



The Association of Directors of Public Health

Policy Position: Healthy Ageing

Key Messages

- The proportion of older adults in the UK is projected to reach 24.7% by 2049 and this will bring benefits as well as challenges.
- A whole system approach is needed to support older adults to remain independent and healthy.
- A renewed focus is needed on prevention across the life course to support people to age healthily and to delay or prevent the onset of long-term conditions.
- Public health should promote the importance of ageing well and highlight the contribution and skills of older people.

ADPH Recommendations

National

Whole system approach: Governments across the four nations should take a whole system approach to positive ageing that starts at the beginning of the life course and adopt a health in all policies approach to decision-making and policy.

Investment in public health must be increased across the four nations. In England, the Public Health Grant needs £0.9 billion more a year to reverse years of funding cuts.¹

Reforming the design of the social care funding system including additional investment, with a focus on prevention, should be a national priority to deliver the essential care and support older people deserve.

Narrative building: Governments across the four nations should employ more positive rhetoric when discussing ageing to avoid negative stereotyping around older people and their abilities.

Role of the NHS: The NHS should ensure that prevention forms a key, mandatory and funded part of its plans to ensure good health across the life-course and reduce long-term conditions in old age.

Addressing loneliness should be considered as a key preventative measure in shifting from acute and long-term care to self-help and support in communities across the health and care system.

Working with business: Governments across the four nations should work with businesses to determine how best to support the ageing workforce through training and lifelong learning.

Housing: A more strategic approach is needed by Governments across the four nations to deliver appropriate housing provision for the ageing population.

Transportation: Governments and local public health authorities across the four nations should determine how to future proof transport systems and ensure they are appropriate for the ageing population.

Preventing dementia: Governments across the four nations should invest in the prevention of the modifiable risk factors identified in the [Lancet Commission](#) to help to reduce cases of dementia.

Addressing ageism: Public health should promote the importance of ageing well and highlight the contribution and skills of older people.

Local

Whole system approach: Effective integration of health and social care services and a whole system, place-based approach should be adopted to improve older people's health and wellbeing.

Local public health authorities should take an asset-based approach to older people's health and consider approaches that utilise resources in the community, such as social prescribing models. Co-production approaches to developing interventions for older people are vital, both in terms of securing uptake but also to empower older people.

Local pathways for older people's health and wellbeing should not just focus on ways to reduce emergency admissions and demand but focus on the wellbeing of older people.

Local public health authorities should consider the needs of older people when implementing [NICE Guidance NG90 on physical activity and the environment](#) to encourage them to adopt an active lifestyle.

Local public health authorities, healthcare professionals and social workers should use Making Every Contact Count (MECC) and opportunistic interventions to engage with older people around health and wellbeing.

Local public health authorities should continue to deliver targeted interventions around fuel poverty.

Local public health authorities should work with hospitals and the voluntary and community sector (VCS) to tackle malnourishment of older people in the community.

The VCS should be supported to scale up evidence-based interventions to tackle loneliness. The success of social prescribing and other referral schemes relies on the VCS to offer the opportunities and activities to which people can be referred.

Background

Living longer lives is certainly something to be celebrated. The elderly should be supported to develop and maintain their functional ability that enables wellbeing in older age.²

Research from the International Longevity Centre UK (ILC) on [Maximising the longevity dividend](#) states that 'ageist attitudes are reinforced by policy makers spending more time worrying about the fiscal costs of ageing than exploring how to maximise the opportunities of longer lives'. Their research reveals that by 2040, older people will be spending 63p in every pound spent in the UK economy – rising from 54p in 2018, and that tackling the barriers to older people's spending could add 2% (or £47 billion) to the UKs' GDP annually, by 2040.³ The economy is expected to be affected by people living healthier lives for longer and increases in economic activity at older ages. The ONS estimated that the population aged 65 and over in the UK is projected to increase by almost a third in the next 20 years.⁴ It is also predicted that by 2050, one in four people will be aged 65 years or over.⁵ A renewed focus is needed on prevention across the life course to support people to age healthily and to delay and or prevent the onset of long-term conditions.

