> <p>It should also be noted that recommendation 1.2 in NICE guideline NG32 states that technical support that encourages the use of information and communication technologies (ICT) such as mobile telephones, internet-enabled TVs and computers; and activities related to hobbies and interests, education and other learning opportunities could be considered (see below for further details).</p>

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<p>No evaluations were found of the effect on mental wellbeing of community interventions to improve the physical and social environment (for example, street lighting) that were specifically aimed at older people. No evaluations were found of the impact of access to community facilities and services (such as benefits advice or educational and volunteering opportunities) on the mental wellbeing of older people.</p>		
<p>One study was identified on the impact of an community environmental intervention on the mental wellbeing of older people:</p> <p>A cross-sectional study with adults aged over 65 years old (n=NR) living in intervention streets (residential street improvements as part of Sustrans DIY streets) or comparison streets, found that the intervention did not impact on quality of life. [28]</p>	<p>A topic expert noted that 'there are many Areas of Outstanding Natural Beauty and National Parks that support schemes to attract older people and those with dementia enabling them to get out and about' and said that 'It would be good to reference these as well' (no references to evidence provided)</p>	<p>New evidence was identified that does not have an impact.</p> <p>There remains limited evidence in this area.</p>
<p>There was little evaluation of the specific component of an intervention that would ensure continued effectiveness (for example, disaggregating the effect of social interactions from physical exercise).</p>		
<p>No studies were identified.</p>	<p>No evidence.</p>	<p>No new evidence was identified, no changes</p>
<p>There was a lack of long-term evidence for effectiveness and cost effectiveness.</p>		
<p>An RCT with frail community-dwelling adults aged 65 or older (n=153) randomised to a case management intervention delivered by nurses and physiotherapists over 12 months, with 1 or more home visits per month or a control group, found no significant differences in loneliness, life satisfaction or depressive symptoms using an ITT analysis at 6 and 12 month follow-up; significant improvements were found in a complete case analysis in favour of the intervention for loneliness and life satisfaction at 6</p>	<p>No evidence.</p>	<p>New evidence was identified that does not have an impact.</p> <p>There remains limited evidence in this area.</p>

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months follow-up and for depressive symptoms at 12 months. [3]		
In many cases better quality research is required before the wider applicability of the interventions can be determined.		
No studies were identified.	No evidence.	No new evidence was identified, no changes

NG32

Summary of new evidence from 2-year surveillance	Summary of new intelligence from 2-year surveillance (from topic experts or initial internal intelligence gathering)	Impact
NG32-01 Recommendation 1.1 Principles of good practice		
evidence statements 1.1.1, 1.1.2; review 3; review 4; Expert Paper (EP) 1, EP3, EP4, EP6		
No studies were identified.	No evidence.	<p>No new evidence was identified, no changes</p> <p>Recommendation 1 covers basic principles of good practice, including: supporting/publicising/providing a range of group, one-to-one and volunteering activities that meet the needs and interests of local older people; co-production; ensuring activities take place at regular times and locations, provide the opportunity to socialise and complement other activities that may support different aspects of older people's independence and mental wellbeing, such as their physical health, their sense of belonging to a community ('social connectedness') and their sense of purpose; ensuring activities are inclusive and take account of a range of different needs.</p>

