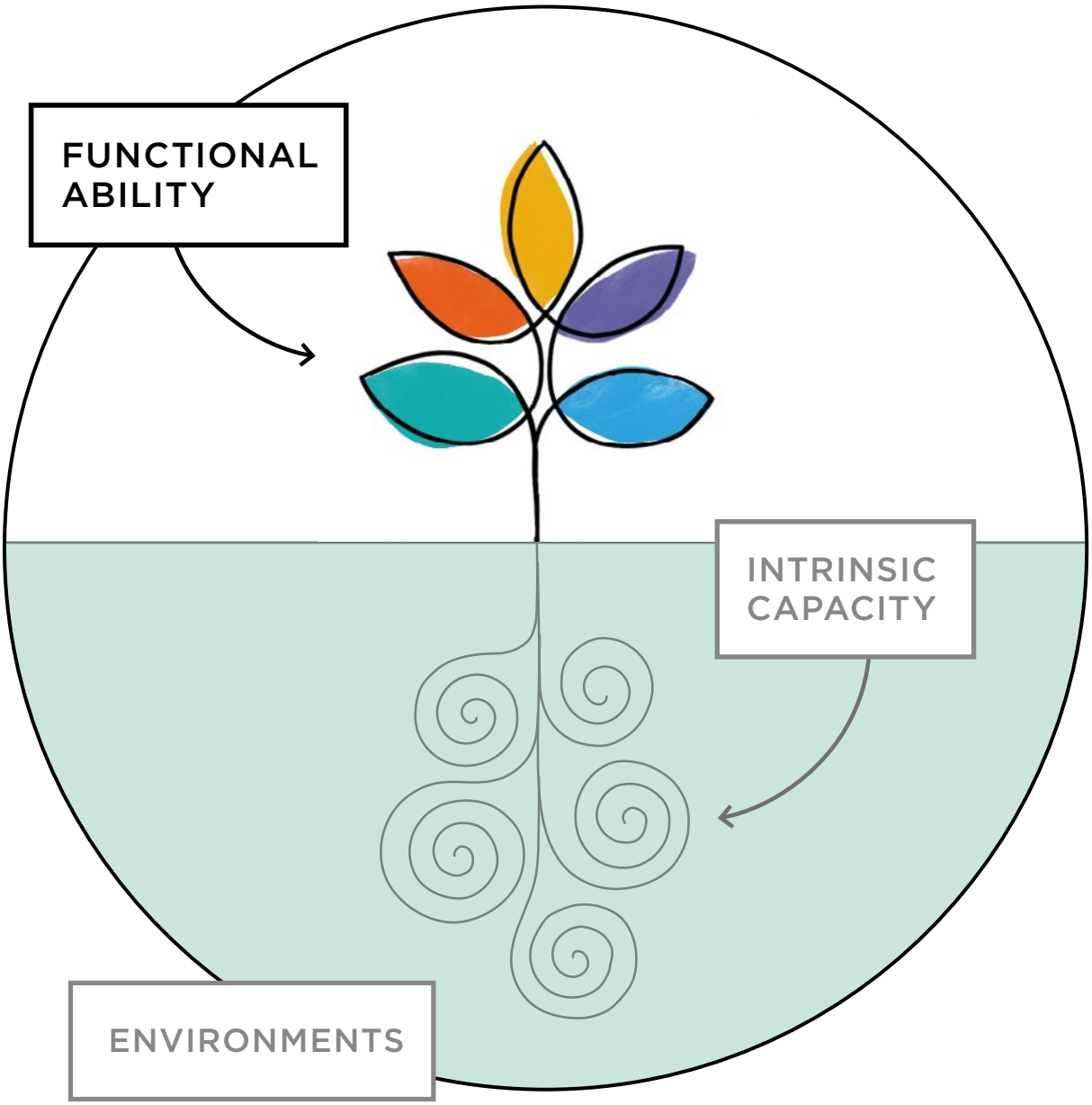

DECADE OF HEALTHY AGEING

BASELINE REPORT

World Health Organization

Decade of healthy ageing: baseline report

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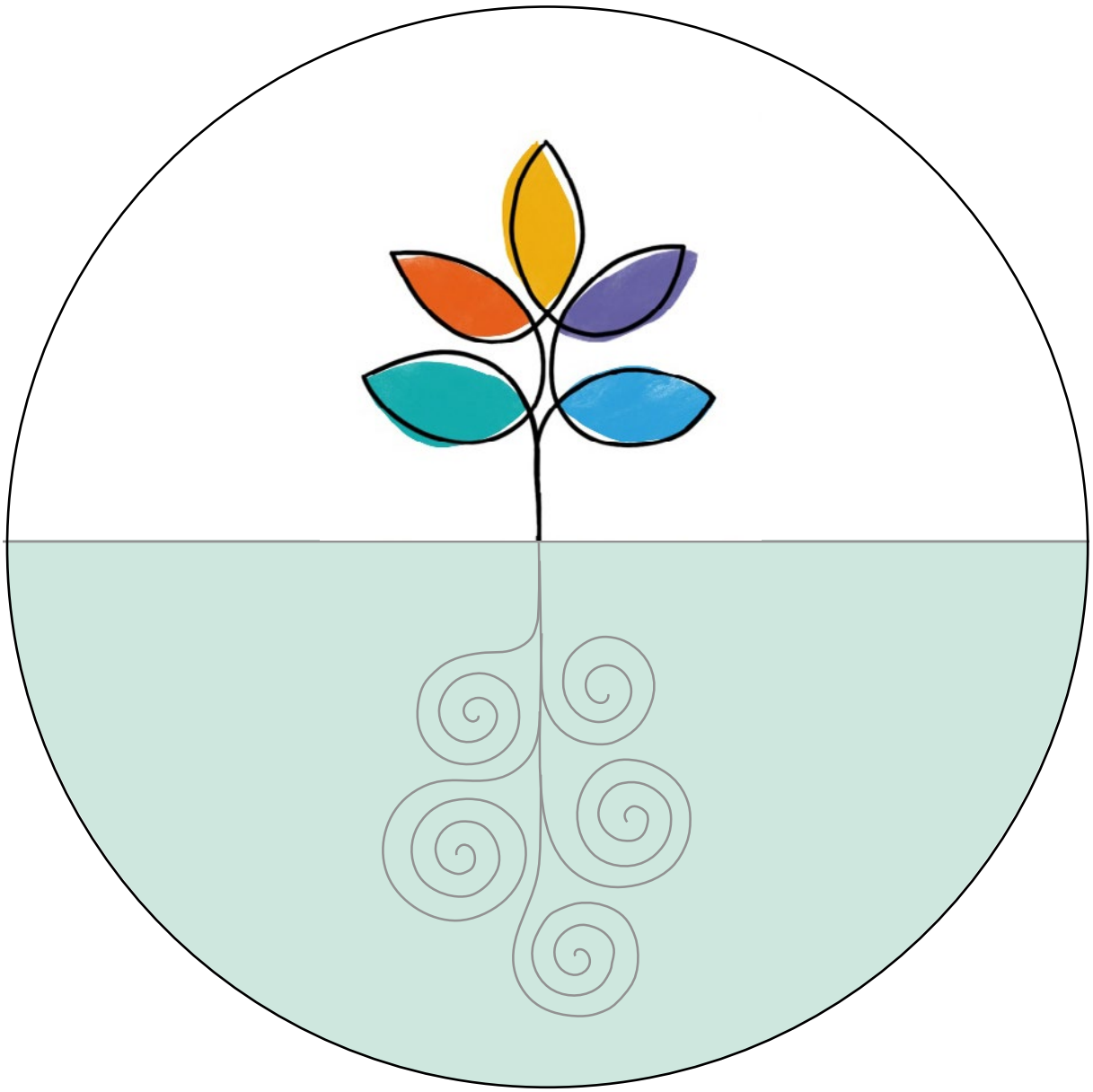

DECADE OF HEALTHY AGEING

BASELINE REPORT

World Health Organization

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Foreword

Humans now live longer than at any time in history. Global life expectancy has doubled since 1900 and continues to rise, although there remains a wide disparity between the countries with the shortest and longest life expectancy.

But adding more years to life can be a mixed blessing if it is not accompanied by adding more life to years. With birth rates dropping and people living longer, leadership and innovation are needed at all levels and in all sectors to realize the dividends of longevity, and to ensure that these benefits are experienced equitably within and across countries.

In 2016, the World Health Assembly adopted the Global strategy and action plan on ageing and health, with the aim of using evidence-based approaches to maximize the abilities of older persons, grounded in the concept of healthy ageing, a rights-based response to population ageing.

Another goal of the first action plan was to prepare for a "Decade of Healthy Ageing"; a proposal endorsed by the World Health Assembly in August 2020 and by the United Nations General Assembly in December 2020, as the UN Decade of Healthy Ageing 2021-2030. This is a tremendous opportunity to align global, national and local policies, with older people, for older people.

The start of this decade also coincides with the COVID-19 pandemic, which has disproportionately affected older people, especially those with non-communicable diseases or living in long-term care facilities. Yet we have also seen older people's ability to contribute to society, such as health workers who have come out of retirement to lend their expertise to colleagues on the front lines, or as community volunteers to support those who are struggling.

The Decade of Healthy Ageing will focus on four key actions: changing how we think, feel and act towards age and ageing; developing communities in ways that foster the abilities of older people; delivering integrated care and primary health services that are responsive to the needs of older people; and providing older people who need it with access to long-term care. All are critical for building back better, and for fostering healthy ageing.

But to reach our destination, we need to know our starting point. That's why this *Baseline Report for the Decade of Healthy Ageing* is so important. Its key messages are anchored in evidence – comprehensive and forward-looking, yet eminently practical. Throughout, experiences from different countries and multiple sectors are used to illustrate how we can optimize older people's abilities through innovative solutions, engaging older people and communities.

The Baseline report estimates that more than 142 million older people, or 14% of all people aged 60 years and over globally, are currently unable to meet all of their basic daily needs. Furthermore, older people are often invisible in statistics as we have so little information about them. While we know that some people lose physical and mental capacities as they age, we know too little about their needs and whether their environments can compensate and allow them to live with dignity, continue to be active and able to thrive.

In my view, the *Baseline Report for the Decade of Healthy Ageing* has the potential to transform the way policy-makers and multiple service-providers engage with older people. We have to work together, to foster the abilities and well-being of our older generations, who continue to give us so much. We owe them our best.

Dr Tedros Adhanom Ghebreyesus
Director-General, World Health Organization

ACKNOWLEDGEMENTS

This report was produced under the overall technical oversight of Ritu Sadana, Head, Ageing and Health Unit, with the direction of Anshu Banerjee, Director, Maternal, Newborn, Child and Adolescent Health and Ageing Department, within the Division of Universal Health Coverage across the Life Course, and with the guidance of Zsuzsanna Jakab, Deputy Director-General and Executive Director a.i., Division of Universal Health Coverage across the Life Course at World Health Organization (WHO) headquarters in Geneva.

Overall coordination of the report's research and development was provided by Ritu Sadana and Anshu Banerjee; project management was provided by Ana Posarac, Consultant, Ageing and Health Unit. The steering group for the technical design and review consists of WHO Regional Advisors for Ageing and their teams: Francoise Bigirimana, Nancy Kidula, Triphonie Nkurunziza, Innocent Bright Nuwagira, Saliyou Sanni (Africa); Enrique Vega, Carolina Hommes, Patricia Morsch (Americas); Ramez Mahaini, Samar Elfeky (Eastern Mediterranean); Manfred Huber (Europe); Neena Raina, Prasun Chatterjee (South East Asia); Hiromasa Okayasu (Western Pacific), with significant inputs from the WHO Ageing and Health Forum made up of over 80 WHO staff contributing to ageing and healthy ageing from across WHO's technical departments at headquarters; and Sarah Barber, Paul Ong and Megumi Rosenberg at the WHO Centre for Health Development, Kobe, Japan.

Special thanks for insightful comments from: the Ageing and Health Unit members Islene Araujo de Carvalho, Zee A Han, Liying Huang, Yuka Sumi and Jotheeswaran Amuthavalli Thiyagarajan; Naoko Yamamoto, Assistant Director-General, Universal Health Coverage and Healthier Populations; Etienne Krug, Director, Department of Social Determinants of Health, and the Demographic Change and Healthy Ageing Unit, Alana Officer, Mary Manandhar, Christopher Mikton and Vânia de la Fuente Núñez.

We collectively acknowledge with great sadness, the deaths of three colleagues in 2020, Islene Araujo de Carvalho, Ramez Mahaini and Peter Salama.

The principal report writing team consisted of Ritu Sadana and Ana Posarac, with Anshu Banerjee, David Bramley, Melissa Co, Elyse Couch, Hsin-yi Lee, Erica Lefstad, Dario Moreno-Agostino, Robert Moulder, Matthew Prina, Rana Sagha Zadeh and Yu-Tzu Wu. The report benefitted from national case studies on ways data and information are used to drive decisions to improve the lives of older people, led by Ministries of Health with WHO Regional and Country Offices in eight countries covering all regions. National case study teams include: Bernardita Canals Cavagnaro, Maria Jose Galvez, Felipe Herrera Muñoz, Pablo Pizarro, Francisco Adriazola Santibañez (Chile); Lui Ming, Feng Xinglin (China); Anja Noro, Taru Koivisto, Satu Karppanen, Seija Viljamaa, Riitta Aemjelaeus, Teija Hammar, Anna Haverinen, Raija Hynynen, Anni Lausvaara, Minna-Liisa Luoma, Mikko Martikainen, Seija Meripaasi, Hennamari Mikkola, Mari Patronen, Laura Pikkarainen, Markus Rapo, Hannele Ridanpää, Tarja Saarelainen, Anna Tamminen, Merja Tepponen, Eija Tolonen, Päivi Topo (Finland); Collins Badu Agyemang, Jeremiah Sixtus Dery (Ghana); A.B. Dey, Nilambuj Sharan (India); Hanadi Khamis Al Hamad, Shirmila Syamala (Qatar); Tawanchai Jirapramukpitak, Jongjit Rittirong, Kanchana Thienlai, Jirawan Phuaphae, Phongsak Sakultaksin, Chirawut Punnawit (Thailand); Rahul Malhotra, Angelique Chan, Ruth Lewis, Jason CH Yap, Teo Yik Ying (Singapore); and factilitation by WHO Country Office and additional Ministry of Health staff, including Rayana Bou Haka, Puangpen Chanprasert, Mario Cruz-Penate, Roseline Doe, Atreyi Ganguli, Derrick Heng, Kitti Larpsombutsiri, Jianrong Qiao, Rattanaporn Tangthanseth, Taketo Tanaka, Junxiong Teo and Tuohong Zang.

While the report provides an overview, it was developed alongside: 1) an in-depth analysis of nationally representative data from 42 countries informing section 2 of the report, led by Ritu Sadana, Robert Moulder, Jotheeswaran Amuthavalli Thiyagarajan, Ana Posarac, Steve Boker, Theresa Diaz and Anshu Banerjee, and contributions from Somnath Chatterji, Alarcos Cieza, Hudson Fernandes Golino, Isabelle Fortier, Susan Kirkland, Parminder Raina, Rita Wissa and Christina Wolfson; 2) a feasibility study of geospatial data in the public domain informing section 2 of the report, led by Steve Boker, Elena Martynova, Robert Moulder and Ritu Sadana; 3) an update of the national progress indicators informing section 3 of the report, led by all WHO Regional Advisors on Ageing, Liying Huang and Ana Posarac; and 4) development of an evidence-to-impact framework and approach to select cases and evidence from around the world for sections 1 and 4 of the report, led by Anshu Banerjee, Monserrat Conde, Tracey Howe, Ramez Mahaini, Ana Posarac, Matthew Prina, Ritu Sadana, Rana Sagha Zadeh and Vivian Welch, with contributions from Taghreed Adam, Rajiv Bahl, Valentina Baltag, Bernadette Daelmans, Theresa Diaz, Tanja Kuchenmüller, Allisyn Moran, John Reeder, Rob Terry and Pavel Ursu; and informing the narrative on learning from noncommunicable diseases, Alarcos Cieza, Nicolettea De Lissandri, Dan Hunt, Bente Mikkelsen, Leanne Riley, Menno Van Hilten, Cherian Varghese and Temo Waqanivalu; and benefiting from all WHO Regional Advisors for Ageing who gathered cases and evidence across regions.

Members of the WHO Consortium on Metrics and Evidence for Healthy Ageing, including policy-makers, civil society representatives, researchers and practitioners, contributed background papers and analyses, or peer reviews of the three streams of work addressing national case studies, metrics and data analyses and evidence syntheses. In addition to the core writing team, contributors to insights and boxes include: Rachel Albone, Halimah Binti Awang, Sarah Barber, Jane Barratt, Steven Boker, Somnath Chatterji, Alarcos Cieza, Patricia Conboy, Jon Cylus, Joseph Dieleman, John Fogarty, HelpAge International Tanzania, Hunter Green, Hudson Fernandes Golino, Zee-A Han, Tracey Howe, Chandni Jacob, Jinkook Lee, Matilde Leonardi, Minxia Luo, Ignacio Madero-Cabib, Mary Manandhar, Norma Mansor, Mike Martin, Hiroyuki Matsumoto, Vânia de la Fuente Núñez, Monique Verschuren, Alana Officer, Arokiasamy Perianayagam, Ninez Ponce, Drystan Phillips, Fakhrina Ab Rashid, Liset Rietman, Christina Röcke, Tomas Roubal, Teri Reynolds, Karin Stenberg, Yuka Sumi, Aidan Timlin, Jotheeswaran Amuthavalli Thiyagarajan, Vivan Welch and Ho Qiao Ying.

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None of the experts involved in the development of this report declared any conflict of interest.

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ABBREVIATIONS

AAL	Active Assisted Living
AOT	Array of Things
APL	National List of Priority Assistive Products (Tajikistan)
ATHLOS	Ageing Trajectories of Health: Longitudinal Opportunities and Synergies
ATM	Automated teller machine
AUB	American University of Beirut
BMI	Body mass index
CADTC	China Assistive Devices and Technology Centre
CASEN	National Survey of Socio-Economic Characterization (Chile)
CNS	Community Networks for Seniors (Singapore)
COPD	Chronic obstructive pulmonary disease
COPE	Care of Persons with Dementia in Their Environments
DAH	Development assistance for health
DALYs	Disability-adjusted life years
DCS	Doetinchem Cohort Study
EEPNA	Ethiopian Elderly and Pensioners National Association
ENDPM	National Study of Dependency on the Older People (Chile)
GRAVIS	Gramin Vikas Vigyan Samiti (India)
GRC	Guidelines Review Committee
HALE	Healthy life expectancy
HIC	High-income countries
HRS	Health and Retirement Studies
ICOPE	WHO Guidelines on Integrated Care for Older People
IFA	International Federation on Ageing
ISHC	Intergenerational Self-Help Clubs (Viet Nam)
IT	Information technology
LE	Life expectancy
LMIC	Low- and middle-income countries
LTA	Land Transport Authority (Singapore)
MARS	Malaysia Ageing and Retirement Survey
MCSS	Multi-Country Survey Study
MDS	Model Disability Survey
NASQ	National Ageing Survey Qatar
NBS	National Bureau of Statistics (China)
NCD	Noncommunicable disease
NGO	Nongovernmental organization
NHC	National Health Commission (China)
NHIA	National Health Insurance Authority (Ghana)
NHSA	National Health Care Security Administration (China)
NIA	National Institute on Aging (United States)
SAGE	Study on Global AGEing and adult health
SDGs	Sustainable development goals
STIs	Sexually transmitted infections
TAPAS	Time and Places and Space in Ageing
U3A	University of the Third Age
UfS	University for Seniors
UHC	Universal health coverage
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNICEF	United Nations Children's Fund
WHO	World Health Organization
WHS	World Health Survey
WHS+	World Health Survey Plus

EXECUTIVE SUMMARY

The Baseline Report for the Decade of Healthy Ageing 2021–2030 addresses five issues:

1. **Introduces Healthy Ageing, the Decade's actions and enablers, and a pathway to accelerate impact by 2030.**

2. **Where are we in 2020?** The report provides a first-time baseline for healthy ageing worldwide.

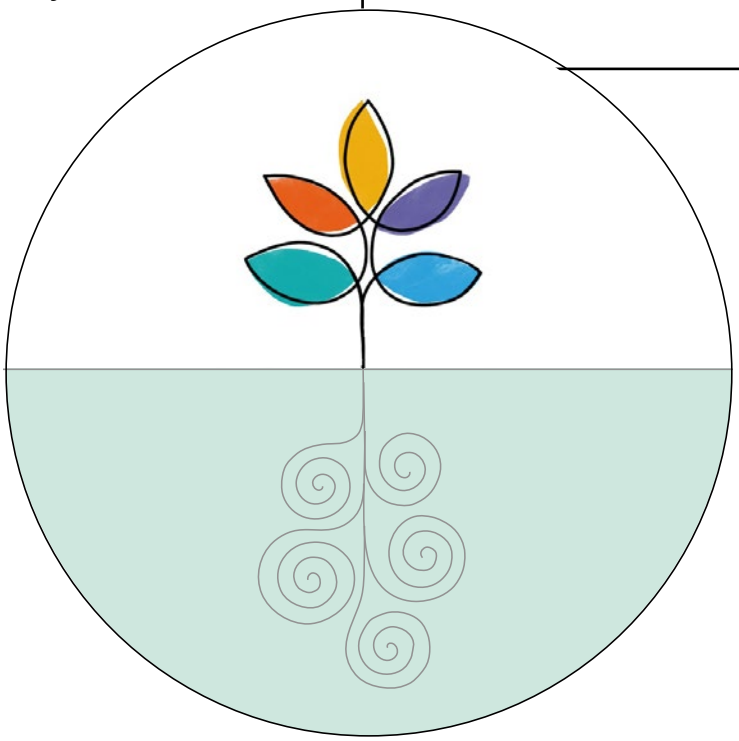
3. **What improvements could we expect by 2030?** It documents progress and scenarios for improvement.

4. **How can we accelerate impact on the lives of older people?** It shows how older people and stakeholders can together optimize functional ability.

5. The next steps including **opportunities to boost collaboration and impact by 2023,** the next reporting period.

THE REPORT STRESSES THAT

- At least 142 million older persons worldwide are unable to meet their basic needs.
- Optimizing functional ability is a key to healthy ageing.
- Governments and other stakeholders must invest in data to monitor healthy ageing across the life course.
- Actions must be accelerated to make a measurable impact on older persons by 2030; older people must be engaged at all stages.
- Global evidence and cases highlight what can be done and what we can learn.



1

GETTING READY FOR THE DECADE OF HEALTHY AGEING 2021-2030

Healthy ageing is "the process of developing and maintaining the functional ability that enables well-being in older age". The goal of the Decade is to optimize older people's functional ability.

Functional ability includes: 1) ability to meet one's basic needs; 2) ability to learn, grow and make decisions; 3) mobility; 4) ability to build and maintain relationships; and 5) ability to contribute. Functional ability combines the intrinsic capacity of the individual, the environment a person lives in and how people interact with their environment.

The Decade provides opportunities to work together to improve functional ability by 2030, with older people involved from the beginning. The report presents a six-point pathway to optimize functional ability, with four action areas, namely:

- change how we think, feel and act towards age and ageing;
- ensure that communities foster older people's abilities;
- deliver person-centred integrated care and services that respond to older people's needs; and
- provide access to long-term care for older people who need it.

These efforts are supported by four "enablers" – meaningful engagement with older people, families, caregivers and others; building capacity for integrated action across sectors; linking stakeholders to share experience and learn from others; and strengthening data, research and innovation to accelerate implementation. The pathway brings these enablers together to accelerate implementation and optimize functional ability.

2

WHERE WE ARE NOW – THE GLOBAL STATUS OF HEALTHY AGEING

For the baseline assessment, WHO accessed comparable data from just 42 countries. Some 14% of older people in the analysis were shown to be unable to meet their basic needs – i.e. within their environment, they cannot dress themselves, get and take their own medication or manage their own money, bills or finances. Enabling environments are needed in the home and community to support needs and strengthen all abilities to foster older people's well-being.

At every age there is a lot of diversity in older people's intrinsic capacity – all the physical and mental capacities that a person can draw on. Although declines occur with age for many older people, declines are not inevitable: some people at the oldest ages (90+ years) have the same capacity as those at younger ages (60-64 years).

The lack of data on healthy ageing or older age groups increases the invisibility of older people. Governments and other stakeholders need to invest in data to monitor healthy ageing across the life course. What is required:

- comprehensive information on all abilities, that capture what older people value to be and to do;
- more standardization of data for measuring healthy ageing and monitoring policies and programmes;
- more innovation in collecting, analysing and using information;
- more interoperability of data-sharing;
- more involvement of older people in policy- and decision-making across sectors.

3

WHAT IMPROVEMENTS COULD WE EXPECT BY 2030?

National commitment to Healthy Ageing improved slightly between 2018 and 2020, but many gaps remain. A major goal is to strengthen country reporting. WHO will report progress in 2023, 2026, 2029 and 2030.

A projection based on current progress suggests that four indicators would be reached by all countries only after 2030, and only one by 2023. Consequently, action must be accelerated. More comparable data, more evaluation of programmes, and new technologies can help us respond to older people's needs and expectations.

Healthy life expectancy (HALE) – the overall indicator for measuring the impact of WHO's Triple Billion targets – is endorsed in the Decade action plan. HALE – especially after 60 years – reflects the extent to which years of life are spent in good health.

Member States already have commitments to many elements of healthy ageing in the targets of other strategies and action plans, such as the 2030 Agenda for Sustainable Development. Scenarios for the Decade – descriptions of a possible future – will clarify what we are willing to work towards.

Most underlying determinants of healthy ageing can be shaped by policy and require multi-sectoral collaboration.

4

HOW COULD WE IMPROVE BY 2030?

Optimizing the functional ability of all older people by 2030 requires that all actions taken are underpinned by evidence. For that, new studies are needed with research across countries and disciplines engaging older people. Knowledge from a range of stakeholders, including civil society, will fill gaps and provide new insights to accelerate action. As we build the evidence base, we can learn from programmes and activities around the world.

This section describes learning from practices that are underway worldwide to speed up actions that improve older people's functional ability – meeting basic needs; learning, growing and making decisions; being mobile; building and maintaining relationships; and contributing to society. Many activities enable older people to use their skills and talents.

The section proposes learning from disease programmes – particularly approaches addressing noncommunicable diseases among older people. Healthy ageing requires optimizing functional ability among those with disease; it also requires person-centred integrated care that focuses on people's capacities and disease management that reflects personal goals.

What needs to be done, and in what order, will depend on the person and situation.

5

A NEW DECADE OF ACTION

Optimizing functional ability and accelerating measurable impact on older people's lives – the main thrusts of the Decade – also link to WHO's Triple Billion goals: 1) one billion more people benefitting from universal health coverage; 2) one billion more people better protected from health emergencies; and 3) one billion more people enjoying better health and well-being.

For the first goal, accelerating impact means scaling up interventions that reach all older persons who would benefit from Universal Health Coverage. For the second goal, accelerating impact must address how to respond to natural, manmade and other environmental emergencies. This includes leveraging learning from the COVID-19 pandemic. And for the third goal, evidence from the report shows the importance of coordinating multisectoral action in cities and communities, and addressing them from the perspective of older people. As the number of older people worldwide increases during the Decade, the report urges us to work together to ensure their needs are met and to foster the elements that contribute to their well-being.

The next steps will increase the visibility of older people within the Sustainable Development Goals and support countries to monitor Healthy Ageing. These will contribute to the 2023 progress report for the Decade.

Healthy ageing is "the process of developing and maintaining the functional ability that enables well-being in older age".

1

GETTING READY FOR THE DECADE OF HEALTHY AGEING 2021-2030

Each older person can drive change

In 2020, the global population aged 60 years and over (older persons) is just over 1 billion people, representing 13.5% of the world's population of 7.8 billion. That number is 2.5 times greater than in 1980 (382 million), and is projected to reach nearly 2.1 billion by 2050.

KEY FACTS[1]:

- Globally, in 2020, two-thirds of older people live in middle-income countries.
- By 2030, 1 in 6 people will be 60 years of age or older.
- By 2050, this proportion will have increased to 1 in 5 people.

Each number relates to a human life.
These numbers represent older people who contribute to families, communities and the social, political and economic well-being of societies. The numbers represent older people whose love, talent, wisdom and care mark each person, shape who we are and represent who we can aspire to become. These are people whom societies should value and ensure that they enjoy their human rights, live with dignity, and live long and healthy lives.

Older people are at the centre of a new action plan on ageing and health – called the United Nations (UN) Decade of Healthy Ageing 2021–2030[2] – which was endorsed by WHO's 194 Member States on 3 August 2020 and by the UN General Assembly[3] on 14 December 2020. The Decade of Healthy Ageing ("the Decade") commits WHO and the UN to 10 years of collaboration and action. It brings together governments, civil society, international agencies, professionals, academia, the media and the private sector to collaborate in improving the lives of older people, their families and their communities.

From the start, getting ready for the Decade has been a search for meaningful engagement and empowerment of older people. Putting the experience of older women and men at the centre is the only way forward to accelerate action. Transformative change cannot happen without the expertise and experience of the hundreds of millions of older people in every region of the world → 1.1.

This baseline report for the Decade is dedicated to all older people around the world.

Decade of healthy ageing

The Decade focuses on what can be done for people in the second half of their lives. It addresses four areas for action at multiple levels and in multiple sectors in order to promote health, prevent disease, maintain intrinsic capacity and enable functional ability. The action areas are:

1. **change how we think, feel and act towards age and ageing;**
2. **ensure that communities foster the abilities of older people;**
3. **deliver person-centred integrated care and primary health services that are responsive to older people;**
4. **provide access to long-term care for older people who need it.**

Together, these actions should foster healthy ageing and improve the well-being of older people.

1.1

Older people as drivers of change

Two global civil society organizations – HelpAge International and the International Federation of Ageing – are in official relations with WHO. Both support WHO to champion the voices of older people. Featured are four older activists in their networks whose determined and passionate campaigning have achieved real change for older women and men around the world, helping shape the world they want to see.

Tilahun Abebe, Age Demands Action ambassador, Ethiopian Elderly and Pensioners National Association (EEPNA). Founder and leading actor of the National Movement for the Social and Economic Benefit of the Ethiopian Elderly, Ethiopia. Tilahun passed away on 1 November 2020.

Shashi Tyagi, co-founder of Gramin Vikas Vigyan Samiti (GRAVIS), activist and board member of many development organizations, advocating sustainable development inclusive of older people, India. Shashi passed away on 15 November 2020.

Nguyen Thi Diem, Chairwoman of the Intergenerational Self Help Club of Thuy Ung and Association of the Elderly of Phung. Active participant in social and volunteering activities in the community, Viet Nam

"We must listen to the voices of older people on what matters most to them in their daily lives."

– Olive Bryanton

Olive Bryanton, Activist and Leader in the Older Adult and Caregiver Advisory Committee, AGE-WELL, and many other organizations. At the age of 82, she graduated with her PhD thesis on *Pioneers in Aging: Voices of Women Age 85 and Older Aging in Place in Rural Communities*, Canada

THE MANDATE FOR THIS REPORT

The Global Strategy on Ageing and Health and its first action plan 2016–2020[4,5] mandate WHO to produce a baseline report in 2020 for the Decade of Healthy Ageing. A preliminary report[6] was presented to the World Health Assembly in May 2020. The strategy's new action plan, the Decade, also calls for WHO and UN partners to produce status reports at baseline and confirms WHO's mandate to track progress during 2021–2030. This report is the baseline from WHO's perspective.

This mandate recognizes that what is measured drives action. Action needs to be informed by evidence and aligned with older persons' expectations and the priorities that are negotiated with stakeholders and resourced by decision-makers. To develop this report, WHO launched an International Consortium on Metrics and Evidence for Healthy Ageing (the Consortium) in 2017 with 50 experts from all WHO regions including policy-makers, civil society organizers and researchers.[7,8] WHO's country, regional and global offices, and its Ageing and Health Forum, also extensively contributed to the report, as did health ministries and stakeholders in multiple sectors. WHO commissioned[9] or led work in the following areas to inform this report:

1 transformative pathway

towards optimizing functional ability, building on WHO strategies and frameworks on research, knowledge translation, scale-up and delivery to support acceleration of implementation.