The elderly population has contributed to society throughout their lives therefore they should be given choice, support, and opportunity to do so even as they age. Older workers often face different challenges such as ill health, job automation and ageism. A greater focus on prevention and good health literacy is key to improving the health of the working age population. They should also be supported in retraining and developing skills that are in demand so that they can be in control of their financial situation.⁶

The elderly are also quite often reliant on pensions, in many circumstances as their sole source of income.

The UK state pension provides just 58% of previous earnings from work, which is below the Organisation for Economic Co-operation and Development (OECD) average of 62%.⁷ The cost-of-living crisis adds even more pressure to the elderly which risks widening existing health inequalities. Health inequalities is a reality amongst older people. According to studies, older men and women of lower socioeconomic status are five and four times more likely to have depression respectively. Moreover, they are also twice as likely to have type two diabetes and respiratory problems. It should also be noted that of the eight local areas in England where men have a life expectancy of 82 years or more, six are in London.⁸ A whole system approach is needed to support older adults to remain independent and healthy, and to reduce health inequalities.

Policy Context

What are the strategies to promote healthy ageing in the four nations?

The World Health Organisation (WHO) have created a network of Age-friendly Cities and Communities to connect places working towards making their environment more accommodating for older groups. The network seeks to promote ageing that is both healthy and active.

In England, the Office for Health Improvement and Disparities (OHID) and the Centre for Ageing Better released a consensus statement which set out their aim for England to be one of the most pleasant places in the world for people to age.⁹ In 2023, the Secretary of State for Health and Social Care Steve Barclay announced a 'Major Conditions Strategy' in 2023 which aims to improve healthy life expectancy.¹⁰

The Welsh Government published the '[Age friendly Wales](#)' strategy in 2021. It highlights the importance of recognising older people as important members of society.¹¹ Wales also has an older people's commissioner that reviews how older people are safeguarded and encourages local authorities (LAs) to join the Global Network of Age-friendly Cities and Communities.¹² The Government also provides funding for LAs to help them work towards joining the WHO's network of Age-friendly Cities and Communities.

Similarly, the Scottish Government published their strategy '[A Scotland for the future](#)' in 2021. It sets out their target to bolster life expectancy and healthy years for their population. It emphasises the importance of reducing disparities between the most and least well-off communities.¹³

The Northern Ireland Executive published the '[Active Ageing](#)' strategy in 2016 which was updated in 2020. Like Wales, Northern Ireland takes a rights-based approach to ageing and acknowledges the contribution older demographics make to society. The strategy is based on the United Nations' five principles of older persons: independence, participation, care, self-fulfilment and dignity.¹⁴

What are the plans to improve adult social care and housing in England?

The NHS' Long Term Plan (LTP) sets out a course of actions to address the challenges that an ageing population brings. It takes a multi-faceted approach to ensure people live longer in their homes. It plans to offer care homes more support to ensure that the links between local general practices (GPs), communities and care homes are more robust. It also sets in place plans to enhance community team responses to tackle health issues before people reach the point of hospitalisation.¹⁵

In 2021, the Government published an '[adult social care reform white paper](#)'. This paper set out a 10-year vision to reform social care in England.¹⁶ Moreover, in 2022 the Government announced a cross-government task force on Housing for Older People. The task force will consider methods to provide better quality housing for older communities in partnership with the Department of Health and Social Care

(DHSC).¹⁷ However, the commitments made in the white paper have yet to be realised, as the Government's £250 million investment in workforce initiatives fall short of its white paper pledge of £500 million. There has also been no mention of the £300 million to integrate housing into local health and care strategies.¹⁸

ADPH Position

A whole system approach to supporting older adults

A whole system approach to supporting older adults is important to promote wellbeing in old age. This requires joint working between local public health authorities, health, and community partners. Public health should work towards improvements across the social determinants of health (including transport, housing, and employment) to support healthy ageing. Governments across the four nations should also employ more positive rhetoric when discussing ageing to avoid negative stereotyping around older people and their abilities. There is also a need to shift away from the view of ageing as a burden on resources towards seeing older people as assets to society.