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NG32-02 Recommendation 1.2 Group-based activities evidence statements 1.1.1, 1.1.2, 1.1.5, 1.1.7, 1.2.1, 1.2.2, 1.2.3, 1.4.1, 1.4.2, 1.6.1, 1.6.2, 1.6.3, 1.6.4; review 3; review 4; EP3, economic modelling report		
<p>Twenty studies (5 SRs, 1 review, 6 RCTs, 2 non-RCTs, 5 BA studies and 1 survey) were identified that assessed the effectiveness of group-based interventions in older adults on mental health and well-being; and 6 studies were identified (3 SRs, 2 reviews and 1 BA) that assessed the effectiveness of activities, training or support that encourage older people to use information and communication technologies:</p> <p>Interventions involving music & singing</p> <p>A systematic review of 39 studies on the relationship between music and singing interventions and wellbeing, found that a third of studies included older people, and that these showed 'evidence that participatory music and singing programmes can help to maintain wellbeing and prevent isolation, depression and mental ill health in older people'. [29]</p> <p>A systematic review of wellbeing outcomes of music and singing for adults (n=1,364 participants of varied ages with health conditions) reported that there was moderate quality evidence that 'targeted, culturally relevant music interventions, including playing a musical instrument and singing, can decrease depression in older people with chronic conditions in residential and community settings.' [30]</p> <p>A survey study of older people (n=NR) comparing participation in musical versus other activities reported that participation in music-based activities resulted in significantly more positive responses in</p>	<p>Initial intelligence gathering identified the following on-going research:</p> <p>Promotion of mental well-being in older people</p> <p>We will monitor the progress of ongoing research and consider the results when they become available.</p> <p>A topic expert highlighted A preventative lifestyle intervention for older adults (lifestyle matters): a randomised controlled trial [2], however it was considered to be more relevant to PH16 as it was for an intervention based on recommendations in Mental wellbeing in over 65s: occupational therapy and physical activity interventions (2008) NICE guideline PH16. The study has been considered as part of the surveillance review of PH16.</p>	<p>New evidence was identified that does not have an impact on the recommendation.</p> <p>Recommendation 2 recommends that the following group activities are provided: singing programmes; arts and crafts and other creative activities; intergenerational activities (e.g. older people helping with reading in schools or young people providing older people with support to use new technologies); tailored community-based physical activity programmes including walking schemes (recommendations 2 and 3 in PH16 are referenced here).</p> <p>The recommendation states that the following <u>could be considered</u>: technical support that encourages the use of information and communication technologies (ICT) such as mobile telephones, internet-enabled TVs and computers; and activities related to hobbies and interests, education and other learning opportunities.</p> <p>Overall, the evidence on group-based interventions for older adults supports the current recommendation to provide singing, arts and crafts, other creative activities and inter-generational activities to older adults to support mental health and wellbeing; and supports the use of these alongside physical activity [9, 27, 29-45]. The evidence on ICT supports the recommendation to consider offering this intervention as there still remains some inconsistency concerning the effectiveness of ICT-based interventions in</p>

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<p>purpose, autonomy, control and social affirmation. [31]</p> <p>Music and physical activity</p> <p>A systematic review of 15 studies on relaxation interventions in older adults found that these interventions often led to reductions in depression and anxiety when compared to controls. The authors reported that 'progressive muscle relaxation training, music intervention, and yoga had the strongest intervention effects on depression. Music intervention, yoga, and combined relaxation training most effectively reduced anxiety symptoms among older adults' and the effects can last for 14 to 24 weeks after the interventions. [9]</p> <p>A BA study with community-dwelling older adults (n=15) taking part in sessions involving singing familiar songs, physical exercise to music and observation of historical pictures over 10 weeks, reported no significant differences in the Mini Mental State Examination or Behavioral Rating Scale for the Elderly at the end of the intervention, but did report a significantly higher score on the physical component summary of SF-8. [23]</p> <p>Dance and arts</p> <p>A BA study with older people (n=21) participating in a 3 month dance and arts programme reported improvements in QoL 'reaching statistical significance' at the end of the programme. [32]</p> <p>Reminiscence-based interventions</p> <p>A systematic review of 5 studies on interventions with both music and reminiscence activities reported that</p>		<p>improving mental health and well-being among older adults [46-51].</p>