8 national case studies

on the use of existing data, information and evidence to improve older people's lives during 2019–2020, led by the ministries of health of Chile, China, Ghana, Finland, India, Thailand, Qatar and Singapore.

10 progress indicators

reflecting national commitments related to the Global Strategy in 2020, previously reported on in 2018 (these indicators are also endorsed in the Decade).

A decade of action creates urgency to meet the needs and rights of older persons and to generate transformative change

10 **research studies**

on ways to operationalize, develop metrics and measure healthy ageing in a comparable way, within and across countries.

12

evidence syntheses of interventions

that aim to improve healthy ageing, methods for evidence synthesis, reviews of existing guidelines or identification of evidence gaps.

350

cases

of how governments, civil society, private sector and older people themselves are creating new evidence, developing and implementing actions that promote healthy ageing, with more than 40 cases retained (many address the Decade's four areas for action, while all focus on optimizing older people's functional ability).

55

existing nationally representative studies

with data on older people, reviewed for potential inclusion, harmonization and analysis (studies from 42 countries meet criteria and offer comparative results).

WHO and external experts have peer-reviewed the report, with estimates of healthy ageing benefiting from a formal country consultation. Multiple background papers and access to methods of analysis and statistical code are available in line with WHO's policies.[10]

HEALTHY AGEING

Healthy ageing is relevant to everybody. Healthy ageing is the process of developing and maintaining the functional ability that enables well-being in older age. Functional ability reflects a person's physical and mental capacities, the environments he or she inhabits and the ways in which people interact with their environment.

Fostering healthy ageing requires leadership and commitment to ensure that political and operational platforms exist for effective multisectoral action. Collaboration is needed between government and nongovernmental actors, including service designers, service providers, academics and older people themselves.

Healthy ageing:

- is a rights-based response to population ageing;
- embraces human development;[11]
- includes all persons, including those who experience disease or disability;
- enables older people to have a central role including decision-making about their own lives;
- mitigates inequities accumulated over the life course;
- optimizes functional ability with a whole-of-society approach; and
- addresses governments' concerns for sustainable and cost-effective approaches.

As people age, their health needs tend to become more chronic and complex. **A transformation is needed in the way that health systems, including primary health services, are designed in order to ensure affordable access to integrated services that centre on the needs and rights of older people.** Needs not only relate to the need for care or the ability to meet basic needs. Needs also relate to people's desire to contribute to society and reach their personal goals for well-being. In most contexts, this will require fundamental changes in the clinical focus of care and in the way care is organized, funded and delivered.

Creating age-friendly environments and communities requires collaboration and coordination across multiple sectors and with diverse stakeholders, including older people. Age-friendly environments promote health and support for people experiencing capacity loss. Such environments ensure that older people age safely, continue to develop personally and contribute to their communities while retaining autonomy and health.

Worldwide, the number of older people requiring care and support is increasing. **Every country needs an integrated continuum of long-term care services** that provides to older people who require it the ability to maintain the best possible level of functioning, and offers flexibility to meet the changing and diverse needs that older persons may have at home, in their communities and, when needed, in facilities.

Despite the many contributions of older people to society and their wide diversity, **negative** attitudes about older people are common across societies and are seldom challenged. **Stereotyping** (how we think),

Healthy Ageing is relevant to everybody – not only to those who are disease-free.

prejudice (how we feel) and **discrimination** (how we act) towards people on the basis of their age – referred to as ageism – affects people of all ages but has particularly deleterious effects on the health and well-being of older people.[2] **Every country needs programmes to reduce and eliminate ageism** in various sectors – including health, employment and education – and campaigns to increase public knowledge and to foster diversity. Moreover, when ageism intersects with other forms of discrimination it can be particularly disadvantageous to older women, older persons with disabilities and older people who are in other ways socially or economically marginalized.

As this baseline report documents, comparable data from around the world are limited, and many countries do not yet have sufficient data on older people. Qualitative data, and data that reflect participatory processes, are also lacking.[12] This prevents a full understanding of the health concerns, needs and preferences of older people in their specific contexts and of the usefulness of interventions to address them. **Focused research, increased data collection and improved measurement are essential to better understand and act on healthy ageing.**

Healthy ageing is about creating the opportunities that enable people to be and do what they value throughout their lives. Being free of disease or impairment is not a requirement for healthy ageing; many older people have one or more health conditions that, when well managed in an enabling environment, have little influence on their well-being. Rather, **optimizing functional ability is the key to healthy ageing.**

WHO DEFINES HEALTHY AGEING AS

"the process of developing and maintaining the functional ability that enables well-being in older age".

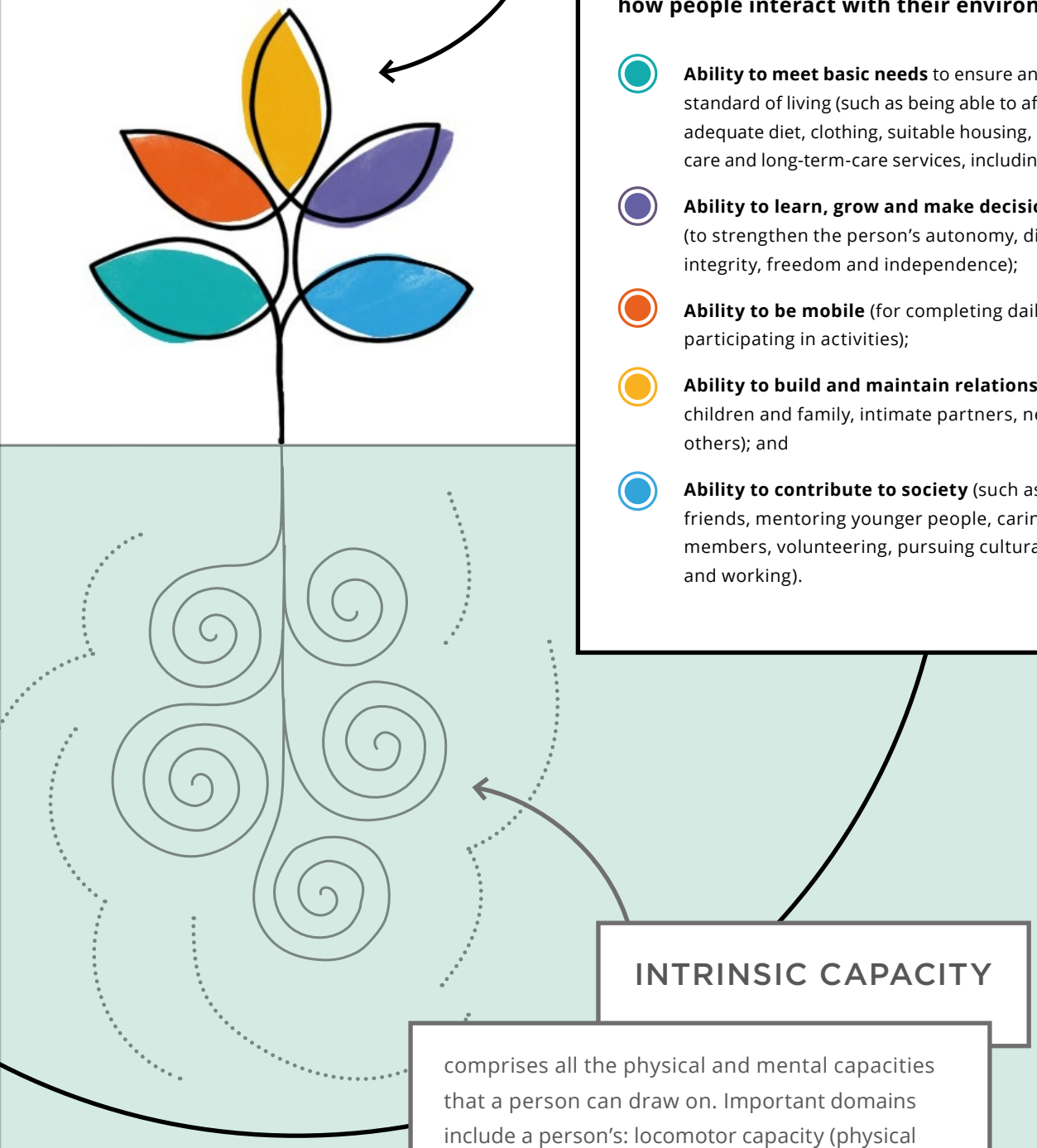
The three components of healthy ageing

In 2016 all WHO Member States endorsed the goal of healthy ageing. WHO has further clarified the concepts[13] and definitions of healthy ageing in order to help measure it in a comparable way in different countries and over time. The three components of healthy ageing are functional ability, intrinsic capacity and environments.[4]

FUNCTIONAL ABILITY

Functional ability combines the **intrinsic capacity** of the individual, the **environment** a person lives in and **how people interact with their environment**.

- **Ability to meet basic needs** to ensure an adequate standard of living (such as being able to afford an adequate diet, clothing, suitable housing, and health-care and long-term-care services, including medications);
- **Ability to learn, grow and make decisions** (to strengthen the person's autonomy, dignity, integrity, freedom and independence);
- **Ability to be mobile** (for completing daily tasks and participating in activities);
- **Ability to build and maintain relationships** (with children and family, intimate partners, neighbours and others); and
- **Ability to contribute to society** (such as by assisting friends, mentoring younger people, caring for family members, volunteering, pursuing cultural activities and working).



INTRINSIC CAPACITY

comprises all the physical and mental capacities that a person can draw on. Important domains include a person's: locomotor capacity (physical movement); sensory capacity (such as vision and hearing); vitality (energy and equilibrium); cognition; and psychological capacity.

WHO has further clarified the concepts and definitions of healthy ageing in order to help measure it in a comparable way in different countries and over time.

FUNCTIONAL ABILITY

Functional ability combines the intrinsic capacity of the individual, the environment a person lives in and how people interact with their environment. The optimizing of functional ability requires inputs from multiple sectors and a whole-of-government response to population ageing, with important roles and responsibilities for health-in-all-policy, each of the health system functions – e.g. stewardship, financing, resource-generation (human and physical capital) and service provision – and the integration of health and social care.

Functional ability enables people to be and to do what they have reason to value. Important domains[13] refer to people's abilities to:

1. **meet their basic needs to ensure an adequate standard of living** (such as being able to afford an adequate diet, clothing, suitable housing, and health-care and long-term-care services, including medications);
2. **learn, grow and make decisions** (to strengthen the person's autonomy, dignity, integrity, freedom and independence);
3. **be mobile** (for completing daily tasks and participating in activities);
4. **build and maintain relationships** (with children and family, intimate partners, neighbours and others); and
5. **contribute to society** (such as by assisting friends, mentoring younger people, caring for family members, volunteering, pursuing cultural activities and working).

INTRINSIC CAPACITY

Intrinsic capacity comprises all the physical and mental capacities that a person can draw on. Important domains[14] include a person's:

1. **locomotor capacity (physical movement);**
2. **sensory capacity (such as vision and hearing);**
3. **vitality (energy and balance);**
4. **cognition; and**
5. **psychological capacity.**

Developing and maintaining a person's intrinsic capacity along the life course, with a positive connotation that builds up reserve, are additional keys to healthy ageing. This positive framing, however, recognizes that the level of intrinsic capacity is influenced by a number of factors, including the presence of diseases or injuries and psychological and age-related changes. Domains of intrinsic capacity are interrelated. Older people who experience declines require an integrated person-centred approach to assessment and management. For example, hearing helps people to communicate, maintain autonomy, and sustain mental health and cognition. Significant declines are closely related to care dependence in older age.

ENVIRONMENTS

Environments are where people live and conduct their lives. Environments shape what older people with a given level of intrinsic capacity can be and do. Environments include the home, community and broader society, and all the factors within them. Key domains[15] relate to:

1. **products, equipment and technology that facilitate movement, sight, memory and daily functioning;**
2. **the natural or built environment;**
3. **emotional support, assistance and relationships provided by other people and animals;**
4. **attitudes (as these influence behaviour both negatively and positively);** and more broadly
5. **services, systems and policies that may or may not contribute to enhanced functioning at older ages.**

Environments provide a range of resources or barriers that will ultimately decide whether older people are able to engage or participate in activities that matter to them. The development of enabling, age-friendly environments that optimize functional ability is another key for healthy ageing.

For the three components of healthy ageing, each of the five domains identified are described further in Annex 1.

These components also describe the whole person rather than focusing on specific diseases → 1.2.

1.2

Comprehensive, person-centred perspective

Healthy ageing looks at the whole person in their unique environment.[13,15,16] Describing and improving functional ability, intrinsic capacity and environments – the three components of healthy ageing – represent a paradigm shift in thinking about older people and ageing. Information on multiple domains of each component can help prioritize and tailor interventions to match an older person's needs, preferences and goals in that person's unique context. This shows the importance of optimizing what is meaningful to older people.

This is in contrast to focusing only on morbidity diagnosis and disease management. For instance, photo A focuses on the manifestation of arthritis. Information on the older person is reduced to describing the disease and, if there are other conditions or diseases, these may not be considered together and the context remains unknown.

Understanding healthy ageing requires a description of the complete range of abilities and capacities of the individual within the context of the person's environment and goals. This is the case whether a person has no disease or several underlying conditions.

Photo B enlarges photo A to show a person buttoning a child's coat, and represents a step towards a more meaningful and complete picture of the functioning of the person, or by extension, of populations.

Over time, measures of intrinsic capacity[17] (such as hand grip strength, bone density, cardiovascular and lung function) and functional ability (such as the ability to dress, walk short distances, communicate by Skype, Facebook or other social media, take care of sick or disabled adults or children) can be better in predicting future declines that an older person may experience[18,19] – as well as mortality[20,21] – compared to measuring disease or counting morbidities. This evidence underlines the importance of integrating person-centred assessments of intrinsic capacity and functional ability of older people in in primary care, general practice and geriatric care, as promoted by WHO's handbook *Guidance on person centred assessment and pathways in primary care.*[22]

Different factors shape people's intrinsic capacity and the environments they live in. Over time, these factors result in trajectories of intrinsic capacity and functional ability for each person, or a group of people. Almost all determinants of healthy ageing can be shaped by policy → 1.3.

Trajectories are also influenced by local and global events, as demonstrated at the start of this decade by the COVID-19 pandemic, and can be shaped by other drivers such as climate change.

1.3

Dynamic process across the life course

Multiple factors and potential pathways form the trajectories of healthy ageing. Three perspectives are essential in understanding why healthy ageing is a dynamic process that is relevant to all people.

First, a life course perspective suggests that intrinsic capacity during early development[23] and during critical stages or periods of life can be influenced by a range of factors (biological, socioeconomic and environmental).[24] This, in turn, influences the age of attainment of peak function and the potential onset and rate of declines.[25] Interventions targeting pregnancy, infancy, childhood and adolescence, aimed at enhancing intrinsic capacity in the first half of life can help individuals to attain their full health potential. Moreover, healthy lifestyles and enabling environments during adulthood help to maintain intrinsic capacities after peak capacity is obtained **(Figure 1.1)**. These minimize the risk of early declines (e.g. by reducing the incidence of noncommunicable diseases [NCDs] such as cardiovascular and chronic lung disease, diabetes and some forms of cancer that are associated with accelerated declines in capacities in older people).

Second, a social determinants of health approach adds further insights into the cumulative health impact of social and economic disadvantage or privilege that sort people into different life course trajectories.[26] These trajectories shape opportunities and vulnerabilities as people age, and contribute to people's functional ability.[27] Intergenerational transmission of health inequities can alter healthy ageing trajectories from birth.[28] Data show that these two perspectives help us to identify and understand what contributes to healthy ageing.

Most determinants of healthy ageing can be shaped by policy

Third, almost all these underlying determinants are amenable to policy change. A systematic review in 2018 provides evidence on the relationship between five types of determinants (demographic, biological, behavioural, psychological and social) and their impact on healthy ageing over time.[29] Similarly, results from an analysis of longitudinal cohort studies (that track the same people over time) also find the positive impacts of higher levels of education, wealth and physical activity[30,31] on trajectories that lead to better health at older ages. Policies at different levels (household, communities, regional, national or global), can improve these determinants and their contribution to optimizing healthy ageing.

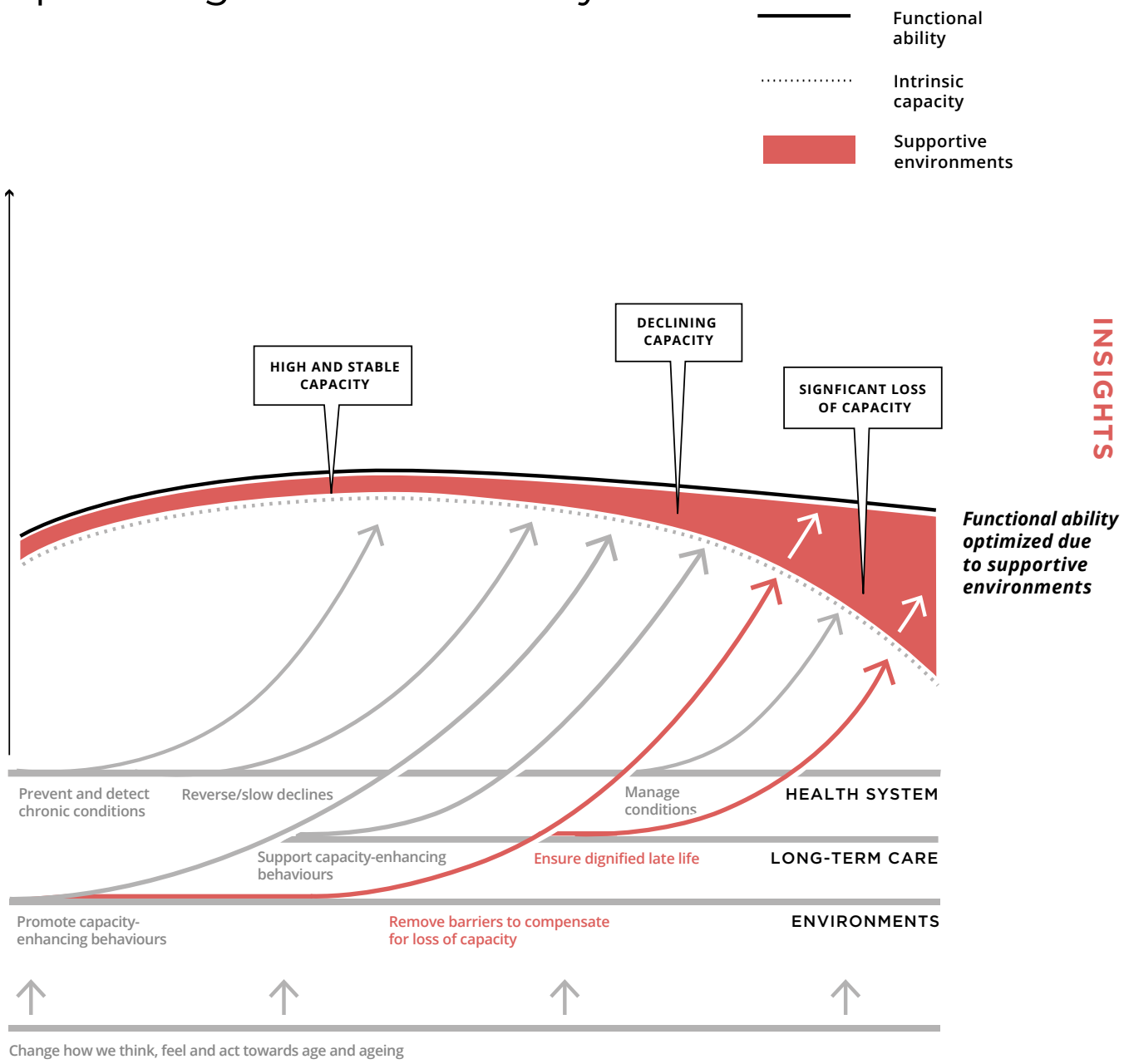
Actions that dismantle discrimination and level up socioeconomic conditions will likely uplift the trajectory of healthy ageing for everyone.

INSIGHTS

FIGURE 1.1

Trajectories of healthy ageing

optimizing functional ability



ACCELERATE IMPLEMENTATION AND OPTIMIZE FUNCTIONAL ABILITY

The Decade commits to collaboration and action over the next 10 years 2021-2030. Our challenge is to see meaningful and measurable improvements in the lives of older people, their families and their communities by 2030. Partnerships are needed with older people and civil society that represent older people's expectations, and with decision-makers in governments, including with ministries of health and those who design and implement community programmes. In each country many other sectors need to be involved to improve healthy ageing – including education, finance, long-term care, social protection, labour, housing, transport, information and communication.

Finding a way to implement, and sustain commitment to, high-priority objectives is the key to a transformative process that delivers impact.

A purposeful and systematic approach is needed to support priorities and motivate action. The approach must:

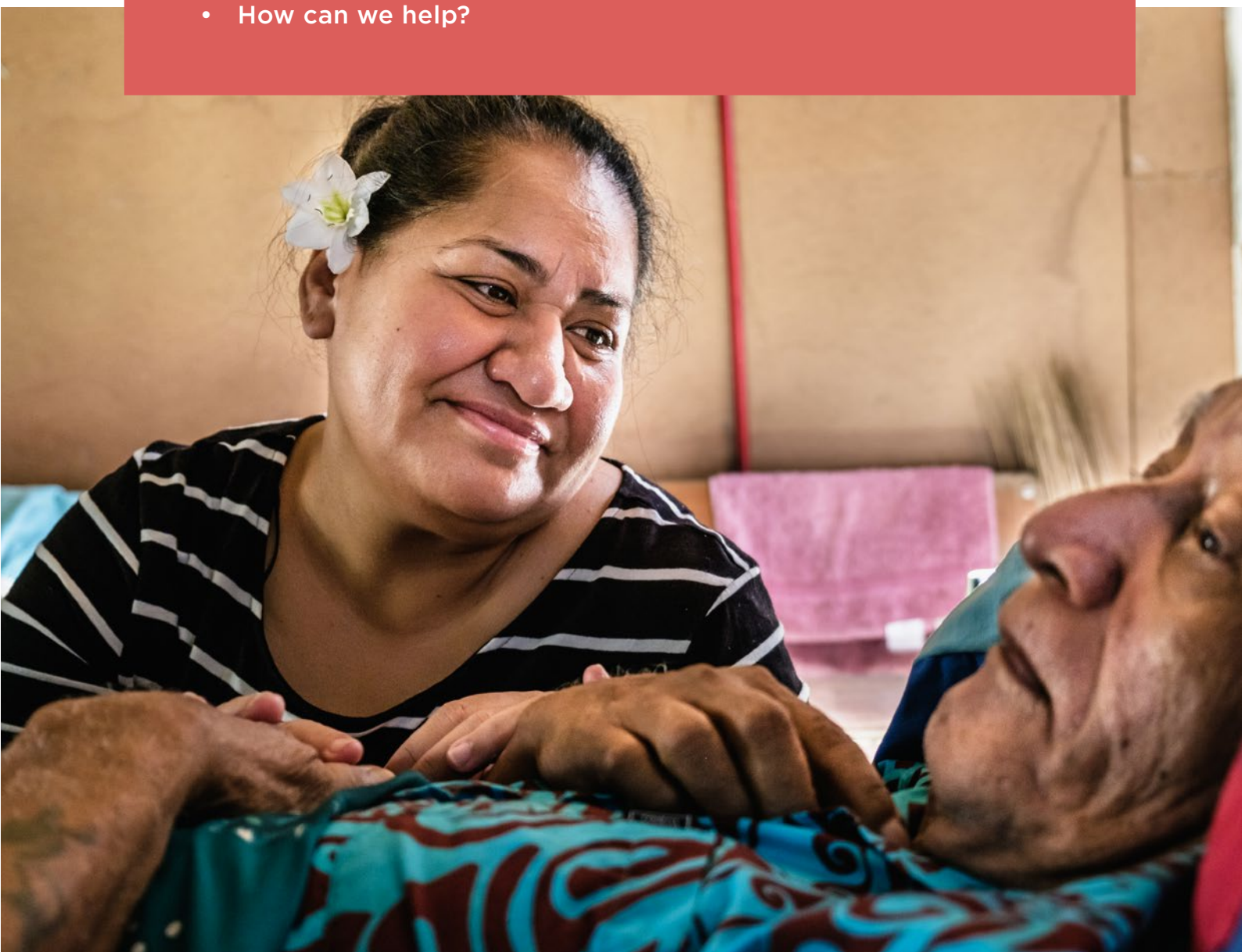
- meet the needs and expectations of older people and their families as well as policy-makers;
- provide evidence that is directly applicable to older people;
- design programmes that develop and maintain older people's functional ability within their communities; and
- building system capacity and motivation with ambition, focus, clarity, urgency and irreversibility.

Accelerating the scale-up of effective programmes with impact on functional ability that reaches all older people requires:

- meaningful engagement and empowerment of older people;
- continuous monitoring and evaluation of process and impact on people's lives; and
- routine sharing of evaluated experiences and learning across communities and countries.

Transformative change requires systems that allow a leader in government, and in other sectors including civil society, to ask and answer these basic questions[32] consistently and rigorously:

- What are you trying to do?
- How are you planning to do it?
- How, at any given moment, will you know whether you are on track?
- If you are not on track, what are you going to do about it?
- How can we help?



Decade of healthy ageing

Strong collaboration for transformative change will benefit from four enablers that are outlined in the Decade. These enablers are:

1. **listening to diverse voices and enabling meaningful engagement of older people, family members, caregivers, young people and communities;**
2. **nurturing leadership and building capacity for integrated action across sectors;**
3. **connecting various stakeholders around the world to share and learn from the experience of others; and**
4. **strengthening data, research and innovation to accelerate implementation.**

A pathway[33] brings these enablers together to accelerate implementation and optimize functional ability (Figure 1.2). The intent is to overcome barriers in the production and translation of research[34] and in its uptake within a specific context.[35] This includes:

- the limited or under-used evidence on what can be done in practice from a person-centred perspective;[36]
- limited existing programmes to evaluate (as older people are often excluded);
- limited demand for evidence by decision-makers;
- limited mechanisms to enable dialogue and translation that respond to policy-makers' priorities and those of other stakeholders; and
- limited mechanisms to ensure that ambitious priorities endorsed in the Decade action plan will be maintained in a particular community, country or at global level.

Drawing on existing WHO strategies, the pathway takes a stepwise approach to identifying priorities, research,[37] knowledge translation for ageing and health,[38,39] and scale-up[40,41,42,43] to accelerate the implementation of interventions to optimize functional ability. WHO's drive to deliver impact on people's lives is related to the ambitious goals of the Triple Billion targets[44] and offers best-in-class performance management tools. Together, these provide the ingredients for a transformative pathway:

CLARIFY: Understand what will be optimized within each domain of functional ability and prioritize what is important to older people and decision-makers, with the aim to catalyze transformation.

IDENTIFY: Gather evidence on interventions (addressing intrinsic capacity, environments and functional ability), synthesizing research that shows effect size on older people and is appraised for local or national use, and understanding the capacities to put the interventions into practice.

DESIGN AND ASSESS: Design health and social or other multisectoral programmes to deliver interventions, assess with older people and their families whether these are feasible and acceptable (e.g. through pilot studies) and document whether these work in study conditions (e.g. in multi-country or multi-site trials).

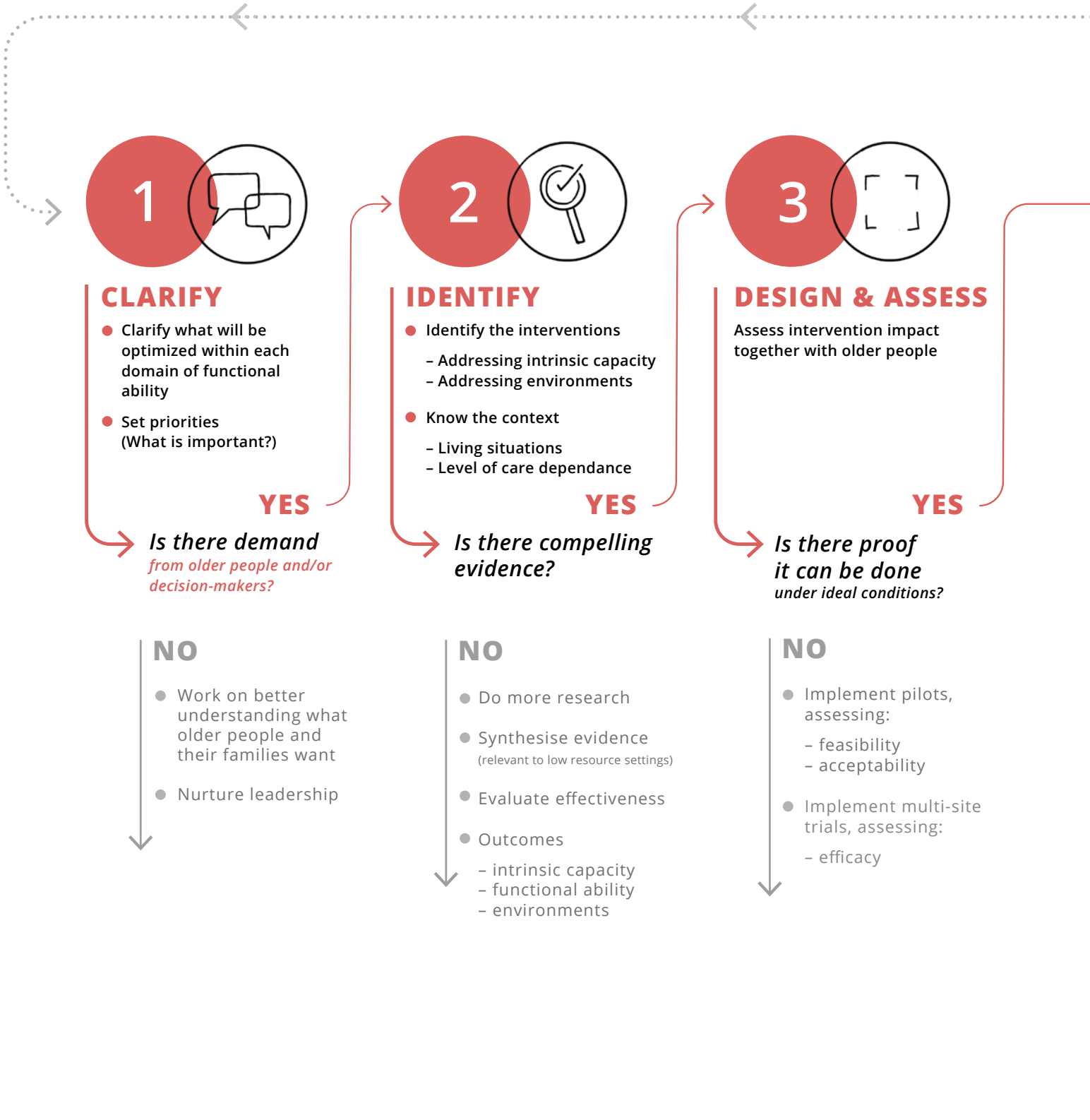
EVALUATE: Learn from how these are implemented in practice and document effectiveness, including what works and what does not work in practice; use problem-solving tools to understand how implementation is facilitated, unblock implementation bottlenecks, and routinely document and share learning from different settings.

REACH: Increase the scale and sustainability of programmes systematically and reach older people who might otherwise be marginalized, discriminated against or left behind, building on interventions that have the most impact.

ACCELERATE IMPACT: Meet objectives within a timeframe by communicating results, engaging new stakeholders and resources, promoting transfer of learning (including approaches and technologies) and fostering continuous innovation to build a culture for impact.

FIGURE 1.2

The pathway to optimize functional ability



4

EVALUATE

Evaluate what actually works & what doesn't in practice in each setting

Do no harm and do not increase inequality

How can it be done?

