

# Healthy ageing



Jane Sims



## Background

The increasing number of people reaching their 80s and 90s has triggered multidisciplinary consideration of how to address and capitalise on the longevity phenomenon.

## Objective

The aim of this article is to provide an overview of ways in which clinicians can work with older patients to optimise their health and wellbeing during the later years of life.

## Discussion

Old age need not be burdensome to individuals or society. There is strong evidence to support the management of many chronic diseases presenting in – or extending into – old age. General practice will need to adapt to the demographic challenges of an ageing population by targeting conditions that impede people from contributing to family and societal life. General practitioners (GPs) will also need to adapt to the changing expectations of, and from, older patients across the upcoming generations.

**H**ealthy ageing and its associated concepts (eg successful ageing, positive ageing, ageing well, ageing productively) have been developed over the years as a response to changing population demographics.<sup>1,2</sup> Healthy ageing is defined as ‘the process of developing and maintaining functional ability that enables wellbeing in older age’.<sup>3</sup>

A range of theories seek to explain the later stages of ageing, such as Rowe and Kahn’s successful ageing<sup>4</sup> and Baltes’s selection, optimisation and compensation theory.<sup>5</sup> Organisations such as the World Health Organization (WHO) have also issued resources advocating for optimal health in older people.<sup>3,6</sup>

Common to these theories and statements are the concepts of independence, autonomy, purposeful and meaningful existence, and the opportunity to participate and contribute. To fulfil these aspirations, people need to maintain adequate physical and mental health status. The promotion of healthy ageing focuses on sociocultural and physical factors. In this regard, the ‘International classification of functioning, disability and health’ (ICF) provides a useful framework for considering the interrelationships between the person and their environment.<sup>7</sup> The framework’s focus is not decline; rather, it highlights functional and social activity and participation.

Older Australians are a heterogeneous group, not least in terms of their degree of independence. General practitioners (GPs) work with older people (aged ≥65 years) across the spectrum: the 7.8% living in residential care, 2.4% on home and community care packages (Australian Institute of Health and Welfare [AIHW] 2014 figures)<sup>8</sup> and the remaining majority who are living independently in the community.

The aim of this article is to provide an overview of ways clinicians can work with older patients to optimise their health and wellbeing during the later years of life. The use of an enablement approach in promoting functional status and mental health will be presented. The challenge of working in a cultural environment that does not necessarily value older people will be considered.

## Themes

### Physical and functional health

Ageing well is influenced by fixed (genetic) and modifiable factors. Functional status is a major independent risk factor for dependency,

institutionalisation and mortality in older populations. The 'disease burden' can be measured in disability-adjusted life years (DALYs), where a DALY reflects one year of 'healthy' life lost. It is the sum of years of life lost due to premature death and those lost to disability. In developed countries, such as Australia, ischaemic heart disease, visual disorders, dementia, cancers and stroke are common contributors to disease burden (Table 1).<sup>9</sup> While old age is not usually devoid of ill health, age-related impairment, limitation and restrictions that contribute to frailty can be modified.<sup>10,11</sup> The clinician has a key role in ameliorating age-related and pathological changes.<sup>12</sup>

The evidence base shows that the impact of many non-communicable diseases can be ameliorated by lifestyle changes,<sup>13</sup> notably physical activity and dietary modification, and obesity, tobacco, alcohol, salt, blood glucose and blood pressure reduction. Proactive management may include conducting – and acting upon – a health assessment, assessing factors such as dementia, falls, immunisation status, continence, oral health, hearing and vision. In their review, Stuck et al noted that such assessments need to be regularly reviewed and that assessments appear more beneficial for the 'young old' (65–74 years) and those with a lower mortality risk.<sup>14</sup> A later review confirmed the benefits of assessment,<sup>15</sup> reporting reductions in nursing home admission, falls and physical function decline following complex community interventions. A systematic approach with appropriate intervention

and follow-up is needed to promote health and reduce functional decline.<sup>16</sup> For example, a consultation with a patient who is sedentary and obese, and has diabetes and poor eating habits, may result in referral to a dietitian. The feedback from the consultation with the specialist can then be discussed with the patient, key messages reinforced and the next steps determined with them.