More public health funding needed to improve outcomes for older people

Investment in public health must be increased across the four nations. Public health needs to be funded sustainably and adequately in line with local populations' health needs. In England, LAs' public health funding has suffered a 26% cut (in real terms on a per person basis) since 2015/16.¹⁹ Although Directors of Public Health (DsPH) have been acting to manage these cuts they have reached the limit of available efficiencies. This may negatively affect services to improve outcomes for older people. Reductions in general LA funding also have negative impacts on older people's outcomes, for example, through reductions to social care provision and grants to VCS organisations.

More funding is needed for the social care system

The social care system is currently under a tremendous amount of financial pressure. In November 2022 the Autumn Statement announced new funding for adult social care, with up to £2.8 billion in 2023/24 and up to £4.7 billion in 2024/25.²⁰ However, The Local Government Association (LGA) feels it is unlikely that the full £2.8 billion will be received in 2023/24. Despite the increased funding we are now also facing a lack of staff across social care services. The Association of Directors of Adult Social Services (ADASS) released a report in July 2022 which highlighted that vacancies in adult social care roles were up 52%.²¹ Sustainable funding of the social care funding system is extremely important for older people's wellbeing and dignity and must be addressed as a matter of urgency. Reduction in social care funding has resulted in reduced ability to deliver preventative services.

Prevention across the life course to reduce inequalities

Primary, secondary, and tertiary prevention should be embedded throughout the life course to maximise the opportunity for independent healthy ageing and reduce inequalities in later life. At the primary level this means supporting health promoting behaviours throughout the life-course. At the secondary and tertiary levels, it means delivering initiatives to ensure older people are living as healthily as possible and can access services including screening, immunisation, and health checks. Action is needed on the commercial determinants of unhealthy ageing such as smoking, excessive alcohol consumption and poor diet. This will help to increase healthy life expectancy, delay the onset of long-term conditions, and ease pressure on social care. Physical activities are also important for older people's health, and it is

recommended that older adults undertake both aerobic activity and strength exercises every week.²² Preventative action is needed to reduce falls, for example through group exercise programmes.

Addressing loneliness

Loneliness is a significant issue amongst older adults and should be recognised as part of the healthy ageing agenda. Over one million older people report that they always or often feel lonely, and nearly half of older people say that television or pets are their main form of company.²³ Loneliness is linked to higher rates of depression, high blood pressure, and dementia. It has also demonstrated higher rates of premature mortality comparable to those associated with smoking and alcohol consumption which is 30% higher than the general population.^{24 25} Loneliness can be caused by social isolation. Action is needed to identify and address the root causes of isolation such as digital exclusion, access to public transport, and ageism. Older adults should be supported to maintain their independence by working closely with stakeholders such as the VCS and social services. Wales has this goal embedded in their Well-being of Future Generations (Wales) Act 2015 and has a Connected Communities Strategy that focuses on interventions to limit the risk and prevalence of social isolation.²⁶

Measures should be in place to tackle the modifiable risk factors of dementia

The term 'dementia' is used to describe symptoms including memory loss, as well as problems with reasoning, perception and communication skills.²⁷ At present there are 944,000 people diagnosed with dementia in the UK and this figure is forecast to rise.²⁸ Moreover, it is estimated that a person's risk of developing dementia doubles every five years.²⁹ Dementia results in higher health and social care costs (£11.9 billion) than cancer (£5 billion) and chronic heart disease (£2.5 billion) combined.³⁰

Age is the strongest known risk factor for dementia, but it is not an inevitability. This makes preventative action that much more important in order to reduce the likelihood of dementia prevalence in future generations. [The Lancet Commission](#) on dementia identified nine modifiable risk factors which could prevent more than a third of dementia cases: low educational level in childhood, hearing loss, hypertension, obesity, smoking, depression, physical activity, social isolation, and diabetes.³¹