- Can it be done?
- Who is engaged?
- Who provides it?
- How is it delivered?
- What is unique to this setting?
- Which needs, rights and/or values are addressed?
- How to address barriers and bottlenecks

5

REACH

Address scalability, leaving no one behind

- **Scale up vertically**
- **Scale up horizontally**
- **Leave no one behind**
- **Ensure efficacy & sustainability**
- **Monitor effectiveness & impact**

6

ACCELERATE IMPACT

Maintain and increase effectiveness & efficiency

- **Communicate the impact**
- **Engage more stakeholders**
- **Mobilize new resources**
- **Promote technology transfer**
- **Foster research & innovation cycle**
- **Build a culture for impact**

THIS BASELINE REPORT SETS THE STAGE FOR THE DECADE OF HEALTHY AGEING 2021 – 2030

1

KEY MESSAGES:

- **Healthy ageing is a dynamic process**, embracing all older people and requiring a whole-of-society approach. It is made up of three components – functional ability, intrinsic capacity and environments.

- **Governments and other stakeholders committed themselves by 2030 to achieve meaningful and measurable improvements** in the lives of older people, their families and their communities. Putting this into practice requires us to draw on all of the Decade's enablers, including strengthening data, research and innovation to accelerate implementation.

- **Strong collaboration for transformative change requires the building of systems that allow leaders, scientists and civil society, including people of all ages** – in a wide range of sectors, communities and disciplines – to ask and answer basic questions. These include: Where are we in 2020, getting ready for this Decade? What improvements could we expect and work towards by 2030? Are we on track? How can we accelerate impact on the lives of older people, their families and their communities? How can we help? What are the next steps?

- **A transformative pathway illustrates how this can be done.** Evidence, cases and programmes gathered and reviewed from around the world illustrate each of the pathway's components through a series of narratives described in Section 4. Although programmes or other interventions focusing on functional ability are relatively new, the curated cases reflect an exciting array of commitments, activities and impacts.

The Decade emphasizes the central role of older persons, identifies four priority areas for action, and acknowledges that what is measured drives action.

The remaining sections of this baseline report therefore address the following questions:

2

THE GLOBAL STATUS OF HEALTHY AGEING

Where are we now?

Section 2 describes how we have measured healthy ageing, shows which components of functional ability and intrinsic capacity have comparable data, and provides a snapshot of the current levels in 42 countries by age, sex and educational level. Section 2 also demonstrates the feasibility of assessing environments from geotagged digital maps. Cases illustrate additional analysis and show how existing data are used and applied to enhance programmes that support older people.

3

PROGRESS NOW AND EXPECTED IMPROVEMENTS BY 2030

What improvements can we work towards by 2030?

Section 3 tracks the national progress indicators of the Decade, showing improvements between 2018 and 2020 by each WHO Region. The section contrasts the pace of improvement in life expectancy with that of healthy life expectancy, with the latter reflecting years of life spent in good health. The section considers different scenarios on whether we can improve the baseline estimates of ability to "meet some basic needs" by 2030 – the only domain of functional ability partially represented with data in Section 2.

4

OPTIMIZING OLDER PERSONS' FUNCTIONAL ABILITY BY 2030

How can we accelerate improvement in functional ability by 2030?

Section 4 uses the pathway introduced in Section 1 and, for each domain of functional ability, presents cases from around the world showing what is currently being done with older people. These include the four priority action areas and four enablers identified in the Decade. The section calls for further evaluation of interventions and shared learning in order to accelerate impact. It highlights how interventions focused on NCDs could be integrated into person- centred approaches that foster healthy ageing.

5

A NEW DECADE OF ACTION

What are the next steps?

Optimizing functional ability and accelerating measurable impact on older people's lives are the main thrusts of the Decade. Section 5 relates these to WHO's Triple Billion goals that address increased universal health coverage, better protection from health emergencies and greater enjoyment of health and well-being. The report ends by describing the next steps in tracking progress to increase the visibility of older people within the Sustainable Development Goals (SDGs). Both are important milestones on the path to 2030.


CEO
12

2

WHERE ARE WE NOW? GLOBAL STATUS OF HEALTHY AGEING

Measuring healthy ageing

CONCEPTS, DEFINITIONS, MEASUREMENT

WHO has taken a systematic approach to measuring healthy ageing. Concepts, definitions and important areas that need to be understood and measured – reflecting this comprehensive reframing of healthy ageing in older people – were introduced in Section 1.

For this global baseline of 2020, the focus is on older persons aged 60 years and over and on the analysis of data from existing nationally representative studies. Several steps were applied to collect studies, develop and test metrics, and harmonize and analyse data → 2.1.

Data from the greatest number of countries meeting the criteria and analysis approach were collated with the intent to measure each component of healthy ageing, including all domains, and to produce comparable results. Based on the steps taken, 42 countries in total have estimates either for one domain of functional ability (37 countries) or for two items that contribute to intrinsic capacity (36 countries). Thirty-one countries have estimates for both.

Results across 42 countries include data on 151 718 older people (age 60 years and over), with 68 456 men (45%) and 83 262 women (55%). Based on UN population estimates for 2020, these 42 countries have a population of 678.5 million older people, representing 16% of the total population in these 42 countries and 65% of all older people worldwide (Annex 2).

Results across 42 countries include data on 151 718 older people (age 60 years and over), with 68 456 men (45%) and 83 262 women (55%)

2.1

Steps to measure functional ability and intrinsic capacity[45]

- Nationally representative studies with a rich set of items (questions, performance tests, biomarkers), conducted with large samples of older people, were used to explore data for all components of healthy ageing. Analysis of studies conducted in Canada, India and the USA,[46,47] confirmed that healthy ageing reflects a multidimensional construct, showing that the components and domains of healthy ageing are related. This also provided proof that healthy ageing could be measured through existing studies in different countries if sufficient comparable items are included in these studies.

- Items commonly used in existing studies were mapped to each of the five domains of intrinsic capacity and functional ability and were reviewed by WHO technical experts to ensure consistency with existing measurement standards. Environments were excluded because of the limited items and insufficient measurement standards. This resulted in 27 items for four of the five domains of functional ability (missing: learning and making decisions), and 25 items for intrinsic capacity across each of the five domains **(Annex 3)**.

- Nationally representative studies of older persons with data collected between 2013 and 2019 were identified drawing on the last available year. These primarily reflect household surveys with interviews of older people living at home (and do not include people living in institutions such as long-term care facilities). WHO gained access to data from studies in 55 countries, with 52 released for WHO to analyse by June 2020.

- For the 52 studies in the analysis, comparable items (following a harmonization exercise) with quality data (less than 40% missing on any item) were mapped to intrinsic capacity or functional ability. Maximizing the number of countries with comparable data in the baseline analysis was prioritized over including a large set of items: 42 country studies met the criteria of measuring some aspects of either functional ability or intrinsic capacity. Nevertheless, a minimum of three comparable items across countries are needed to estimate a score for each component or domain.

- An estimation approach (multiple joint ordinal-continuous factor model) was applied to the data from 42 countries to estimate a score for all countries on the same scale. This enabled items with ordered categories (e.g. yes, no) and with continuous (e.g. numbered) response scales to be included and accounts for the relationship between functional ability and intrinsic capacity. For the baseline analysis, this resulted in one factor meeting all criteria that measures partially one domain of functional ability – i.e. ability to meet some basic needs, reflecting three items. This is scaled from 0 (lowest) to 100 (highest) for interpretability. For intrinsic capacity, only two comparable items met criteria, mapped to cognition and vitality. These are transformed into standardized scores reflecting harmonized, pooled data across countries, and are reported separately as place-holders for intrinsic capacity.

- For each country, average estimated scores are available by each age or by five-year age groups (from ages 60–64 to ages 90 years and over), by men and women and by level of education. All estimated scores are age-standardized applying the WHO World Standard Population.

- Population estimates representative of non-institutionalized older people for each country reflect survey- and person-specific sample weights. Pooled population estimates are weighted for each country's population and apply the proportion of people in each 20-point score band to the UN population estimates for 2020.

FUNCTIONAL ABILITY

What is measured at baseline?

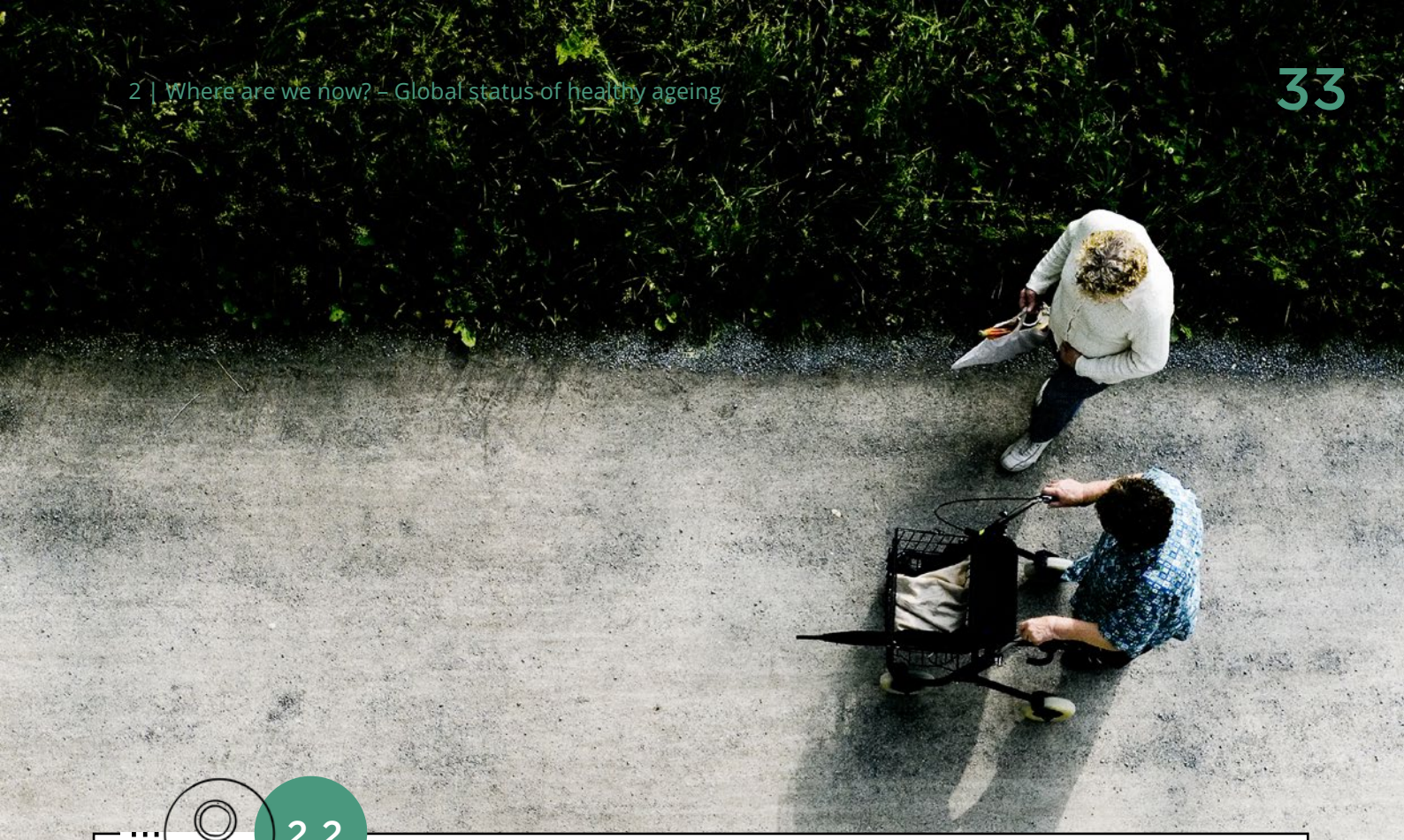
Three items addressing ability to meet some basic needs

Thirty-seven country studies have comparable data on the ability to meet some basic needs (**Annex 2**). These countries have 514 million older people, representing 20% of the total population in these 37 countries and 49% of all older people worldwide in 2020. Results are reported for pooled data across countries and visualized by a different colour for each country.

Functional ability (limited to meeting some basic needs) reflects a person's interaction with their environment. Three elements make up this score:

- ability to get dressed;
- ability to take medication; and
- ability to manage money.

→ 2.2



2.2

Only three comparable items to measure the ability to meet some basic needs

Questions on the ability to perform daily activities to meet basic needs are among the most common questions asked that can be used to assess the functional ability of older people.[48] Questions related to the access of services and adequate standard of living involve different individual phenomena.[49] They all reflect the person's ability to meet their basic daily needs such as managing money, bills and finances.

The three items included in the analysis – **the ability to get dressed, take medication and manage money –** have been extensively included in national surveys, and were the most common items in 37 of the 52 studies included in the analysis that were mapped to the domain of meeting basic needs **(Annex 3)**. The extent to which older persons are able to perform these and other activities on a day-to-day basis is highly reliant on their levels of intrinsic capacity (physical and mental) and their environment.

Environmental characteristics play a fundamental role to enable older people to adapt or compensate for the losses of intrinsic capacity. The environment can sometimes present avoidable barriers to meet some basic needs. For instance, poor readability and understandability of medication labels can hinder correct handling and intake.[50] Since these activities are at the intersection between the person's physical and mental capacities and the hindering or enabling environmental characteristics, these adequately reflect some aspects of a person's ability to meet basic needs.[13] However, comparable questions on other aspects of the ability to meet basic needs, such as adequate housing or diet, are lacking in existing surveys that also include items on intrinsic capacity..

The three items were sufficient to create a "meeting some basic needs" score. The model fit was excellent, with all items contributing significantly to the estimated score.

FIGURE 2.1

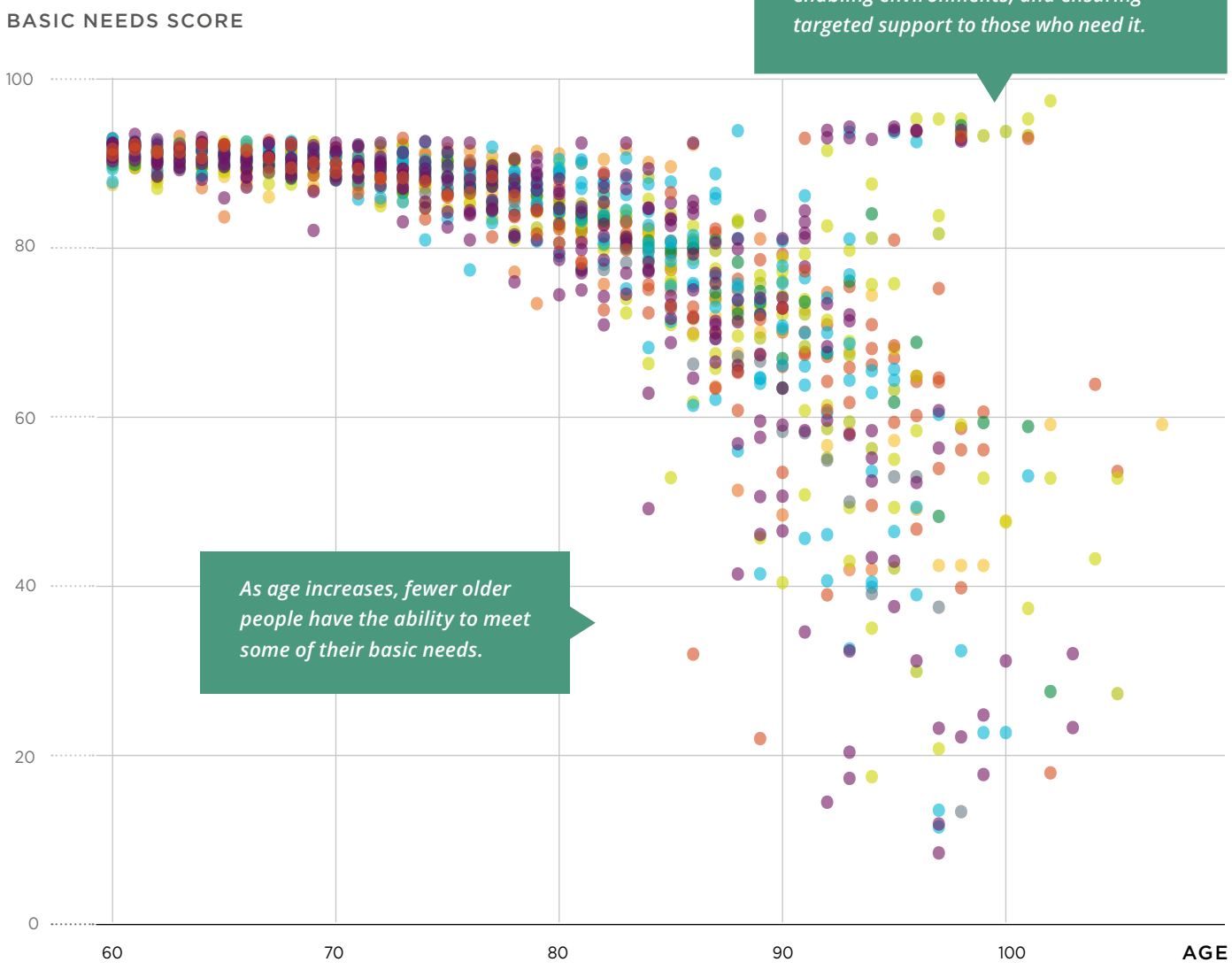
Ability to meet some basic needs by age

in 37 countries*

This score is based on more than 127 000 older persons in 37 countries*. Each colour represents a different country. At every age, there are 37 dots, representing the average score at each age for each country.

On average individuals in some countries have relatively high scores at older ages.

This demonstrates that, at every age, people could be supported to meet their basic needs through a combination of maintaining intrinsic capacities, providing enabling environments, and ensuring targeted support to those who need it.



* Austria, Belgium, Brazil, Bulgaria, Canada, Chile, China, Costa Rica, Croatia, Cyprus, Czechia, Denmark, England, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Israel, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sri Lanka, Sweden, Switzerland, and United States of America.

RESULTS ACROSS COUNTRIES

Figure 2.1 illustrates a cross-sectional view of older people included in studies from 37 countries.

The scatter plot illustrates the association between age and the estimated score for ability to meet some basic needs, which is the most basic ability to be met. Each country is represented by a different colour, with age on the horizontal axis, from 60 years onwards. The estimated score is on the vertical axis, with 0 being the worst score and 100 being the best score.

The highest score band, 80–100, should be attainable by all older persons. For the average at each age, this is the case for all countries until around age 75. As age increases, the score decreases particularly after 80 years – reflecting cross-sectional data. These averages mask considerable variation within each age.

Figure 2.2 shows, across the 37 countries included, the estimated score for ability to meet some basic needs, for men and women separately (men in blue and women in red).

On average, based on cross-sectional data, men and women have similar abilities to meet some basic needs between ages 60 and 80 years. This scatter plot also shows lines for the 10th, 50th and 90th percentile scores for men (blue) and women (red) separately. After 80 years of age, more women are less able to meet some of their basic needs than men, with the gap widening with increasing age. At older ages, more women are likely to live alone and in poverty compared to men.

Further disaggregated analysis was limited to what was comparable across countries – i.e. the person's level of education. Across countries, older people with higher levels of education (post-secondary and secondary) – as a marker of socioeconomic status – are more able to meet some of their basic needs compared to those with only primary or no formal education. In many countries, differences by educational levels are more important than differences between men and women. Comparable data on poverty and wealth (including household assets), rural–urban residence, or other markers of inequality should be included in the next reporting period.

Based on the estimated score, the majority of older people (86%) are in the highest score band of 80–100. However, attention should focus on the remaining 14% of older people who are unable to meet some of the basic needs that are necessary for a life of meaning and dignity. This percentage represents some 71 million older people in the 37 countries. This includes 4% of older people – more than 20 million older people in these 37 countries – who have a low ability score – i.e. less than 40 points out of 100 points, corresponding to the bottom two score bands.

These percentages and numbers reflect national sampling strategies by each study but do not include older people living in long-term care facilities or other institutions. There were also no comparable items on other aspects of basic needs, such as adequate housing or diet, which means that there may be more older people in each country who are unable to meet their basic needs.

At every age, people could be supported to meet their basic needs through a combination of maintaining intrinsic capacities, providing enabling environments, and ensuring targeted support to those who need it.

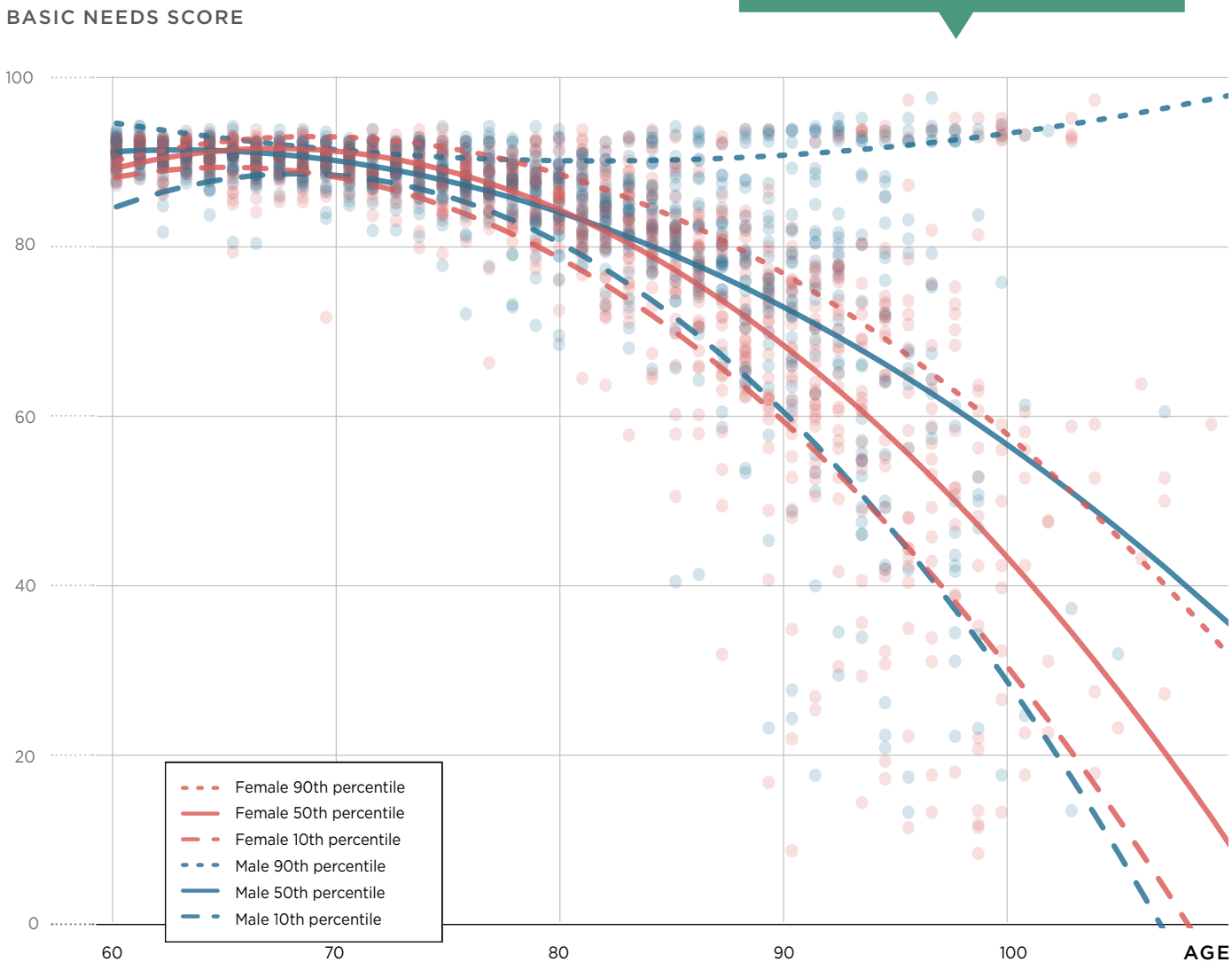
FIGURE 2.2

Ability to meet some basic needs by age

men and women, 37 countries*

Each dot represents the average score at each age, for men (blue) and women (red) separately for each country. This represents some 57 000 men and 70 000 women across the 37 countries.

After 80 years of age, more women are less able to meet some of their basic needs than men, with the gap widening with increasing age.



* Austria, Belgium, Brazil, Bulgaria, Canada, Chile, China, Costa Rica, Croatia, Cyprus, Czechia, Denmark, England, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Israel, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sri Lanka, Sweden, Switzerland, and United States of America.

POLICY IMPLICATIONS

- In view of the range of countries included in the baseline analysis (primarily high- and middle-income) it is likely that this percentage is higher globally. Using this low estimate applied to all older people globally (over 1 billion people age 60 years and over), this could mean that at least 142 million older people aged 60 and over worldwide are unable to meet all of their basic needs.

- Recognizing that older people are not a homogeneous group, both universal and targeted approaches to meeting the basic needs of older people are required, tailored to the specific context of each country and the older person. This reflects the diverse experience and needs of older people. Policy responses must include supporting intrinsic capacity and fostering environments that are enabling and age-friendly. Most older people want to "age in place" – i.e. to remain at home in their familiar surroundings and maintain the relationships that are important to them → 2.3

- Only the ability to meet basic needs, one of five domains of functional ability, has some comparative data. Improved and additional items are needed to reflect fully this domain of functional ability. This emphasizes the need for further development of comprehensive and comparative items to estimate scores across countries to measure and track progress on all five domains for functional ability (namely, ability to learn, grow and make decisions; be mobile; build and maintain relationships; contribute to society; and meet basic needs). This also requires using data to inform community interventions → 2.4 and continuing to develop new ways to collect real-time data that can help older people, their caregivers and health professionals → 2.5.

- With comprehensive data on each domain, only then can we fully track progress to optimize functional ability during the Decade of Healthy Ageing.

Basic needs should be met for older people at any age, and approaches should mitigate inequalities in opportunities.

2.3

THE ROLE OF FAMILY AND COMMUNITY IN PROMOTING HEALTHY AGEING IN PLACE

MALAYSIA

Social Wellbeing Research Centre, University of Malaya

INSIGHTS

Nationally representative data can provide up-to-date insights. The Malaysia Ageing and Retirement Survey (MARS)[51] suggests that relationships and connectedness between family and community members remain strong and intact, including relationships with children through co-residence, contact, care and support.

About 91% of the respondents reported having a loving family, 94% live with their spouse and/or other family members, 84% meet in person with their children at least four times a year, while 79% talk to their children by telephone, WhatsApp or emails several times a month. The data indicate that family connectedness remains strong and promotes ageing in place.

On average, 75% of the respondents from age 60 onwards are not prepared to live in an assisted living facility such as a nursing home, suggesting that they wish to continue to live in their own homes. Significant factors influencing older people to stay at home include having a loving family, rural residence, and receiving financial and other support from their children. Older people who are prepared to live alone, along with those who frequently participate in social outings, are more likely to want to live in an assisted living facility. Surveys of those who live in long-term care institutions should supplement these analyses in the future.

Overall, the results confirm that context matters in understanding environments and older people's preferences.

These results differ from the perception that traditional family-based care in many countries is on the decline, including in Asian countries. **Policies should be informed by nationally representative data, with incentives for family members who are care providers.** For many countries this would be more cost-effective and sustainable than building and maintaining more nursing homes and similar facilities. Home care and improved design are also in line with the majority of older people's preferences.

2.4

USING INFORMATION ON FUNCTIONAL ABILITY TO SUPPORT OLDER PEOPLE

UNITED REPUBLIC OF TANZANIA

HelpAge

Why is this being done

HelpAge advocated for a national strategy on the provision of quality health services for older people.[52] This strategy, adopted in 2019, includes a strong focus on functional ability, reducing dependency, supporting self-care and improving overall well-being – all areas monitored by HelpAge at the community level. Longitudinal community-level data collection can be useful in assessing and monitoring older people's functional ability so that programmatic change can result in improvements in process and impact.

What is the impact

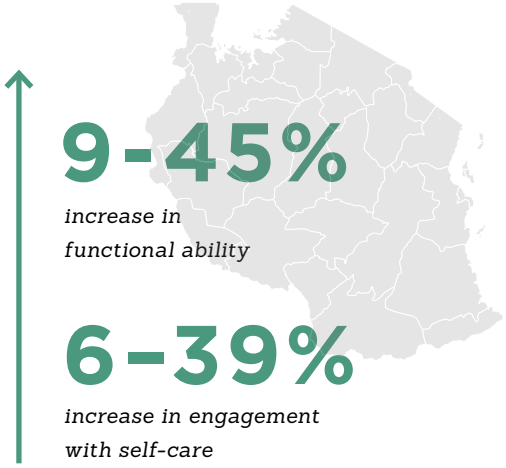
The home caregivers' observations, supported by the data, documented that gradual improvements in functional ability were followed by improvements in engagement with self-care. Programme changes have resulted in a functional ability increase of 9–45%, and an increase in engagement with self-care of 6–39% across different communities.

What data are collected

HelpAge International uses a community-level data collection tool to measure and monitor functional ability and a range of other indicators, including engagement with self-care and perceived access and quality of health services in rural, peri-urban and urban communities in eight districts of Tanzania. Sample sizes are small but are representative of the communities. Since 2013 there have been eight rounds of data collection on older people of 60 years and over.

How data are used

Initial rounds of data on functional ability highlighted a need for HelpAge to review its approach to health and care services in Tanzania. A more holistic approach focused on functional ability, well-being and independence was developed. This included developing a community home-based care approach to be implemented alongside ongoing work with the health system. Home-based carers were trained to support older people and their family members, focusing on diet, exercise, rehabilitative massage, and building strength and confidence. Older persons who were bedbound were gradually supported to sit up in bed and to feed themselves. Their functional ability began to improve, as they were supported to stand, go to the toilet and wash themselves.



9-45%

increase in functional ability

6–39%

increase in engagement with self-care

2.5

REAL-TIME COLLECTION OF DATA ON FUNCTIONAL ABILITY

SWITZERLAND

Gerontology Center and Dynamics of Healthy Aging Center, University of Zurich

INSIGHTS

Most existing studies measure functional ability at a single point in time, asking about different abilities during the past month or week (e.g. during a survey interview or clinical assessment). These studies do not capture a person's real-time functional ability, taking into account a person's intrinsic capacity and interaction with their environment, in a dynamic way and specific to the context of each person. Some older people, particularly those with more serious cognitive impairments, may also not be able to respond to questions. **Addressing these concerns, readily-available wearable sensor technology can be used to measure functional ability; advances in this area are likely to accelerate the monitoring of healthy ageing over the Decade.** This technology reflects advances in data architecture and rapid build-up of analytical capacities and can assess what a person values doing in his or her specific environment.

What is the impact

Functional ability assessments that provide objective data are sensitive to real-time improvements.[53,54] With objective information on each context, this information could inform "just in time" interventions that are up to 90% more effective as they can be applied when help is most needed (e.g. orientation support in situations where disorientation occurs).[55,56]

What data are collected

Using a device that includes three sensor units to assess mobility (Global Navigation Satellite System), intensity and type of activity (Inertial Measurement Unit consisting of an accelerometer and a magnetometer), and social and cognitive activities (microelectro-mechanical systems microphone), the University of Zurich conducted a pilot study in Switzerland yielding objective measures of contextualized activity profiles in persons of 65–90+ years of age. A pilot project with more than 150 older people showed that feasibility and acceptability of the device is high.

Profiles significantly distinguish more than 25 properties of mobility, social and intellectual activities over four weeks.[57,58] The profiles include context-specific interaction between persons and their environment – including access to different modes of transportation, activities in public spaces, participation in educational and physical activity opportunities and ways to contribute to society. Similar pilots in Hong Kong, China, and Mexico City, Mexico[59,60] demonstrate comparable feasibility across a wide range of age, education, income, language and community contexts.

How data are used

Patterns on the range, regularity, variability and complexity of activities give important insights that provide decision support to all stakeholders, including older persons themselves. Older people receive graphs of their own activity and mobility profiles which they review and use for their own health management. **Real-time functional ability assessments reduce the need for health practitioners and other care providers to re-collect person- and context-specific data.**

With objective information on each context, this information could inform "just in time" interventions up to 90% more effectively as they can be applied when help is most needed.