Given that older people often have comorbidities, it may be practical to recommend lifestyle changes (eg physical activity uptake) that will benefit several conditions, rather than focusing on managing a single disease. Research studies tend to focus on single health outcomes, but across the literature the benefits of physical activity have been noted.<sup>17</sup> Physical activity has a role in the prevention and management of physical, functional, mental and cognitive health (eg diabetes, falls, osteoarthritis, dementia). Not all older people are amenable to the concept of being 'physically active'. The GP can tailor advice about physical activity using language that reflects the individual patient's functional and sociocultural needs and preferences. Depending on the patient's beliefs and degree of self-efficacy, it may be appropriate to refer them on to an allied health professional (eg physiotherapist).

Preventive health strategies have diminishing returns in terms of simply extending life. Rather than aiming for disease-free years of life, we should aim to increase the quality of life and reduce overall morbidity, while accounting for duration and cost of treatment.

**Table 1. Prevalence of moderate/severe disability in older adults across health condition groups<sup>6,9</sup>**

Health condition	Prevalence (millions) in high income countries	Prevalence (millions) in low and middle income countries
Hearing loss	18.5	43.9
Visual impairment	15.0	94.2
Osteoarthritis	8.1	19.4
Dementia	6.2	7.0
Chronic obstructive pulmonary disease	4.8	8.0
Ischaemic heart disease	2.2	11.9
Cerebrovascular disease	2.2	4.9
Rheumatoid arthritis	1.7	3.7
Depression	0.5	4.8
	<b>Total disease burden (DALYs) aged 65–74 years</b>	<b>Total disease burden (DALYs) aged ≥75 years</b>
Cancers	26%	27%
Cardiovascular	20%	48%
Neurological	13%	51%
Respiratory	18%	25%
Endocrine	25%	35%
Musculoskeletal	17%	15%
Kidney/urinary	20%	54%
Other	8%	12%

*DALYs, disability-adjusted life years*

To be sustained and effective, patient self-management requires not only health literacy, but also motivation. Using the example of falls prevention, Nyman and Victor<sup>18</sup> highlighted the challenge of adherence to various strategies. The GP can offer support to their patient and suggest alternative approaches to maintain helpful behaviours. The knowledge a GP obtains via an ongoing patient relationship can also offset inappropriate management. For example, dementia<sup>19</sup> can be misdiagnosed when the actual problem is delirium<sup>20</sup> because of a treatable underlying problem (eg infection, dehydration, audiovisual impairment, alcohol/drug misuse).

Given the prevalence of polypharmacy in older people, medication review is vital.<sup>21</sup> Tools such as the 'Beers' and 'START/STOPP' criteria can be used to screen for potentially inappropriate medications to be avoided or withdrawn.<sup>22</sup> The clinician should then monitor for any subsequent adverse drug reactions and events. Ideally, the patient should be involved in the deprescribing process. Jansen et al argue that the patient should at least be aware that they have that option.<sup>23</sup> Subsequent decision making will need to be tailored according to the patient's circumstances.

## Mental health

It is also important to consider the influence of psychological change among older people – how longevity may influence a person's priorities and life tasks. The GP can have a role in supporting the older patient to optimise their goals within the limitations of their health circumstances.

Recent mental health reforms have neglected older people. Even so, as with other adults, high prevalence mental health conditions such as anxiety and depression can be managed using behavioural techniques and medications.<sup>24</sup> Encouragement of goal-setting and problem-solving can help older people to address cognitive and psychosocial changes they experience (eg redundancy, bereavement, divorce) that are not illnesses. Close attention to certain groups, such as older men living alone, is recommended.<sup>25</sup> Suicide rates are highest among men aged  $\geq 80$  years,<sup>26</sup> indicating there is scope for early intervention strategies.