Infrastructure to improve accessibility and facilitate active travel

Travel can have a range of positive outcomes for older people, the wider community, and the economy. However, Age UK has found that older people find public transport inconvenient and that those living in rural areas do not have adequate access to public transport. It is estimated that 32% of people aged 65 and older never use public transport therefore more needs to be done to design transport networks that cater for the needs of older people.³²

Encouraging older people to undertake more active travel could deliver positive outcomes for health as well as higher levels of personal mobility. The average number of cycling trips per person per year increased from 19 to 21 from 2019-2020 in people aged 60 and over in the UK.³³ However, cycling only makes up only 1% of all journeys undertaken by people over the age of 65 in the UK compared to 23% in Holland and 9% in Germany.³⁴ Age-appropriate infrastructure is fundamental to enabling active travel amongst older people. This would require an integrated approach to the planning and design of cycle lanes, walking routes, safe crossings, level pavements, and the location of amenities and services.

Older adults should be supported to work or engage in volunteering activities

Employment and other activities such as volunteering support healthy ageing through increased physical

activity, mental stimulation, and social networking. According to the Centre for Better Ageing there are now 19,000 more people aged 50-64 unemployed and 228,000 more economically inactive than there were pre-pandemic. This could be due to illnesses, but it has also been found that older people were more likely to be made redundant.³⁵ Older adults should be provided with equal opportunities (including access to learning and development opportunities) to apply for and remain in employment if they choose to. People over the age of 50 in work were found to be less likely to receive training and 22% of the oldest workers reported that they did not feel as though their job offered adequate opportunities to progress their careers.³⁶ Businesses should be more flexible and adaptable to enable older people to participate meaningfully in the workforce. Action is also needed on workplace age discrimination; complaints of age discrimination to employment tribunals increased by 74% in 2020, the largest rise of any complaint.³⁷

Appropriate housing should be provided for older people

Appropriate housing is extremely important for older people, particularly given that two million homes in England are headed by people over the age of 60 and do not meet the basic decency criteria.³⁸ If £4.3 billion was used to fund the repair of housing hazards in households over the age of 55 it would only take eight years to see a complete return on this investment just through savings to the NHS.³⁹

Falling hazards within homes also need to be addressed with appropriate housing design and standard. A third of people aged 65 or over fall each year, and this rises to 50% in those aged 80 or over. Falls at home cost the NHS in England around £435 million.⁴⁰ Furthermore, fragility fractures are much more common in individuals over the age of 50, specifically in women as they are at greater risk of developing osteoporosis. Half of all women and 20% of men will experience a fracture after the age of 50.^{40 41} Hip fractures alone account for 1.8 million hospital bed days and £1.1 billion in hospital costs every year.⁴²

More advice and guidance should be provided to older people on their housing options. Housing for older people needs to be within easy reach of local services, amenities, and public transport links. Housing should also be designed so that it is fit for purpose and meets the 'Lifetime Homes Standards'.

Measures should be taken to reduce fuel poverty in the over 65s

Over the winter of 2022, people aged 90 and above experienced more than double (12.1%) additional winter deaths than those aged zero to 74 who only had a winter mortality index of 5.5%.⁴³ The leading cause of winter deaths in England was reported to be Covid-19 (25.9%), followed by dementia and Alzheimer's disease (14.6%). Contrastingly, in Wales the leading cause of winter mortality was dementia and Alzheimer's disease (15.2%) followed by respiratory diseases (14.4%).

There is a strong relationship between poor insulation, low indoor temperature and excess winter deaths; the latest ONS figures have shown that 13,400 more deaths occur in the winter months compared with summer.⁴⁴ Targeted action is required to reduce fuel poverty in the people aged 65 and over.

Prevention, screening and treatment are vital for tackling malnourishment

It is estimated that almost 1.5 million people aged 65 and over are either malnourished or at risk of malnourishment.⁴⁵ Groups at risk of malnutrition include those with chronic diseases, acute illnesses, frailty, and those who are housebound or have poor social support. Poverty also increases the risk of malnutrition.⁴⁶ Malnutrition is associated with several long-term conditions such as depression, COPD, dementia, and physical disability.^{47 48 49} Upstream prevention work, screening, identification, and treatment are vital for tackling malnourishment.

