# **Promoting Healthy Ageing**

**Background report for the 2019 Japanese G20 Presidency** 

Prepared for the G20 Health Minister's Meeting 19-20 October 2019 Okayama, Japan



# Table of contents

EXECUTIVE SUMMARY	4
1. Population ageing: a major driver of economic and social change	7
1.1. Population ageing is rapidly reshaping G20 societies	7
1.2. Population ageing has not always occurred in good health	
1.3. Population ageing also has implications for major global health priorities such as	
antimicrobial resistance	14
2. Healthy ageing brings opportunities for well-being and the economy	16
2.1. There are significant economic consequences to population ageing	16
2.2. Promoting healthy ageing will help to reduce the economic costs of ageing	
3. Sustainable and inclusive societies for all ages require a life course approach	24
3.1. Promote healthy ageing early in life	24
3.2. Facilitate active participation in the community	
3.3. Improve the well-being of older populations in need of care	
4. Conclusion	38
References	30
Figures	
Figure 1.1. Median age of the population (years), G20 countries	7
Figure 1.2. Share of G20 population aged 65 years and above	8
Figure 1.3. Projected start of population decline over time	
Figure 1.4. Health expenditure per capita, 2016 (or nearest year)	
Figure 1.5. Gains in life expectancy, 2000-2015	
Figure 1.6. Proportion of adults 65+ living alone	
Figure 1.7. Self-reported poor health and disability rates for individuals 65+	
Figure 2.1. Contribution of key drivers to average annual health spending growth to 2030 by	
scenario	17
Figure 2.2. Working-age population contribution to GDP per capita growth	18
Figure 2.3. Employment rates, age 55-64	
Figure 2.4. Retirees per 100 workers, 2017 and 2050	
Figure 2.5. Annual reduction in premature deaths among people 50-70 years old	22
Figure 2.6. Reduction in per-capita health expenditure after halting the rise in obesity rates	
Figure 3.1. Prevalence of overweight-obesity, select G20 countries	
Figure 3.2. Rising overweight (including obesity) rates in adults aged 15-74 years	
Figure 3.3. Adult population smoking daily, 2000 and 2015 (or nearest year)	
Figure 3.4. Recorded alcohol consumption among adults, 2000 and 2015 (or nearest year)	
Figure 3.5. Individuals using the internet to seek health information in the past 3 months (%)	

### Boxes

Box 2.1. Global Action Plan for the Prevention and Control of NCDs	21
Box 3.1. Encouraging a healthier, longer working life	31
Box 3.2. Harnessing new technologies to encourage healthy ageing in the community	

#### **EXECUTIVE SUMMARY**

There are enormous opportunities – both social and economic – to be gained from promoting healthy ageing. Ensuring people remain healthy into old age by developing policies to promote healthy ageing is essential to foster well-being and independence, and to encourage the labour force participation of older people. Creating an environment that helps people prevent poor health, engage actively in their communities, and supports older people when they do get sick or need care is critical to ensuring countries can achieve healthy ageing.

However, population ageing and the rising share of old people in our societies will require many changes in our labour markets, cities, social policies, and particularly in our social care and health systems. Whilst population ageing should be embraced as one of the greatest achievements of modern life, failure to adapt policies appropriately could slow economic and social progress.

There are many good-practices in G20 countries that promote healthy ageing and minimize the potentially challenging economic effects of population ageing. This paper outlines three broad sets of key **recommendations** to promote healthy and active ageing:

- Support prevention policies to avoid unhealthy behaviours before they take hold
  - o Promote targeted health and digital literacy interventions;
  - o Implement comprehensive policy packages to reduce harmful alcohol use, smoking, and overweight-obesity.
- Develop and strengthen health and long-term care systems to provide good care to those who require it, while protecting them from economic risk
  - Strengthen the role of primary care systems to improve prevention efforts, better co-ordination of care, and greater access to health services;
  - o Promote universal health coverage (UHC) among countries that have not yet achieved it, ensuring adequate financial protection across the population;
  - Better integrate health and social care services to improve care for people at home.
- Encourage active participation in the community through age-friendly initiatives and demand- and supply-side policies to promote a healthier, longer working life
  - Work across health and other sectors including housing, transportation, and security services – to develop services and programs that promote the autonomy of older people living at home, including those with dementia;
  - Promote training and volunteer programs that raise awareness, address ageism
    and reduce stigma about dementia and other age-related issues throughout the
    broader society, including individuals, public services, and private business;
  - Reduce incentives to retire early, promote lifelong learning and reward longer working lives, and promote age-diverse work cultures to tackle demand-side barriers to longer employment.

#### **Key findings**

#### Population ageing has major implications for economic and social systems

- More than one in eight people in the G20 is now 65 or older. In the coming decades, ageing will continue, and in many cases, accelerate. The proportion of the population aged 80 and above will nearly triple by 2050, rising to nearly one in twelve people in the G20.
- Population ageing and low birth rates mean that some countries, including Japan and Italy, have already begun to experience population decline. Current estimates suggest that Russia, Germany and China will join them by 2030, and South Korea and Brazil by 2050.
- Expenditure on health is projected to continue to increase over the coming years. By 2030, health expenditures as a share of GDP across 15 G20 countries will increase from 8.7% of GDP in 2015 to 10.3% in 2030 if current trends continue.
- Population ageing has significant implications for current economic and social structures: with a growing number of older people, the population needing greater medical and long-term care support is rising at the same time that the number of retirees per worker is also increasing. Keeping people healthy throughout their lives will reduce demand for health and long-term care services, while also allowing people to avoid leaving the workforce early due to poor health.

#### Promoting healthy ageing has significant payoffs

- Good health can extend the working lives of older adults by reducing the time spent out of work in poor health and health-related early retirement. Obesity, smoking, heavy alcohol use, and chronic diseases are all associated with lower rates of employment: OECD analysis shows that non-obese older adults between the ages of 50-59 are 22% more likely to be employed than those who are obese (OECD, 2016<sub>[1]</sub>).
- Healthy ageing strategies also help to mitigate some of the inequalities that develop and widen over the life course by preventing poor health before it begins. Recent OECD work showed that over the course of a career, bad health reduces lifetime earnings by 33% for men with low levels of education (OECD, 2017<sub>[2]</sub>).
- Successful risk reduction efforts can mitigate the serious and growing challenge dementia poses to G20 countries. Nearly 40 million people in the G20 live with dementia today a number that will rise to more than 100 million by 2050 without effective prevention efforts and treatment breakthroughs.
- Multisectoral interventions promoting age-friendly initiatives, including dementiafriendly communities, help to make communities more inclusive for all ages and can allow people to live more independently at older ages, improving quality of life while also reducing demands on formal long-term care systems.
- Much poor health is preventable. New analysis from the OECD demonstrates that just halting any further rise in obesity would have a striking impact on health and economic outcomes. G20 countries could reduce premature mortality among people aged 50-70 by 1.3% annually between 2020 and 2050. Put in other terms, more than 4.3 million

<sup>&</sup>lt;sup>1</sup> Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Korea, Mexico, Turkey, the United Kingdom, and the United States

- premature deaths could be averted across G20 countries between 2020 and 2050 if a further rise in obesity rates were halted.
- Substantial savings to the health system could also be generated through preventing further rise in obesity rates. Per-capita health expenditures would be on average 0.5% lower per year across G20 countries resulting in annual health expenditure savings across G20 countries of more than USD PPP 11 billion per year.

#### Policies to achieve healthy ageing require a life course approach

- Implementing comprehensive policy packages that include health interventions as well as fiscal and regulatory measures are cost-effective and critical to generating behavioural changes and preventing non-communicable diseases. For example, a comprehensive policy package to tackle harmful alcohol use could avert roughly 10% of the entire burden of disease associated with harmful alcohol use in Germany while generating yearly savings to the health system of more than USD 300 million (OECD, 2015<sub>[3]</sub>).
- Currently, fewer than one in ten adults 75 years or older use the internet to search for health information in high-income G20 countries. Addressing barriers to health literacy among older populations and preventing the digital divide from compounding existing health inequalities will be essential to prevent unhealthy ageing.
- Much more can be done to improve the quality of life of people living with dementia
  even in the absence of an effective treatment or cure. Initiatives such as dementiafriendly communities that take a whole-of-society approach reduce ageism while
  ensuring community-based services are accessible to those who need them. Many of
  these initiatives are still nascent, and there is considerable scope to scale up further
  initiatives.
- Even with effective healthy ageing policies, not all poor health can be prevented, and health and long-term care services must be equipped to care well for older people if they do get sick. While some progress has been made, countries must do more to ensure health and social care services are available and better coordinated for people living at home, and the availability and quality of care facilities must also be improved.
- The average number of retirees (those 50 and over not in the labour force) could increase by nearly 60% by 2050 if entry and exit patterns in the labour force do not change (OECD, 2019[4]). A substantial proportion of this increase could be mitigated by strengthening older-age employment, delaying retirement, and encouraging employers to hire and retain older workers. Programs that promote lifelong learning and skills development encourage people to stay engaged in their communities and work lives and are important to combatting social isolation, maintaining engagement, and preserving brain health.

#### 1. Population ageing: a major driver of economic and social change

#### 1.1. Population ageing is rapidly reshaping G20 societies

# 1.1.1. G20 countries are rapidly ageing, with more than one in eight people now aged 65 years or older

1. Between 2000 and 2015, the share of the population aged 65 years and above in the G20 increased by 27%, faster than the rate of growth in the preceding 15 years. More than one in eight people in the G20 is now 65 or older. In the next decade, these trends will continue to accelerate. By 2030, the population aged 65 years and older will rise by a further 39% across G20 countries. Population ageing has pushed the median age above 40 in almost half of G20 countries, while the speed of ageing will be particularly fast in some emerging G20 economies, such as China, Brazil, Turkey and India (Figure 1.1).