2.6

THE USE OF A CELLPHONE APPLICATION TO MONITOR "ME-BYO"

JAPAN

Kanagawa Prefecture, including 33 municipalities

What data are collected

Kanagawa Prefecture has proposed "ME-BYO"[61] to develop its innovative policy towards self-care and optimizing health for a future era when people live to be 100 years old. ME-BYO is a concept that considers people's physical and mental conditions on a dynamic continuum, rather than a sharp line between health and sickness. Based on this concept, the prefecture launched the "ME-BYO Index" in March 2020. It quantifies the current state of "ME-BYO" in four areas: lifestyle choices, cognitive capacities, daily living functions, and mental health, including stress.

Individual monitoring and management of "ME-BYO" is done through a free smartphone app "My ME-BYO Record" that includes voice recognition. The app allows people to calculate their own ME-BYO Index and monitor their scores through 15 items such as sex, age, height, weight, blood pressure, Mini-Cognitive assessment, Locomo Five checklist, gait speed and mental status, the latter based on an analysis of the person's voice. The approach aligns with the five domains of intrinsic capacity.

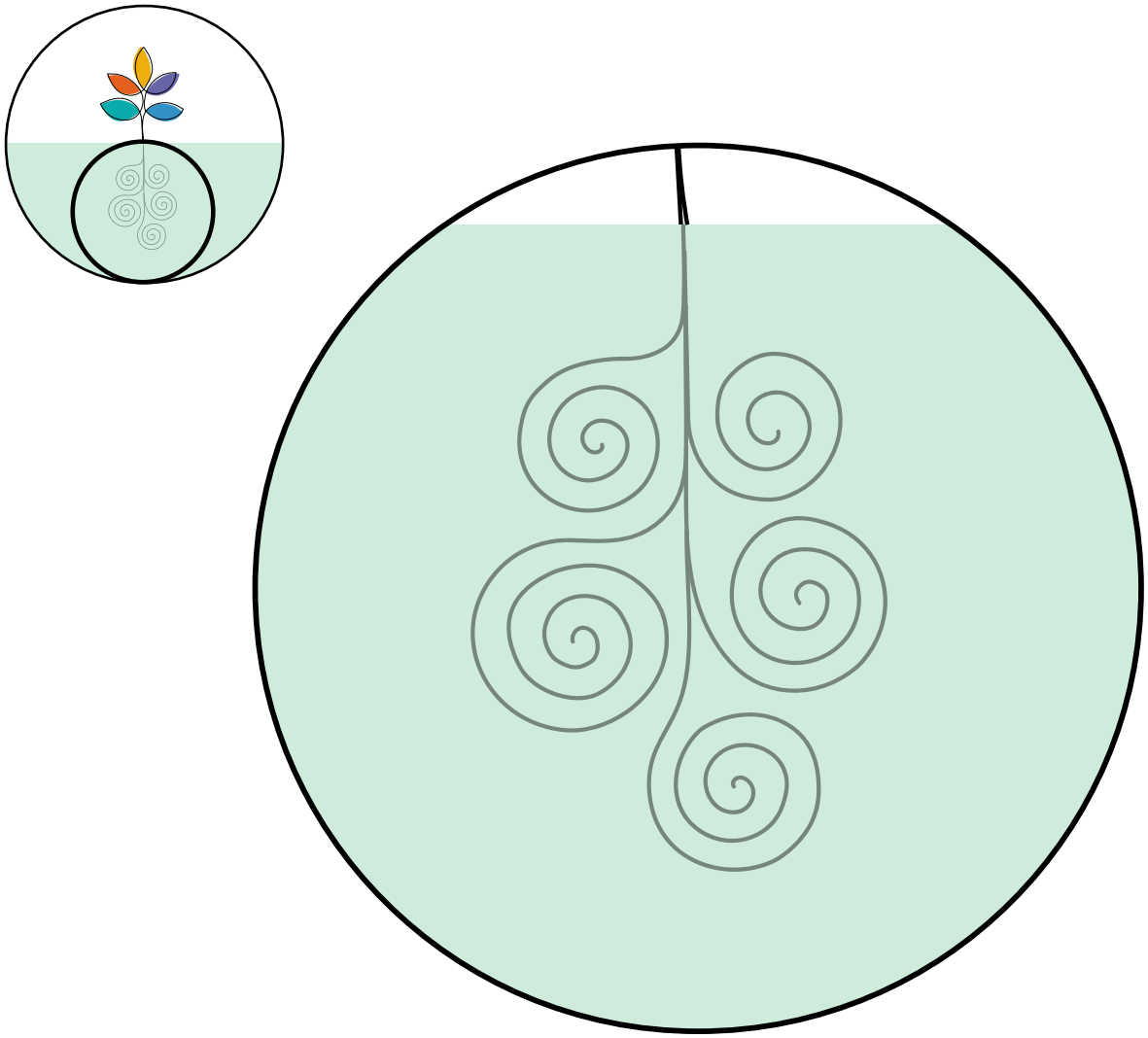
How data are used

The index aims to provide timely and relevant information directly to adults in order to catalyze change and enable people to better manage and promote ME-BYO, including the early detection and self-management of declines in intrinsic capacity. Evaluation can be done by individuals without additional assistance as the app provides advice based on the ME-BYO index results through an algorithm that is aligned with the tools of WHO's Integrated Care for Older People (ICOPE).

ME-BYO is a concept that considers people's physical and mental conditions on a dynamic continuum, rather than a sharp line between health and sickness.

What is planned

Kanagawa will also utilize ME-BYO Index to develop related business products or services to optimize physical and mental health, and overall well-being. The prefecture plans to add a forecasting function to show possible future health scenarios given different lifestyle and behaviour patterns. As a real-time monitoring system, the ME-BYO Index will support evaluation of impact at the individual and community levels.



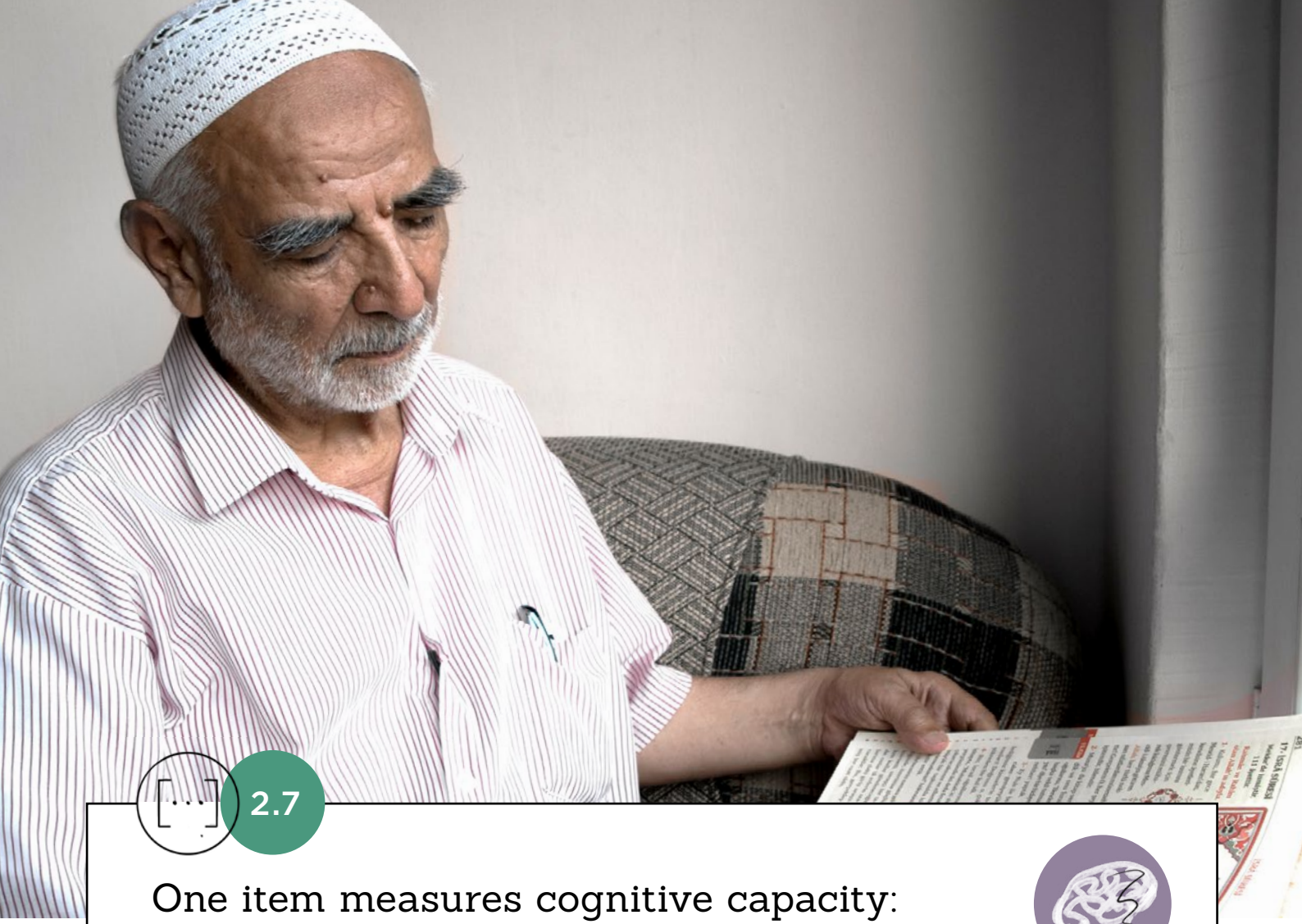
INTRINSIC CAPACITY

What is measured at baseline?

Two items – delayed word recall and hand grip strength

Thirty-six country studies have comparable data for two items measuring intrinsic capacity. This represents about 25% of WHO Member States, with 31 countries from this list also having an estimated score for the ability to meet some basic needs **(Annex 2)**. These 36 countries have some 578 million older people, representing 15% of the total population in these 36 countries and 55% of all older people worldwide in 2020. Results are reported for pooled data across countries and visualized for each country.

Two items (delayed word recall and hand grip strength) were transformed into standardized scores, to help compare estimates within and across countries. These two items map to different domains of intrinsic capacity – cognition → 2.7 and vitality → 2.8. A third item, respondents' weight, was also comparable across countries. However, weight alone is not considered sufficient to measure intrinsic capacity. Details on ways to measure older people's body composition are found in **Annex 4**.



2.7

One item measures cognitive capacity:

DELAYED WORD RECALL

Cognitive function in later life can be measured in several ways, including remembering a list of words and recalling it right away (immediate recall) or at a later stage (delayed recall). **A 10-word list, delayed recall test, is a sensitive measure that predicts cognitive decline in older people.**[62] The number of words to remember can vary; some studies include 3, 5, 10 ,15 or 20 words. Results from word recall tests are reported in several common ways. These include reporting the number of words recalled, sometimes also referred to as a score.[63,64,65,66,67,68,69,70] Alternatively, reporting may be the mean and standard deviation of recalled words per person, or age group[71,72] and through a standardized score, as done for this baseline analysis.[73,74] These tests measure capacity and do not reflect the interaction of the person and their environment.

These simple tests have very strong predictive validity, and poor performance is associated with the onset of dementia in later life.[75] Performance can vary across the life course, with older cohorts (compared to younger groups), women (compared to men), widows/widowers and those who never married (compared to married) having been shown to decline faster in a US cohort.[76] The trajectories (starting point and potential rate of decline) are, however, not likely to be homogenous, and in the United Kingdom four different types of trajectory have been identified: a very low starting point/followed by rapid decline, a low/average decline, average/stable, and good/stable.[77] Being a woman, being younger, having higher education and literacy levels, being wealthier, doing regular physical activity, with a lower level of depressive symptoms and lack of cardiovascular disease is associated with better trajectories of cognition. Addressing risk factors of cognitive decline in early life such as depressive symptoms may lead to better trajectories of cognitive capacity in older age.[78]

Across the 36 countries, only the item delayed word recall, is available (Annex 3). On average, expected changes by chronological age are found in the standardized scores estimated for delayed word recall within this baseline analysis. Using both immediate recall, an easier test, and delayed recall, a more difficult test, enhances the sensitivity of the test. This would better distinguish those who are at the lower end of memory and cognitive capacity.

DELAYED WORD RECALL

Cross-sectional data from 36 countries indicate that delayed word recall (range 0-10 words) declines with increasing age. On average, older people with higher levels of education (post-secondary, secondary) as a marker of socioeconomic status at each age have the capacity to recall more words compared to those with only primary or no formal education. On average, differences between men and women are minor."

There is a strong social gradient associated with older people's highest level of education attained, also a marker of socioeconomic status **(Figure 2.3)**. The decrements with age (based on cross-sectional data), however, are similar for all but those with post-secondary education. **The averages for individual ages mask considerable variation.**

On average, older people with higher levels of education (post-secondary, secondary) as a marker of socioeconomic status at each age have the capacity to recall more words compared to those with only primary or no formal education.

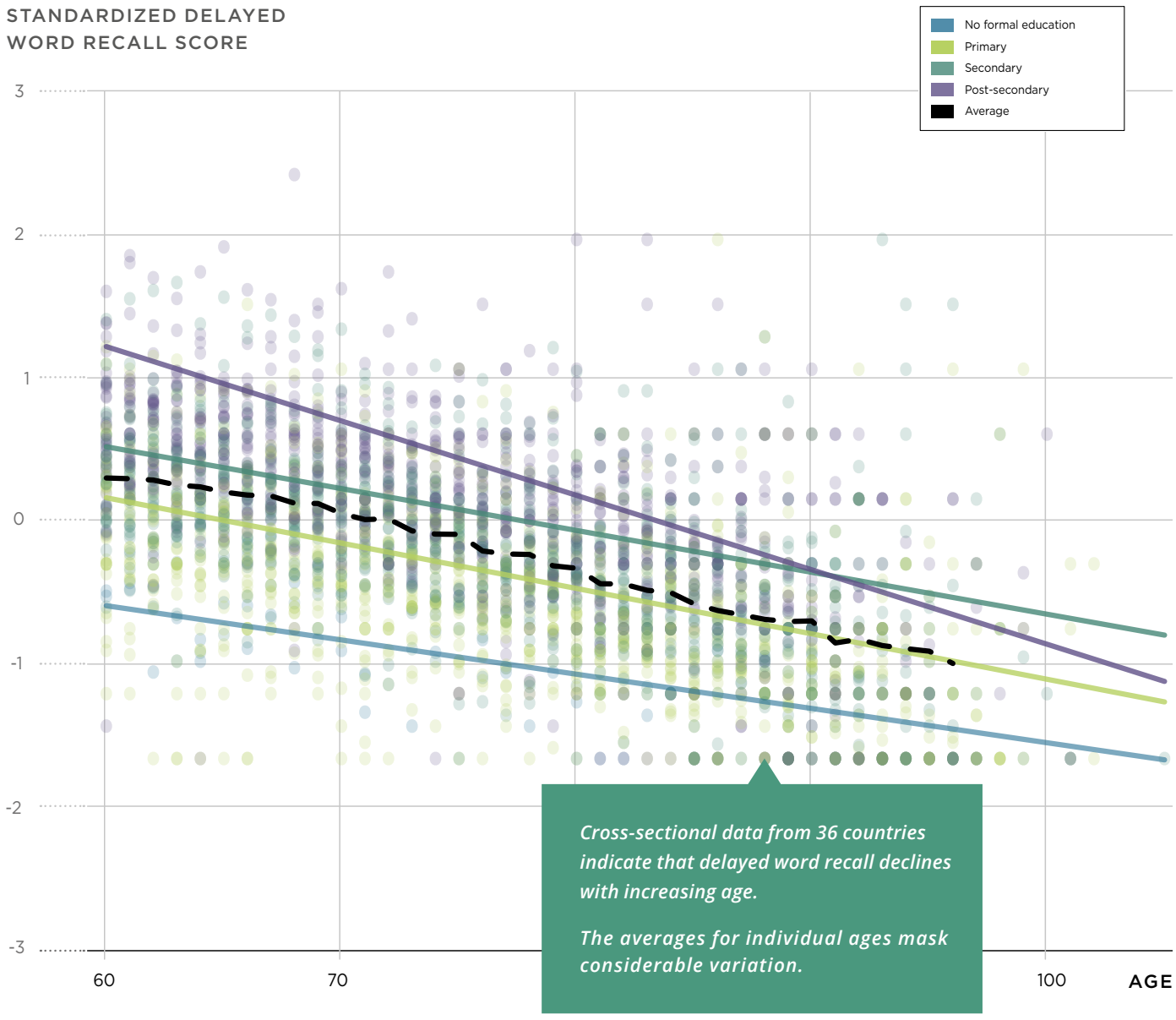
The scatter plot in **Figure 2.3** indicates the number of standard deviation units (above or below) the average score by country and educational level, for each age from 60 years onwards. After age 85, there is a significant proportion of people at almost -2 standard deviations below the average. To better distinguish among individuals at the lowest score ranges in the future, an additional, easier test should be collected in all surveys, such as immediate word recall.

On average, across the 36 countries, the standardized scores for men and women by age groups 60–64 years and 65–69 years are almost identical; as is also the case for the 75–79, 80–84 and 85–89 years age groups. For ages 70–74 years, on average women's scores are similar to those of men at ages 64–69, whereas men's scores drop to the same level as women at ages 75–79. However, for ages 90+, women have a lower score than men.

FIGURE 2.3

Cognitive capacity (delayed word recall) by age and education level in 36 countries*

This score is based on more than 121 000 older persons in 36 countries. The black line is the average across countries. Other colours represent a different level of education. At every age, there are average scores for each level of education, for each country.



* Austria, Belgium, Brazil, Bulgaria, Canada, China, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Ghana, Greece, Hungary, India, Israel, Italy, Latvia, Lithuania, Luxembourg, Malaysia, Malta, Mexico, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, South Africa, Spain, Sweden, and Switzerland.

HAND GRIP STRENGTH

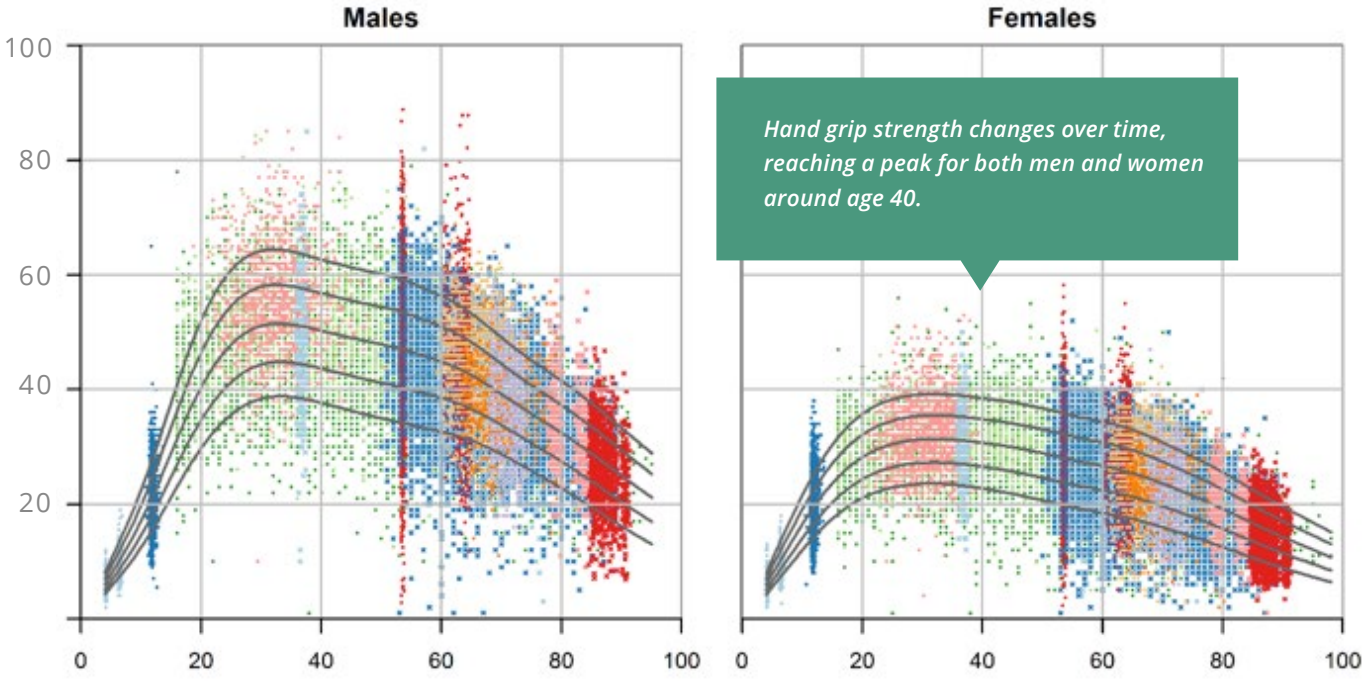
Studies in the United Kingdom have identified that hand grip strength changes over time, with both men and women reaching a peak of hand grip strength around age 40 with gradual declines; however, at each age, there is significant variation **(Figure 2.4)**.[79,80]

A study carried out across European countries also identified that the decline was associated with low occupational position in mid-life for men, but not for women.[81] More evidence on how sociodemographic factors and inequalities affect trajectories of hand grip strength is, however, needed: this is relevant to building and maintaining intrinsic capacity at the population level. On average, expected differences between men and women, and changes by chronological age, are found in the standardized scores estimated for hand grip strength within this baseline analysis. **However, as for delayed word recall, there is a lot of variation at each age.**

FIGURE 2.4

Vitality (hand grip strength) by age in the United Kingdom

Combines data from multiple population representative studies[80]



2.9

One item measures vitality:
HAND GRIP STRENGTH

Hand grip strength is a measure of muscular strength or the maximum force/tension generated by one's forearm muscles. It is a simple but powerful predictor of declines in intrinsic capacity, onset of morbidity, and mortality.[82] It is most useful when multiple measurements are taken over time to track capacity of older people and chart trajectories. Outcomes of hand grip strength measures are typically presented as a direct reading from the instrument used (kilograms, pounds, Newtons etc.), as a mean with a standard deviation, or after it has been standardized in some manner – as reported in this baseline analysis.

Hand grip strength is considered as an indicator of vitality (a domain of intrinsic capacity) in older people.[83] A growing body of evidence suggests that skeletal muscle function is an important component of intrinsic capacity of older people. A recent analysis of cross-sectional data from China, Ghana, India, Mexico, Russia and South Africa documents a significant and consistent relationship between hand grip strength and other measures of intrinsic capacity across the five important domains of locomotion, psychological, cognition, vitality and sensory, and suggests that hand grip strength is the single most important measure of intrinsic capacity.[84]

At the individual level, the major determinants of handgrip strength are age, sex, stature, weight, nutritional status, socioeconomic status and chronic diseases.

Relative hand grip strength, adjusted by body mass index, could be an appropriate measure for future comparative analysis but requires measures of hand grip strength, weight and height. For this baseline analysis, only the first two were available across most country studies (Annex 3).

HOW TO MEASURE HAND GRIP STRENGTH

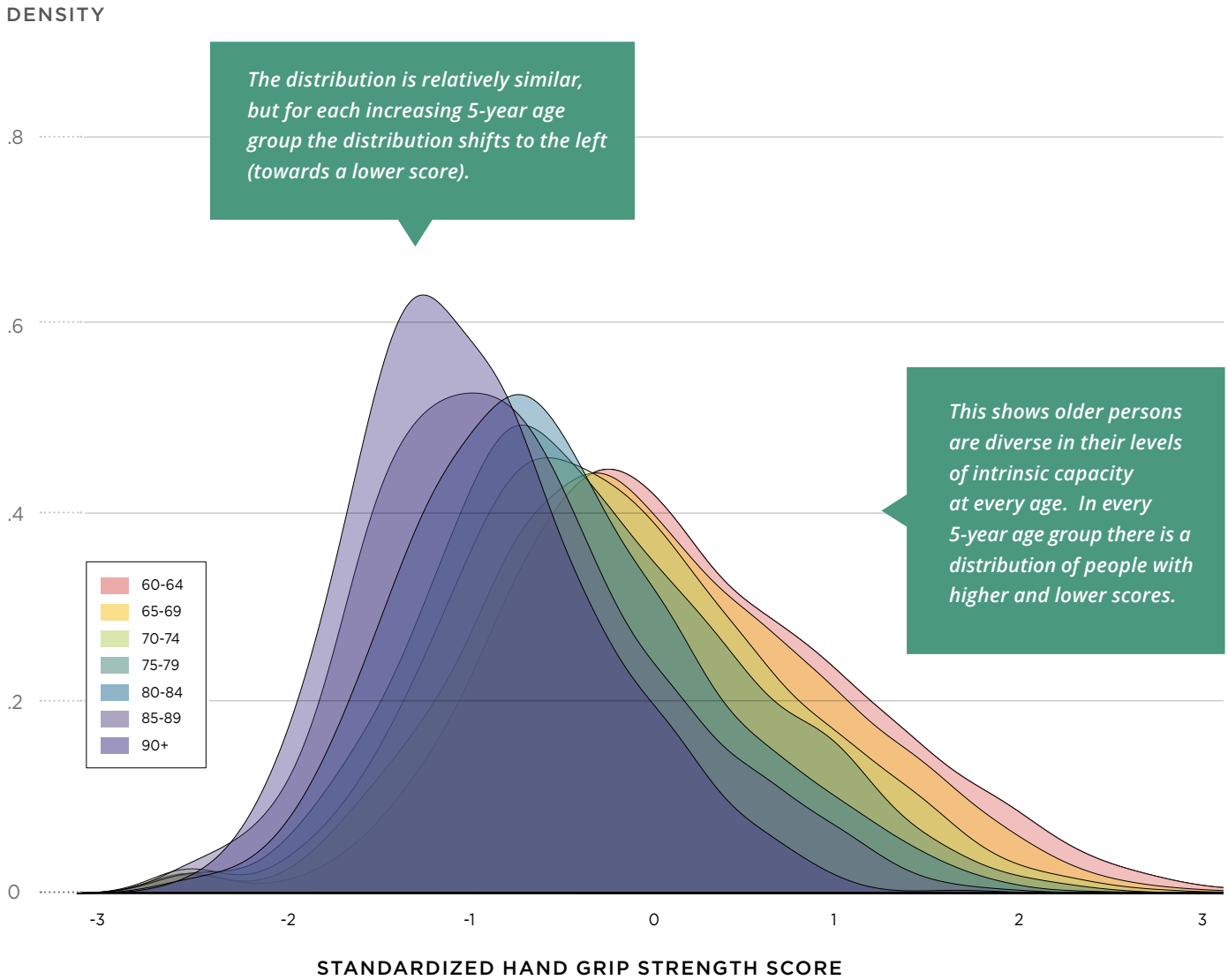
In a sitting position, keep your upper arm against your body and bend your elbow to 90 degrees with the palm facing in (like shaking hands), then squeeze the dynamometer as hard as possible for a few seconds.

FIGURE 2.5

Vitality (hand grip strength), score distribution

by 5-year age groups, in 36 countries*

Density plots visualize a distribution of people and their scores.
This represents more than 121 000 older persons in 36 countries, within 7 distributions, one for each 5-year age group (60-64, 65-69, 70-74, 75-79, 80-89, 90+ years).



* Austria, Belgium, Brazil, Bulgaria, Canada, China, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Ghana, Greece, Hungary, India, Israel, Italy, Latvia, Lithuania, Luxembourg, Malaysia, Malta, Mexico, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, South Africa, Spain, Sweden, and Switzerland.

The density plot in **Figure 2.5** shows the distribution of people in each 5-year age group on the basis of their standardized score for hand grip strength. **The distribution is relatively similar, but for each increasing 5-year age group the distribution shifts to the left (towards a lower score).** Some people at the oldest ages (90+ years) have the same capacity as those at younger ages (60–64 years).

Figure 2.6 illustrates that, on average, at every age across the 36 countries men have higher hand grip strength than women, with the difference slightly narrowing in the oldest age groups.

Developing appropriate measures to monitor intrinsic capacity across countries calls for norms that take account of what is biologically acceptable. For hand grip strength, comparing women to women, and men to men provides a more meaningful interpretation of the standardized scores – as was done in the WHO–UNICEF child growth standards[85] in which weight for height are calculated separately for girls and boys.

Within countries, future analysis could consider differences by different determinants of hand grip strength besides age and sex, such as stature and weight (e.g. through an adjustment based on body mass index which was not available in the comparative items of this baseline analysis). However, differences due to unequal opportunities, such as nutritional status and life course socioeconomic status, should be investigated and should not be considered as acceptable when comparing hand grip strength within or across countries.

Although not all older people experience declines in intrinsic capacity as measured by delayed word recall and hand grip strength, on average, chronological age is associated with declines, but declines are not inevitable. Country-specific data showing single-age averages mask wide variations at every age.

Differences between men and women, and between older people in general, should be carefully reviewed and assessed with regard to whether these relate to stature, or are driven by social determinants of healthy ageing.

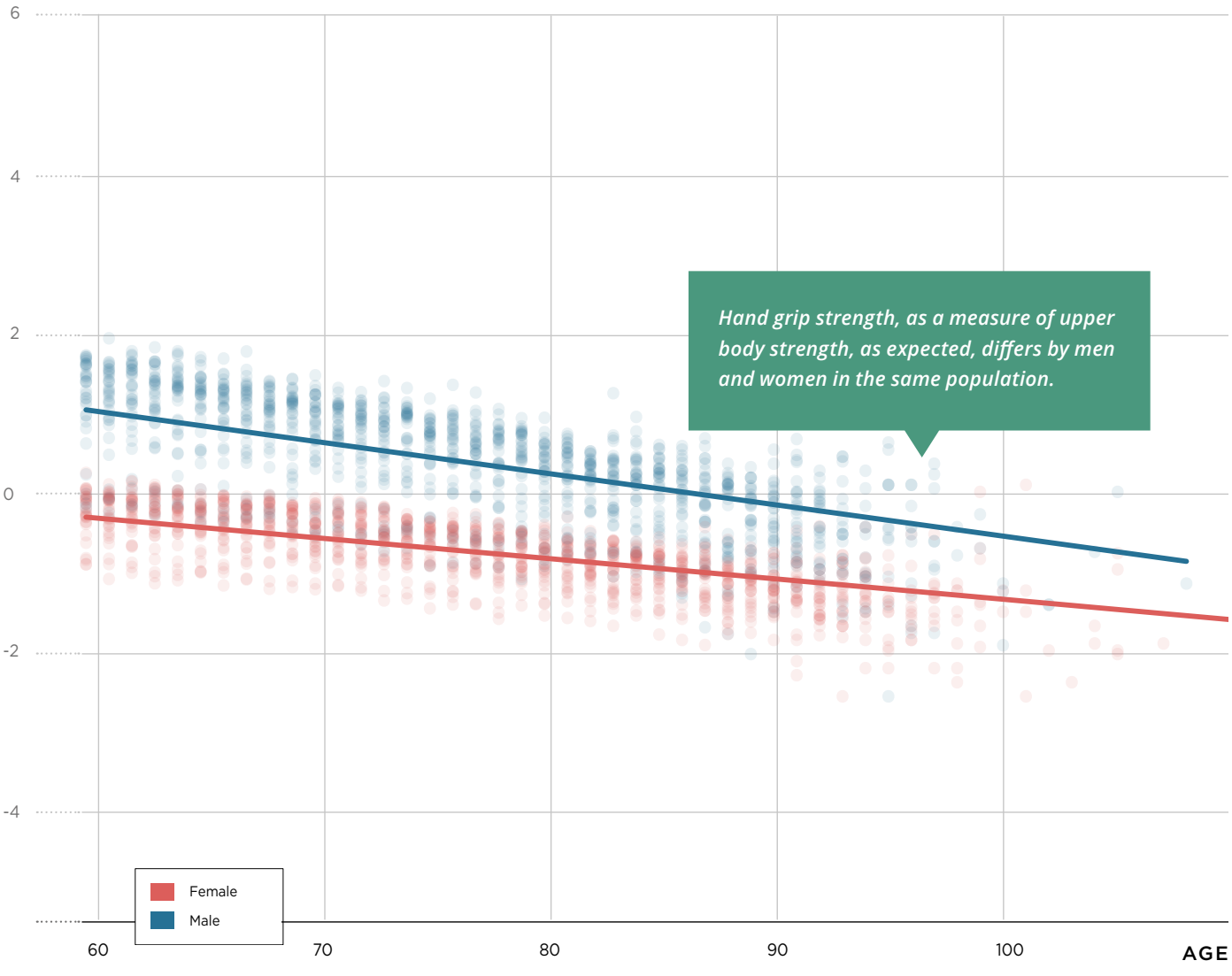
Differences between men and women, and between older people in general, should be carefully reviewed and assessed with regard to whether these relate to stature, or are driven by social determinants of healthy ageing. This has implications for the appropriate policy response as well as for the approach to global monitoring of functional ability and intrinsic capacity.