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<p>these interventions had a positive effect on wellbeing in four of the studies. [33]</p> <p>An RCT with elderly women (n=29) randomised to a narrative group reminiscence intervention or a control group discussions for 6 sessions, found a significant improvement in happiness scores after the 3rd and 6th sessions in the intervention group and no difference in happiness in the control group. [34]</p> <p>An RCT with 'seniors' (n=40) randomised to a secular song group, religious song group or standard story reminiscence group run over 6 weeks, found no evidence of a main effect of change in anxiety or life satisfaction at the end of the interventions, but reported a time by type of intervention effect whereby 'initial fit with the story reminiscence group was associated with ... greater life satisfaction, while fit with the religious song reminiscence group was associated with greater life satisfaction and less anxiety'. [35]</p> <p>A non-RCT with older adults participating in a reminiscence intervention programme on coping strategies (n=150) or control (n=NR) reported significant improvements in problem-solving coping, positive reappraisal, social support seeking, and avoidance coping in the intervention compared to control group. Effects declined after 3 months, but there was higher problem-solving coping, positive reappraisal and lower overt emotional expression reported in the intervention vs control group (stats=NR). [36]</p> <p>Social activity-based interventions</p>		

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<p>A systematic review of cost-effectiveness of interventions that aim to reduce loneliness in older people reported that there was 'mixed evidence for the cost effectiveness of befriending interventions and the benefits of participation in social activities, ranging from cost saving to cost ineffective interventions' but signposting and navigation services may be cost effective. [37]</p> <p>A scoping review of 31 studies on the effects of Men's Sheds and other gendered social activities on the health and wellbeing of older men reported that there was 'some limited evidence that Men's Sheds and other gendered social activities may have impact on the mental health and wellbeing of older men' and that key components of successful interventions were 'accessibility, range of activities, local support and skilled coordination'. [38]</p> <p>An RCT with community living 67-92 year olds with severe mobility limitations (n=121) randomised to an individualised outdoor activity intervention involving volunteers assisting the participant in attending recreational out-of-home activities once a week for 3 months or waiting list control reported that depressive symptoms did not change in the intervention group, but that sub-group analysis showed that those with minor depressive symptoms at baseline showed a reduction in depressive symptoms in the intervention group and an increase in the control group. [39]</p> <p>An RCT with adults aged 75-79 years (n=223) randomised to a 6 month social intervention (choice of supervised exercise, social activity, or personal counselling) or control reported no change in number of depressive symptoms, a significant decrease in</p>		

Summary of new evidence from 2-year surveillance	Summary of new intelligence from 2-year surveillance (from topic experts or initial internal intelligence gathering)	Impact
<p>loneliness and melancholy and significant increase in attachment and guidance in both the intervention and control groups, with only social integration significantly increasing in the intervention group but not in controls. [40]</p> <p>A BA study with low income older adults (n=52) participating in a programme designed to facilitate community participation (Let's Go) reported significant improvements in social activities, social life and relationships at 4 weeks and 6 months. [41]</p> <p>A BA study of a social capital intervention involving co-ordinated action to build a network between primary healthcare centres and community assets in a neighbourhood plus a group-based programme promoting social capital among lonely older people (n=38) through social support and participation, reported a significant decrease in loneliness and increase in social participation and support, which was also evident at 2 years follow-up. [42]</p> <p>Memory-based interventions</p> <p>An RCT with healthy older adults (n=113) and those with amnesic mild cognitive impairment (n=106) randomised to a 6 week memory group or waitlist control, found intervention effects for wellbeing in both groups. [43]</p> <p>An RCT with adults aged 65 years or older with memory difficulties (n=44) randomised to health promotion, cognitive training or a participation-centred course reported that all 3 interventions seemed to decrease loneliness. [44]</p>		