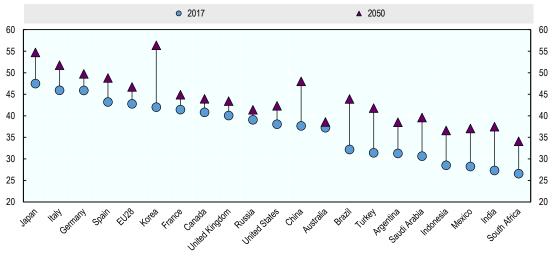


Figure 1.1. Median age of the population (years), G20 countries

Source: EU28: Eurostat estimates and projections; Australia, Brazil, Canada, France, Germany, Italy, Japan, Korea, Mexico, Spain, the United Kingdom and the United States: national estimates and projections; and, for the other countries: United Nations (2017), World Population Prospects: The 2017 Revision.

2. Even more striking is how the demographic shift will affect the very old populations in G20 countries. By 2050, the proportion of people aged 80 years and above will represent 8% of the G20 population, nearly triple what it is today. In Japan, one in six people will be 80 or older by 2050. The rapid increase in the share of the "oldest old" will be more pronounced in many of the G20 countries with relatively younger populations today, where the proportion of the population 80 and older is still very low. In China, for example, the proportion of the population aged 80 years and above is projected to increase from 1.7% in 2015 to 8.1% in 2050, while in Korea, it will rise from 2.6% – about one in 38 people – in 2015 to 14.3% – or one in seven – by 2050.

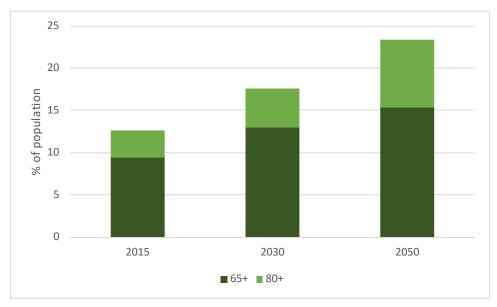


Figure 1.2. Share of G20 population aged 65 years and above

*Source*: OECD analysis based on data from UN World Population Prospects. Data for 2030 and 2050 use the medium variant scenario.

3. As populations age, G20 countries will see a significant increase in the burden of age-related health conditions. Should current trends continue, the number of people living with dementia in G20 countries is projected to rise from nearly 40 million in 2019 to more than 100 million by 2050 – a 250% increase over the next three decades. The rise in age-related health conditions will have significant economic implications for G20 countries, both in terms of the effects on employment – for those living with dementia as well as their carers – and the increased costs to health and social care systems.

#### 1.1.2. Working age populations will decline

- 4. Among the countries where the demographic transition is furthest along, the implications of this transition are stark. In Japan, the old-age dependency ratio the ratio of people 65 and over to those aged 15-64 doubled in the 20 years between 1995 and 2015 and is projected to increase further, by more than 20%, by 2030. While in 1995 there were nearly five people of working age for every person over 65, in 2030 there will be fewer than two. Emerging economies of the G20 will also experience rapid change. In Indonesia, the old-age dependency ratio will increase by nearly 60% between 2015 and 2030 (from 7.6 people 65 and older per 100 of working age, to 12.1), while in China, it will nearly double over the same period (from 13.3 to 25.3) (OECD, 2019[4]). Across the G20 overall, the old-age dependency ratio is projected to decline from more than six people of working age per every person 65 and older in 2017 to just three by 2050.
- 5. In most countries, two concurrent trends have driven population ageing: a decline in fertility rates and longer life expectancies at older ages. Fertility rates declined by more than 15% in the G20 between 1995 and 2015. Since 2000, life expectancy at age 60 has risen by nearly two years in the G20 (OECD, 2019<sub>[5]</sub>).
- 6. In the countries where population ageing has progressed most, a new challenge has emerged: population decline. Between 2010 and 2015, the overall population declined in

two G20 countries with some of the oldest populations, Italy and Japan. By 2050, it is predicted that at least seven G20 countries will see a declining population, assuming rates of migration remain constant. After a century of record population growth, a contracting population will have significant implications, including on economic growth.

Indonesia Germany Japan China Brazil Argentina India 2000 2010 2040 2050 2060 2070 2080 2090 Italy South Korea Mexico Russia South Africa Saudi Arabia Turkey

Figure 1.3. Projected start of population decline over time

Source: UN World Population Prospects 2018.

#### 1.1.3. Spending on health will continue to grow

7. The amount that G20 countries currently spend on health varies by a factor of 37. In 2016, G20 countries spent an average of USD 2904 per capita, though this figure masks substantial variation between the highest spender (the United States, at USD 9892 per resident) and the lowest spender (India, with USD 269 per resident). Emerging economies in the G20 spend substantially less than high-income countries, with Russia spending about 47% of the G20 average of USD 2904, China about one-quarter of the G20 per-capita spending level, and India and Indonesia just 10% of the G20 average (Figure 1.4). Emerging economies in the G20 also spend less on health as a proportion of their GDP.

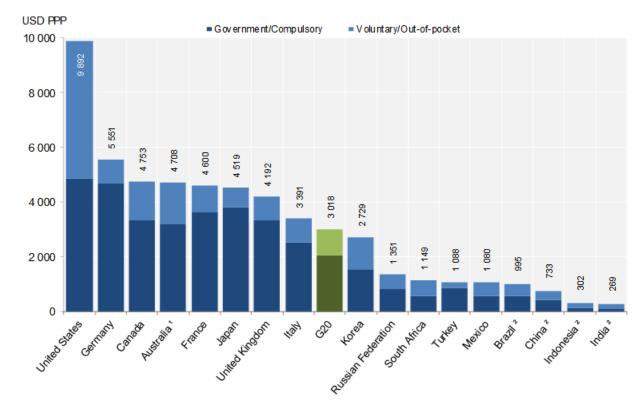


Figure 1.4. Health expenditure per capita, 2016 (or nearest year)

Note: Expenditure excludes investments, unless otherwise stated.

1. Australian expenditure estimates exclude all expenditure for residential aged care facilities in welfare (social) services. 2. Includes investments. G20 average excludes Argentina and Saudi Arabia. Source: OECD analysis using data from OECD (2017). Health at a Glance 2017.

8. Expenditure on health is projected to continue to increase over the coming years. By 2030, health expenditures as a share of GDP across 15 G20 countries<sup>2</sup> will increase from 8.7% of GDP in 2015 to 10.3% in 2030, if current trends continue. This increase is driven by a variety of trends, including technological advancement, productivity gains, economic growth, and demographic change. Growth rates will be especially high in emerging economies such as India, Indonesia and China, and more contained in countries with already old populations such as Italy, Japan and Germany.

#### 1.2. Population ageing has not always occurred in good health

# 1.2.1. G20 countries have made impressive longevity gains in recent decades, but gains in good health have not always accrued evenly

9. By many measures, G20 countries have made some impressive gains in the health of their populations in recent years. Life expectancy at age 60 reached 22.3 years in 2015, a nearly two-year increase since 2000. Current projections indicate that gains in longevity

<sup>&</sup>lt;sup>2</sup> Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Korea, Mexico, Turkey, the United Kingdom, and the United States

will continue to accrue: by 2050, life expectancy at age 60 could reach as high as 25.8 years in the G20.

- 10. Even as life expectancy has increased, living longer does not automatically equate with living well. Between 2000 and 2015, while most of the gains in life expectancy across 11 G20 countries were lived in good health, at least 15% of the gains were lived in poor health, caused by disease or injuries (Figure 1.5).
- 11. Moreover, since 2011 gains in life expectancy have begun to slow, sometimes dramatically, in a number of G20 countries, including the United States, United Kingdom, France and Germany. One of the major drivers of this slowdown has been the rise in diseases of older ages, including respiratory disease, Alzheimer's disease and other dementias, and slower improvements in cardiovascular disease mortality (Raleigh, 2019<sub>[6]</sub>). Other factors such as the opioid crisis in North America have also contributed to this trend. While it remains unclear whether this slower improvement in life expectancy will continue over the longer-term, these recent trends underscore the fact that continued gains are not inevitable.

Figure 1.5. Gains in life expectancy, 2000-2015

Years

Years

The state of the

Selected G20 countries

Note: Total gains in life expectancy at birth, 2000-15 Source: Preventing Ageing Unequally, OECD Publishing, 2018

12. Gains in life expectancy have not been distributed evenly across populations, either, even within the same country. Significant differences based on socioeconomic status have persisted and in some countries, such as the United States, even widened in recent years. In 23 OECD countries, the life expectancy gap at age 65 between highly-educated and low-educated populations is 3.5 years for men and 2.4 years for women (OECD, 2017<sub>[7]</sub>). This represents a difference of nearly 20% of remaining life expectancy for men, and more than 10% for women (OECD, 2017<sub>[7]</sub>). The impact of socioeconomic status on health outcomes at older ages is even stronger in many emerging economies. Health gaps between highly-educated and low-educated women in China and Indonesia are wider than in many advanced economies, while higher income is more closely associated with good health in China than in Europe (OECD, 2017<sub>[7]</sub>).