About ADPH

The Association of Directors of Public Health (ADPH) is the representative body for Directors of Public Health (DsPH) in the UK. It represents the professional views of all DsPH as the local leaders for the nation's health.

The Association has a heritage dating back over 160 years and is a collaborative organisation, working in partnership with others to strengthen the voice for public health. It seeks to improve and protect the health of the population through collating and presenting the views of DsPH; advising on public health policy and legislation at a local, regional, national and international level; facilitating a support network for DsPH; and providing opportunities for DsPH to develop professional practice.

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References

- ¹ The Health Foundation, Public Health Grant. 2023. <https://www.health.org.uk/news-and-comment/charts-and-infographics/public-health-grant-what-it-is-and-why-greater-investment-is-needed> [Accessed April 2023].
- ² World Health Organisation, Healthy ageing and functional ability. 2020. <https://www.who.int/news-room/questions-and-answers/item/healthy-ageing-and-functional-ability> [Accessed April 2023].
- ³ International Longevity Centre, Maximising the longevity dividend. 2019. <https://ilcuk.org.uk/maximising-the-longevity-dividend/> [Accessed April 2023].
- ⁴ Office for National Statistics, Population and migration. 2021. <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/> [Accessed April 2023].
- ⁵ Office for National Statistics, Living longer and old-age dependency – what does the future hold?. 2019. <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/ageing/articles/livinglongerandoldagedependencywhatdoesthefuturehold/2019-06-24> [Accessed April 2023].
- ⁶ Government Office for Science, Future of an Ageing Population. 2016. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/816458/future-of-an-ageing-population.pdf [Accessed April 2023].
- ⁷ Organisation for Economic Co-operation and Development, Pensions at a Glance 2021. 2021. https://www.oecd-ilibrary.org/finance-and-investment/pensions-at-a-glance-2021_2770acc6-en [Accessed April 2023].
- ⁸ Office for National Statistics, Health and social care. 2021. <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/> [Accessed April 2023].
- ⁹ Office for Health Improvement and Disparities, Healthy ageing: consensus statement. 2019. <https://www.gov.uk/government/publications/healthy-ageing-consensus-statement> [Accessed April 2023].
- ¹⁰ UK Parliament, Government Action on Major Conditions and Diseases. 2023. <https://questions-statements.parliament.uk/written-statements/detail/2023-01-24/hcws514> [Accessed April 2023].
- ¹¹ Welsh Government, Age friendly Wales: our strategy for an ageing society. 2021. <https://www.gov.wales/age-friendly-wales-our-strategy-ageing-society-html#:~:text=By%20building%20communities%2C%20homes%2C%20transport,for%20as%20long%20as%20possible> [Accessed April 2023].
- ¹² Welsh Government, Older People’s Champions helping to create an Age Friendly Wales. 2023. <https://www.gov.wales/older-peoples-champions-helping-create-age-friendly-wales-0> [Accessed April 2023].
- ¹³ Scottish Government, A Scotland for the future: opportunities and challenges of Scotland's changing population. 2021. <https://www.gov.scot/publications/scotland-future-opportunities-challenges-scotlands-changing-population/pages/6/> [Accessed April 2023].
- ¹⁴ Department for Communities, Active Ageing Strategy 2016-2022. 2016. <https://www.communities-ni.gov.uk/publications/active-ageing-strategy-2016-2022> [Accessed April 2023].
- ¹⁵ National Health Service, Ageing Well. N.D. <https://www.longtermplan.nhs.uk/areas-of-work/ageing-well/> [Accessed April 2023].
- ¹⁶ Department of Health and Social Care, People at the Heart of Care: adult social care reform white paper. 2021. <https://www.gov.uk/government/publications/people-at-the-heart-of-care-adult-social-care-reform-white-paper> [Accessed April 2023].
- ¹⁷ UK Parliament, Housing for Older People. 2022. <https://hansard.parliament.uk/lords/2022-03-15/debates/3F26FFF6-35B4-494D-9BBA-80A5B095EA66/HousingForOlderPeople> [Accessed April 2023].
- ¹⁸ Institute for Government, Funding changes signal an end to the government’s ambitious social care reform package. 2023.