Summary of new evidence from 2-year surveillance	Summary of new intelligence from 2-year surveillance (from topic experts or initial internal intelligence gathering)	Impact
<p>A BA study with older adults with visual impairment (n=30; data for 19) attending a day centre rehab programme involving walking groups, language courses and memory games found no changes in depression at the end of 12 months in the programme, the only significant change was an improvement in cognitive scores. [27]</p> <p>Inter-generational activities</p> <p>A non-RCT with over 65 year olds receiving training and volunteering to read picture books to children within schools (n=26) or control group (n=54) found that sense of meaningfulness significantly increased in the intervention group over time, and that participation in the intervention was associated with a sense of manageability, which was significantly associated with depressive mood. [45]</p> <p>Information and communication technologies</p> <p>A systematic review of 21 studies on technology-based interventions aiming to promote mental health and wellbeing in people aged 65 years and older reported that the evidence base was inconsistent; it highlighted that 3 of the 6 studies with high or moderate quality, which focused on computer/internet training, reported statistically significant positive effects on life satisfaction, experienced social support and depression. The authors noted that there is a 'need for more methodologically rigorous studies'. [46]</p> <p>A systematic review of 12 reviews including 22 studies evaluating e-interventions for social isolation or loneliness reported 'inconsistent and weak</p>		

Summary of new evidence from 2-year surveillance	Summary of new intelligence from 2-year surveillance (from topic experts or initial internal intelligence gathering)	Impact
<p>evidence on using e-Interventions for loneliness in older people'. [47]</p> <p>A systematic review of studies investigating the link between internet use and mental health in older adults (18 quantitative and 14 qualitative) reported that findings from synthesising quantitative data indicated 'an overall positive association between Internet use and mental health and its psychosocial covariates in later life'. [48]</p> <p>A literature review of publications (n=NR) on information and communication technologies in ambient assisted living projects in elderly adults reported that these interventions can 'successfully contribute to all dimensions of elderly's quality of life' but that further research is required. [49]</p> <p>A scoping review of studies (n=NR) on older people's use of information and communication technology on QoL reported inconsistent findings, the authors stated that 'Studies which have rigorously assessed the impact of older people's use of ICT on their QOL mostly demonstrate little effect'. [50]</p> <p>A BA study with adults aged 65 years and older (n=144) helped to use the internet either by volunteers in their own home over 8 visits (home) or in small group sessions over 6 visits (group) found that, compared to baseline, number of contacts with others significantly increased, loneliness scores decreased and mental wellbeing improved. [51]</p>		

Summary of new evidence from 2-year surveillance	Summary of new intelligence from 2-year surveillance (from topic experts or initial internal intelligence gathering)	Impact
NG32-03 Recommendation 1.3 One-to-one activities evidence statements 1.3.1, 2.6; review 3		
<p>Two studies (SR[37] and RCT[52]) were identified that assessed the effectiveness of befriending interventions:</p> <p>A systematic review of cost-effectiveness of interventions that aim to reduce loneliness in older people reported that there was 'mixed evidence for the cost effectiveness of befriending interventions and the benefits of participation in social activities, ranging from cost saving to cost ineffective interventions' but signposting and navigation services may be cost effective. [37]</p> <p>An RCT with adults aged over 74 years randomised to a telephone befriending intervention (n=24) or a control (n=30) found non-significant improvements in 6 month mental health scores (SF-36), however the trial was not sufficiently powered and closed early due to poor recruitment of volunteers to deliver the intervention. [52]</p>	<p>Initial intelligence gathering identified the following on-going research:</p> <p>Putting Life in Years (PLINY): Telephone friendship groups research study. Evaluation of the effectiveness and cost effectiveness of an intervention to promote mental wellbeing in community living older people</p> <p>A topic expert highlighted a study: Only available to a selected few? Is it feasible to rely on a volunteer workforce for complex intervention delivery? Which reports on the problems recruiting and retaining a volunteer workforce within RCT identified in the literature search [52].</p>	<p>New evidence was identified that does not have an impact on the recommendation.</p> <p>Recommendation 3 recommends offering the following 1-to-1 activities: programmes to help people develop and maintain friendships; befriending opportunities that involve brief visits, telephone calls or the use of other media; and information on national or local services offering support and advice by telephone and other media.</p> <p>There is inconclusive evidence of the effectiveness [52] or cost-effectiveness [37] of befriending interventions, but this is based on only 2 studies; and this is an area of on-going research, which will be looked at on publication.</p>
NG32-04 Recommendation 1.4 Volunteering evidence statements 1.2.1, 1.2.3, 2.2; review 3; review 4; EP4		
<p>One study was identified that assessed the effectiveness of volunteering:</p> <p>A non-RCT with over 65 year olds receiving training and volunteering to read picture books to children within schools (n=26) or control group (n=54) found that sense of meaningfulness significantly increased in the intervention group over time, and that</p>	<p>No evidence.</p>	<p>New evidence was identified that does not have an impact on the recommendation.</p> <p>Recommendation 4 states that older people should be made aware of the value and benefits of volunteering; be provided with opportunities to volunteer; and actions should be taken to encourage volunteering, such as varying the length and times of</p>