- 13. Moreover, older populations across the G20 face a range of hardships that can affect their health and quality of life, including financial insecurity, loneliness, social isolation and mental distress. Poverty rates for people 60 and older are higher than for the general population in Indonesia, while nearly one in four people over the age of 60 in China live below the poverty line (Priebe and Howell, 2014; Keck, 2013). Across the OECD, people aged 75 and older have the highest poverty rates of any age group. More than one in seven people above 75 live in poverty in the OECD (OECD, 2017<sub>[7]</sub>). Women, in particular, are at a high risk of experiencing poverty in old age. People aged 65 and older with low education are more than twice as likely to report that their health is poor compared with those with high education.
- 14. With younger adults facing greater labour market instability than previous generations, the risk has also risen that inequalities stemming from structural changes in the labour market will result in even greater inequality in older ages in the coming decades. Income inequality has been rising with each generation in two-thirds of OECD countries (OECD, 2017<sub>[7]</sub>).
- 15. Older populations grapple with a higher prevalence of social isolation and loneliness, which have been demonstrated to be important risk factors of poor well-being and health, particularly in old age (Courtin and Knapp, 2017<sub>[8]</sub>). Nearly one-third of adults 65 and older in many G20 countries are estimated to live alone, including two in five women 65 and older—a rate that is more than twice as high as men in the same age group. Older adults in advanced G20 economies are more likely to live alone: while 40% of adults 65 and older in Germany reported living alone, for example, 11% of older adults in China, and just 3% of older adults in India, reported the same (Figure 1.6).

Selected G20 countries, by sex 60% 50% 40% 30% 20% 10% 0% India China Mexico USA Italy France Germany ■ Men ■ Women

Figure 1.6. Proportion of adults 65+ living alone

Source: OECD analysis (2019) using microdata from SHARE, HRS, ELSA, MHAS, LASI, CHARLS health and retirement surveys.

- 16. Many of these older adults exhibit symptoms of mental distress that can be linked to loneliness and isolation. People who live alone are more than 30% more likely to report symptoms of mental distress than those living with family or friends, with nearly one in two people living alone reporting to have recently felt sad or depressed. Across many G20 countries, at least 39% of people 65 and older demonstrate symptoms of mental distress, including nearly one in three men and close to one in two women 65 and older. Feelings of mental distress are particularly high at older ages. Among those aged 80 and above, more than two in five people reported symptoms of mental distress.
- 17. Inequalities developed over the life course have significant effects on health and well-being at older ages. Differences in outcomes based on education inequalities, in other words, entrenched decades before an individual reaches old age have a significant impact on a host of well-being outcomes in older age (OECD, 2017<sub>[2]</sub>). Across eight G20 countries<sup>3</sup>, older adults with lower educational attainment are more than 40% more likely to live alone than older adults with high educational attainment. Just two in three older adults with low education report regular moderate physical activity, compared with more than four in five adults with high education. Those with low education are more than three times as likely to report having difficulty with at least four activities of daily living, such as bathing, dressing and getting in and out of bed.

#### 1.2.2. Older populations face cognitive and physical impairment

- 18. While many people grow old without experiencing significant physical or cognitive limitations, one in five people 65 and older, and nearly two in five people 80 and above, report having difficulty with at least some activities of daily living across eight G20 countries. Difficulties with self-care and instrumental activities of daily living can make it challenging for older persons to live independently and increase their need for support, either through informal (often family) carers or through more formal systems of long-term care.
- 19. Experiencing difficulty performing activities of daily living is a strong predictor of need for long-term care. In 2015, it was estimated that there were 200 million older persons in need of care globally. By 2030, a further 100 million older persons are projected to require care, a rise of 50% (ILO and OECD, 2019[9]). Yet living with functional limitations is not a natural consequence of ageing. Underscoring how entrenched inequalities can compound the challenges of unhealthy ageing, people with low education are more than twice as likely to report having some difficulty with at least one activity of daily living (ADL), compared with those with high education, and three times as likely to report having some difficulty with at least two ADL. Older adults with low educational attainment are more than twice as likely to report that their health is poor (Figure 1.7).

<sup>&</sup>lt;sup>3</sup> China, India, Mexico, France, Italy, Germany, United Kingdom, United States

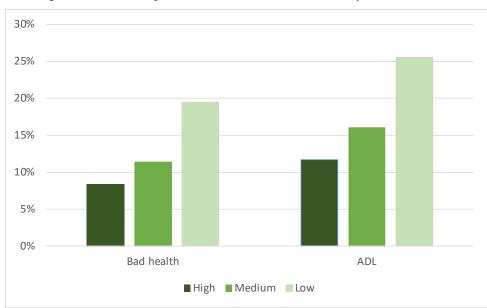


Figure 1.7. Self-reported poor health and disability rates for individuals 65+

Average across China, Europe, India, Mexico and the United States, by educational attainment

*Note*: Poor health and disability are measured using self-reported indices: i) participants responded "poor" when asked whether their health was excellent, very good, good, fair, or poor; ii) participants reported at least one limitation in activities of daily living (ADL).

Source: OECD analysis (unpublished) using microdata from SHARE, HRS, MHAS, LASI, CHARLS health and retirement surveys.

20. Ageing populations also mean that G20 countries are grappling with a rise in age-associated conditions, including dementia. Across the G20, nearly 40 million people are already living with dementia. Without the introduction of a disease-modifying treatment or cure, this number will continue to rapidly increase, and could reach more than 100 million people by 2050. Even without the development of effective treatments, much can be done to improve the quality of life of people living with dementia and their carers. Yet the quality of care many people living with dementia continue to receive is poor. Rates of inappropriate antipsychotic prescribing and other forms of inadequate care remain persistently high, for example (OECD, 2018<sub>[10]</sub>). Moreover, the rapid increase in the number of people living with dementia has stark economic, as well as societal, costs. The global cost of dementia was estimated to have crossed the USD 1 trillion threshold in 2018 (Prince et al., 2015<sub>[11]</sub>). G20 countries, which comprise a large proportion of the world's older population, represent 92% of the global cost of the condition (Wimo et al., 2017<sub>[12]</sub>).

## 1.3. Population ageing also has implications for major global health priorities such as antimicrobial resistance

21. In addition to the impacts that population ageing will have on the economic structures of G20 countries, ageing will further have a significant effect on efforts to make progress on key global public health priorities. The growing threat of antimicrobial resistance (AMR) to health and health systems around the world is well established. Across OECD countries in 2017, nearly 20% of bacterial infections were antibiotic resistant, while across the G20, antibiotic resistance in some countries has exceeded 40%. Combatting the spread of antimicrobial resistance has been high on the global health agenda in recent years,

with commitments to fighting AMR made under the recent Argentine and German G20 Presidencies.

22. Certain parts of the health system contribute disproportionately to the spread of AMR. This is particularly true of long-term care facilities, which have been found to have particularly high rates of antibiotic prescribing. Studies suggest that a high proportion of nursing home residents may be colonised by multi drug-resistant organisms (Giufrè et al., 2017<sub>[13]</sub>; Lim et al., 2014<sub>[14]</sub>). Yet despite the evidence suggesting that older adults exhibit the highest rates of antibiotic resistance, the advanced age of many hospital patients, and the high rate of antibiotic resistance in long-term care facilities, there has been relatively little attention paid to how long-term care may contribute to this challenge.

#### 2. Healthy ageing brings opportunities for well-being and the economy

23. In the coming decades, population ageing could have significant economic consequences for countries should this demographic change not be anticipated and well managed. At the same time, many of these challenges could be mitigated and countries could enjoy significant payoffs if healthy ageing is promoted. There are significant economic and social benefits to promoting healthy ageing. Reducing the amount of time people spend in poor health helps to reduce healthcare costs while delaying the need for long-term care services. Good health can also help to extend the working lives of older adults by reducing the time spent out of work in poor health and health-related early retirement. Moreover, by preventing poor health before it begins, healthy ageing strategies can also help to mitigate some of the inequalities that develop and widen over the life course.

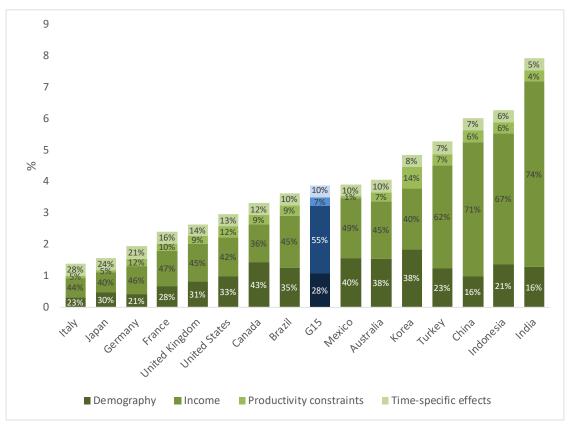
#### 2.1. There are significant economic consequences to population ageing

# 2.1.1. Population ageing will contribute to more than a quarter of the increase in health and long-term care spending

24. Health and long-term care expenditure projections suggest that health expenditure will increase by an average of 3.9% annually between 2015 and 2030, rising to 10.3% of GDP across 15 G20 countries by 2030. Over this time period, 28% of the increase in health expenditure will be driven by changes in the population structure brought about by ageing. In addition to demographic factors, rising incomes, productivity constraints, and technological progress are key drivers of health spending growth (Figure 2.1).

Figure 2.1. Contribution of key drivers to average annual health spending growth to 2030 by scenario

Select G20 countries



Source: OECD analysis based on methodology developed for Lorenzoni, et al, 2019.

25. The magnitude of this increase in health expenditure can be managed depending on the policy response. Most notably, according to scenario analysis, health promotion policies that encourage healthy ageing <sup>4</sup> and healthier lifestyles could result in the containment of health expenditure as a share of GDP in OECD countries in the order of 0.5% by 2030 relative to a continuation of current trends. On the other hand, under a scenario where health systems experience additional cost pressures, this would result in a further growth in the share of health spending in GDP of 1.5% (Lorenzoni et al., 2019<sub>[15]</sub>). Healthy ageing policies, pursued in tandem with other strategies to improve the efficiency of health systems, could help to mitigate future increases in health expenditure.