<https://www.instituteforgovernment.org.uk/comment/funding-changes-social-care-reform> [Accessed July 2023].

¹⁹ The Health Foundation, Public health grant - What it is and why greater investment is needed. 2023. <https://www.health.org.uk/news-and-comment/charts-and-infographics/public-health-grant-what-it-is-and-why-greater-investment-is-needed> [Accessed March 2023].

²⁰ HM Treasury, Autumn Statement 2022: documents. 2022. <https://www.gov.uk/government/publications/autumn-statement-2022-documents> [Accessed March 2023].

²¹ Samuel M, Adult social care vacancies up 52% over past year. 2022. <https://www.communitycare.co.uk/2022/07/22/adult-social-care-vacancies-up-52-over-past-year/> [Accessed March 2023].

²² NHS Choices, Physical activity guidelines for older adults. 2019. <https://www.nhs.uk/Livewell/fitness/Pages/physical-activity-guidelines-for-older-adults.aspx> [Accessed March 2023].

²³ Age UK, Evidence Review: Loneliness in Later Life. 2015. https://www.ageuk.org.uk/globalassets/age-uk/documents/reports-and-publications/reports-and-briefings/health--wellbeing/rb_june15_loneliness_in_later_life_evidence_review.pdf [Accessed March 2023].

²⁴ Local Government Association, Loneliness: how do you know your council is actively tackling loneliness?. 2018. <https://www.local.gov.uk/publications/loneliness-how-do-you-know-your-council-actively-tackling-loneliness> [Accessed April 2023].

²⁵ Holt-Lunstad J, Smith T.B, Baker M, et al, 'Loneliness and Social Isolation as Risk Factors for Mortality: A Meta-Analytic Review', *Perspectives on Psychological Science*, 2015, 10 (2), 227 – 237.

²⁶ Welsh Government, Connected Communities. 2020. <https://www.gov.wales/sites/default/files/publications/2020-02/connected-communities-strategy-document.pdf> [Accessed April 2023].

²⁷ Public Health England, 'Dementia: applying All Our Health. 2022. <https://www.gov.uk/government/publications/dementia-applying-all-our-health/dementia-applying-all-our-health> [Accessed April 2019].

²⁸ Alzheimer's Research UK, Numbers of people in the UK. 2022. <https://dementiastatistics.org/statistics/numbers-of-people-in-the-uk-2/> [Accessed April 2023].

²⁹ Alzheimer's Society, What can increase a person's risk of dementia?. 2021. <https://www.alzheimers.org.uk/about-dementia/risk-factors-and-prevention/what-can-increase-persons-risk-of-dementia> [Accessed April 2023].

³⁰ Alzheimer's Research UK, 'Dementia Statistics Hub' [<https://www.dementiastatistics.org/statistics/prevalence-by-age-in-the-uk/>] accessed 11 April 2019

³¹ Frankish H. and Horton R, 'Prevention and management of dementia: a priority for public health', *The Lancet*, 2017, 390 (10113), 2614-2516.

³² Age UK, The Future of Transport in an Ageing Society. 2015. https://www.ageuk.org.uk/globalassets/age-uk/documents/reports-and-publications/reports-and-briefings/active-communities/rb_june15_the_future_of_transport_in_an_ageing_society.pdf [Accessed April 2023].

³³ Department for Transport, Walking and cycling statistics, England: 2021. 2021. <https://www.gov.uk/government/statistics/walking-and-cycling-statistics-england-2021/walking-and-cycling-statistics-england-2021> [Accessed April 2023].