FIGURE 2.6

Vitality (hand grip strength)

men and women, in 36 countries

Each dot represents the average score at each age, for men (blue) and women (red) separately for each country. This represents some 55 000 men and 66 000 women across the 36 countries.



* Austria, Belgium, Brazil, Bulgaria, Canada, China, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Ghana, Greece, Hungary, India, Israel, Italy, Latvia, Lithuania, Luxembourg, Malaysia, Malta, Mexico, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, South Africa, Spain, Sweden, and Switzerland.

POLICY IMPLICATIONS

- These results underline that at every age there is a lot of diversity in older people's physical and cognitive capacities. Older people in every age group differ; some at the oldest ages (90+ years) have the same capacities as those at the younger ages (60–64 years). Policies and programmes to build, maintain, prevent or address declines in intrinsic capacity should be informed by disaggregated data and information across all ages for planning, monitoring and evaluation.

- Significant declines in physical and mental capacities can limit older people's ability to care for themselves and to participate and contribute to society. Access to rehabilitation, assistive technology and enabling, inclusive environments can improve functional ability. Long-term care services need to reach all adults with significant declines in intrinsic capacity, including those at home and in communities.

- Measures of intrinsic capacity, including delayed word recall and hand grip strength, are associated with socioeconomic characteristics, including the highest level of education attained. Strategies to support older people's physical and mental capacities need to address accumulated inequities and current unequal opportunities for support. This requires collecting data and measuring trajectories of intrinsic capacity across the life course.

- However, to enable monitoring of healthy ageing globally, there is a need for more comparable items that measure each domain of functional ability and intrinsic capacity. Ideally, this would require at least three items that measure different aspects of each domain, and, in order to construct trajectories over time, be sensitive to change.

- A wide range of countries and stakeholders are measuring and using information on intrinsic capacity collected over time. This includes real-time data on intrinsic capacity that can immediately support self-care and other caregivers' and professionals' decisions →2.6.

INSIGHTS

The baseline report draws on cross-sectional studies to provide a snapshot of healthy ageing. However, there is much to be learned from longitudinal studies that follow people over time. Analysing these studies can help build up the evidence base by documenting cause and effect, and evaluating whether policies, programmes or specific interventions are having the desired impact on people's capacities and abilities. These include in-depth studies of intrinsic capacity among people from the same city →2.9, or nationally representative longitudinal studies that can identify different trajectories for an entire population →2.11.

Trajectories can be constructed to examine the broader social and economic contexts and how these contribute to healthy ageing, including gender inequality →2.10, and how people transition between life phases, such as between work and retirement →2.12. These insights can help shape policies that support optimizing functional ability of all older people.

2.9

IMPACT OF WAIST CIRCUMFERENCE ON COGNITIVE CAPACITY

NETHERLANDS

Longitudinal analysis from the Doetinchem Cohort Study (DCS)[86],
National Institute for Public Health and the Environment

A higher body weight is often accompanied by a larger waist circumference due to an increase in abdominal fat. Higher weight and large waist circumference negatively affect different domains of intrinsic capacity, including cognition.

In the DCS[87,88,89] the long-term effect of waist circumference on general cognitive capacity across the life course was explored.

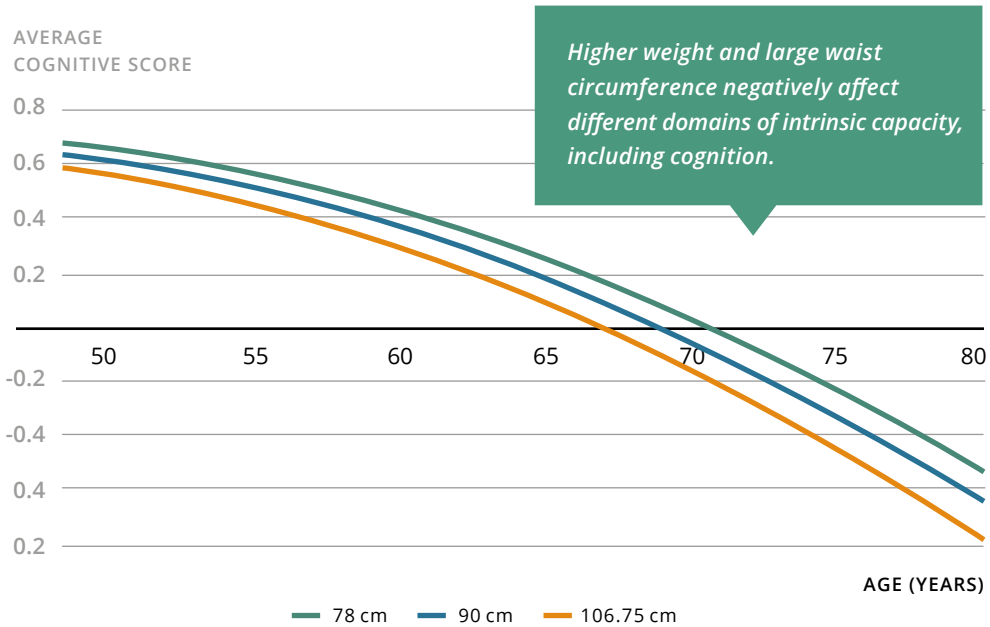
The key findings are:

- women have, at any age, a better cognitive capacity at a smaller waist circumference;
- the rate of cognitive decline is less in women with a smaller waist circumference;
- on average, women with a smaller waist circumference at the 10th percentile have, at age 70, a cognitive capacity similar to that of women with a higher waist circumference at the 90th percentile at age 67.

This implies that women with a smaller waist circumference are three years cognitively younger than women with a larger waist circumference.

These and other results from the DCS strengthen the evidence base and contribute to recent policies to promote healthy ageing. One main area of the 2018 Dutch National Prevention Agreement is to prevent and reduce overweight and obesity by promoting healthy eating and physical activity and creating a healthier environment.[90]

Trajectories of cognitive capacity by waist circumference in women



INSIGHTS

2.10

GENDER INEQUALITY AND IMPACT ON MEETING SOME BASIC NEEDS, 23 COUNTRY STUDIES

UNITED STATES OF AMERICA

Gateway to Global Aging Data, University of Southern California

Picking up on the importance of reducing inequalities across societies, this multi-country, longitudinal study finds that living in a country where gender inequality is more pronounced increases the risk of developing a difficulty with at least one of five activities (bathing, dressing, feeding, toileting, and getting in or out of bed) for women but not for men.[91] Difficulty in dressing is one of the comparable items included in this baseline assessment within the estimated score of ability to meet some basic needs. A combination of macro-level indicators and micro-level indicators are evaluated for impact on ability to meet these basic needs in 23 countries from from the Americas, European and Western Pacific regions.

Key findings include that gender inequality contributes to an increase in the two-year incidence of a women's inability to meet some basic needs, in comparison to men, starting from age 65 onwards. Results differ across the 23 countries included in the analysis, indicating that each country benefits from its own longitudinal study – results in one country cannot always be generalized to others.

Potential underlying reasons for women's inability to meet their basic needs in countries with greater gender disparity include inequalities in power (including political), access to social and economic resources, as well as coverage of social protection policies, and discriminatory economic and labour market policies.[91,92]

Beyond this study, in general, the combination of gender inequality, age-based discrimination and ageist attitudes also disadvantage women more than men. Reducing and eliminating gender inequality is therefore crucial for women and their ability to meet basic needs.

> Reducing and eliminating gender inequality is crucial for women and their ability to meet basic needs.

INSIGHTS

2.11

TRAJECTORIES OF HEALTHY AGEING

ANALYSIS OF 26 LONGITUDINAL COUNTRY STUDIES CAPTURE COMMON PATTERNS

from the ATHLOS study

The Ageing Trajectories of Health: Longitudinal Opportunities and Synergies (ATHLOS)[93] consortium provides new evidence based on a measure of healthy ageing that includes up to 41 items [94] combining cognitive and physical capacities and ability to meet some basic needs in eight studies from Australia, England, Japan, Mexico, Republic of Korea, Spain, USA, and 19 European countries that had more than three study waves (data collection time points on the same individuals). Some of these studies overlap with the cross-sectional data used in this baseline analysis.

Figure 2.7 tracks the year on the horizontal axis and healthy ageing score (0–100, with 100 being the best) on the vertical axis. This documents that the majority of people were represented by three different trajectories.[31] Some 71.4% of study participants had a ***high and stable level of healthy ageing*** throughout the follow-up period (green line); a smaller group (25.2%) displayed a ***low level of health over time*** (blue); and a small group (3.4%) had a ***rapid deterioration from high to low levels of health*** (red).

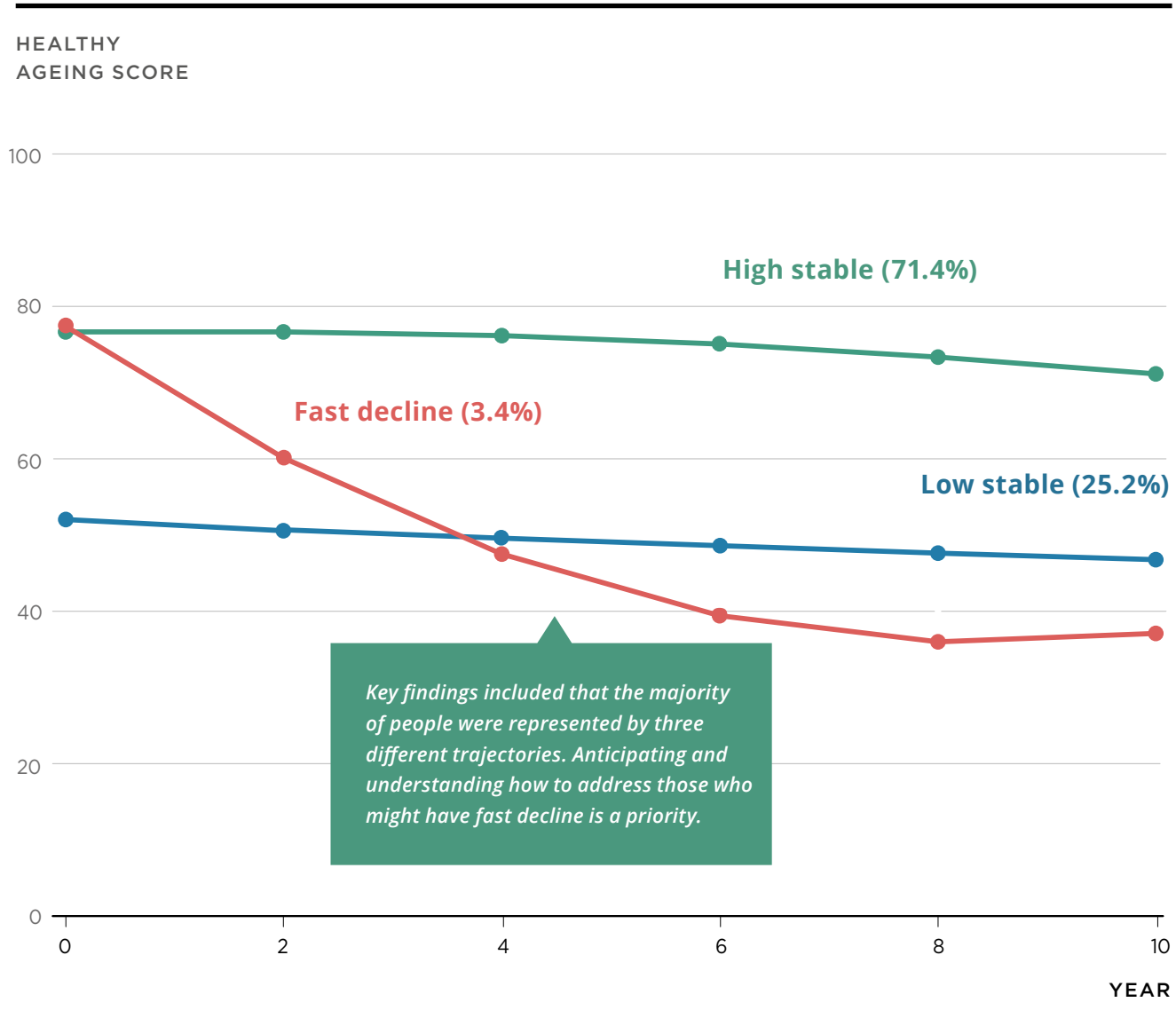
Factors associated with each trajectory provide further insight on what might contribute to each.[31] Levels of education and wealth affected baseline scores of healthy ageing but had less impact on the rate of decline over the 10-year period.[30] People with lower education and less wealth who were physically inactive and ever smokers, were more likely to be in the "low stable", or the "fast decline" trajectories, than in the "high stable" class. Women were more likely to belong to the low stable trajectories compared to the high stable class, but not more likely to be in the fast decline trajectory.

This analysis also highlights the importance of physical activity promotion and of smoking cessation policies, and also the importance of reducing socioeconomic inequalities across societies.

FIGURE 2.7

Three types of healthy ageing trajectories in 26 countries

This represents some 130 500 older people in longitudinal studies that collected data over 10 years.



2.12

TRAJECTORIES OF WORK AND RETIREMENT TRANSITION

ANALYSIS OF 12 LONGITUDINAL COUNTRY STUDIES CAPTURE THE FULL RANGE OF EXPERIENCES

Institute of Sociology and Department of Public Health, Pontificia Universidad Católica de Chile

INSIGHTS

Labour and broader social and economic policies shape opportunities for older people and their functional ability, including how they contribute to families, communities and broader society. Harmonized, longitudinal data from 10 European countries, Chile and the USA from 2004 to 2015 allow for a comparative analysis of older people's labour market experiences in the five years before and after country- and gender-specific retirement ages.[95]

Key findings included that reaching "full pension age" did not signify a one-time labour market exit as many older people work part-time, partially retire, or constantly move in and out of the labour market. This dynamic situation means that analysing trajectories is more meaningful than taking a single picture. Five common trajectories **(Figure 2.8)** reflect the proportion of time spent on average in seven different "states" including working full-time, part-time, not in the labour force, retired, and partially retired. Although the two most conventional patterns are ***early retirement*** (45%) and ***conventional retirement*** (30%) across the 12 countries, a proportion of older people continue to ***work part-time*** or ***experience partial retirement*** (7.5%).

Adults who are ***not in the labour market*** are more likely to report poor self-rated health in countries with minimal social security and higher precarious employment conditions; whereas adults in ***part-time*** and ***partial retirement*** trajectories report better self-rated health. People on the predominantly ***part-time*** trajectory have, on average, fewer chronic diseases, while people in the ***early retirement*** and ***partial retirement*** trajectories have more. However, individuals with limited financial resources work longer regardless of their health status.

A country's welfare benefits and employment conditions also contribute to gender differences. Women make up the majority of ***part-time*** and ***not in the labour market*** trajectories, due to a combination of lack of benefits and women's significant contributions to families, resulting in women providing care for children and other older people.

Additional studies in a wider range of countries can further identify and evaluate whether:

- policies that promote longer working years need to take account of the employment conditions in which individuals have to continue working;
- policies allow for flexibility that mitigate gender-based discrimination and other forms of inequalities, including age-based discrimination;
- policies successfully promoting older people's longer working lives are coupled with lifelong learning and universal health coverage;
- policies have reversed perverse incentives that previously forced older people in poor health with limited financial resources to work longer; while older people who would like to work longer, are forced to stop working due to a mandatory retirement age.

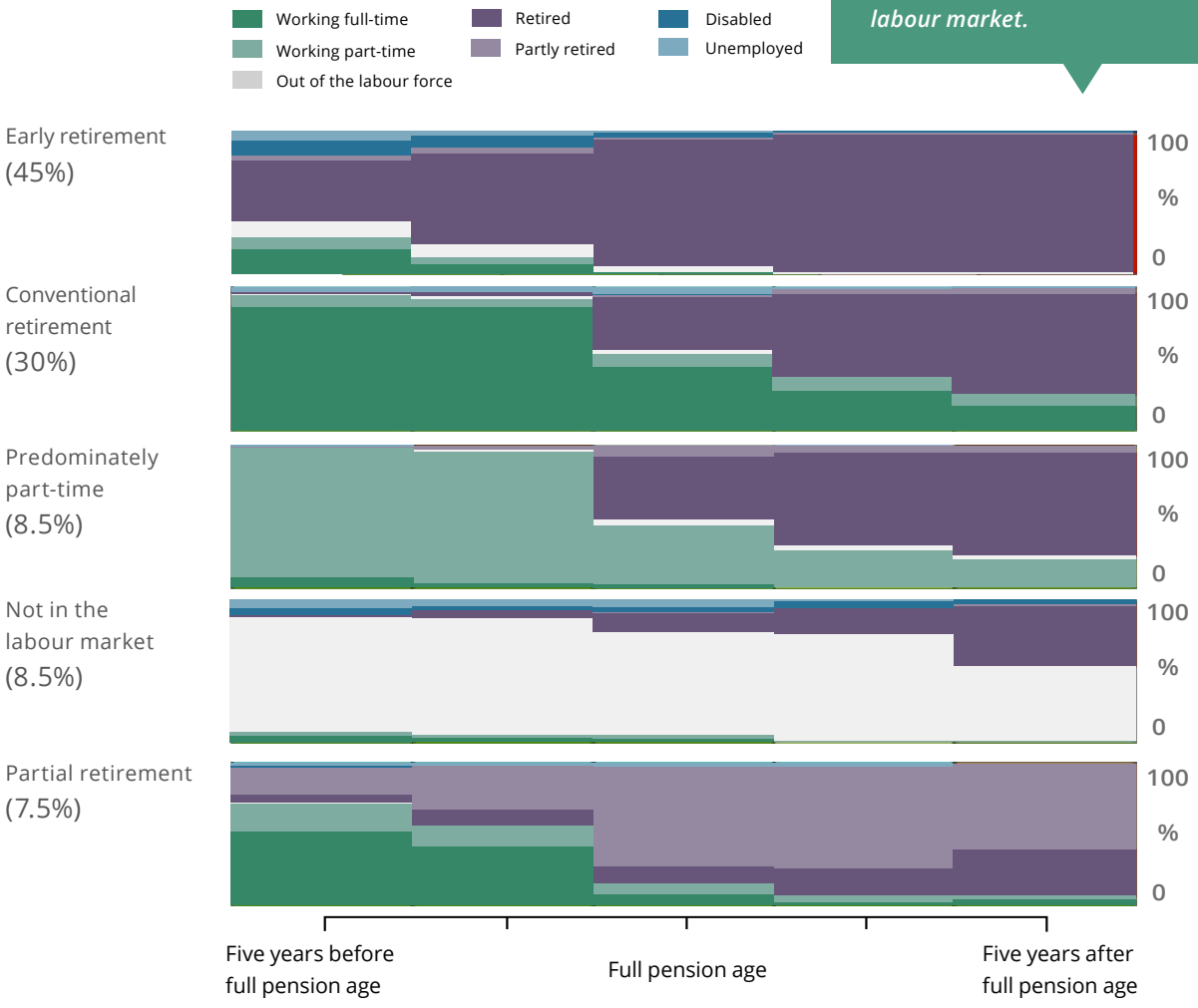
This is relevant to avoid exacerbating existing health inequalities and to increase flexibility in the options available to older people, such as part-time work and partial retirement. Comprehensive assessment of policies will identify if all older people are included in universal benefit programmes and if they have opportunities to increase their ability to learn, grow and make decisions.

FIGURE 2.8

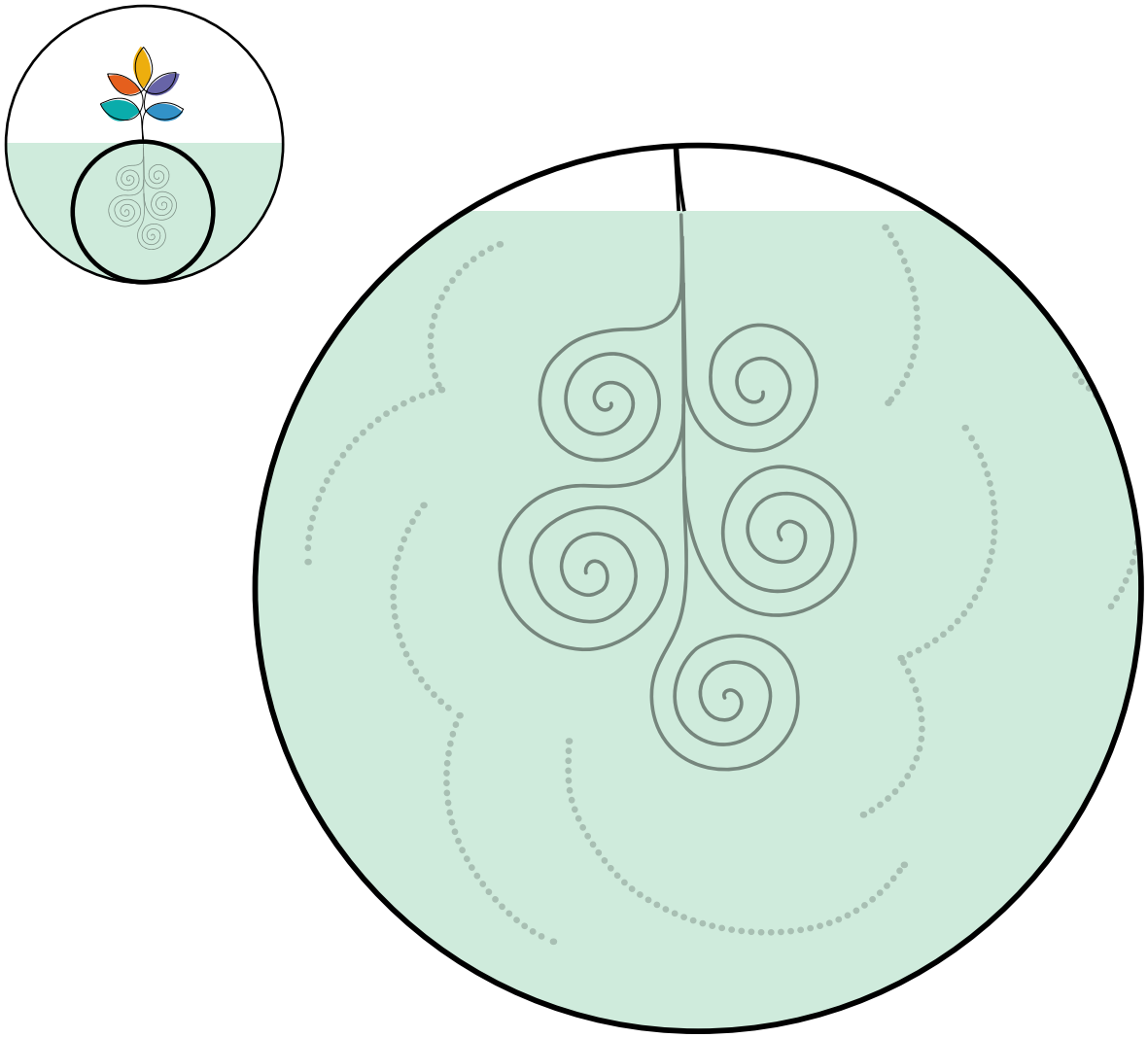
Five types of later life employment trajectories in 12 countries[95]

This represents some 3600 older people in longitudinal studies that collected data over 10 years.

Key findings included that reaching "full pension age" did not signify a one-time labour market exit as many older people work part-time, partially retire, or constantly move in and out of the labour market.



Understanding the impact of policies and actions on gaps[96] will enable all older people to have greater choice in how they want to contribute to families, communities and societies. Evaluating the impact of policies through longitudinal studies, engaging older people and policy-makers, and sharing experiences across countries can contribute to reforms that create conditions where extending working life enables older people to contribute in diverse ways. For further examples, see Section 4.



ENVIRONMENTS

We need to work more at measuring and understanding how people interact with their environments

For this baseline analysis, the third component of healthy ageing, environments and its five domains, were not assessed because of the limited number of nationally representative studies with comparable data. However, acceleration of impact and optimization of functional ability will require the tracking of environments and understanding to what extent these hinder or enable functional ability, and where progress is being made. Many approaches are promising and require further measurement standards, engagement of older people and could draw on wider data sources.

Integrating geographical data and existing studies that include older people can be a fruitful approach to investigating the potential interaction of environments with intrinsic capacity and impact on functional ability. Google Maps and Open Street Map can be used to identify different types of local amenities – such as library, post office, convenience store and hospital, as well as green and blue spaces in local areas → 2.13 – and determine their accessibility and distance from a person's home.[97]

2.13

Environments and association with cognitive capacities

How are data collected and analysed?

This approach was applied to population-based cohort studies[97] including older people in four countries: China, Dominican Republic, Mexico and United Kingdom. Postcodes and address information of the study participants was geocoded into latitude and longitude coordinates. Several environmental measures were generated, including distance to the nearest amenities, quantity of local amenities and percentage of green and blue spaces within 400 and 800 metres of participants' homes. The cross-sectional associations between these environmental measures and dementia, a focus of these studies, were examined and revealed that living far from local amenities such as post offices or convenience stores is associated with higher odds of dementia.

How could data be used?

The approach documents the potential in using publicly accessible databases to generate measures for the built and natural environment in diverse settings, and to investigate the role of environments in supporting cognitive capacity and functional ability in later life. Drawing on accessible databases avoids using country-specific administrative units and can identify specific environmental characteristics close to where people live. Results can help build up the evidence base and inform policies aimed at improving age-friendly environments and optimization of older people's functional ability.

What more could be done?
To facilitate analyses of existing data, it is important to enhance links between geographical and epidemiological data sets and further develop collaboration with researchers, older people, industry partners and other stakeholders, including:

- identifying local amenities together with older people to review local cafés, laundromats, swimming pools or other places that may have reserved hours for older people, to find out how welcome older persons feel, or not, and to ensure there are places where they can go with grandchildren, with friends, or alone or as a couple;
- facilitating access to historical data on environments to enable retrospective analysis;
- improving data availability and quality from online map databases, making it more uniform within and across countries;
- adding real-time measurement that can facilitate daily decisions, as well as support prospective and longitudinal analysis to trace healthy ageing over time and better establish cause and effect.

it is important to enhance links between geographical and epidemiological data sets and further develop collaboration with researchers, older people, industry partners and other stakeholders

FEASIBILITY OF DRAWING ON GEOCODED MAPS

Whether through a computer or smartphone application, many people have access to geocoded maps. A variety of map services are available to identify geocodes in different countries (e.g. Apple maps, Baidu Maps, Gaode Maps, Google Maps and OpenStreetMap). These maps reflect geotagging, the process of adding geographical information to various media. This can be done with devices that have a global positioning system (GPS) and is a popular feature of social media platforms that enables "check-ins" to locations when a user shares content. The process can engage people of all ages in coding what they think is important and what they value.

Relevant to the third component of healthy ageing (i.e. environments), geocoded maps enable a person to visualize localities in an area and explore choices in selecting a possible destination type. One can also determine the destination accessibility in terms of distance and time. For instance, Google Maps' Google Places provides locations of 90 different categories of place types, including shops, services, health providers, public transportation, religious centres and learning environments.

To investigate the feasibility and relevance of this method of assessing environments, nine environmental resource categories were defined to match the core indicators proposed to measure the age-friendliness of cities → 2.14.[98] Each of these categories also contributes to different functional ability domains – meeting basic needs; learn, grow and make decisions; mobility (getting around); build and maintain relationships; and contribute to families, communities and society. This was applied to the most populous cities in more than 180 countries from all six WHO regions. **Figure 2.9** illustrates dashboards from nine different cities.

INSIGHTS

2.14

GEOCODED MAPS CAN HELP ASSESS THE AGE FRIENDLINESS OF CITIES

Nine items measure natural and built environment, and services, systems and policies

Using geocoded maps, observations can be made on what is possible to access, and how accessible places or services are for older people. When a query is made at a given latitude and longitude in Google Maps – e.g. from a mobile telephone – the distance and travel time to each of up to 20 nearby places will be returned. For this feasibility study nine indicators listed below were generated through Google Maps.[99] These measure some aspects of two domains of environments (natural and built environment, and services, systems and policies):

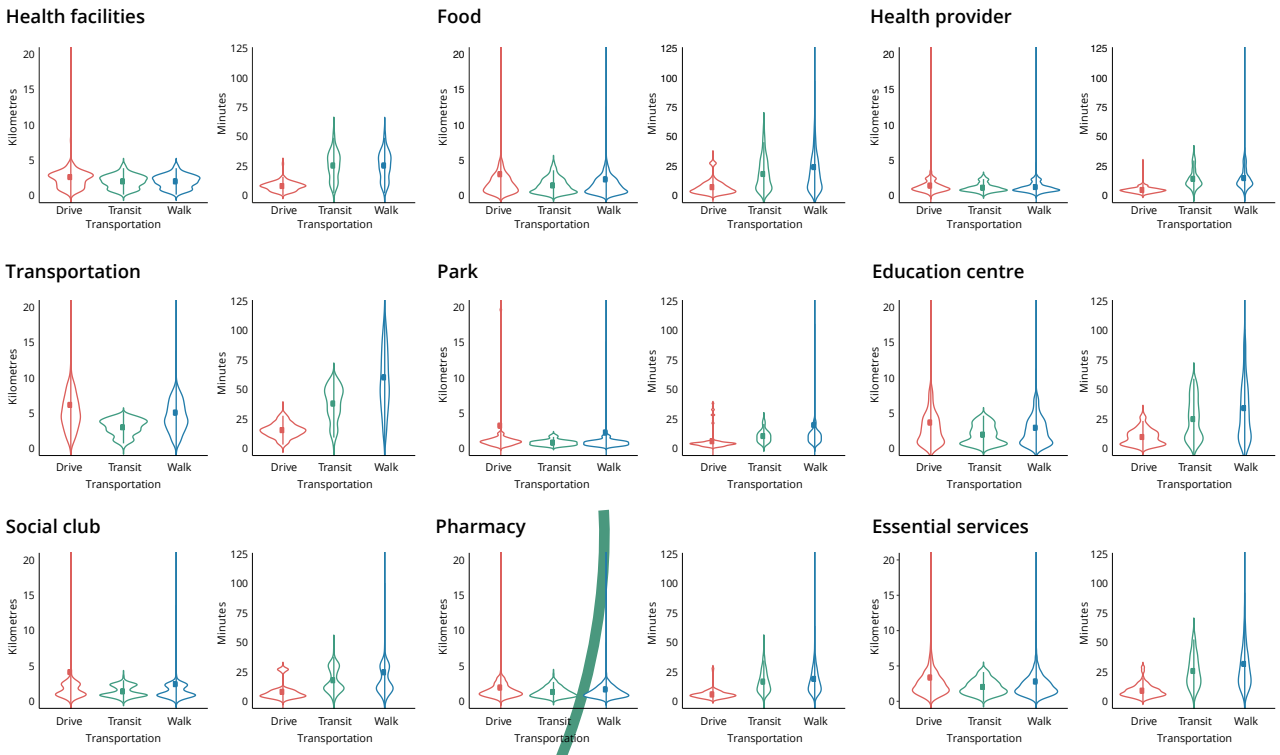
- public spaces (park)
- health facilities (hospital)
- health provider (doctor, dentist)
- pharmacy
- food (supermarket, restaurant, meal delivery)
- education centre (school, book store, library
- social club (school, hobby, sport and military clubs)
- transportation (bus station, subway station, taxi stand, train station)
- other essential services (bank, police, post office).

The distance in kilometres and travel times in minutes by driving, taking public transport, or walking for each of the nine categories for each city, are shown in separate "violin plots" for nine cities **(Figure 2.9)**. The validity of the maps reflects the extent and accuracy of what is geotagged as of November 2020.