#### 2.1.2. Poor health has lifelong impacts on working lives

26. Poor health affects both the likelihood that people will be in the workforce, and the length of time they spend in employment. Being in good health can extend how long older adults spend in employment both by reducing the amount of time they take off work due to poor health, and reducing the likelihood that they will retire early for health-related reasons. Risk factors for poor health, including obesity, smoking, heavy alcohol use, and chronic

<sup>&</sup>lt;sup>4</sup> Define model's assumptions around healthy ageing

diseases are all associated with lower rates of employment. Non-obese older adults between the ages of 50-59, for example, are 22% more likely to be employed than those who are obese (OECD, 2016[1]).

#### 2.1.3. Ageing is affecting economic growth

27. As the growth in the working-age population slows, the rising old-age dependency ratio will exert pressure on future growth of GDP per capita. Without a rapid adjustment in policies, the improvement in living standards could slow as the share of the working-age population declines. Between 2018 and 2030, the decline in the working-age population is projected to reduce growth in GDP per capita in 11 G20 countries, and by 2030, only two G20 countries – India and South Africa – will still enjoy gains to GDP from the demographic dividend (Figure 2.2).

Figure 2.2. Working-age population contribution to GDP per capita growth

Source: OECD (2018), The Long View: Scenarios for the world economy to 2060.

# 2.2. Promoting healthy ageing will help to reduce the economic costs of ageing

#### 2.2.1. Healthy ageing helps to extend the working lives of older people

28. In recent years, employment rates for older workers – especially women – have increased in a number of G20 countries, rising from 47.8% in 2000 to 60.4% in 2017 (Figure 2.3).

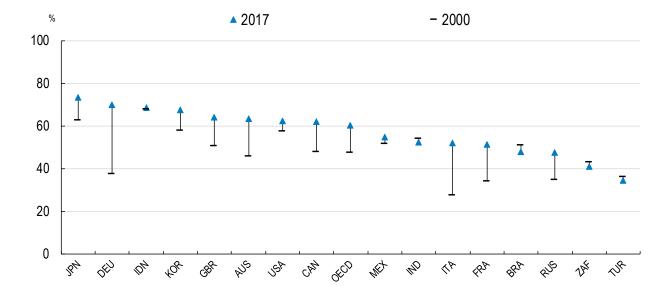


Figure 2.3. Employment rates, age 55-64

Source: OECD Labour Force Statistics database.

- 29. With growth in the working-age population slowing and the old-age dependency ratio rising, population ageing could create headwinds to further economic growth and challenge the sustainability of public finances if the right policies are not pursued. Without a change in labour force entry and exit patterns, the average number of retirees (those 50 and over not in the labour force) could increase by nearly 60%, from 35 per 100 workers in 2019 to nearly 55 per 100 workers in 2050 (OECD, 2019<sub>[16]</sub>).
- 30. Yet a substantial proportion of this increase could be mitigated by strengthening older-age employment, delaying retirement, and encouraging employers to hire and retain older workers. Under a delayed labour market exit scenario, in 2050 the number of retirees per 100 workers would rise to 46 higher than 2019, but considerably lower than if employment were not increased at older ages (OECD, 2019[16]).

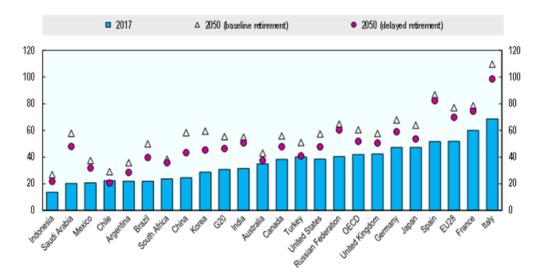


Figure 2.4. Retirees per 100 workers, 2017 and 2050

Note: Retirees refer to all people aged 50 and over who are not in the labour force and workers to the total labour force. The baseline projections of the labour force used to obtain the ratio of retirees per worker are obtained by assuming that labour force entry and exit rates over a 5-year period by gender and 5-year age groups remain constant at their average rate observed in the period 2008-17. The projections with delayed retirement are obtained in the same way but with exit rates from age 55 onwards adjusted downwards by 20% (10% in India, Indonesia, Japan, Korea and Mexico, where participation rates for men and/or women are already very high at older ages), phased in over the period 2017-30.

Source: OECD population and labour force projections dataset (unpublished).

#### 2.2.2. Healthy ageing helps reduce costs to health and social care systems

- 31. Reducing the burden of non-communicable diseases and other avoidable conditions could have a substantial impact on health outcomes and costs, lowering the burden of disease and mortality for some conditions, helping to reduce health expenditure, and increasing engagement in the workforce for some older workers.
- 32. In recent years, countries have made clear public commitments to preventing and controlling the spread of NCDs. The 2015 Sustainable Development Goals include as a key priority of SDG 3 on healthy lives and well-being a sub-goal to reduce preventable deaths from non-communicable diseases by one-third. The 2011 UN Political Declaration on NCDs committed countries to develop and strengthen national NCD prevention and control plans. Building on this global commitment, the WHO Global Action Plan for the Prevention and Control of Non-Communicable Diseases identified nine global targets which countries have agreed to work towards to 2025.
- 33. To understand how mitigating the burden of obesity could impact health and health spending in the coming years, the OECD assessed, using a micro-simulation model, the health and economic outcomes of achieving a halt in the rise in obesity between 2020 and 2050, in line with the voluntary global target on obesity set out in the Global Action Plan for the Prevention and Control of NCDs (Box 2.1). The analysis examines the effects of halting the rise in obesity on mortality, morbidity, and health expenditures in G20 countries.

#### Box 2.1. Global Action Plan for the Prevention and Control of NCDs

#### **Voluntary Global Targets**

- 1. A 25% relative reduction in risk of premature mortality from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases.
- 2. At least 10% relative reduction in the harmful use of alcohol, as appropriate, within the national context.
- 3. A 10% relative reduction in prevalence of insufficient physical activity.
- 4. A 30% relative reduction in mean population intake of salt/sodium.
- 5. A 30% relative reduction in prevalence of current tobacco use in persons aged 15+ years.
- 6. A 25% relative reduction in the prevalence of raised blood pressure or contain the prevalence of raised blood pressure, according to national circumstances.
- 7. Halt the rise in diabetes and obesity.
- 8. At least 50% of eligible people receive drug therapy and counselling (including glycaemic control) to prevent heart attacks and strokes.
- 9. An 80% availability of the affordable basic technologies and essential medicines, including generics, required to treat major non-communicable diseases in both public and private facilities.

Source: (World Health Organization, 2013[17])

34. Arresting a further rise in obesity rates would have a substantial effect on health outcomes across G20 countries. On average in G20 countries, halting an increase in obesity rates would reduce premature mortality among people aged 50-70 by 1.3% annually between 2020 and 2050. Put in other terms, more than 4.3 million premature deaths would be averted across G20 countries between 2020 and 2050 if a further rise in obesity rates were halted.

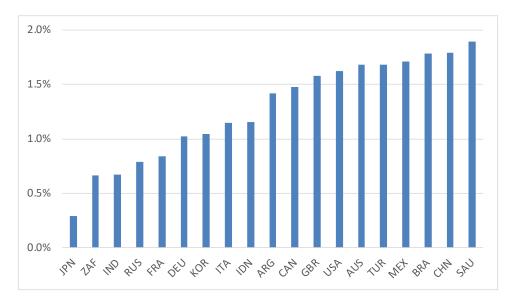
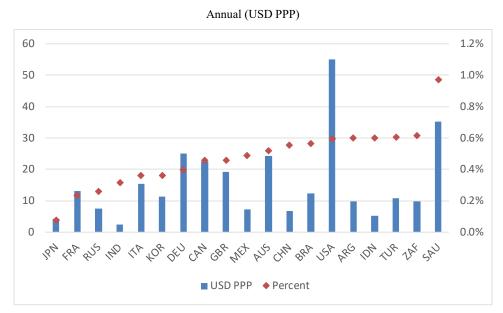


Figure 2.5. Annual reduction in premature deaths among people 50-70 years old

Source: OECD microsimulation analysis, 2019

- 35. Halting the rise in obesity rates would also have a large impact on morbidity, including from other diseases. Across G20 countries, nearly one million cases of cancer, 2.2 million cases of dementia, 5 million cases of diabetes, and more than 27 million cases of cardiovascular disease would be avoided among people 50 and older between 2020 and 2050 if obesity rates remained flat. For some other diseases including cirrhosis of the liver and chronic obstructive pulmonary disease, halting the rise in obesity rates would *increase* the number of cases of disease: some people who may have died of obesity-related causes will now survive to develop other illnesses instead.
- 36. Substantial savings to the health system could also be generated through preventing further rise in obesity rates, particularly where obesity rates are highest. Percapita health expenditures would be on average 0.5% lower per year across G20 countries, compared with the status quo. This would result in annual health expenditure savings in G20 countries of more than USD PPP 11 billion per year.

Figure 2.6. Reduction in per-capita health expenditure after halting the rise in obesity rates



 ${\it Source}: OECD\ microsimulation\ analysis,\ 2019.$ 

# 3. Sustainable and inclusive societies for all ages require a life course approach

37. Policies to improve health outcomes among older adults will not be enough to move towards societies that truly promote healthy ageing. A life course approach is needed to achieve sustainable and inclusive societies for all ages. Policies that target young populations – to ensure poor health is prevented before it begins – are essential to realising a healthy ageing society, as are policies that encourage people's participation in the labour market and in their communities. G20 countries will also need to take a holistic approach to healthy ageing that includes not only health interventions but also broader, often multisectoral initiatives that address the many socioeconomic factors that can affect well-being at older ages.