Loneliness has psychophysiological consequences, including risk-taking, poor sleep quality, cognitive decline, and cardiac and cerebrovascular disease, which have an impact on morbidity and mortality.<sup>27</sup> GPs familiar with their older patients may identify early signs of loneliness and diminishing self-confidence. Participation in social engagement can assist in ameliorating social isolation and loneliness.<sup>28</sup> The evidence does not stipulate a 'gold standard' activity. Indeed, successful outcomes will be driven by the participants' preferences. There are many activities to choose from, including volunteering and joining community recreation groups (Box 1). Benefits have been attained from social activities involving creative, educational and/or group support interventions.<sup>28</sup>

## Cultural context

Doctors operate in a society where ageism remains prevalent. Robert Butler, a US geriatrician and Pulitzer Prize winner, originally

coined the term 'ageism' in his 1975 book *Why survive? Being old in America*.<sup>29</sup> Unfortunately, negative stereotypes and negativity towards older people, in society and the healthcare system, continue into the 21st century. Hitchcock, in an eloquent essay on caring for the elderly, noted the continuance of therapeutic nihilism and futility among fellow clinicians.<sup>30</sup> The reality of person-centred care for older people will be that clinicians be mindful of the pressures to ration treatment and continue to provide the most appropriate treatment for all patients, regardless of their age. It would appear that longevity is set to continue.<sup>1</sup> Cultural attitudes and practices need to adjust accordingly, not simply to counter discrimination. Research has demonstrated that older people respond to positive stereotyping with boosts to self-esteem and even function.<sup>31</sup> Further, positive thinking can enhance an older person's wellbeing and promote longevity.<sup>32</sup> Older people tend to be more positive than professionals about their situation.<sup>33</sup> Consistent with the prevailing philosophies of person-centred care and consumer-driven services, lay perspectives are important in informing policy and programs. The challenge is for older people to work with their healthcare provider(s) to optimise function and the capacity to participate in community and family life.

## System change

The WHO 2004 report *Active ageing: Towards age-friendly primary health care*<sup>34</sup> and its accompanying resources remain relevant to current providers. The resources consider attitudes and knowledge transfer at the micro level, with structural recommendations at the meso level, including suitable training of practitioners, management systems amenable to older people's needs and easier access for those with mobility, hearing or vision impairments. They complement The Royal Australian College of General Practitioners' (RACGP's) *Guidelines for preventive activities in general practice* (Red Book).<sup>16</sup>

### Box 1. Advice for supporting healthy ageing during the consultation

- Most older people are aware of lifestyle changes that can benefit their health, but require encouragement to adopt and motivation to sustain them: the GP has a key role in this regard.
- There may be technical or health literacy reasons for not making lifestyle changes. To address these, consider referral to a specialist (eg exercise physiologist, psychologist, dentist, dietitian).
- Volunteering and special interest groups can ameliorate loneliness and social isolation and promote physical, mental and social health. Older people can be encouraged to get involved with social groups in their community and/or online.
- Local councils can provide information on recreational activities, run by groups such as COTA, National Seniors, Probus, U3A and Active Ageing Australia.
- Access (eg cost, transport, waiting lists) is a common concern for older people. The GP cannot be expected to know about all services available in the community, but should be aware of a selection of accessible services.

The current community aged care services model is a step in the right direction, enabling consumers to have greater involvement in choosing appropriate service options. Similar approaches are being developed for residential aged care. We must continue to develop policy and practice to increase 'healthy life expectancy'<sup>35</sup> among older people.

## Conclusion

Older people form a diverse component of the patient population. A person-centred, health-promoting approach to the management of their care is as apposite as it is in other age groups. Such an approach will optimise the autonomy and wellbeing of our older Australians.