FIGURE 2.9

Distance and travel times to places and services within a city

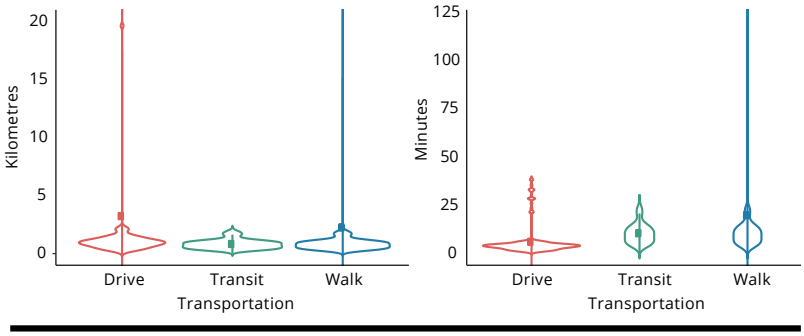
For Tokyo, a dashboard displays information for all nine indicators.



These violin plots are a combination of a box plot and density plot, rotated on its side to show the full distribution and shape of the data. A violin plot that sits on the floor, like a flat box with no line, indicates that most services for most people are very near.

TOKYO, JAPAN

Park



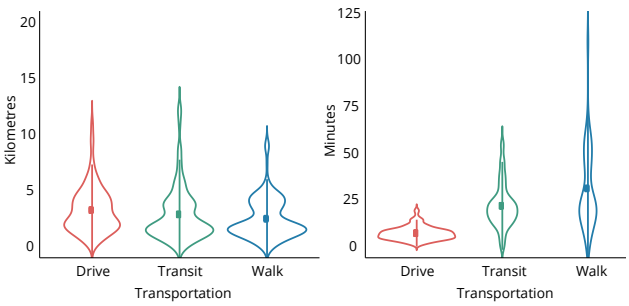
For people living in Tokyo, parks are within a few kilometres, whether driving, taking public transportation or walking.

Some older people may take longer to walk the same distance.

INSIGHTS

DOHA, QATAR

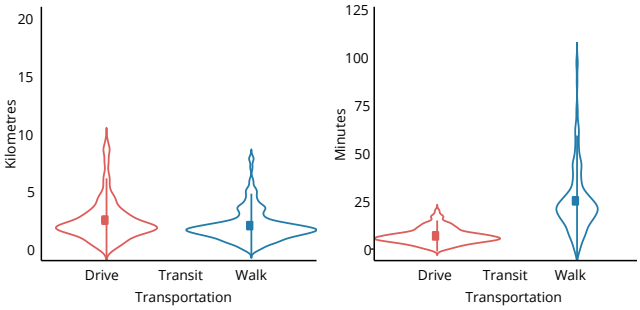
Health facilities



Distance to health facilities in Doha seems to vary. However, the average distance using all examined modes of transport is about 3 km. Average transit and walking time appear to be similar.

ACCRA, GHANA

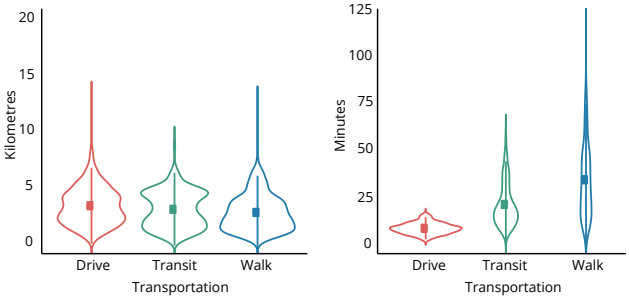
Pharmacy



Pharmacies in Accra are on average at a distance of 2.5 km, with the greatest proportion concentrated at less than 6 km from each location. Average walking distance is around 25 minutes, while average driving distance appears to be 10–15 minutes. No public transport information is provided (November 2020).

SANTIAGO, CHILE

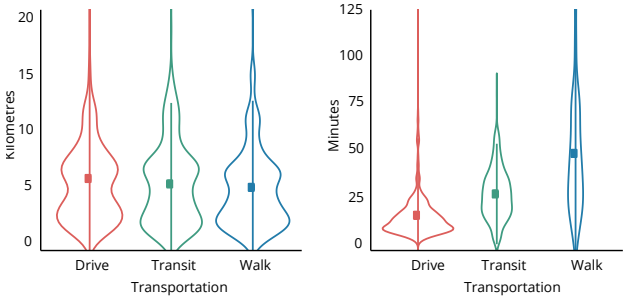
Health provider



The greatest proportion of health providers in Santiago appear to be situated within a 2–5 km distance from each location, a average driving time of less than 10 minutes and a public transport travel time of less than 25 minutes.

HELSINKI, FINLAND

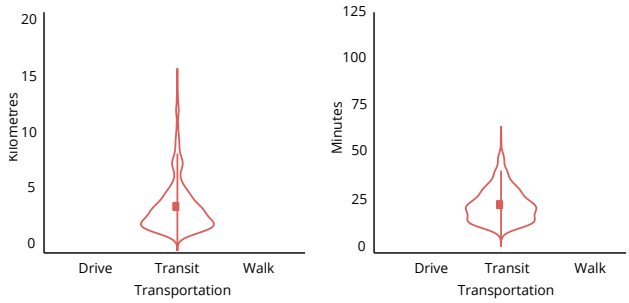
Food



The distance to places offering food (supermarkets, restaurants, meal delivery) in Helsinki varies. However, the highest proportion is situated 2.5–7 km from the selected points of measurement for drivers and those taking public transport, and 2–7 km for those walking.

SEOUL, REPUBLIC OF KOREA

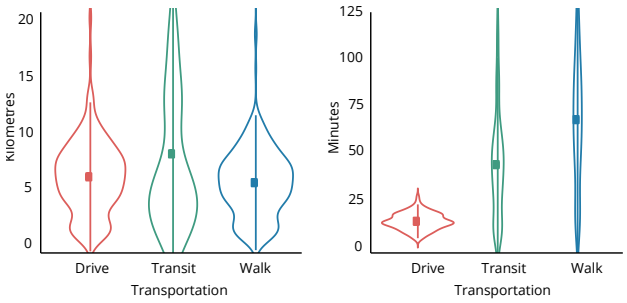
Education centre



While Google Maps does not provide information on driving or walking routes (November 2020), it does provide information on public transport in Seoul. The highest proportion of education centres from each location is less than 7.5 km with a average transit time of 20 minutes.

JOHANNESBURG, SOUTH AFRICA

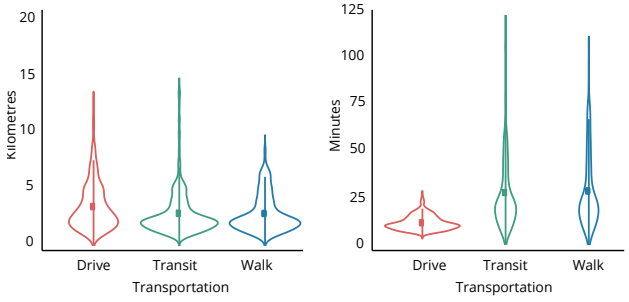
Transportation



Getting to a bus, subway, train station or taxi stand from the nine locations sampled in Johannesburg by driving or walking is on average about 5 km. Taking public transport to another location is around 8 km. There is great variation in the time to walk and the time to take transport to other locations, but less variation for those who can drive.

BANGKOK, THAILAND

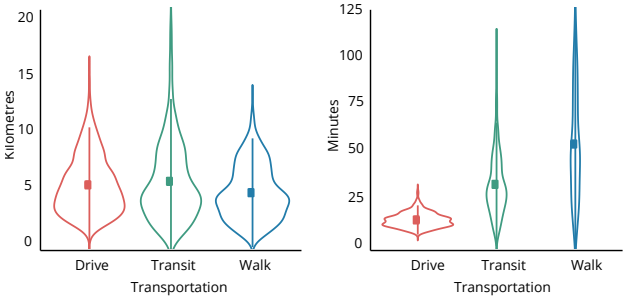
Social club



There appear to be quite a few social clubs in Bangkok, given that the average distance to one using any of the measured modes of transport is around 2.5 km. In Thailand, the term for "elderly club" which refers to a place set up for older people to participate in social activities in the community, has yet to be geotagged.

CHICAGO, USA

Other essential services



The average distance to Chicago's essential services is around 5 km, but travel times vary. Driving is most efficient at less than 15 minutes while public transport takes double this amount of time and average walking is close to an hour. The accuracy of Chicago's geotagged maps is considered to be relatively high → 2.15.

2.15

Chicago

One of the world's top "smart cities"

INSIGHTS

Chicago is one of the world's most geotagged cities with a data-driven approach that leverages geospatial data to solve problems and align goals.[100]

Chicago aims to create inclusive and accessible urban environments, a goal since joining WHO's Age-Friendly Cities and Communities network in 2012. To enable government agencies to improve and develop services to support older people to age in place, a baseline assessment and policy-building-exercise collected data from more than 2600 residents.[101] This included 60 indicators covering nine domains. For example, one domain, outdoor spaces and buildings, investigated access to public buildings; clean environments; green spaces and parks; and safe streets. Adults of all ages reported great satisfaction that "parks and green spaces are within easy walking distance from my home" while indicators showing the need for improvement included "bicycling conditions are safe for pedestrians" and better "conditions for walking".

Healthy Chicago 2.0, launched in 2016, prioritizes health equity and aims to address the social determinants of health.[102] One goal is to improve Chicago's built environment and transportation network so that residents can live and age well.

The city uses several data and analytics platforms to provide context-specific awareness of the environment. The Chicago Health Atlas website has interactive maps of health-related data over time and across communities, plus locations of various health resources.[103] The website is not only for policy-makers and health-care professionals; all residents can track progress of implementing Healthy Chicago 2.0.

Another prominent system is WindyGrid, a geographic information system that delivers government data in real time and provides a unified view of city operations. The data include locations of 911 (emergency assistance) and 311 (for help with non-emergency city services) service calls, fire and ambulance vehicles, roads needing repair, and other critical information such as building permits, food safety inspections and tracking mosquitos that carry West Nile Virus.[104]

Chicago was the first city to launch the "Array of Things" (AOT).[105,106] This is a network of interactive sensor boxes around Chicago that collect real-time, granular data on the city's environment (such as light, air and surface temperature, vibration, sound intensity, air quality, pedestrian and vehicle traffic). These data platforms have many uses, including their potential for targeted responses ensuring mobility, accessibility of services and maintenance of a safe environment for residents of all ages.

INSIGHTS

POLICY IMPLICATIONS

- **Environments play a crucial role in promoting healthy ageing and ensuring no older person is left behind.** Cities and communities can foster the full participation of older people. This requires a better understanding of how people interact with their environments and to what extent these hinder or enable functional ability. Moreover, all domains of environments need to be assessed including support and relationships → 2.9, attitudes, and broader services, systems and policies.

- **Improvements in geocoded maps will accelerate over the next decade.** This is an opportunity for older people to benefit from real-time information, whether quantitative or qualitative, in the context of where they live, socialize and work – from meeting basic needs, being safe at home and in their communities, and enabling them to do what they enjoy and value.

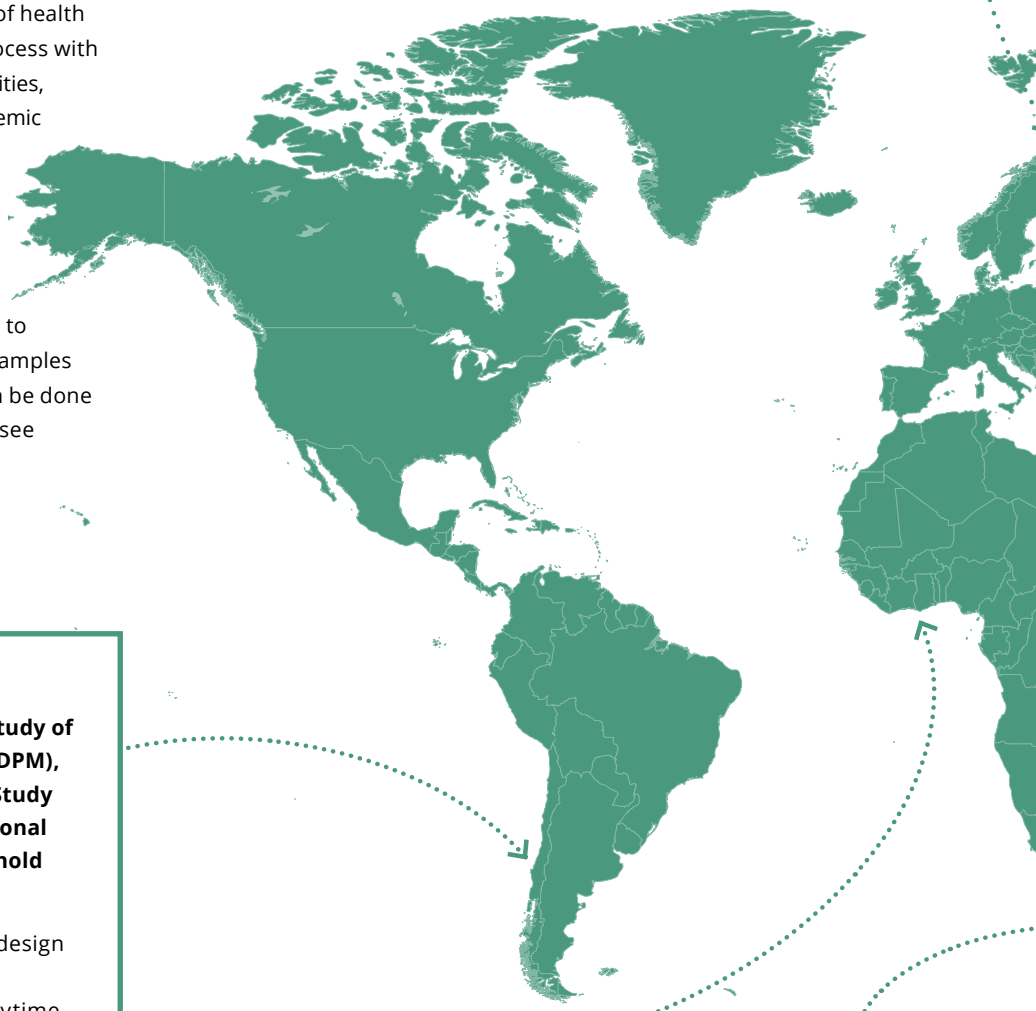
- **It is fundamental to increase health literacy at all ages.** Technologies can facilitate innovations that empower older people to monitor and understand their own health, and track their trajectories of healthy ageing, enabling greater decision-making about their own lives.

- **This raises the broader challenge of decreasing the digital divide by gender, geographical location and age.** Men, urban residents and younger people are more likely to be online than women, rural dwellers and older people.[107] This has implications for communication, telehealth, telemedicine, buying goods and services, and ways of working and contributing to society. Digital inclusion requires increasing access to the Internet and smartphones that older persons can easily use, and capacity-building in using these technologies as part of lifelong learning. Inclusive and equitable development will accelerate optimization of functional ability.

Engagement of older people and municipalities can steer the use of digital technology to support enabling environments – and reduce the digital divide between older and younger people.

USING DATA TO DRIVE IMPACT AT COUNTRY LEVEL

Driving impact for healthy ageing is not only about data collection. It is also about how leaders and decision-makers in multiple sectors are driving the use of these data to improve policies and programmes for older people. During 2019–2020, eight ministries of health from all WHO regions led a collaborative process with other ministries, regional and municipal entities, civil society (including older people) and academic partners to compile reports on the types of data sources in their country, the extent to which information is disaggregated at older age groups, and to describe case studies on how to inform policies or programmes relevant to older people. New opportunities to collect and use data were also identified. Examples drawn from these efforts illustrate what can be done to accelerate impact. For further examples, see Section 4.



CHILE[108]

National Survey of Socio-Economic Characterization (CASEN), National Study of Dependency on the Older People (ENDPM), Survey on Quality of Life in Old Age, Study of Inclusion and Exclusion of the National Service of older people, Social Household Registry

Multiple information sources support design and evaluation of the Day Centres Programme which provides specialized daytime services for older people with mild-to-moderate dependence.

GHANA[110]

National Health Insurance Authority (NHIA) Data

Creates and updates drug lists relevant for older people and their specific needs covered under the National Health Insurance Scheme; data also used by decision-makers to shape policies that support older people and other vulnerable groups.

QATAR[111]

Planned National Ageing Survey Qatar (NASQ)

The National Public Health Strategy, Healthy Ageing component, catalyzed planning and commitment to benchmark national progress with international progress. The new survey will also inform integrated social and health care services for older people.

FINLAND[109]

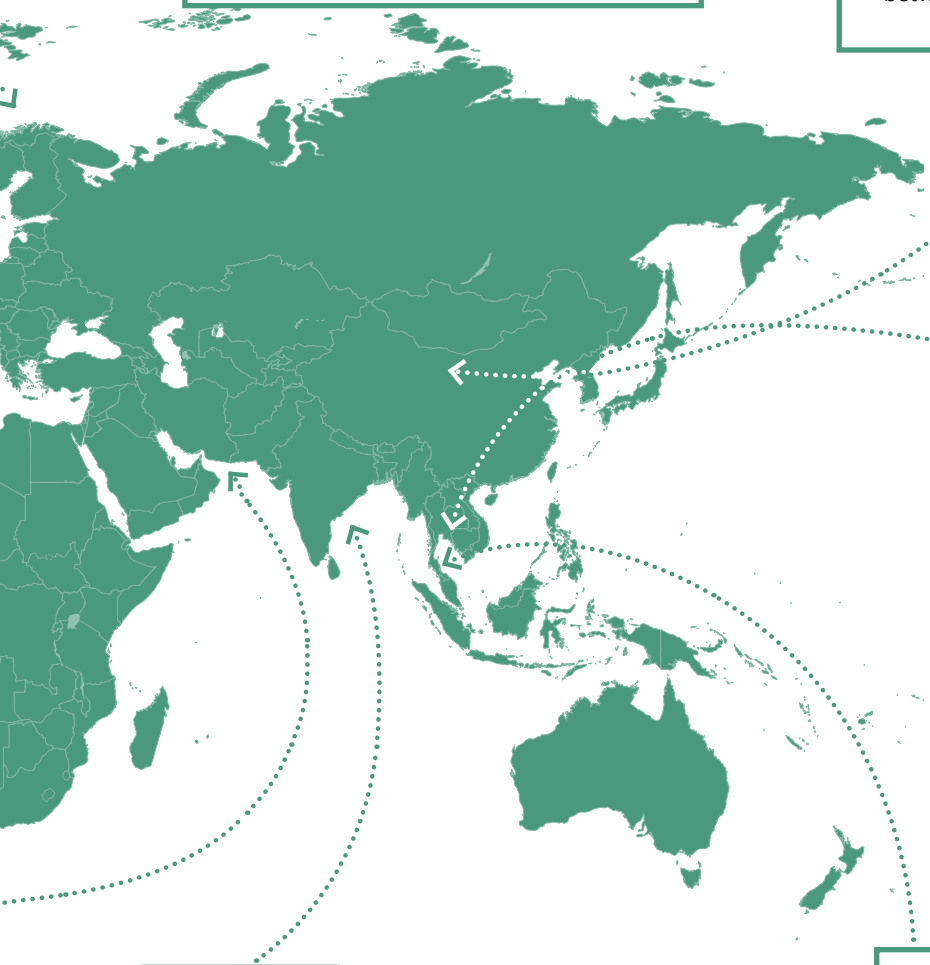
Knowledge management in regional health and social care district, Eksote

Health and social care services are monitored through the TIJO model, using an artificial intelligence based information system, supporting provincial-level integration of services. Information includes the specific needs of older people, costs and services provided over time.

CHINA[115]

Data from databases managed by the National Bureau of Statistics (NBS), National Health Commission (NHC), The National Health Care Security Administration (NHSA)

Databases and analysis of information informed creation of the Health Promotion Action for the Elderly, 2019. The Action proposes targets and operational plans, such as to reduce the incidence of care dependency among people aged 65–74 years between 2019 and 2030.



THAILAND[113]

Statistics Office Survey of the Elderly

With other data sources, used as a basis for the widely cited annual *Report on the Situation of the Thai Elderly.*

The 2019 report features an evaluation of recently launched national long-term care schemes for older people with community participation. Policy recommendations for developing a social safety net for older persons are outlined.

INDIA[112]

Data managed by the Office of the Registrar General & Census Commissioner, Hospital records, Sample Registration System, Disease registers, Epidemiological surveillance

Supports the Integrated Program for Older Persons and Senior Citizens, 2018. The programme provides financial, maintenance and general support for a variety of services for older people, including continuous care, educational and entertainment opportunities, and mobile units providing care for older persons living in rural, isolated areas.

SINGAPORE[114]

Data gathered by the Land Transport Authority (LTA)

Based on discussions with community organizations and older people, and through Senior Footprint Mapping Exercises, the LTA has developed approaches to support older people to continue to travel on public transport and as pedestrians, such as **Green Man+** – a feature on crosswalks, or pedestrian crossings, allowing older people to scan a card and extend the "green man" time on the pedestrian crossing signal.

Data and information are needed for each jurisdiction. National case studies also acknowledge that, in some countries, programmes addressing older people are designed and administered by state or provincial authorities. State-level data and information are therefore crucial for monitoring and evaluating the impact of programmes. For instance, the **Longitudinal Ageing Study in India**[116] is a standardized survey conducted in every state and union territory in India, producing subnational and nationally representative information. The same is the case for the **Canadian Longitudinal Study on Ageing**[117,118] which provides provincial-level estimates of health determinants, health status and health-system utilization. Both are important for tracking impact on older people's lives.

There are also stand-alone state or provincial studies that inform policies and programmes. In the USA, the state of California has the largest population of older people in the country. The **California Health Interview Survey** is the largest state health survey in the USA. It releases annual population-representative data, disaggregated by the state's 58 counties and diverse racial and ethnic groups. Information, such as the Elder Index,[119] a measure of older people's economic security and its interactive dashboard, are routinely used by state legislators, policy-makers, local health departments, community organizations and other stakeholders to plan across sectors, including for health services and affordable housing.

2

KEY MESSAGES

At least 142 million older persons worldwide currently lack the ability to meet their own basic needs. Gender-based and socioeconomic inequalities contribute to differences within and across countries.

Policy implication: Cooperation is needed to ensure that these basic needs are fulfilled and that abilities that contribute to older people's well-being are strengthened.

- Although some declines in capacities may not be avoidable, older people at any age should have the ability to meet all of their basic needs, and approaches should mitigate inequalities in opportunities.
- Older persons are not a homogeneous group, so both universal and targeted approaches are needed to leave no older person behind.
- A feasibility study to measure environments highlights that it is possible to draw on big data such as geocoded maps.

Three quarters of the world's countries have limited or no comparable data on healthy ageing or on older age groups, and this situation contributes to the invisibility and exclusion of older people. For each component of healthy ageing, this baseline analysis could provide only a snapshot. Rather than reporting country-specific estimates by age and sex, this snapshot provides an overview of the availability and comparability of data.

Policy implication: To monitor progress over the Decade, there is an urgent need to work together in an accelerated approach to:

- monitor healthy ageing across the life course;
- identify core items and standardize the data that are being collected in order to cover all components and domains of healthy ageing, giving a comprehensive and comparable picture of older persons' lives, needs and expectations;
- continue to advance research on metrics of healthy ageing to describe fully each component (intrinsic capacity, functional ability and environments) and produce meaningful indicators useful for decision making to optimize functional ability;
- employ innovative approaches to collect, analyse and use information, both for and by older persons;
- increase the interoperability of data by harmonizing standards and platforms to share and analyse data;
- disaggregate data by gender, disability, urban or rural residence, socioeconomic status, educational level, ethnicity or indigeneity and other drivers of inequality; and
- align reporting and analysis with the indicators of the SDGs.[120]

Cases from around the world highlight commitment to collecting and analysing data, often with new technologies and methods engaging older people. These point out ways to connect individuals and their environment, with data and information supporting actions to optimize functional ability. Older people can also use this information to care for themselves, to make informed decisions and to pursue what they value.

National case studies indicate that every country can use existing data to inform policies and programmes for older people and find ways to link across sectors and use a wide range of data sources (administrative, facilities, insurance, etc.).

This baseline analysis of 2020, initiates tracking progress. The next section reviews indicators endorsed in the Decade and considers what improvements we can work towards.

3

WHAT IMPROVEMENTS COULD WE EXPECT BY 2030?

Understanding and measuring success together

WHO has a mandate to track progress over the Decade in 2023, 2026, 2029 and 2030 at both national and subnational levels to ensure that no older person is left behind.

The Decade of Healthy Ageing advocates for evidence-informed actions to optimize functional ability and accelerate the impact on older people's lives by 2030.[2,6] Along with this baseline assessment, WHO has a mandate to track progress over the Decade in 2023, 2026, 2029 and 2030 at both national and subnational levels to ensure that no older person is left behind.

Over the Decade, many sectors will have to be involved to improve healthy ageing – including not only the health sector but also finance, long-term care, social protection, education, labour, housing, transport, information and communication. This effort will include national, subnational and local governments as well as the health and social care workforce, civil society, the private sector, organizations for older people, academia, and older people themselves and their families and friends. Engagement and communication of information needs to be relevant to a wide range of stakeholders at all levels.

Member States have a key role in sustaining their commitments and creating the conditions that enable multiple stakeholders, sectors and jurisdictions to work together, including listening to the voices of older people and their expectations for a successful Decade. They are encouraged to produce and disseminate data, share reports and organize events to discuss progress and adapt plans, as ministries of health in eight countries across all WHO regions recently put into practice (see Section 2). Across these eight countries, processes engaged other ministries, civil society and partners in other United Nations agencies, along with national planning commissions, municipal and subnational authorities, public health institutes, health information systems and national statistical offices – the latter responsible for monitoring each country's progress on the SDG indicators.[120] Similar efforts should be encouraged in all countries, and documented so that learning can be shared and discussed.

This baseline assessment includes two types of indicators, as endorsed in the Decade:

- **progress at the national level,** as agreed for the Global Strategy on Ageing and Health; and
- **outcome and impact on people's lives,** including healthy life expectancy and healthy ageing.

Based on the estimated number of people worldwide who are unable to meet some of their basic needs (the only domain of functional ability with comparable data and estimates in this baseline analysis), "what if" scenarios for 2030 are also briefly considered.

PROGRESS AT NATIONAL LEVEL

Ten progress indicators at national level reflect the process endorsed in the Global Strategy on Ageing and Health at the 69th World Health Assembly[3] in 2016 **(Annex 5)**. These were reported to the 71st World Health Assembly in the mid-term progress review of the first action plan in 2018 and were endorsed within the Decade of Healthy Ageing in 2020 by the 73rd World Health Assembly.[121] A second round of reporting on the 10 progress indicators completed in May 2020 serves as a baseline for the Decade.

All WHO and UN Member States have committed to implement actions to fulfill each indicator. **Table 3.1** provides a global overview, comparing achievement by 2018 and by 2020, together with the rate of progress.

Globally, with potentially 194 countries reporting information, the good news is that there is improvement on 10 out of 10 indicators, documenting an increasing worldwide commitment to healthy ageing and the engagement of older people.

An increasing worldwide commitment to healthy ageing and the engagement of older people is documented.

However, depending on the indicator, some 22–36% of all countries have not yet reported on progress in 2020, though this proportion varies across regions.

On the basis of reports from those countries which have reported on progress, the top three indicators with affirmative action reflect national commitment – having a focal point on ageing and health; having a strategy, policy or plan on ageing and health; and holding multi-stakeholder forums that include older people.

Moreover, based the rate of progress between 2018 and 2020:

- The greatest increase (34 additional countries, a 125% jump) is in national policies for comprehensive assessment of older people, confirming a rapid demand for integrated person-centred care for older people.
- The smallest increase (2 additional countries) is in national legislation and enforcement strategies against age-based discrimination, which is a basic requirement to combat ageism and is fundamental to the Decade.

Of concern is the fact that a simple projection from now to 2030 suggests that four indicators might not be reached until 2030, and only one by the next reporting period – 2023 – underlining the need for accelerated action.

ARE WE ON TRACK?

An older person, a member of parliament, mayor of a city or a head of a long-term care facility could ask whether their country is on track to implement the Decade of Healthy Ageing and achieve measurable improvements on older people's lives by 2030.

One approach to tracking national progress is a straightforward projection based on the rate of improvement documented for each indicator between 2018 and 2020. From a global perspective, the collective commitment is for all countries to report "yes". To project whether all countries are on track, the observed rate of increase was applied through to 2030, without any other assumptions, to project in what year all 194 countries might achieve each indicator.

INDICATORS OF PROGRESS AND IMPACT

- need to make a difference in older people's lives;
- can be improved by governments and other stakeholders' actions; and
- need to be measured often enough to show if progress is on track

Table 3.1 shows that out of the ten indicators, four might be reached by all countries only after 2030, signaling that **we are not on track**. A further three indicators might be achieved either in 2027 or 2028; two around 2025; and only one around 2023 which is the next date for reporting (see last column).

This simple projection points out that accelerated efforts are needed for all countries to implement these actions. A second question is: if we are not on track, **what are we going to do about it?** Most stakeholders would probably agree that in order to catalyze the transformative change committed to in the Decade, progress needs to be accelerated. It could be reasonable to see all countries working with stakeholders, including civil society and communities, to implement the 10 national progress indicators by, for instance, midway through the Decade. This includes improving data and information on older people (indicators 9 and 10) as this would equip countries to track the impact on older people's lives. Other scenarios could also be envisioned and considered.

TABLE 3.1

Global overview on 10 progress indicators:

Where are we, what is the rate of progress, and are we on track?