#### 3.1. Promote healthy ageing early in life

#### 3.1.1. Prevent unhealthy behaviours

- 38. One of the most effective measures to promote healthy ageing in later life is to prevent unhealthy behaviours from becoming entrenched. Improvements in the prevention of cardiovascular diseases have driven much of the gains in life expectancy at older ages in recent decades. As countries experience an epidemiological transition from predominantly infectious diseases to chronic conditions such as cardiovascular diseases, major drivers of morbidity and mortality are strongly linked to preventable risk factors, including overweight-obesity, alcohol consumption, and smoking.
- 39. For example, overweight and obesity rates have increased dramatically across G20 countries in recent decades, and three in five adults aged over 65 years across many G20 countries, including more than one in two over 80, are now overweight (Figure 3.1). The links between obesity and chronic disease, including cardiovascular disease and diabetes, are clearly established. Around the world, overweight and obesity was estimated to have contributed to four million deaths in 2015 (GBD 2015 Obesity Collaborators et al., 2017<sub>[18]</sub>). Projections for the future point to continued increase (Figure 3.2).

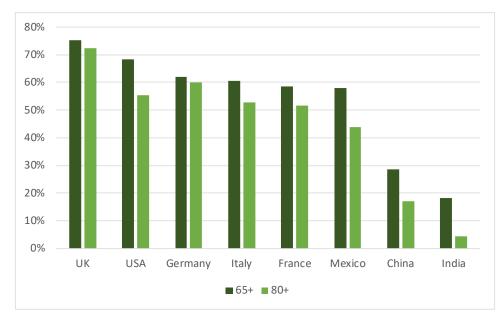


Figure 3.1. Prevalence of overweight-obesity, select G20 countries

*Note:* Proportion of the population with BMI>=25

Source: OECD analysis (unpublished) using microdata from ELSA, SHARE, HRS, MHAS, LASI, CHARLS health and retirement surveys.

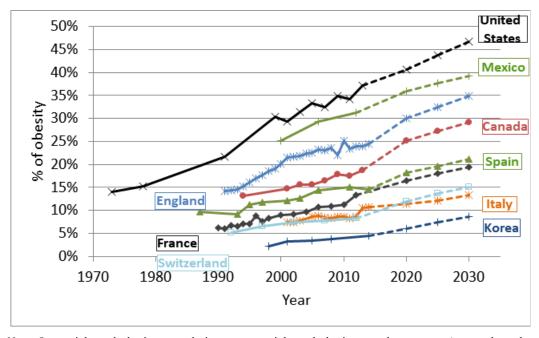


Figure 3.2. Rising overweight (including obesity) rates in adults aged 15-74 years

*Note*: Overweight and obesity rates designate overweight and obesity prevalence rates. Age- and genderadjusted rates of overweight (including obesity), using the 2005 OECD standard population. Measured height and weight in England, Hungary, Korea, Mexico and the United States; self-reported in other countries. *Source*: OECD 2017

40. Though tobacco consumption has declined across nearly all G20 countries since the turn of the century, smoking remains one of the leading risk factors for years of healthy life lost across G20 countries, and is among the three leading risk factors in 14 G20 countries (Forouzanfar et al., 2016<sub>[19]</sub>). Worryingly, tobacco consumption increased dramatically in Indonesia between 2000 and 2015, suggesting that stronger policies are needed to effectively reduce smoking and its associated health effects (Figure 3.3).

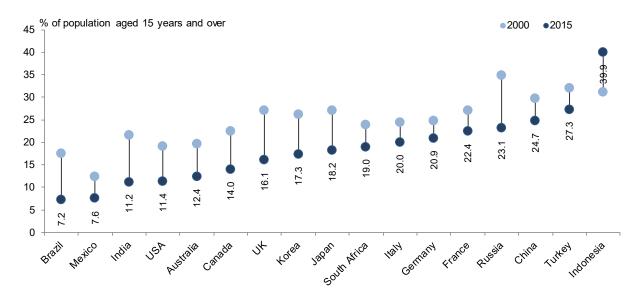


Figure 3.3. Adult population smoking daily, 2000 and 2015 (or nearest year)

Source: OECD Health Statistics 2017.

41. As with tobacco, harmful alcohol consumption represents one of the top ten leading risk factors for years of healthy life lost. On average in G20 countries, alcohol consumption has declined since 2000, from 7.41 to 7.25 litres of pure alcohol per capita per year. However, the decline in average consumption masks considerable variation between countries: alcohol consumption has increased dramatically in a number of emerging economies, including China and India, while Italy and Japan have experienced large reductions in consumption (OECD, 2015<sub>[20]</sub>). Worryingly, many countries have seen a significant increase in the most harmful alcohol consumption behaviours, including binge drinking, especially among young people and women. Such behaviour can compound the negative health effects associated with alcohol consumption: in addition to the direct health effects of harmful drinking, much of the global burden of disease is attributable to alcohol-related violence and traffic accidents (OECD, 2015<sub>[3]</sub>).

<sup>&</sup>lt;sup>5</sup> Argentina and Saudi Arabia are excluded

| 27

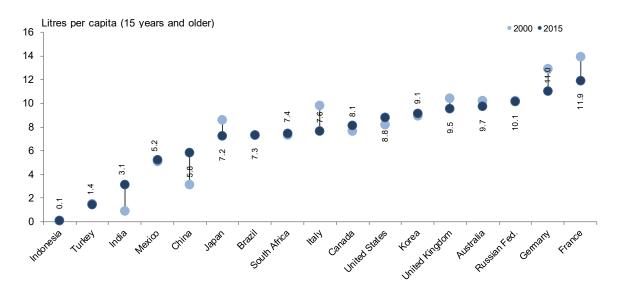


Figure 3.4. Recorded alcohol consumption among adults, 2000 and 2015 (or nearest year)

Source: OECD Health Statistics 2017.

- 42. Comprehensive policy packages have been found to be very cost effective in tackling overweight-obesity, harmful alcohol and tobacco consumption. G20 countries have adopted a range of policies that cover health care interventions and fiscal, regulatory, and communication measures to help prevent unhealthy behaviours. A package of policies designed to shift consumer preferences away from harmful behaviours can provide an affordable, cost-effective approach to preventing unhealthy behaviours and the onset of avoidable non-communicable diseases (OECD, 2015; OECD, 2017; WHO, 2017). Such a policy package can consist of communication policies (such as mass media information campaigns, labelling requirements, and advertising restrictions), regulating the sale and consumption of unhealthy products (such as limited hours on sales of alcohol and bans on smoking in public spaces), increasing the price and reducing demand for unhealthy products (such as taxes on alcohol and tobacco), and increasing access to health prevention services (such as the role of primary care physicians in addressing heavy alcohol consumption). A comprehensive policy package to tackle harmful alcohol use implemented in Germany, for example, would avert roughly 10% of the entire burden of disease associated with harmful alcohol and lead to yearly savings to the health system of more than USD 300 million (OECD, 2015<sub>[3]</sub>).
- 43. Laudably, G20 countries have made good progress in making tackling NCDs a national priority. Every G20 country has developed a national strategy or action plan to address adult obesity as well as national dietary guidelines, while sixteen have developed national obesity strategies targeting children (OECD, 2019<sub>[21]</sub>). In addition, many countries have implemented policy options promoting healthier lifestyles to help reduce overweight and obesity. G20 countries have adopted myriad policies intended to influence lifestyle and expand the availability of healthy options. All G20 countries with the exception of Turkey, for example, require mandatory back-of-package nutrition labelling (OECD, 2019<sub>[21]</sub>). Nonetheless, the continued rise in overweight and obesity rates suggests that a gap between policy design and implementation and reach persists.
- 44. Countries should pay particular attention to ensuring that disadvantaged and marginalised populations are reached. Differences in the prevalence of risky behaviours is

a major cause behind inequalities in morbidity and mortality. Smoking alone is estimated to account for half of the socioeconomic inequality in mortality in Europe (OECD, 2017<sub>[7]</sub>).

#### 3.1.2. Encourage physical activity

45. Physical activity is critical to maintaining good health and reducing many NCD risk factors. With the exception of Russia, G20 emerging economies have not developed national physical activity guidelines that could help to counter trends in physical inactivity (OECD, 2019<sub>[21]</sub>).

#### 3.1.3. Address barriers to health literacy

- 46. Ensuring that older populations have sufficient health literacy to make informed decisions about their health and participate in their own care is critical for healthy ageing. Yet overall health literacy remains poor: across 18 OECD countries, it is estimated that at least one-third of the population has poor health literacy; in twelve of these including six G20 countries<sup>6</sup> the proportion of the population with low health literacy exceeds 50% (Moreira, 2018<sub>[22]</sub>). Evidence suggests that vulnerable populations, including older populations, are particularly at risk of low health literacy.
- 47. Poor health literacy among older adults has been found to be associated with a higher risk of mortality, underscoring the need to ensure that health information is communicated clearly and the population is equipped to understand it (Bostock and Steptoe, 2012<sub>[23]</sub>). Higher health literacy is further linked with better self-management of care and improved medication adherence, allowing patients to better manage their health risks and improve their outcomes. Moreover, as patients increasingly turn to online sources to seek health information, it is important that age-related inequalities in online literacy do not compound inequalities in health literacy. Just 9.7% of adults aged 75 and older reported going online to seek health information across ten OECD countries<sup>7</sup>, compared with 47.3% of adults between the ages of 25 and 54 (Figure 3.5). Policies that promote digital literacy among older adults, such as the Erlebnis Internet initiative to train older people to use the internet in Germany, are needed to complement health literacy initiatives and ensure older adults do not fall behind.

<sup>&</sup>lt;sup>6</sup> Australia, Canada, Germany, Italy, Japan, Turkey

Australia, Chile, Czech Republic, Italy, Korea, Mexico, Norway, Slovak Republic, Spain, United States

60
50
40
30
20
10
Mexico Italy United States Australia Korea

Figure 3.5. Individuals using the internet to seek health information in the past 3 months (%)

Select G20, 2016 (by age group)

Note: Data for the United States refers to 2015.