## Case

Mrs Brown, a widow aged 75 years, is slightly overweight. She takes perindopril and indapamide to manage her hypertension, and analgesics as required for her osteoarthritic joint pain. Mrs Brown tries to eat sensibly, but finds it 'difficult to walk distances' because of her arthritis. Following discussions with her GP, she agrees to explore aqua aerobics sessions provided at her community pool. On follow-up, Mrs Brown reports that she is enjoying the social interaction with other group participants. She had been feeling rather lonely since her daughter and family moved interstate, and this new activity has helped in this regard. She agrees to continue attending the aqua aerobic sessions and hopes that she will soon feel the overall health benefits.

## Author

Jane Sims, BSc (Hons), MSc, PhD, Honorary Senior Research Fellow, Department of General Practice, General Practice and Primary Health Care Academic Centre, Melbourne Medical School, University of Melbourne, Parkville, Vic; Honorary Senior Research Fellow, School of Primary Health Care, Monash University, Notting Hill, Vic. drjanesims@gmail.com

Competing interests: None.

Provenance and peer review: Commissioned, externally peer reviewed.

## References

1. Australian Institute of Health and Welfare. Healthy life expectancy in Australia: Patterns and trends 1998–2012. Canberra: AIHW, 2014. Available at [www.aihw.gov.au/publication-detail?id=60129549634](http://www.aihw.gov.au/publication-detail?id=60129549634) [Accessed 8 November 2016].
2. Peel N, Bartlett H, McClure R. Healthy ageing: How is it defined and measured? *Australas J Ageing* 2004;23(3):115–19.
3. World Health Organization. World report on ageing and health. Geneva: WHO, 2015.
4. Rowe J, Kahn RL. Human aging: Usual and successful. *Science* 1987;48(237):143–49.
5. Baltes P. On the incomplete architecture of human ontogeny. Selection, optimization, and compensation as foundation of developmental theory. *Am Psychol* 1997;52(4):366–80.
6. World Health Organization. Good health adds life to years. Global brief for World Health Day 2012. Geneva: WHO, 2012. Available at [http://apps.who.int/iris/bitstream/10665/70853/1/WHO\\_DCO\\_WHD\\_2012.2\\_eng.pdf](http://apps.who.int/iris/bitstream/10665/70853/1/WHO_DCO_WHD_2012.2_eng.pdf) [Accessed 2 November 2016].
7. World Health Organization. International classification of functioning, disability and health (ICF). Geneva: WHO, 2001.
8. Australian Institute of Health and Welfare. Aged care in Australia. Canberra: AIHW, 2014. Available at [www.aihw.gov.au/aged-care/residential-and-home-care-2013-14/aged-care-in-australia](http://www.aihw.gov.au/aged-care/residential-and-home-care-2013-14/aged-care-in-australia) [Accessed 8 December, 2016].
9. Australian Institute of Health and Welfare. Australian burden of disease study: Impact and causes of illness and death in Australia 2011. Canberra: AIHW, 2016. Available at [www.aihw.gov.au/publication-detail/?id=60129555173](http://www.aihw.gov.au/publication-detail/?id=60129555173) [Accessed 8 November 2016].
10. Marengoni A, Angleman S, Melis R, et al. Aging with multimorbidity: A systematic review of the literature. *Ageing Res Rev* 2011;10(4):430–39.
11. Rockwood K, Mitnitski A, Song X, Steen B, Skoog I. Long-term risks of death and institutionalization of elderly people in relation to deficit accumulation at age 70. *J Am Geriatr Soc* 2006;54(6):975–79.
12. Inouye S, Studenski S, Tinetti ME, Kuchel GA. Geriatric syndromes: Clinical, research, and policy implications of a core geriatric concept. *J Am Geriatr Soc* 2007;55(5):780–91.
13. Kontis V, Mathers CD, Rehm J, et al. Contribution of six risk factors to achieving the 25x25 non-communicable disease mortality reduction targets: A modelling study. *Lancet* 2014;384(9941):427–37.