³⁴ Cycle Boom, Cycling into older age: A review of policy and practice. 2016. https://www.cycleboom.org/wp-content/uploads/2016/10/cB_Policy_Review_Digital.pdf [Accessed April 2023].

³⁵ Centre for Ageing Better, Work | The State of Ageing 2022. 2022. <https://ageing-better.org.uk/work-state-ageing-2022> [Accessed April 2023].

³⁶ The Chartered Institute of Personnel and Development, Understanding older workers. 2022. <https://www.cipd.co.uk/knowledge/work/trends/understanding-older-workers#gref> [Accessed April 2023].

- ³⁷ People Management and the Chartered Institute of Personnel and Development, Age discrimination claims rise by 74 per cent during pandemic, analysis shows. 2021. <https://www.peoplemanagement.co.uk/article/1745121/age-discrimination-claims-rise-by-74-per-cent-during-pandemic> [Accessed April 2023].
- ³⁸ Centre for Ageing Better, Housing | The State of Ageing 2022. 2022. <https://ageing-better.org.uk/housing-state-ageing-2022> [Accessed April 2023].
- ³⁹ Centre for Ageing Better, National scandal of poor housing for over-55s revealed in new report. 2020. <https://ageing-better.org.uk/news/national-scandal-poor-housing-over-55s-revealed-new-report> [Accessed April 2023].
- ⁴⁰ National Institute for Health and Care Excellence, Falls in older people: assessing risk and prevention. 2013. <https://www.nice.org.uk/guidance/cg161/chapter/Introduction> [Accessed April 2023].
- ⁴¹ National Osteoporosis Society, Effective Secondary Prevention of Fragility Fractures: Clinical Standards for Fracture Liaison Services. 2015. <https://theros.org.uk/media/1eubz33w/ros-clinical-standards-for-fracture-liaison-services-august-2019.pdf> [Accessed April 2023].
- ⁴² Public Health England, Falls: applying All Our Health. 2022. <https://www.gov.uk/government/publications/falls-applying-all-our-health/falls-applying-all-our-health> [Accessed April 2023].
- ⁴³ Office of National Statistics, Winter mortality in England and Wales: 2021 to 2022 (provisional) and 2020 to 2021 (final). 2023. <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/excesswintermortalityinenglandandwales/2021to2022provisionaland2020to2021final#winter-mortality-by-sex-and-age> [Accessed April 2023].
- ⁴⁴ Office for National Statistics, Winter mortality in England and Wales. 2021. <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/excesswintermortalityinenglandandwales/2021to2022provisionaland2020to2021final> [Accessed April 2023].
- ⁴⁵ Age UK, 1 in 10 (1.4 M) aged 60+ have been eating less since the start of the pandemic. 2021. <https://www.ageuk.org.uk/latest-press/articles/2021/1-in-10-1.4-million-aged-60-have-been-eating-less-since-the-start-of-the-pandemic/> [Accessed April 2023].
- ⁴⁶ World Health Organization, Malnutrition. 2021. <https://www.who.int/news-room/fact-sheets/detail/malnutrition> [Accessed April 2023].
- ⁴⁷ García-Montero C, Ortega M.A, Alvarez-Mon M.A, Fraile-Martinez O, Romero-Bazán A, Lahera G, et al, The Problem of Malnutrition Associated with Major Depressive Disorder from a Sex-Gender Perspective, *Nutrients*. 2022;14(5):1107. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8912662/> [Accessed April 2023].
- ⁴⁸ Bernardes S, Teixeira P.J.Z and Silva F.M, Association of reduced BMI, length of hospital stay, mortality, and malnutrition diagnosis in patients with acute exacerbation COPD: A secondary analysis of a cohort study, *Journal of Parenteral and Enteral Nutrition*. 2022.
- ⁴⁹ Mustafa K.N, Haron H, Shahar S, et al, Current Evidence on the Association of Micronutrient Malnutrition with Mild Cognitive Impairment, Frailty, and Cognitive Frailty among Older Adults: A Scoping Review, *International Journal of Environmental Research and Public Health*, 2022;19(23):15722.

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