Source: OECD analysis using data from OECD Statistical Database, 2018. ICT Access and Usage by Households and Individuals Database.

- 48. Many G20 countries already invest in promoting health information through media campaigns, the development of websites and brochures, and other publicity measures. Health literacy campaigns that actively seek to improve literacy skills of patients and improve communication with the health system are particularly important. Countries have begun to develop toolkits and guidance directed at health professionals to help them improve their communication with patients, such as the "Easy Does It! Plain Language and Clear Verbal Communication" manual in Canada and plain language guidelines developed by the Agency for Healthcare Research and Quality in the United States. Some have begun to integrate improving issues related to health literacy into quality standards. For example, in Australia, the National Safety and Quality Health Service Standards will include health literacy components that assess how well public and private hospitals do in ensuring that their services are accessible, including through clear signage and communication, and the development of health information that is reflective of local diversity (Moreira, 2018<sub>[22]</sub>).
- 49. A community-based approach is particularly important in health literacy policies targeting older populations. Many of the most effective health literacy programmes targeting older adults have harnessed existing community networks and peer support to deliver information and increase literacy, such as the IC Health digital health literacy initiative in Europe.

#### 3.2. Facilitate active participation in the community

#### 3.2.1. Extend quality working lives for older workers

50. In addition to programmes that make the surrounding environment more conducive to independent living for older adults, policies promoting lifelong learning and skills development encourage people to stay engaged in their communities and are important to

combatting social isolation, maintaining engagement, and preserving brain health. Moreover, maintaining and improving skills throughout working life leads to better labour market outcomes.

- 51. A comprehensive approach is needed to increase the labour force participation of older workers. Poor work environments can significantly affect the physical and mental health of older workers. Work environments that contribute to poor health can lead to long periods out of work, including early withdrawal from the labour force for older workers. Good quality work environments, in contrast, can facilitate quicker re-entry into the workforce and can allow people to enjoy healthier, longer working lives (OECD, 2019<sub>[16]</sub>).
- 52. To increase labour force participation among older workers, jobs must be suited to their needs, and older workers must be equipped with the capacities to do these jobs. Given the rapid changes in skill needs brought about by changes in technology, offering older adults, and especially older workers, opportunities to reinforce and develop skills is particularly important. Yet across many countries, older workers are less likely to undergo training than younger groups. There is significant scope to increase employment among older populations, particularly among workers with lower educational attainment.
- 53. Across all ages, people in poorer health work and earn less than their healthier counterparts. The effect of poor health is particularly strong among low-educated workers: health-related employment gaps are twice as large for low-educated workers, compared with those with high education (OECD,  $2017_{[2]}$ ).
- 54. The health-related employment gap, largely consistent in the first decades of employment rises substantially at older ages, from around 25-30% at 20 and 40 to up to 50% among workers in their early 60 (OECD, 2017<sub>[7]</sub>). While reducing health-related disparities at all ages is critical (particularly given the potential of poor health to compound other inequalities), the widening of the health-related employment gap at older ages also underscores the importance of promoting healthy ageing policies for well-being and for higher labour force participation among older workers.

#### Box 3.1. Encouraging a healthier, longer working life

The rising number of older persons per working-age adult in G20 countries means that public finances could come under tremendous pressure if substantial changes to working lives and retirement are not made. In recognition of this growing challenge, many G20 countries have begun to develop policies that encourage older adults to stay in the workforce longer and dissuade early retirement. While these policies may not be fully sufficient to address the growing pressure on public finances – among other changes, many countries must better integrate women into the workforce, while mobilising youth early on is critical to reduce inequalities (particularly in countries with large child and young adult populations) – they are an important component of any strategy to ensure the long-term sustainability of public finances. Moreover, policies that enable healthy older adults to continue to participate in high-quality jobs are also a critical part of any healthy ageing strategy by allowing older adults to stay active and engaged in their local communities as long as they wish to do so.

#### Rewarding work and later retirement

In recent years, several G20 countries have introduced policies to encourage workers to continue working into older ages by reducing incentives around early retirement and offering more flexible transitions into retirement. As life expectancy has risen, a number of high-income G20 countries have raised the official age of retirement beyond 65. In Germany and the United Kingdom, for example, the pension age is being raised gradually to 67, while in Italy, changes in the retirement age are linked to changes in life expectancy. Among the G20's emerging economies, fewer have increased their retirement age, with many (e.g. China, India, Indonesia) remaining below 65. Even with increases in the retirement age, gains in life expectancy mean that the amount of time spent in retirement relative to working life will on average increase (OECD, 2017[18]).

A number of countries have also tightened requirements to accessing early retirement benefits. Some countries (such as France, Germany and Italy) have increased the number of years workers are required to make contributions before accessing a full pension. A number of countries allow workers to remain active in the labour force after retirement age, while receiving a (reduced) pension. However, policies that allow workers to continue working while receiving pension contributions after retirement age can inadvertently discourage older adults from remaining engaged in the labour force. In Japan and Korea, for example, pension benefits are reduced beyond a specified earnings limit, while in France, adults who work beyond the retirement age are obliged to continue paying pension contributions, but do not receive additional benefits.

#### Encouraging employers to retain and hire older workers

While changes to retirement ages and pension benefits can affect the supply of older-age workers, they address only one side of the challenge. G20 countries must also ensure barriers to demand for older workers, notably age discrimination in firms, is addressed sufficiently. Nearly all high-income G20 countries have enacted legislation banning age discrimination in hiring, though the effectiveness of such laws can be mixed without sufficient enforcement.

#### Promoting the employability of workers throughout their working lives

Maintaining and upgrading skills throughout working life is linked with better outcomes in the labour market. Lifelong learning, including upskilling and reskilling, will be particularly important for older workers in the context of rapid technological change. Yet despite the importance of developing new skills, older workers across many G20 countries, including Canada, France and Germany are less likely to receive training than other groups. Policies that provide career advice services for older workers can help recognise the importance of lifelong learning, while policies that encourage employers to provide training programs can help extend working lives.

### 3.2.2. Address social isolation and promote active participation among older adults in their communities

- 55. As people age, home environments that were previously safe such as stairs or slippery surfaces may become increasingly hazardous to live in. Environments that are not adapted to the needs of older people can contribute to falls and other accidents that can lead to rapid declines in health. Ensuring that homes are set up to avoid accidents and allow older people to communicate in times of need is important to supporting long-term independent living. This is particularly true for the 31% of people aged 65 and over, and 47% of people 80 and above, in G20 countries who live alone. New technologies that help individuals and health systems to better monitor and respond to health needs can be particularly useful for people living at home (Box 3.2).
- 56. Across G20 countries, nearly 346 000 people aged 60 and above died from falls in 2016. Many of these accidents can be avoided with appropriate environmental adaptations and modifications to help older adults avoid unnecessary risks.
- 57. The number of older people living with undernutrition is also increasingly common. The prevalence of undernutrition among older people living in the community has been estimated to be as high as 48%, with undernutrition higher in low- and middle-income countries, compared with high-income countries (WHO, 2017<sub>[24]</sub>). Undernutrition is strongly associated with premature mortality and poorer quality of life. Lower body mass index (BMI) can also accelerate the onset of limitations in activities of daily living (ADLs) (WHO, 2017<sub>[24]</sub>).

<sup>&</sup>lt;sup>8</sup> OECD analysis of WHO Global Health Estimates 2016 data.

#### Box 3.2. Harnessing new technologies to encourage healthy ageing in the community

The rapid advancements in new technologies and digital tools offer exciting opportunities for healthy ageing strategies across the G20. These tools can be used both by health and social care systems, as well as older populations directly, to help achieve healthier lives.

#### Linked health data across care settings

- Health systems collect an extraordinary amount of data that can help healthcare
  professionals tailor care to the needs of their patients. Yet too often, this data is kept in
  silos and is not linked to other settings in the health system, dramatically diminishing
  its value. Within OECD countries, care settings important to older populations,
  including long-term care and primary care, remain among the most poorly connected.
- Successful examples of linking data across care settings points to the value of this information. In Sweden, the Swedish Dementia Registry (SveDem) links data from primary care, specialists, and care facilities and supplements this data with information about community-based support and other quality of life measures. This information helps to provide a holistic picture of people living with dementia, and can be used to improve care in a personalised manner (OECD, 2018<sub>[10]</sub>).

#### Telemedicine for more responsive care

• Up to 65% of people in some OECD countries report that they have experienced unmet medical needs because of barriers in access to care, including waiting times, distance from care settings, and lack of transportation options to take them to necessary services. Telemedicine, which uses digital technology to delivery clinical interventions remotely – for example, through video consultations with primary care physicians – may help to address some of these barriers to access. Telemedical services may be particularly helpful in rural areas, where older adults are overrepresented in the population.