Summary of new evidence from 2-year surveillance	Summary of new intelligence from 2-year surveillance (from topic experts or initial internal intelligence gathering)	Impact
<p>participation in the intervention was associated with a sense of manageability, which was significantly associated with depressive mood. [45]</p>		<p>volunteering sessions to suit individual ability or preference, providing training, supervision and ongoing support.</p> <p>The 1 new study identified that assesses the effectiveness of volunteering on older adults mental health and well-being, supports the current recommendation on the benefits of volunteering [45].</p>
<p>NG32-05 Recommendation 1.5 Identifying those most at risk of a decline in their independence and mental wellbeing evidence statements review 3; EP1, EP2, EP3, EP5, EP6</p>		
<p>No studies were identified.</p>	<p>Initial intelligence gathering identified the following:</p> <p>Older people with social care needs and multiple long-term conditions (2015) NICE guideline NG22, recommendation 1.5 highlights what can be done by practitioners to prevent social isolation.</p>	<p>No new evidence was identified, no changes</p> <p>Recommendation 5 recommends that service providers and others are made aware of the effect that poor mental wellbeing and lack of independence can have on an older person's mental and physical health and their social interactions; that staff in contact with older people are aware of the importance of maintaining and improving their independence and mental wellbeing, can identify those most at risk of a decline in their independence and mental wellbeing and give those most at risk information on activities that might help them. It highlights that more information is provided in the implementation section of the guideline.</p>
<p>Research recommendations</p>		
<p>RR – 01 In the UK, which activity-based interventions are most effective and cost effective at protecting older people who are at risk of a decline in their independence and mental wellbeing?</p>		
<p>No studies were identified.</p>	<p>No evidence.</p>	<p>No new evidence was identified, no changes</p>

Summary of new evidence from 2-year surveillance	Summary of new intelligence from 2-year surveillance (from topic experts or initial internal intelligence gathering)	Impact
RR – 02 In the UK, what are the most effective ways to identify older people who at risk of a decline in their independence and mental wellbeing?		
No studies were identified.	No evidence.	No new evidence was identified, no changes
RR – 03 In the UK, what are the key components of a local coordination role to ensure best value for money in promoting older people's independence and mental wellbeing?		
No studies were identified.	No evidence.	No new evidence was identified, no changes
RR – 04 In the UK, what are the most effective ways of involving older people in developing interventions to promote their independence and mental wellbeing?		
No studies were identified.	No evidence.	No new evidence was identified, no changes
RR – 05 In the UK, which factors or processes in an intervention influence older people's mental wellbeing? How do these factors interact with one another and does the importance differ for different groups?		
No studies were identified.	No evidence.	No new evidence was identified, no changes
RR – 06 In the UK, which mid-life groups are currently at most risk of losing their independence or experiencing poor mental wellbeing in later life? And which interventions are most effective and cost effective in preparing these people for later life?		
No studies were identified.	No evidence.	No new evidence was identified, no changes
Gaps in the evidence		
The needs of different populations as they age. In particular how interventions can be tailored for different stages of someone's life.		
No studies were identified.	No evidence.	No new evidence was identified, no changes

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