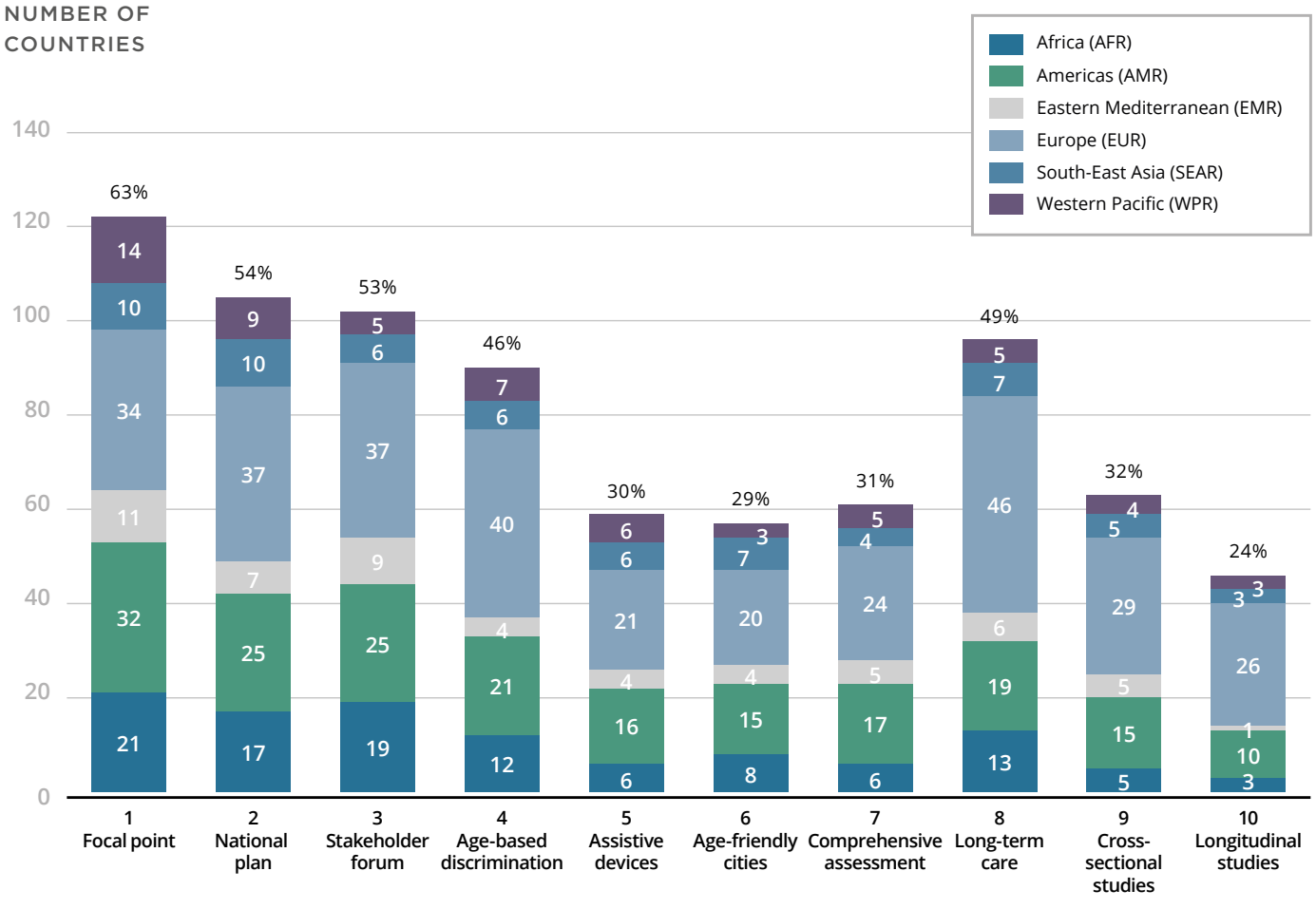
	Number of countries out of 194 responding "yes" to having reached each progress indicator			Current rates of increase and expected year 194 countries will reach each indicator	
Progress indicators	**2018**	**2020**	**Additional countries since 2018**	**Two-year rate of increase (%) 2018–2020**	**At the current rate, all countries are projected to achieve indicator**
Overall national commitment to optimize healthy ageing					
(1) **Focal point on ageing and health**	112	122	10	9%	**after 2030**
(2) **Policy, strategy or plan aligned to healthy ageing**	88	105	17	19%	around 2027
(3) **Multi-stakeholder forum**	88	102	14	16%	around 2027
Contribution to each of the Decade's priority action areas					
(4) **Legislation and enforcement against age-based discrimination**	88	90	2	2%	**after 2030**
(5) **Regulations to support access to assistive devices**	37	59	22	59%	around 2025
(6) **Programme to foster age-friendly cities and communities**	34	57	23	68%	around 2025
(7) **Policy to support older people's comprehensive assessments**	27	61	34	126%	around 2023
(8) **Long-term care policy**	80	96	16	20%	around 2028
Increase nationally representative data on healthy ageing focusing on older people					
(9) **Cross-sectional data on health status and needs**	54	63	9	17%	**after 2030**
(10) **Longitudinal data on health trajectories**	35	46	11	31%	**after 2030**

The number of countries that in 2020 have reported achievement of each progress indicator are compiled in **Figure 3.1**, disaggregated by each of the six WHO regions. This recognizes that each region has a different number of Member States contributing to the overall number of 194 countries.

FIGURE 3.1

Number of countries responding "yes" to each indicator

region and percentage of 194 Member States, 2020

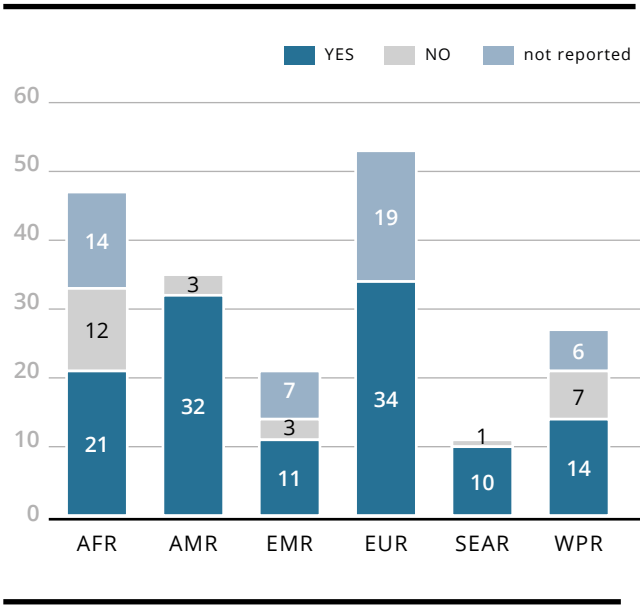


The next 10 graphs and tables provide further details about each indicator by region. This includes the percentage of countries reporting achievement in 2018 and 2020, both globally and within each region, and the number of countries in each region who have yet to report on achievement. Ensuring that all countries report "yes" or "no" by 2023 is a priority.

Overall national commitment to optimize healthy ageing

1

Number of countries with
a focal point on ageing and health in the Ministry of Health, 2020

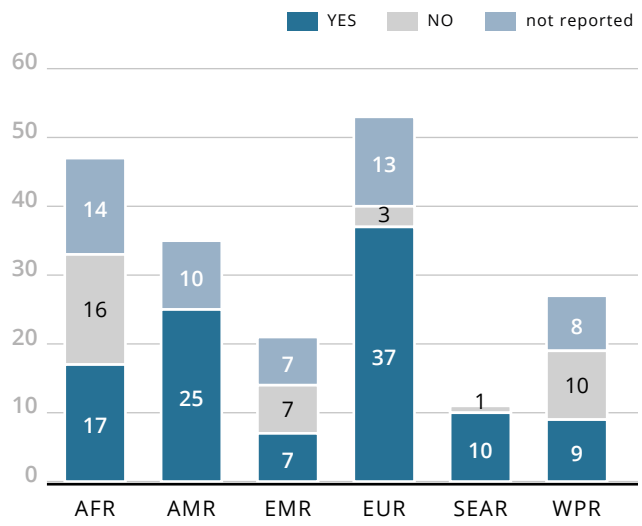


Percentage of countries with
a focal point on ageing and health in the Ministry of Health

	2018	**2020**
Globally	58%	**63%**
AFR	40%	**45%**
AMR	89%	**91%**
EMR	38%	**52%**
EUR	64%	**64%**
SEAR	82%	**91%**
WPR	41%	**45%**

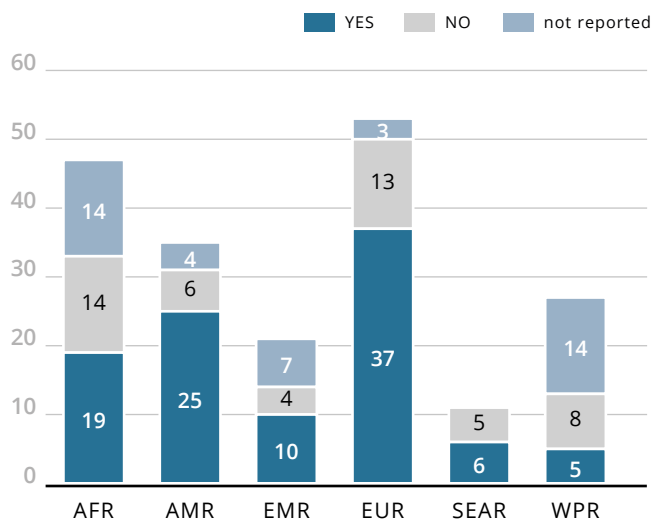
2

Number of countries with
national policies, strategies and plans aligned to healthy ageing, 2020 → 3.1



3

Number of countries with
a national multi-stakeholder forum or committee on ageing and health, 2020



Percentage of countries **reporting a national plan on ageing and health**

	2018	**2020**
Globally	45%	**54%**
AFR	34%	**36%**
AMR	46%	**71%**
EMR	33%	**33%**
EUR	58%	**70%**
SEAR	82%	**91%**
WPR	33%	**33%**

Percentage of countries with **a national multi-stakeholder forum or committee on ageing and health,** 2020

Region	2018	**2020**
Globally	45%	**53%**
AFR	30%	**40%**
AMR	57%	**71%**
EMR	38%	**48%**
EUR	66%	**70%**
SEAR	55%	**55%**
WPR	19%	**19%**

TWELVE NATIONAL PLANS ON AGEING AND HEALTH, AND POLICY COHERENCE WITH HEALTHY AGEING

INSIGHTS

With the endorsement of the WHO Global Strategy and Action Plan on Ageing and Health, all Member States committed to develop or update national policies, strategies or plans aligned to healthy ageing. **An in-depth look at existing plans can facilitate the exchange of experiences across countries.**

A first step involved examining the written text of existing national plans from a range of countries representing all six WHO regions

A first step involved examining the written text of existing national plans from a range of countries representing all six WHO regions
Ghana (Africa)[122,123], Chile[124,125] (the Americas), Oman[126] (Eastern Mediterranean), Czechia[127], Malta[128], Poland[129], Slovenia[130], Turkey[131] (Europe), India[132,133], Sri Lanka[134], Thailand[135] (South-East Asia), and China[136] (Western Pacific). All national plans committed to some areas that are in line with the WHO Global Strategy and WHO regional frameworks on ageing and health, indicating some policy coherence.

However, commitments in some areas could benefit from stronger policy and related actions. For instance, on combating ageism, most countries committed to increase public knowledge on ageing-related issues, but only a few countries proposed to collect evidence-based information about ageing or to modify laws or policies that discriminate on the basis of age.

National plans should support optimization of the functional ability of all older persons. Across most of the 12 plans, areas that require further policy attention include reducing the burden of out-of-pocket payments for health services that address conditions concentrated in older people, or declines in intrinsic capacity (such as declines in hearing, vision or locomotion). These can be addressed through assistive devices, medical treatments or rehabilitation, and should be part of each country's path to Universal Health Coverage (UHC) inclusive of older people.

For new areas identified in the Global Strategy, it was not surprising that policy in most countries requires updating – e.g. to expand existing efforts addressing quality of care, to shift care towards person-centred and integrated care for older persons, to increase alignment and integration of long-term care systems (including financing, workforce and services) across health and social sectors, and to improve measurement and monitoring of healthy ageing.

National plans should support optimization of the functional ability of all older persons

A second step examined whether resources and accountability mechanisms are in place to ensure implementation. Six aspects were considered. Of these, all the countries committed to: 1) identifying a national focal point on ageing and health. Most countries proposed: 2) collaboration with all sectors and stakeholders, and 3) monitoring and reporting mechanisms on the policy's implementation. However, only a few countries, within the written policy and plans, proposed: 4) to allocate financial resources; 5) to have detailed timeframes for specific, defined actions; or 6) to involve older people systematically in the development, implementation, monitoring and evaluation of plans on ageing and health.

LOOKING FORWARD

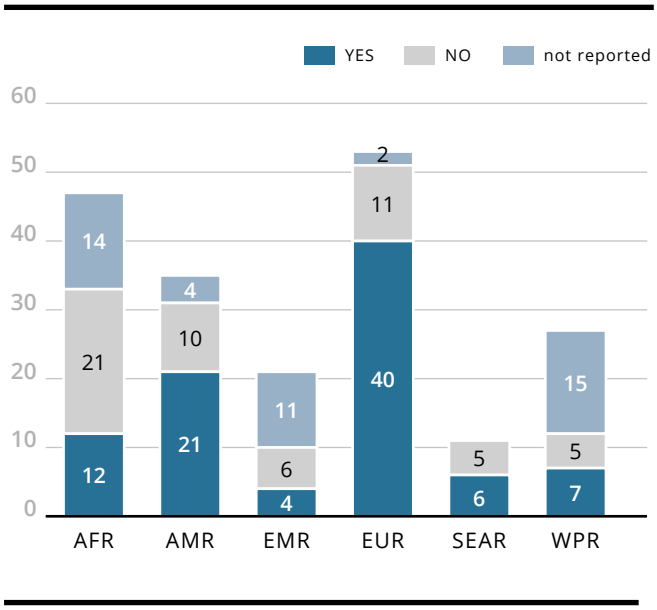
With the endorsement of the Decade of Healthy Ageing by WHO Member States, and by the UN General Assembly in 2020, renewed policy dialogues within and across countries should offer a new window to strengthen policy alignment across subnational-national-regional and global efforts, with strong and visible engagement of older people. This is all part of getting ready for the Decade of Healthy Ageing.

A second step examined whether resources and accountability mechanisms are in place to ensure implementation

Contribution to each of the Decade's priority action areas

4

Number of countries with **national legislation and enforcement strategies against age-based discrimination,** 2020



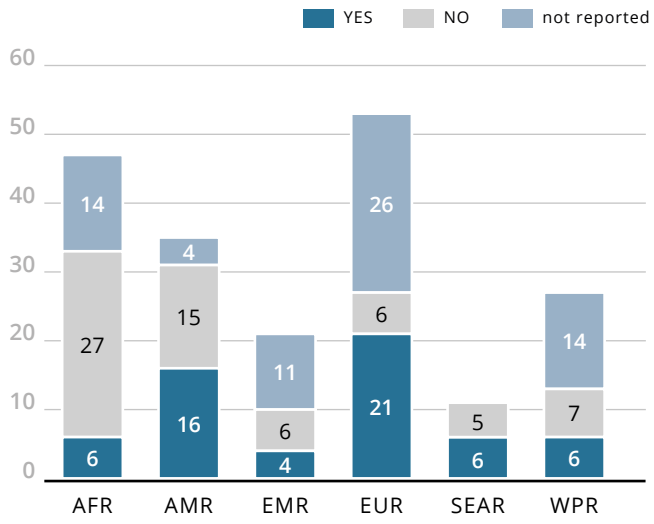
Percentage of countries reporting **national legislation and enforcement strategies against age-based discrimination**

	2018	2020
Globally	58%	**63%**
AFR	40%	**45%**
AMR	89%	**91%**
EMR	38%	**52%**
EUR	64%	**64%**
SEAR	82%	**91%**
WPR	41%	**45%**

Member States commit to adopt or ratify legislation to ban age-based discrimination and ensure mechanisms for enforcement within the Decade action area "change how we think, feel and act towards age and ageing".

5

Number of countries with **legislation/regulations that support older people to access assistive devices from the WHO priority assistive products list**, 2020

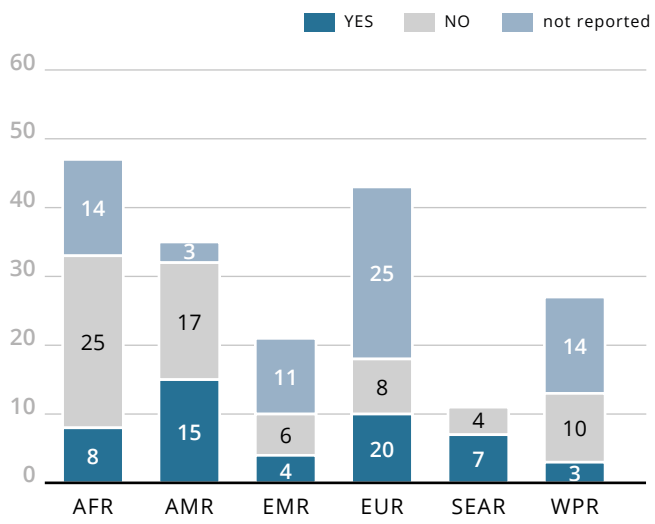


Percentage of countries reporting **national regulations/legislation to support access to assistive devices**

	2018	2020
Globally	19%	**30%**
AFR	13%	**13%**
AMR	40%	**46%**
EMR	19%	**19%**
EUR	0	**40%**
SEAR	64%	**55%**
WPR	22%	**22%**

6

Number of countries with **a national programme to support activities in line with the WHO Global Network for Age-friendly Cities and Communities**, 2020



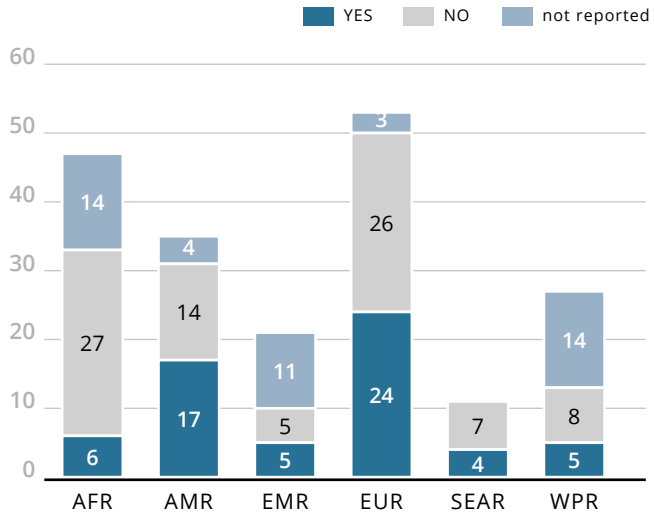
Percentage of countries reporting **a national programme to foster age-friendly environments**

Region	2018	2020
Globally	18%	**29%**
AFR	11%	**17%**
AMR	31%	**43%**
EMR	14%	**19%**
EUR	13%	**38%**
SEAR	45%	**64%**
WPR	11%	**11%**

Member States commit to promote and develop national and/or subnational programmes on age-friendly cities and communities, and engage with communities, older people and other stakeholders, including the private sector and civil society, in designing these programmes, within the Decade action area "ensure that communities foster the abilities of older people".

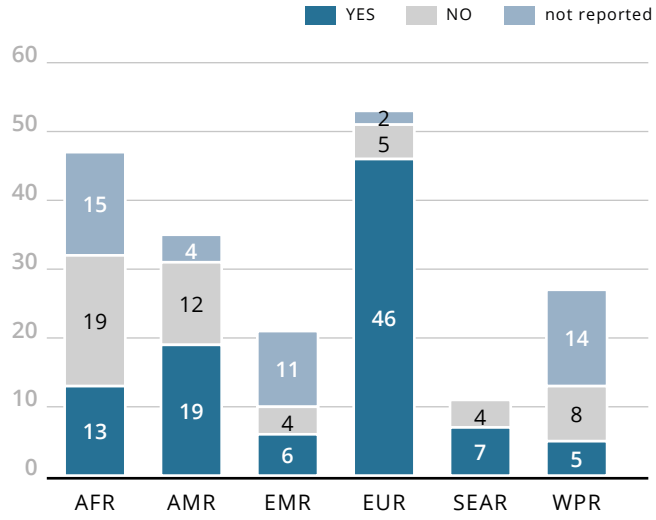
7

Number of countries with **national policies in place to support comprehensive assessments of the health and social care needs of older people,** 2020



8

Number of countries with **a national policy on long-term care, including homes, communities and institutions when needed,** 2020 → 3.2



Percentage of countries with **a national policy to support comprehensive assessments of older people**

Region	2018	**2020**
Globally	14%	**31%**
AFR	9%	**13%**
AMR	34%	**49%**
EMR	14%	**24%**
EUR	0	**45%**
SEAR	27%	**36%**
WPR	19%	**19%**

Member States commit to adopt and implement the WHO Integrated care for older people package, including guidance for person-centred assessment and pathways in primary care and other relevant WHO guidance, such as on reducing the risk of cognitive decline and dementia, within the Decade action area "deliver person-centred integrated care and primary health services responsive to older people".

Percentage of countries reporting **a national policy on long-term care**

	2018	**2020**
Globally	41%	**49%**
AFR	23%	**28%**
AMR	46%	**54%**
EMR	14%	**29%**
EUR	72%	**87%**
SEAR	64%	**64%**
WPR	19%	**19%**

Member States commit to ensure legal frameworks and sustainable financial mechanisms for provision of long-term care, within the Decade action area "provide access to long-term care for older people who need it".

Member States have commited to ensure legal frameworks and sustainable financial mechanisms for provision of long-term care – whether provided at home, in communities, or within institutions when needed.

INSIGHTS

3.2

STRENGTHENING LONG-TERM CARE SERVICES

WHO guidance in light of COVID-19[137]

In many countries, more than 40% of COVID-19-related deaths during 2020 have been linked to long-term care facilities, with the proportion up to 80% in some high-income countries.[138]

In July 2020, WHO released a policy brief on preventing and managing COVID-19 in long-term care facilities and acknowledged those who work in long-term care facilities who are saving and protecting lives. The brief sets out key actions that must be taken by policy-makers and national and local authorities to protect older people. These actions range from integrating long-term care in the national response to mobilizing adequate funding, to ensuring strong infection prevention and control, to providing support for family and voluntary caregivers – and much more.

The severity of COVID-19 has hit older people hardest. The brief suggests 11 ways to transform long-term care services so that older people can receive quality care that respects their rights, freedoms and dignity.

These 11 key actions across long-term care services highlight minimal ways to strengthen preparedness for future pandemics.

1. Include long-term care in all phases of the national response to the COVID-19 pandemic.

2. Mobilize adequate funding for long-term care to respond to and recover from the COVID-19 pandemic.

3. Ensure effective monitoring and evaluation of the impact of COVID-19 on long-term care and ensure efficient information channelling between health and long-term care systems to optimize responses.

4. Secure staff and resources, including adequate health workforce and ensure they get the proper support, and health products, to respond to the COVID-19 pandemic and deliver quality long-term care services.

5. Ensure the continuum and continuity of essential services for people receiving long-term care, including promotion, prevention, treatment, rehabilitation and palliative care.

6. Ensure that infection prevention and control standards are implemented and adhered to in all long-term care settings to prevent and safely manage COVID-19 cases.

7. Prioritize testing, contact tracing and monitoring of the spread of COVID-19 among people receiving and providing long-term care services.

8. Provide support for family and voluntary caregivers.

9. Prioritize the psychosocial well-being of people receiving and providing long-term care services.

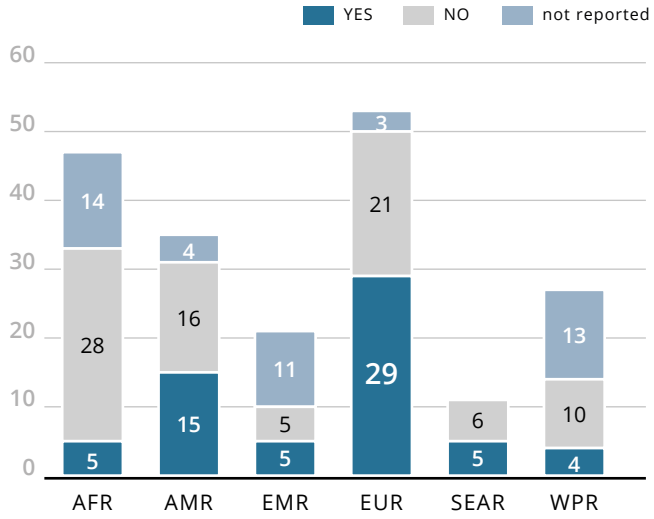
10. Ensure a smooth transition to the recovery phase.

11. Initiate steps for transformation of health and long-term care systems to appropriately integrate and ensure continuous, effective governance of long-term care services.

Increase nationally representative data on healthy ageing focusing on older people

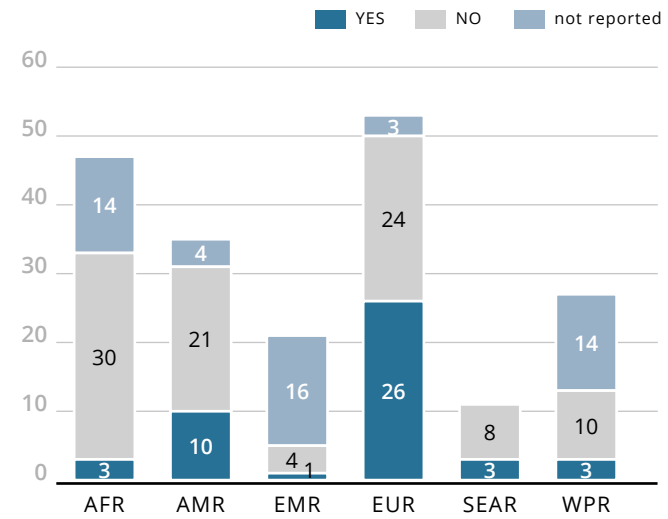
9

Number of countries with **cross-sectional, nationally representative data on health status and needs of older people,** in the public domain, 2020



10

Number of countries with **longitudinal, nationally representative data on health status and needs of older people** in the public domain, 2020 → 3.3



Percentage of countries reporting availability **of cross-sectional data on the health status and needs of older people**

	2018	2020
Globally	28%	**32%**
AFR	11%	**11%**
AMR	29%	**43%**
EMR	14%	**24%**
EUR	53%	**55%**
SEAR	36%	**45%**
WPR	15%	**15%**

Percentage of countries reporting **availability of longitudinal data on the health status and needs of older people**

Region	2018	2020
Globally	18%	**24%**
AFR	6%	**6%**
AMR	20%	**29%**
EMR	0	**5%**
EUR	38%	**49%**
SEAR	18%	**27%**
WPR	11%	**11%**

Within the Decade, partners are requested to support research and innovation and gather evidence on what can be done to foster healthy ageing in diverse contexts.

ACCELERATED EFFORTS ARE NEEDED TO INCREASE CROSS-SECTIONAL AND LONGITUDINAL DATA ON OLDER PEOPLE

INSIGHTS

Tracking progress requires countries to have comparable data. Existing and planned survey efforts should ensure that items collected can estimate all components and domains of healthy ageing in nationally representative samples of older people across all ages. This includes environmental measures consistently collected across different studies. **This will be key in evaluating the success of the Decade.**

The bulk of studies analysed within this baseline report come from the family of Health and Retirement Studies (HRS).[139] **There is much to be learned from this effort that has now extended to 45 countries.**

The United States HRS started in 1992 to provide data for research on ageing and recognized the need to take a multidisciplinary approach to assessing health, economic status, and family and social relations. Nationally representative studies enabled analysis to inform policy. Longitudinal studies not only deepened our understanding of the changes associated with ageing but have also provided opportunities to evaluate the impact of policy reforms. These studies contribute substantially to the evidence base – the United States HRS and the HRS international network have more than 5800 and 10 700 publications respectively as of November 2020.

The vision of individuals and institutions has supported systematic growth and success. **The U.S. National Institute on Aging (NIA) has encouraged international collaboration**. As of 2019, the HRS and its international sister studies[140] had conducted nearly 1.1 million interviews in 45 countries between 1992-2017 **(Figure 3.2)**,[141,142] with a range of high-, middle- and low-income countries. These studies monitor the impacts of health and retirement policies that affect whether older people continue to work, access health services, and achieve adequate incomes – all highly relevant to healthy ageing. **Importantly, large numbers of scientists and policy-makers around the world have used the results in national deliberations to evaluate impacts and shape new policies to support older people.**

Longitudinal studies not only deepened our understanding of the changes associated with ageing but have also provided opportunities to evaluate the impact of policy reforms.

This success builds on the scientific opportunities that multi-country, comparative studies offer. This includes designing surveys and collecting data in a consistent way. It also reflects the ensuring of harmonized data across studies, sharing these data widely (the aim of the Gateway to Global Aging Data[142]) and supporting new analysis of how the ageing process unfolds in different countries and policy environments. Analyses from around the world highlight the barriers to and facilitators of optimizing functional ability, and also document the diversity of older persons' experiences.

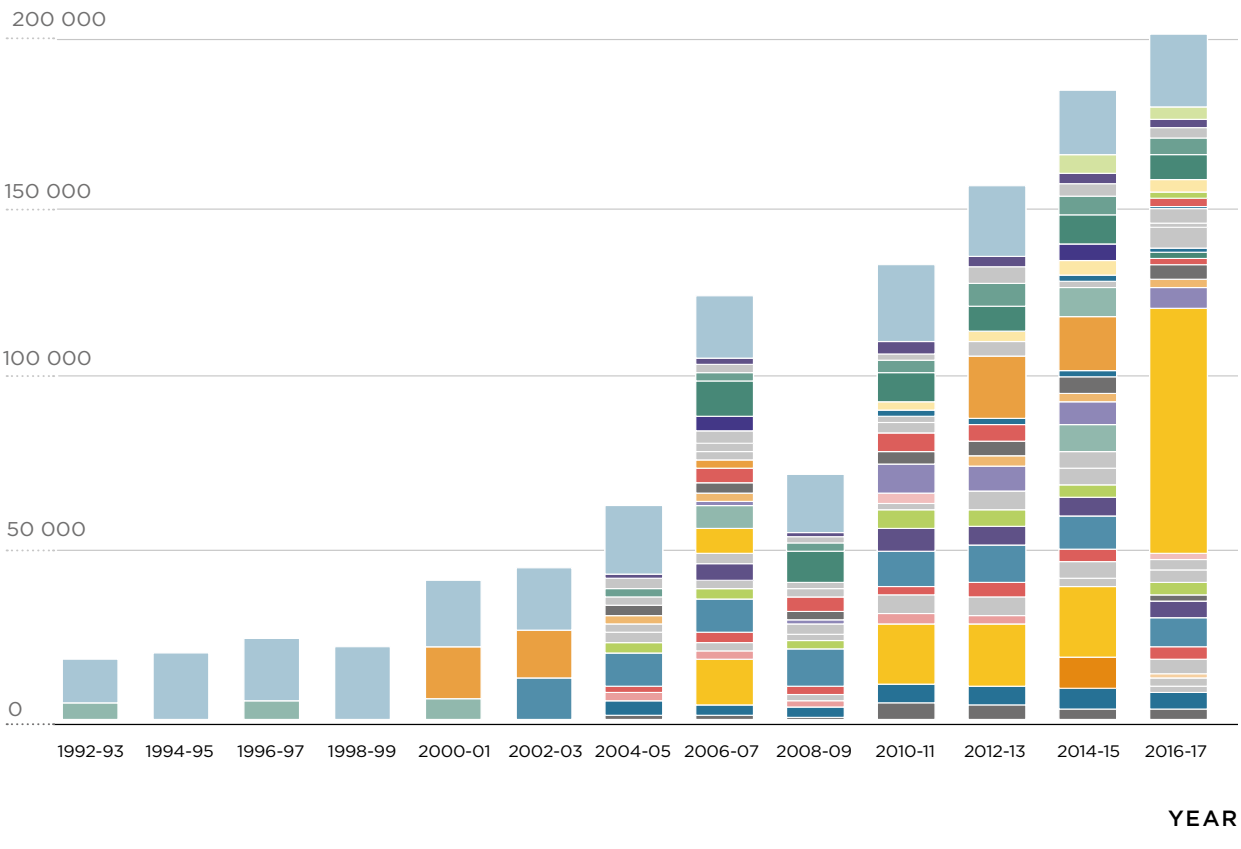
FIGURE 3.2

Expansion of the Health and Retirement Studies (HRS) family of surveys over time: number of interviews

in 45 countries, by year[141,142]

Each colour represents a different country.

The HRS and its international sister studies had conducted nearly 1.1 million interviews in 45 countries with a range of high-, middle- and low-income countries.



* Austria, Belgium, Brazil, Bulgaria, Chile, China, Costa Rica, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Ghana, Greece, Hungary, India, Indonesia, Ireland, Israel, Italy, Japan, Latvia, Lithuania, Luxembourg, Malaysia, Malta, Mexico, Netherlands, Poland, Portugal, Republic of Korea, Romania, Russia, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Thailand, United Kingdom (England, Northern Ireland and Scotland) and United States of America

While data collection is a challenge – because it is resource intensive, requiring effort, talent and funding – it is absolutely necessary for global monitoring and local policy development. The HRS family of surveys has reached a critical mass of studies yet, at the start of this decade, HRS surveys cover just under 25% of WHO Member States. Studies in Egypt, Lebanon, Nepal, Pakistan and Uruguay are planned. Efforts are needed to put in place cross-sectional and longitudinal studies in a wider set of countries.