#### Digital tools for health monitoring

- Recent years have seen an explosion in the number of patient-oriented digital tools for monitoring health. The number of apps available and downloaded by consumers, for example, has increased dramatically in recent years: Between 2013 and 2017, downloads of health-related mobile applications more than doubled, while the use of wearable technologies many of which include built-in health applications more than tripled (Safavi, K., Webb, K., Kalis, 2018<sub>[25]</sub>).
- Many new digital tools address health issues highly relevant to older populations. Falls
  detection technologies, medication adherence reminders, and digital tools to help with
  self-managing chronic conditions such as diabetes and hypertension can help older
  adults take ownership of their health.
- 58. Developing health and social care systems that can deliver supportive care to older adults in their homes is a critical component of any healthy ageing strategy. But it is not sufficient. Beyond ensuring older adults receive adequate clinical support, policies must further help to ensure older adults can participate actively in their communities well into old age. Even where governments have made ageing at home a priority, ensuring communities are well adapted to the needs of older adults, and particularly those living with

- dementia, is challenging. Promoting healthy ageing in the community requires public services including public transportation and safety (police, fire) services to be adaptive to the needs of older adults. But just as importantly, healthy ageing in the community requires the engagement from all members of the community, including both the private sector for example, the service and financial industries and residents.
- 59. In recent years, a number of G20 countries have taken the lead on promoting a whole-of-society based approach to healthy ageing in the community. In Japan and the United Kingdom, significant efforts to improve the quality of life for people living with dementia have led to the development of dementia-friendly community initiatives aimed both at reducing stigma and making communities easier to navigate for people living with the condition (OECD, 2018<sub>[10]</sub>). More than 9.5 million people in Japan have attended 'dementia supporter' training programs aimed at increasing awareness and sensitizing the broader population about dementia. The success of this programme has been echoed elsewhere, including in England, where more than two million dementia 'friends' have undergone awareness training. In total more than 90% of OECD countries have put in place some forms of dementia-friendly initiatives and training programs.

#### 3.3. Improve the well-being of older populations in need of care

#### 3.3.1. Develop the availability and quality of care facilities

- 60. Many G20 countries lack enough trained human resources and funding to accommodate the growing number of elderly and to cater to their specific long-term care needs. Long-term care (LTC) refers to the need for services designed to compensate for limited capacity to carry out activities of daily living such as bathing, dressing and getting in and out of bed, over a prolonged period. Informal carers –mainly daughters, daughters-in-law and spouses in many countries provide the bulk of such services, especially when there is lack of affordable care options.
- 61. Without further investment in the LTC system, societal costs can be large in the face of ageing populations. Quality LTC improves prevention and promotion and reduces the need for health care for older people. For instance, LTC can reduce the unnecessary social admissions in health care and hospitals. It can also promote the labour force participation of informal carers and reduce their own health burden.
- 62. Encouraging healthy ageing in the community reflects the preferences of many older adults, who wish to remain connected to their local communities and lives for as long as possible. Where supported well at home, either through family and other informal care, professional care workers, or a combination, older adults can enjoy a standard of living much higher than they might receive in a traditional care facility.
- 63. Yet home and community-based care services are critically underdeveloped in many G20 countries. In China, for instance, government subsidies are directed mainly to service providers, primarily of residential care.
- 64. The quality of LTC services depends on the existence of an effective and efficient workforce. In many G20 there are acute shortages, difficulties to recruit and high turnover. Workers are mostly insufficiently trained.
- 65. Even as most countries have moved towards encouraging older adults to live at home for as long as possible, some individuals will eventually require a level of care that they cannot receive in their homes, and will need facility-based intermediate- or long-term care. In many cases, though, the availability of home-based care services is insufficient. In

addition, the quality of care within long-term care facilities can dramatically influence the health outcomes and quality of life of the people living in them, and more can be done to ensure that such facilities deliver the highest quality care possible.

- 66. A number of G20 countries with more developed long-term care systems have taken steps in recent years to ensure their long-term care facilities meet the needs of all residents. This includes people living with dementia, for whom traditional nursing home settings can be disorienting and distressing. New models of long-term care facilities, including small-scale living facilities, mixed care facilities, and dementia villages, offer a more person-centred model of support that allows older adults to live more autonomously, even when they require some care. The government in Germany has promoted the idea of *Mehrgenerationshäuser*, or "multi-generational homes", to create communities across ages, from young families to the oldest old (OECD, 2018<sub>[10]</sub>). Subsidies co-financed by the federal ministry and local municipalities are available to develop such homes.
- 67. Design guidelines for care facilities can help ensure that new construction and renovations respond to the needs of people living with dementia and other conditions prevalent in older age. The United Kingdom and other high-income countries have developed guidelines for dementia-friendly design that reflect newer models of care. In some cases (such as in Norway), these guidelines have become mandatory for all new residential and nursing home construction that receive public funding (OECD, 2018[10]).

#### 3.3.2. Integrating services to improve care for people living at home

- 68. The fragmentation of health care services poses a major challenge for many older people, many of whom will need support from a variety of different medical and social care services. Improving the coordination of care for older patients across the care pathway has been a major goal for some G20 health systems. In some cases, for example in Scotland (United Kingdom) and Singapore, countries have taken steps to improve the overall governance of health and social care, including merging separate ministries together or creating new integrated care agencies. In others, steps to improve the integration of services have focussed on how different aspects of health and social care delivery can work better together. Countries where long-term care systems are still nascent have an opportunity to develop systems that promote integration and prevention from the outset.
- 69. For many older adults, an accident or illness leading to hospitalisation can set off a chain of events that makes it difficult for them to stay in their homes. Many hospitalisations are avoidable and hospital-at-home services, telecare, home visits and strengthened primary health care services can help to avoid as many unnecessary hospital admissions, as possible. Programmes that offer in-person or telephone-based support after a hospitalisation, such as reminders to take medication and links to community-based services, have been found to reduce hospital readmissions among older patients (Balaban et al 2015).
- 70. Primary care is an important focal point in organising care across services for those living at home (OECD 2019). Strengthening the role of primary care in care co-ordination for dependent and frail older people, as has been done in the Veterans Administration Patient-Aligned Care Team Model of medical homes in the United States, can help to improve an older person's outcomes while also reducing burnout among healthcare workers (Nelson et al 2014). In Japan, an Integrated Community Care System has been a pillar of the government's strategy to improve support for older populations: the ICCS, organised at the municipal level, provides medical care, long-term care, prevention programmes, housing services, and other support in the community (Mizanur Rahman et al., 2018<sub>[26]</sub>). In Sweden, reforms introduced in 2018 have attempted to better integrate

primary care into care planning processes, with the objective of ensuring people with chronic and multiple conditions receive quality care at home as much as possible. To smooth the transition between hospital and home, hospitals are required to notify the patient's municipality and primary care clinic within one day of admission, to ensure that community services have enough time to prepare for any transition and care co-ordination needs.

## 3.3.3. Promote universal health coverage to protect older populations from economic risk

- 71. Achieving universal health coverage (UHC) plays a critical role in meeting health needs and protecting from economic risk, improving outcomes while helping to ensure the financial sustainability of health systems. As populations age, demand for health and long-term care increases. A substantial proportion of overall health and social care costs is directed at caring for older populations, and in particular the oldest old (Lorenzoni et al 2019).
- 72. In line with the Sustainable Development Goals (SDGs), notably Target 3.8, G20 countries have made good progress in moving towards universal health coverage (UHC) in recent years. The role of UHC in improving health outcomes and helping to protect against financial impoverishment from health care costs is well established. The experiences of countries that have already successfully developed UHC strategies underscores both the need for ensuring the entire population is covered, as well as the imperative of acting quickly within the context of population ageing. UHC can help to reduce the risk that older populations in need of care will not receive it because of lack of affordable options. Expanding health coverage has been demonstrated repeatedly to improve health outcomes and reduce mortality. Expanding Medicare and Medicaid has been found to improve both adult and infant health outcomes in the United States, while higher out-of-pocket (OOP) payments for health has been associated with significant increases in mortality (Pearson et al., 2016<sub>[27]</sub>).
- 73. The experience of OECD economies indicates that achieving universal health coverage is affordable for middle-income countries today. Many OECD economies were at similar stages of economic development as emerging G20 economies are today when they expanded UHC. Moreover, many were already undergoing the demographic transition towards an ageing society when they implemented UHC. In Europe, 14 of 15 countries with data, for example, achieved UHC at a time when more than 10% of their population was over 65 (Pearson et al., 2016<sub>[27]</sub>).
- 74. Nevertheless, the rapid pace of ageing today underscores the urgency of implementing UHC today. Many emerging economies in the G20 are ageing at an even faster speed than was experienced by OECD countries in previous decades. Across the G20 overall, the number of working-age people to those 65 and older will halve between 2017 and 2050, from six people of working age per person 65 and older in 2017 to just three. This change has serious implications for financing universal health coverage and other social protection schemes, particularly where payroll taxes are relied on.
- 75. Emerging G20 countries have taken encouraging steps to expand universal health coverage. In Indonesia, for example, the country's ambitious *Jaminan Kesehatan Nasional* (JKN) programme aims to deliver UHC to all residents by the end of 2019. Since the programme was launched in 2014, government contributions have more than doubled. Nevertheless, out-of-pocket spending for households remains high (OECD, 2016<sub>[28]</sub>).

76. Even where UHC exists, inequalities in access to healthcare and services can persist, and countries must take steps to ensure that vulnerable groups – who usually have higher rates of ill-health at older ages – have effective access to the services and care they need.

#### 4. Conclusion

- 77. The rapid ageing of the population in many G20 countries is radically reshaping society. These changes introduce exciting opportunities for countries to benefit from, both socially and economically, if healthy ageing is achieved. Developing policies that foster healthy ageing is critical for promoting a high quality of life and autonomy, and for ensuring older people can remain engaged in the workforce. Countries have taken important steps to fostering environments that help to prevent poor health, that actively include older people in their communities, and that offer strong health and social support when people eventually do require help.
- 78. Nonetheless, healthy ageing cannot be assumed, and G20 countries must continue to develop strong policies to harness the benefits of an ageing population while minimizing the challenges that also accompany it. G20 countries with younger populations, including many emerging economies, would do well to begin planning for the demographic transition before it arrives. Strengthening core elements of health and social care systems, including expanding universal health coverage and bolstering nascent long-term care systems, will be particularly important in the coming years.
- 79. A life course approach is critical to achieving healthy ageing. Older populations increasingly live with preventable conditions that seriously impact their health, ability to engage in the workforce and their own communities, and can have significant financial costs to health and social care systems. Developing policies that prevent poor health from developing in the first place is important to ensuring unhealthy behaviours are avoided before they take hold.
- 80. Strong health and long-term care systems that provide quality, integrated care to those who need it, and protect them from economic risk, are important to enabling healthy ageing. Countries that have not yet achieved universal health coverage should continue to take steps towards expanding health coverage, while countries that have already achieved UHC must ensure equitable access to care and services.
- 81. G20 countries should also encourage active participation in the community, through age-friendly initiatives and demand- and supply-side policies to encourage a healthier, longer working life. Reducing incentives that encourage early retirement, fighting age discrimination and promoting lifelong learning can help to tackle barriers to staying in the workforce longer, while policies that involve other sectors including housing, transportation, and security services, as well as volunteers and the general public are important to developing services and programs that promote the autonomy of the many older people who live at home.