14. Stuck A, Egger M, Hammer A, Minder C, Beck J. Home visits to prevent nursing home admission and functional decline in elderly people: Systematic review and meta-regression analysis. *JAMA* 2002;287(8):1022–28.
15. Beswick A, Rees K, Dieppe P, et al. Complex interventions to improve physical function and maintain independent living in elderly people: A systematic review and meta-analysis. *Lancet* 2008;371(9614):725–35.
16. The Royal Australian College of General Practitioners. Guidelines for preventive activities in general practice. 9th edn. East Melbourne, Vic: RACGP, 2016.
17. Sims J, Hill K, Hunt S, Haralambos B. Physical activity recommendations for older Australians. *Australas J Ageing* 2010;29(2):81–87.
18. Nyman S, Victor C. Older people's participation in and engagement with falls prevention interventions in community settings: An augment to the Cochrane systematic review. *Age Ageing* 2012;41(1):16–23.
19. Guideline Adaptation Committee, Clinical Practice Guidelines for Dementia in Australia. Clinical practice guidelines for dementia in Australia: A step towards improving uptake of research findings in health- and aged-care settings. *Australas J Ageing* 2016;35(2):86–89.
20. Australian and New Zealand Society for Geriatric Medicine. Position statement abstract – Delirium in older people. *Australas J Ageing* 2016;35(4):292.
21. Castelino RL, Chen TF. Retrospective evaluation of home medicines review by pharmacists in older Australian patients using the medication appropriateness index. *Ann Pharmacother* 2010;44(12):1922–29.
22. O'Mahony D, O'Sullivan D, Byrne S, O'Connor M, Ryan C, Gallagher P. STOPP/START criteria for potentially inappropriate prescribing in older people: Version 2. *Age Ageing* 2015;44(2):213–18.
23. Jansen J, Naganathan V, Carter SM, et al. Too much medicine in older people? Deprescribing through shared decision making. *BMJ* 2016;353(i2893).
24. Dow B, Gaffey E. Mental health and well-being in older people. *Australas J Ageing* 2015;34(4):220–23.
25. Noguchi N, Blyth FM, Waite LM, et al. Prevalence of the geriatric syndromes and frailty in older men living in the community: The Concord Health and Ageing in Men Project. *Australas J Ageing* 2016;35(4):255–61.
26. Australian Bureau of Statistics. Causes of death, Australia, 2013. Canberra: ABS, 2015.
27. Cacioppo S, Grippo AJ, London S, Goossens L, Cacioppo JT. Loneliness: Clinical import and interventions. *Perspect Psychol Sci* 2015;10(2):238–49.
28. Dickens A, Richards S, Greaves C, Campbell J. Interventions targeting social isolation in older people: A systematic review. *BMC Public Health* 2011;11:647. Available at <http://link.springer.com/article/10.1186%2F1471-2458-11-647> [Accessed 8 November 2016].
29. Butler R. Why Survive? Being old in America. New York: Harper & Row, 1975.
30. Hitchcock K. Dear Life: On caring for the elderly. *Quarterly Essay* 2015;57(June):1–78.
31. Levy B, Pilver C, Chung P, Slade M. Subliminal strengthening: Improving older individuals' physical function over time with implicit-age-stereotype intervention. *Psychol Sci* 2014;25(12):2127–35.
32. Levy B, Slade MD, Kunkel SR, Kasl SV. Longevity increased by positive self-perceptions of aging. *J Pers Soc Psychol* 2002;83(2):261–70.
33. Brown LJ, Bond MJ. Comparisons of the utility of researcher-defined and participant-defined successful ageing. *Australas J Ageing* 2016;35(1):E7–12.
34. World Health Organization. Active ageing: Towards age-friendly primary health care. Geneva: WHO, 2004.
35. Depp CA, Jeste DV. Definitions and predictors of successful aging: A comprehensive review of larger quantitative studies. *Am J Geriatr Psychiatry* 2006;14(1):6–20.