# References

Age Platform Europe (2014), 20 ways to improve health literacy among the ageing population, Age Platform Europe, <a href="https://www.age-platform.eu/policy-work/news/20-ways-improve-health-literacy-among-ageing-population">https://www.age-platform.eu/policy-work/news/20-ways-improve-health-literacy-among-ageing-population</a> .	[37]
Boseley, S. (2017), "Mexico's sugar tax leads to fall in consumption for second year running", <i>The Guardian</i> , <a href="https://www.theguardian.com/society/2017/feb/22/mexico-sugar-tax-lower-consumption-second-year-running">https://www.theguardian.com/society/2017/feb/22/mexico-sugar-tax-lower-consumption-second-year-running</a> .	[36]
Bostock, S. and A. Steptoe (2012), "Association between low functional health literacy and mortality in older adults: Longitudinal cohort study", <i>BMJ (Online)</i> , <a href="http://dx.doi.org/10.1136/bmj.e1602">http://dx.doi.org/10.1136/bmj.e1602</a> .	[23]
Courtin, E. and M. Knapp (2017), <i>Social isolation, loneliness and health in old age: a scoping review</i> , Blackwell Publishing Ltd, <a href="http://dx.doi.org/10.1111/hsc.12311">http://dx.doi.org/10.1111/hsc.12311</a> .	[8]
Forouzanfar, M. et al. (2016), "Global, regional, and national comparative risk assessment of 79 behavioural, environmental and occupational, and metabolic risks or clusters of risks, 1990–2015: a systematic analysis for the Global Burden of Disease Study 2015", <i>The Lancet</i> , Vol. 388/10053, pp. 1659-1724, <a href="http://dx.doi.org/10.1016/S0140-6736(16)31679-8">http://dx.doi.org/10.1016/S0140-6736(16)31679-8</a> .	[19]
GBD 2015 Obesity Collaborators, A. et al. (2017), "Health Effects of Overweight and Obesity in 195 Countries over 25 Years.", <i>The New England journal of medicine</i> , <a href="http://dx.doi.org/10.1056/NEJMoa1614362">http://dx.doi.org/10.1056/NEJMoa1614362</a> .	[18]
Giufrè, M. et al. (2017), "Colonization by multidrug-resistant organisms in long-term care facilities in Italy: a point-prevalence study", <i>Clinical Microbiology and Infection</i> , <a href="http://dx.doi.org/10.1016/j.cmi.2017.04.006">http://dx.doi.org/10.1016/j.cmi.2017.04.006</a> .	[13]
ILO and OECD (2019), "New job opportunities in an ageing society", <a href="http://www.oecd.org/g20/summits/osaka/ILO-OECD-G20-Paper-1-3-New-job-opportunities-in-an-ageing-society.pdf">http://www.oecd.org/g20/summits/osaka/ILO-OECD-G20-Paper-1-3-New-job-opportunities-in-an-ageing-society.pdf</a> .	[9]
James, C. et al. (2019), "Health spending projections to 2030 [forthcoming]", OECD, Paris.	[32]
Lim, C. et al. (2014), "Prevalence of multidrug-resistant organisms and risk factors for carriage in long-term care facilities: A nested case-control study", <i>Journal of Antimicrobial Chemotherapy</i> , Vol. 69/7, pp. 1972-1980, <a href="http://dx.doi.org/10.1093/jac/dku077">http://dx.doi.org/10.1093/jac/dku077</a> .	[14]
Lorenzoni, L. et al. (2019), "Health spending projections to 2030. New results based on a revised OECD methodology", OECD.	[15]
Mizanur Rahman, M. et al. (2018), <i>Asia Pacific Observatory on Health Systems and Policies</i> , <a href="http://apps.who.int/iris/">http://apps.who.int/iris/</a> .	[26]

Moreira, L. (2018), "Health literacy for people-centred care: Where do OECD countries stand?", <i>OECD Health Working Papers</i> , No. 107, OECD Publishing, Paris, <a href="https://dx.doi.org/10.1787/d8494d3a-en">https://dx.doi.org/10.1787/d8494d3a-en</a> .	[22]
OECD (2019), Adapting to Demographic Change. <a href="http://www.oecd.org/g20/summits/osaka/OECD-Ageing-and-Demographic-change-G20-JPN.pdf">http://www.oecd.org/g20/summits/osaka/OECD-Ageing-and-Demographic-change-G20-JPN.pdf</a> .	[4]
OECD (2019), Japan: a healthier tomorrow, OECD Reviews of Public Health, OECD, Paris.	[38]
OECD (2019), OECD Health Statistics, https://stats.oecd.org/.	[5]
OECD (2019), The Heavy Burden of Obesity: The Economics of Prevention, OECD Publishing, Paris.	[21]
OECD (2018), Care Needed: Improving the Lives of People with Dementia, OECD Publishing, Paris.	[10]
OECD (2017), Pensions at a Glance 2017: OECD and G20 Indicators, OECD Publishing, Paris.	[31]
OECD (2017), <i>Preventing Ageing Unequally</i> , OECD Publishing, Paris, <a href="http://dx.doi.org/10.1787/9789264279087-en">http://dx.doi.org/10.1787/9789264279087-en</a> .	[2]
OECD (2016), Health at a Glance: Europe 2016: State of Health in the EU Cycle, OECD Publishing, Paris	[1]
OECD (2016), "Indonesia Policy Brief: Health - Setting a sustainable path toward universal health coverage", <i>OECD Better Policies Series</i> , OECD, Paris, <a href="https://www.oecd.org/policy-briefs/indonesia-toward-universal-health-coverage.pdf">https://www.oecd.org/policy-briefs/indonesia-toward-universal-health-coverage.pdf</a> .	[28]
OECD (2015), Policy Brief-Tackling Harmful Alcohol Use, OECD, Paris.	[3]
OECD (2015), Tackling Harmful Alcohol Use: Economics and Public Health Policy, OECD Publishing, Paris.	[20]
OECD (2014), <i>OECD Employment Outlook 2014</i> , OECD Publishing, Paris, <a href="https://dx.doi.org/10.1787/empl_outlook-2014-en">https://dx.doi.org/10.1787/empl_outlook-2014-en</a> .	[29]
OECD (2006), <i>Live Longer, Work Longer</i> , Ageing and Employment Policies, OECD Publishing, Paris, <a href="https://dx.doi.org/10.1787/9789264035881-en">https://dx.doi.org/10.1787/9789264035881-en</a> .	[30]
OECD (2017.), "Obesity Update 2017", <a href="https://www.oecd.org/health/health-systems/Obesity-Update-2017.pdf">https://www.oecd.org/health/health-systems/Obesity-Update-2017.pdf</a> .	[34]
Pearson, M. et al. (2016), "Universal health coverage and health outcomes", <a href="https://www.oecd.org/health/health-systems/Universal-Health-Coverage-and-Health-Outcomes-OECD-G7-Health-Ministerial-2016.pdf">https://www.oecd.org/health/health-systems/Universal-Health-Coverage-and-Health-Outcomes-OECD-G7-Health-Ministerial-2016.pdf</a> .	[27]

Prince, M. et al. (2015), World Alzheimer Report 2015: The Global Impact of Dementia, <a href="http://www.alz.co.uk/worldreport2015corrections">http://www.alz.co.uk/worldreport2015corrections</a> .	[11]
Raleigh, V. (2019), "Trends in life expectancy in EU and other OECD countries: Why are improvements slowing?", <i>OECD Health Working Papers</i> 108, <a href="http://dx.doi.org/10.1787/223159ab-en">http://dx.doi.org/10.1787/223159ab-en</a> .	[6]
Safavi, K., Webb, K., Kalis, B. (2018), Meet Today's Healthcare Team: Patients + Doctors + Machines: Accenture 2018 Consumer Survey on Digital Health, Accenture Consulting.	[25]
Universitas Gadjah Mada (2017), <i>Government Encourages Health Promotion and Healthy Lifestyle Movement</i> , <a href="https://ugm.ac.id/en/news/13434-government.encourages.health.promotion.and.healthy.lifestyle.movemen">https://ugm.ac.id/en/news/13434-government.encourages.health.promotion.and.healthy.lifestyle.movemen</a> .	[35]
WHO (2017), ICOPE Guidelines - Evidence Profile: Malnutrition, World Health Organization, Geneva.	[24]
Wimo, A. et al. (2017), "The worldwide costs of dementia 2015 and comparisons with 2010", <i>Alzheimer's and Dementia</i> , <a href="http://dx.doi.org/10.1016/j.jalz.2016.07.150">http://dx.doi.org/10.1016/j.jalz.2016.07.150</a> .	[12]
World Health Organization (2019), <i>What is Healthy Ageing?</i> , <a href="https://www.who.int/ageing/healthy-ageing/en/">https://www.who.int/ageing/healthy-ageing/en/</a> .	[33]
World Health Organization (2013), Global action plan for the prevention and control of noncommunicable diseases: 2013-2020	[17]