OUTCOME AND IMPACT ON PEOPLE'S LIVES

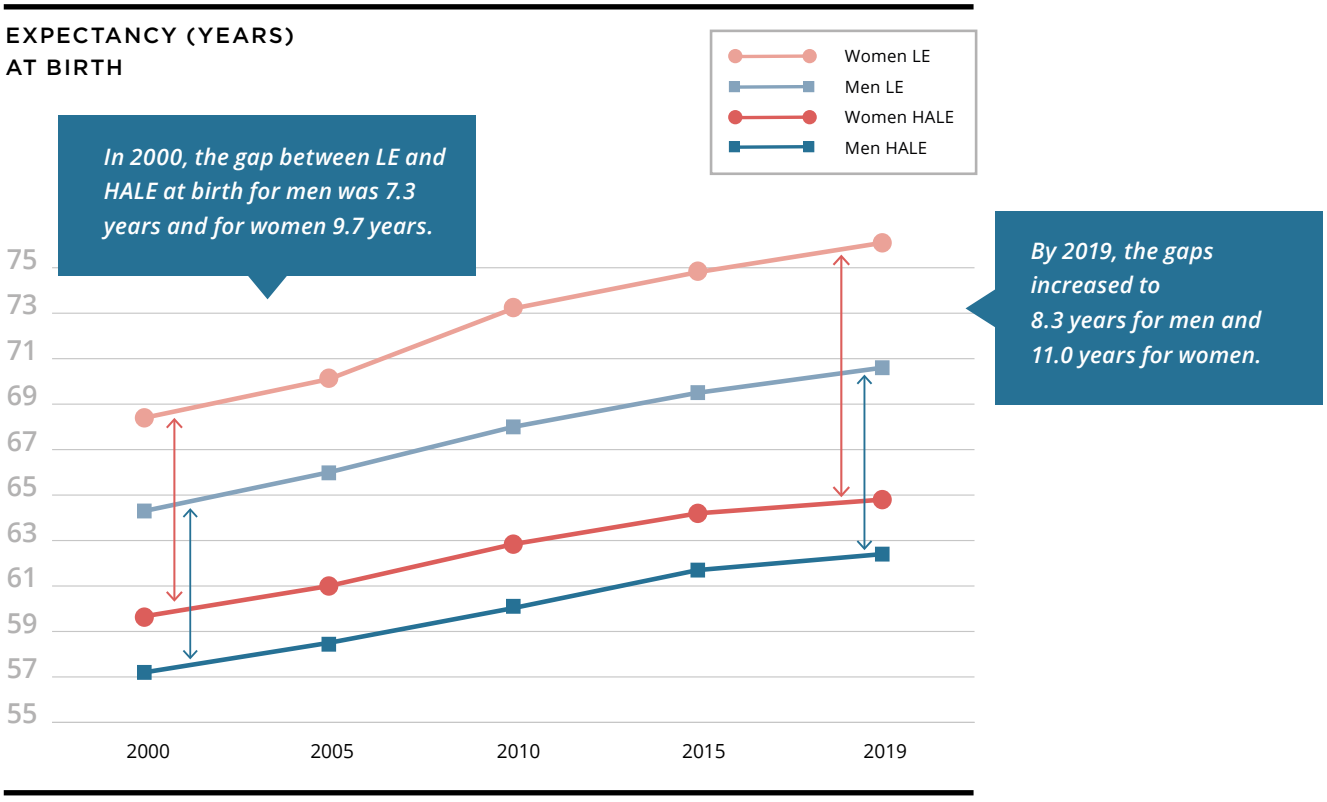
Healthy life expectancy (HALE) is an outcome indicator endorsed in the Decade. **HALE focuses on people, and the drive to add life to years.** It is a summary measure of population health as it combines mortality (death) and morbidity (illness, injury or disease) in a single number.[143,144] HALE is also WHO's overarching indicator to measure impact of the Triple Billion targets[44,145,146] and is used by other institutions, regional entities and countries to track population health.

HALE at any age reflects the extent to which years of life are spent in good health. It is therefore highly relevant for healthy ageing. The difference between life expectancy (LE) and HALE reflects time spent in ill-health.

Building and maintaining intrinsic capacity earlier in life, avoiding declines in intrinsic capacity and slowing the rate of declines, can contribute to higher HALE. This is because declines in intrinsic capacity are

FIGURE 3.3

Gap increases between life expectancy and healthy life expectancy at birth, 2000-2019[147]



often associated with different underlying conditions and morbidities. Therefore efforts to accelerate improvements in HALE should not only keep up with improvements in LE, but also reduce time spent in ill-health. This supports healthy ageing.

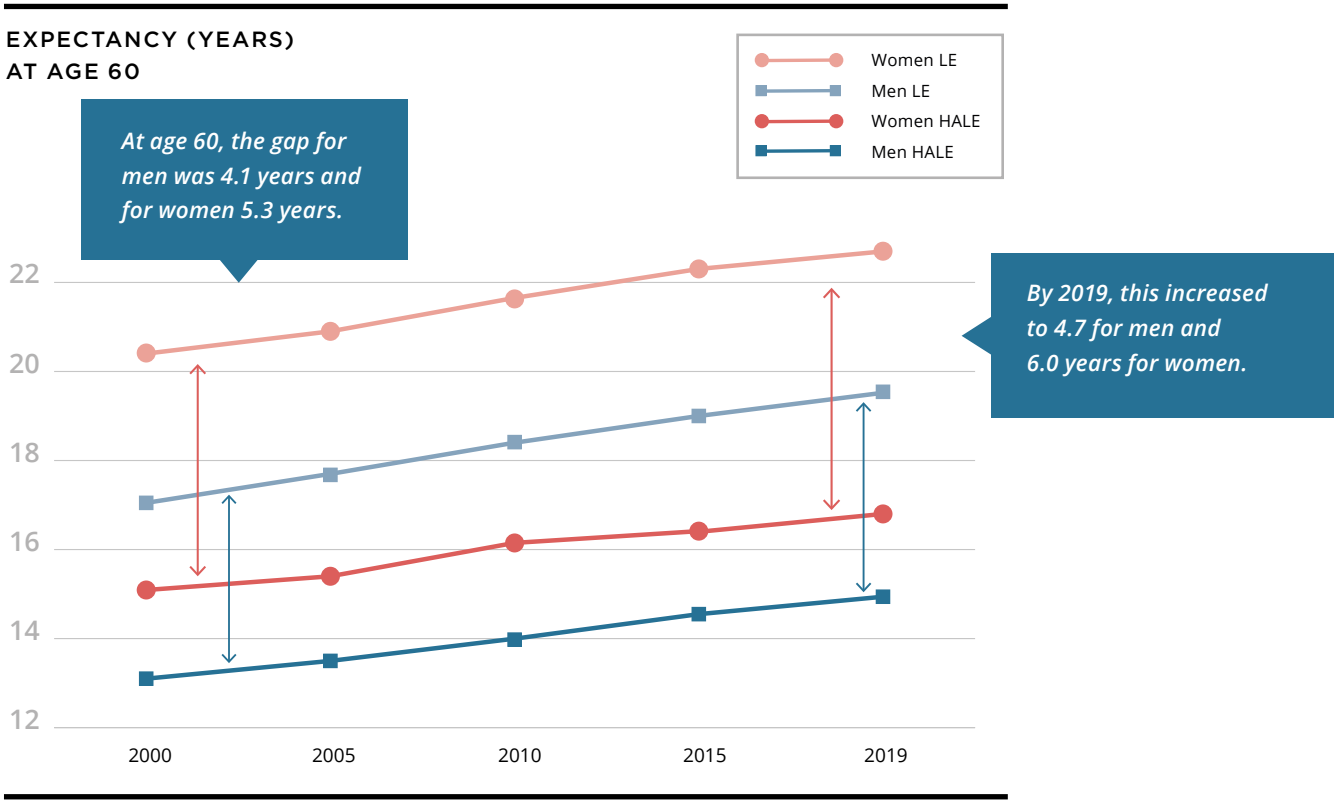
Based on WHO global estimates between 2000 and 2019,[147] **LE increased faster than HALE for both men and women. This reflects an increase in the number of years in ill-health** as shown at birth in **Figure 3.3** and at age 60 in **Figure 3.4**. In 2000, the gap between LE and HALE at birth for men was 7.3 years and for women 9.7 years. By 2019, this increased to 8.3 years for men and 11.0 years for women. At age 60, the gap for men was 4.1 years and for women 5.3 years in 2000. By 2019, this increased to 4.7 for men and 6.0 years for women. Between 2000 and 2019, for men and women combined, this increase is almost 14% at birth and about 15% at age 60. Globally, the proportion of time spent in ill-health has also slightly increased at birth and at age 60. These trends are clearly the opposite of what we would like to see.

However, these global averages and trends mask significant variation within and across countries; some people are experiencing longer lives in better health, confirming it is possible to reduce the gap and spend more time in good health.[148]

Whether this gap is increasing or decreasing, the importance of optimizing functional ability remains relevant for all older people. Enabling environments can enhance the abilities of all older people, and can compensate for declines in intrinsic capacity that many – though not all – older people are likely to experience.

FIGURE 3.4

Gap increases between life expectancy and healthy life expectancy at age 60, 2000-2019[147]



SCENARIOS TOWARDS HEALTHY AGEING

Member States also endorsed outcome indicators relating to healthy ageing in the Decade. However, measurable targets by 2030 are not specified. This is understandable because no baseline existed.

A key finding presented in Section 2 is that 14% of older people − at least 142 million people aged 60 years and over globally − are not able to meet some of their basic needs.

Given this finding, what is the future we want to see by 2030?

The most fundamental of abilities is the ability of older people to manage and meet their immediate and future needs, including an adequate diet, clothing, suitable housing, health care and long-term care services.

Although Member States have not set targets for functional ability, intrinsic capacity or environments, they do have commitments to prioritize meeting basic needs and other domains of healthy ageing. These are expressed through a variety of policy instruments, including strategies, action plans,[149,150] and conventions at global and regional level,[151] with some declared as a human right that all people should enjoy immediately.

Moreover, all UN Member States endorsed related targets by 2030, measured through the Sustainable Development Goals. These 17 goals have profound implications for accelerating healthy ageing by 2030. The implications are expressed not only in the goal of **good health and well-being**, but also in other goals (and example indicators). These include **no poverty** (households with access to basic services), **zero hunger** (reduction in moderate or severe food insecurity), and **decent work and economic growth** (adults with a bank account), to list just a few.

Along with the commitments in the Decade, most stakeholders would agree that these commitments provide a shared goal to ensure that older people are able to meet their basic needs by 2030. Nevertheless, there may be other goals that we also have to consider along with the path of development leading to these goals → 3.4.

Through building scenarios – a description for a possible future – it invites stakeholders to define a shared vision and a desired future and to determine what that vision means for them.

Thinking ahead – scenarios help clarify what might happen and what we are willing to work towards

The scenario method is a technique to assist with planning for a future that is filled with uncertainty and complexity. It does not show the projection of one linear path to future forecasts based on past trends; rather, it depicts the possibilities for multiple futures and considers the path of development leading to that situation.[152] **Through building scenarios – a description for a possible future – it invites stakeholders to define a shared vision and a desired future and to determine what that vision means for them.**[153]

Scenario methods have been used in health planning for disease-related issues (such as mental health, dementia and noncommunicable diseases), health workforce planning, public health and health services.[154,155,156,157] Many governments use scenarios for health and social policy planning;[158,159,160] so do UN agencies such as UNAIDS in addressing HIV.[161] The leading 12 global health institutions also use scenarios to consider different trajectories of progress towards achieving the health-related Sustainable Development Goals.[162]

Scenarios can be tested by anchoring alternatives to real data. Modelling exercises can help identify policy options. For instance, in 2019 the European Observatory on Health Systems and Policies, the WHO Western Pacific Regional Office, and the WHO Centre for Health Development[163,164] used data from Indonesia, Japan and the European Union to: 1) explore whether health expenditure patterns are expected to change in the coming decades as a result of population ageing, depending on whether people age in better or worse health; and 2) study the effects of population ageing on the ability to raise revenues for health from income taxes, goods and services taxes, property taxes and social contributions.

A key finding is that population ageing is not, and will not become, a major driver of health-spending growth but that healthy ageing can bring about savings. Yet population ageing can present significant challenges for health systems, depending on the primary method of revenue raising – for instance, health systems that are highly reliant on the labour market for funding are particularly susceptible to revenue loss as older people transition out of formal employment. Moreover, a range of policy options to sustain the financing of health systems are identified – including diversifying revenue sources, raising contribution rates, and encouraging people to work in formal employment at older ages. The findings underline that the detrimental effects of population ageing on health financing are not inevitable and that the way in which population ageing affects health financing is a policy choice. These results can inform discussions on what can be done in advance to shape policy and the impact on people's lives.

What changes could we expect by 2030?

Three scenarios are considered from 2021 to 2030, anchored to the key finding that 142 million older people do not have the ability to meet some of their basic needs.

Each sketches different impacts and sets of drivers, including determinants of healthy ageing and our ability to work together and maintain commitment to priority actions during the Decade. These scenarios outlined at the right are not meant to be projections, but to engage conversation and initiate deliberations by governments and stakeholders, including civil society and private business. These should be refined, and other scenarios could also be envisioned.

Of the three scenarios, improvement is the one that stakeholders have committed to in the Decade. Promoting healthy ageing across the life course, combined with the commitments to the UN Agenda 2030, this scenario can further build age-friendly environments, address climate change and ensure renewable energy as integrated policy objectives.

SCENARIO 1

Deterioration

The situation relative to the baseline increases significantly the number of older people who cannot meet their basic needs – especially those who have few opportunities whether by age, gender, location or other markers of inclusion or exclusion.

- Health and social services for older people are cut back
- Out-of-pocket payments for health and social services increase
- A greater proportion of households suffer from catastrophic payments for health services
- Pension benefits decrease
- Pandemic response and recovery is not inclusive of older people
- Unequal pace of global progress.

SCENARIO 2

Stagnation

The situation remains largely unchanged with some deterioration. Unequal pace of global progress remains.

- Out-of-pocket expenditures are maintained
- Pension benefits remain unchanged, without flexibility for those who wish to work longer
- No improvements in coverage of quality affordable services for older people
- Legislation to address age-based discrimination neither introduced nor enforced
- Attitudes towards older people remain unchanged
- Delayed recovery and unequal inclusion of older people in pandemic response
- Policy-making remains in silos for most countries.

SCENARIO 3

Improvement

Significant improvement reflecting the ability of older people to meet their basic needs relative to the baseline, a rebound after the pandemic, and improved access to services.

- Integrated care for older persons and long-term care services developed and provided as part of UHC
- Attitudes towards older people change positively
- Faster recovery and inclusive response, mitigating the pandemic's disruptions
- Accelerated improvements in the meaningful and inclusive engagement of older people
- Governments, civil society and the private sector work together to optimize functional ability
- Better distribution of global investments and progress.

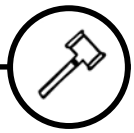
Of the three scenarios, improvement is the one that stakeholders have committed to in the Decade. Promoting healthy ageing across the life course, combined with the commitments to the UN Agenda 2030, this scenario can further build age-friendly environments, address climate change and ensure renewable energy as integrated policy objectives.

HOW TO ENSURE TRANSFORMATION THAT ACCELERATES HEALTHY AGEING?

Current levels of progress and outcome indicators, and the improvements we have commited to by 2030, converge on the importance of accelerating actions and impact. Working together in every country and in every community to build and maintain intrinsic capacity, prevent and manage well existing diseases, respect older people's preferences and goals, and increase the reach of enabling environments that leave no older person behind, will all contribute to optimizing functional ability.

Together, collaborations can make older people visible, result in evidence-informed actions that are championed by all stakeholders and can accelerate measurable impact on older people's lives during the Decade – a transformative pathway towards optimizing functional ability. This is what the next section considers in greater detail with cases from around the world.

3



POLICY IMPLICATIONS

- Improvement on 10 out of 10 indicators documents an increasing worldwide commitment to healthy ageing. However, the level of reporting and pace of progress needs to be accelerated by Member States.
- Commitments Member States have endorsed will be tracked collectively – with the aim to make older people visible.
- These currently reflect existing policy and monitoring frameworks – new indicators could be considered by Member States and all other stakeholders prior to triennial reporting periods.
- "What if" scenarios provide inputs to Member States' and other stakeholders' deliberations; these also offer a stimulus to transform how we work together by anchoring commitments in measurable results.
- Collective benchmarking requires strengthened country data and information systems for health. WHO with partners will provide standards and tools to support countries to measure healthy ageing.
- Over the 10-year period, the tracking of indicators through regular accumulation of data in every country will reveal what is working and what is not, and will help shape current and future efforts with expected updates and progress reports in 2023, 2026, 2029 and a final report in 2030.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4

HOW COULD WE IMPROVE BY 2030?

Learning and working together
to accelerate impact

All Member States have committed to the Decade – all have the responsibility and opportunity to collaborate with civil society and older people.

Optimizing functional ability is a key to healthy ageing. Ensuring that all older people have the ability to meet their basic needs by 2030 is necessary − but not sufficient − to achieve the goals of the Decade and meet the expectations of older people around the world. Working together will determine what we achieve, not only to meet the basic needs of older people but also to optimize all abilities – including older people's abilities to contribute to families, communities and societies. Partnerships for change build trust across generations by optimizing everyone's opportunities for healthy ageing through the life course. Ensuring that evidence underpins these actions will increase their impact.

A DEEPER LOOK AT WHO GLOBAL GUIDELINES

Pooling and appraising global knowledge for wider use and application

Existing "evidence synthesis reviews" indicate what could be drawn on for further appraisal and expert review – to identify what can be done. This process can lead to further guidance and recommendations for clinical, population or systems-level actions at global, national or local levels, in the health sector and beyond. By documenting existing evidence, we can reduce wasted investment in research since up to 85% of research[165] reflects duplication of work, unpublished work, poor quality work and work that focuses on topics that are not a priority.

Over the past decade, WHO has developed packages of interventions that are based on evidence and approved by WHO's Guidelines Review Committee (GRC). Global guidelines mostly provide recommendations on specific diseases at different stages of life. A look at WHO's existing guidelines and evidence packages shows that very few address ways to enhance older people's intrinsic capacity (as of September 2019).[166] Most recommendations, which were based on mixed strength of evidence, focused on the prenatal period and improvement of maternal and perinatal outcomes.

Specifically, of all the GRC-approved guidelines with recommendations on primary prevention, only 49 could potentially have an impact on intrinsic capacity in later life, out of a total of 206 across different life stages. **Figure 4.1** shows that only three guidelines with a total of 14 recommendations focused on older people, most notably the WHO ICOPE package of

guidance that addresses person-centred integrated care for older people and the domains of intrinsic capacity.

Most guidelines did not discuss explicitly the effect of an intervention on any domain of intrinsic capacity or its long-term impacts. This reflects the fact that existing evidence syntheses focus on diseases.

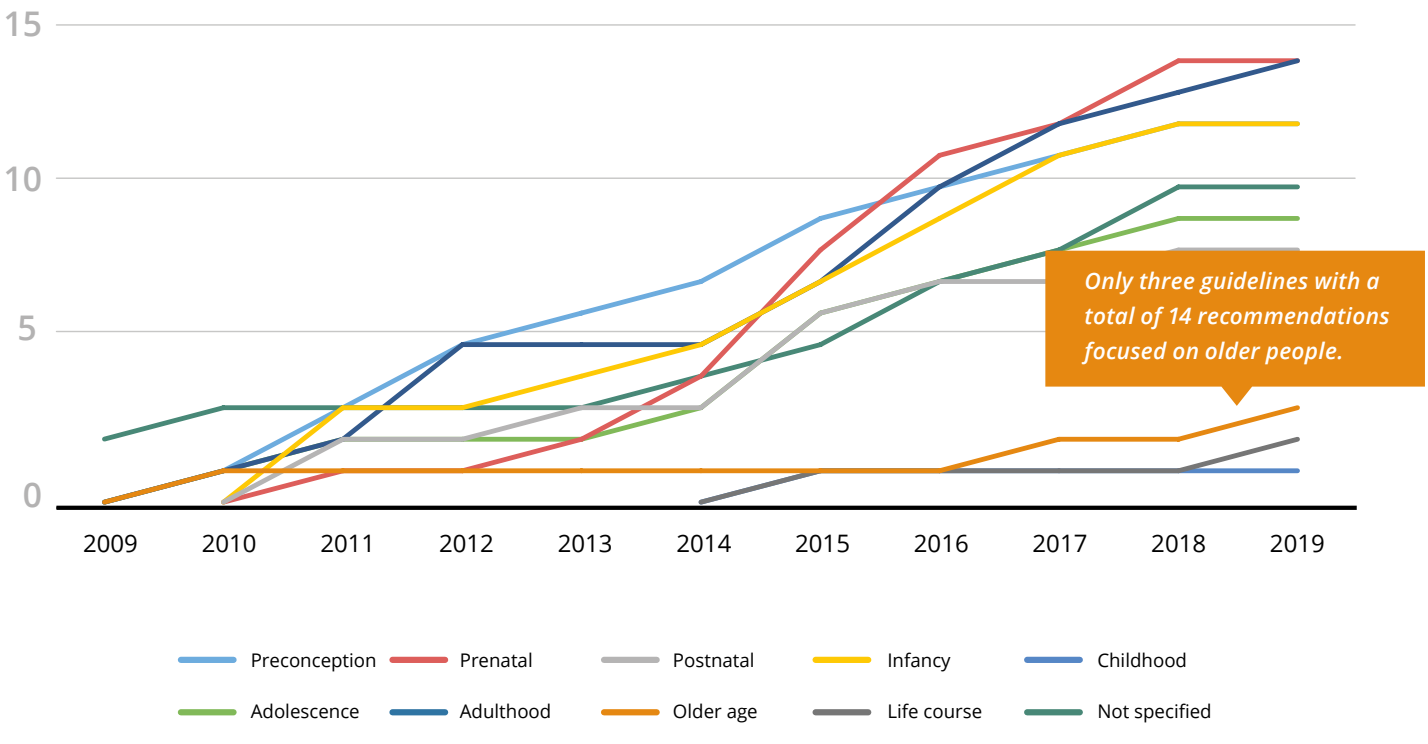
While it is essential to consider prevention approaches earlier in life, some conditions are much more prevalent in later life. There is a clear gap in coverage of NCDs across the life course, which is further compounded by a more general lack of knowledge of how intrinsic capacity in early life could be linked to later life to support healthy ageing.

Although evidence is rapidly emerging on the role of lifestyle and behavioural factors in mid-life and later life on prevention of NCDs, and many of these factors are highlighted on WHO's materials, no formal GRC-approved guidelines have focused specifically on these factors or outcomes since 2009, with the exception of diet, physical activity, cognitive decline and dementia.[78]

FIGURE 4.1

Cumulative number of WHO guidelines addressing any domain of intrinsic capacity

by life stage, 2009-2019



ACCELERATING IMPACT REQUIRES

BUILDING UP EVIDENCE TOGETHER

The transformative pathway towards optimizing functional ability – introduced in Section 1 – draws on WHO strategies and frameworks that address research, knowledge translation and scale-up. Accelerating impact requires an understanding of what older people need and what they want as priorities for action → 4.1. It also requires leadership and practice to be nurtured so that policy-makers and others in government, the private sector, civil society and research are committed to implementing actions to achieve the ambitious goals set out in the Decade. We need to pursue innovation that drives and sustains irreversible change.

This process involves new studies, especially to collect information on functional ability, intrinsic capacity and environments in multiple locations → 4.2. It also requires publishing research on healthy ageing to enable learning across countries and disciplines → 4.3. Moreover, research studies should be reviewed and synthesized and gaps should be identified → 4.4. Existing "evidence synthesis reviews" that address interventions to improve functional ability reveal the state of available research → 4.5. Finally, encouraging knowledge from a wide range of stakeholders, including civil society, will increase innovation, fill in gaps and provide new insights that will accelerate action → 4.6.

There is an opportunity to ensure that research and guidance[167,168,169,170,171] produced at country and regional levels[172,173,174] on topics relevant to healthy ageing is also shared widely and appraised for potential adaptation and use in other regions.

Applying interventions that can benefit older people, their families and communities, and scaling the interventions up to reach more people, must be encouraged. This means not only what to do, but also **how to do it**. For instance, each country needs to plan to ensure that the health and social care workforce has the competencies needed, including gerontological competencies, to deliver effective services to older people in need. A range of interventions with different levels of complexities have to be performed. In systems with workforce shortages, role delegation (known as task-shifting) becomes important to ensure that each service is delivered with impact.

A push is needed to accelerate research on the design of interventions that address person-centred impacts and integrated approaches across sectors, including interventions that support each of the Decade's priority action areas. This means improving the approach to "evidence synthesis reviews" so that these reflect the outcomes of healthy ageing and engage older people.

4.1

CLARIFY AND SET PRIORITIES

Older people's views on what research should be funded – equity and impact matter

INSIGHTS

INSIGHTS

WHO held a global consultation in 2017 with 1700 people to document important issues for healthy ageing that should be addressed with better knowledge – e.g. research priorities. The consultation included listening to the voices of some 600 older people from 77 countries across all WHO regions.[175]

WHAT IS IMPORTANT?

Older people described a problem to be solved, a question or an innovation to be addressed and the expected impacts that they felt are important. Some examples linked to each of the Decade's priority action areas include:

Change how we think, feel and act towards age and ageing

"*How to best train formal and informal caregivers on the concept of ageism? For formal caregivers and physicians, this means that treatment options are not dismissed from consideration simply due to chronological age.*"

"*Creating new opportunities for intergenerational interactions, especially to obtain training in the use of technology.*"

Ensure that communities foster the abilities of older people

"*How to improve and connect climatic conditions, pollution hazards, indoor and outdoor physical infrastructure to render these age-friendly, for better health and well-being.*"

Deliver person-centred integrated care and primary health services responsive to older people

"*Creating and improve ways to get feedback from older people and assess their health-care needs.*"

"*Increase the number of geriatricians and other specialists so that we don't have to travel so far.*"

Provide access to long-term care for older people who need it.

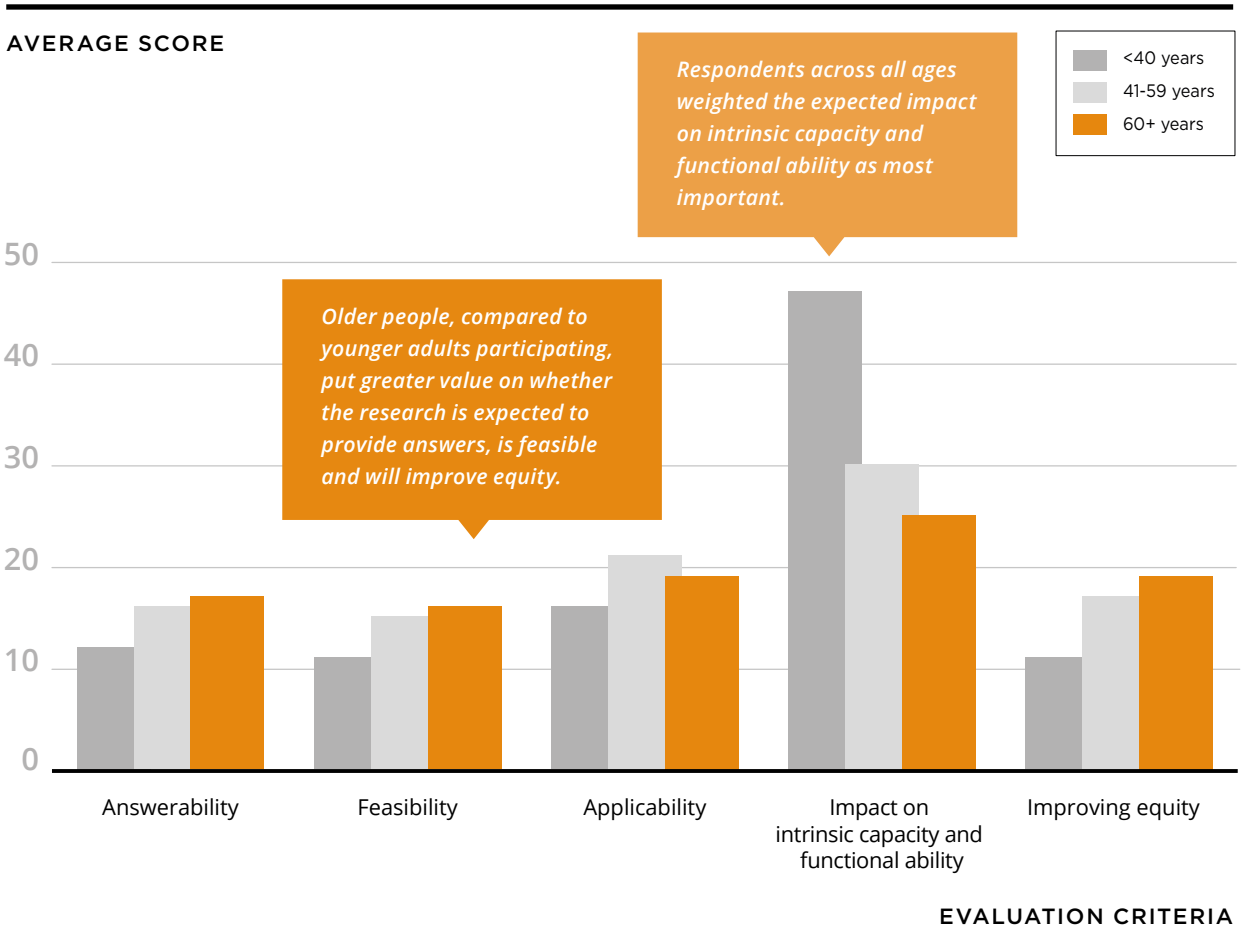
"*Getting home care that supports me, so that my life can still be productive.*"

"*How can the concept of Healthy Ageing also deal with end of life?*"

INSIGHTS

FIGURE 4.2

Importance of research evaluation criterion
by age groups



WHAT SHOULD BE FUNDED?

All persons participating in the consultation were asked to allocate 100 points across five criteria that experts should use to decide whether a research proposal should be funded.[176] These included: will the research reveal an answer; how feasible is it to do the research; will the results be applicable in a wide range of settings; will it improve intrinsic capacity and functional ability; or will it improve equity?

A criterion with more points should be given more weight when reviewing future research proposals. **Figure 4.2** shows that, while respondents across all ages weighted the expected impact on intrinsic capacity and functional ability as most important for evaluating potential proposals for funding, older people, compared to younger adults participating, put greater value on whether the research is expected to provide answers, is feasible and will improve equity.

COLLECT COMPARABLE DATA IN MULTIPLE COUNTRIES

WHO multicountry studies supporting healthy ageing

WHO's household health surveys date back to 2000 with the Multi-Country Survey Study (MCSS) and the World Health Survey (WHS). These collected data on health status and determinants from over half a million respondents from nearly 100 countries in order to provide truly comparable international data.

WHO's Study on Global AGEing and adult health (SAGE)[177] is built on the MCSS and WHS and is a nationally representative longitudinal health examination study with biomarkers in China, Ghana, India, Mexico, Russian Federation and South Africa focusing on adults aged 50 years and older. SAGE provides data on trends in health status and determinants over time. SAGE was also designed to provide results that are comparable to ageing studies in high-income countries → 3.4. Additionally, SAGE is one of the only household surveys to address the critical relationship between health and subjective well-being. Three country studies from SAGE wave 2 are included in this baseline analysis – from Ghana, Mexico and South Africa.

The WHO/World Bank Model Disability Survey (MDS)[178] is a general population survey including all ages that provides comprehensive, self-reported information on intrinsic capacity and functional ability. In addition, the MDS collects detailed and nuanced information about the environment in which people live and the extent to which it facilitates or hinders ability. The Brief MDS, which is a short version of the longer survey was developed to meet calls for a version appropriate for integration into existing and regularly implemented household surveys, such as those on the workforce or living standards. Three country studies from the MDS full version are included in this baseline analysis – from Chile, Costa Rica and Sri Lanka.

A new effort by WHO is also planned for expansion during the Decade: the World Health Survey Plus.

The World Health Survey Plus (WHS+) builds on SAGE and is designed to be a nationally representative cross-sectional or longitudinal household health examination survey that has a modular approach and can be integrated into a country's planned survey schedule. The WHS+ data-collection exercise is a multi-topic, multi-platform and multi-design system that uses standardized questionnaires, sampling designs and protocols to ensure data comparability across countries and surveys. The flexible modular design of WHS+ makes it suitable for collecting SAGE-like data with increased efficiency. It incorporates the use of mobile telephone technologies.

The target population is adults aged 18 years of age and older. The strategy is to implement surveys linked to facility and administrative data sources and patient registries integrated with national health information systems. The WHS+ will use a robust methodology with a blend of tools, technology and technical exchange to build a sustainable system to monitor both UHC and the SDGs. **Efforts are under way to ensure that items included measure all components and domains of healthy ageing.**

INSIGHTS

4.3

PUBLISH RESEARCH ARTICLES ON HEALTHY AGEING

Ensure access to the global knowledge base

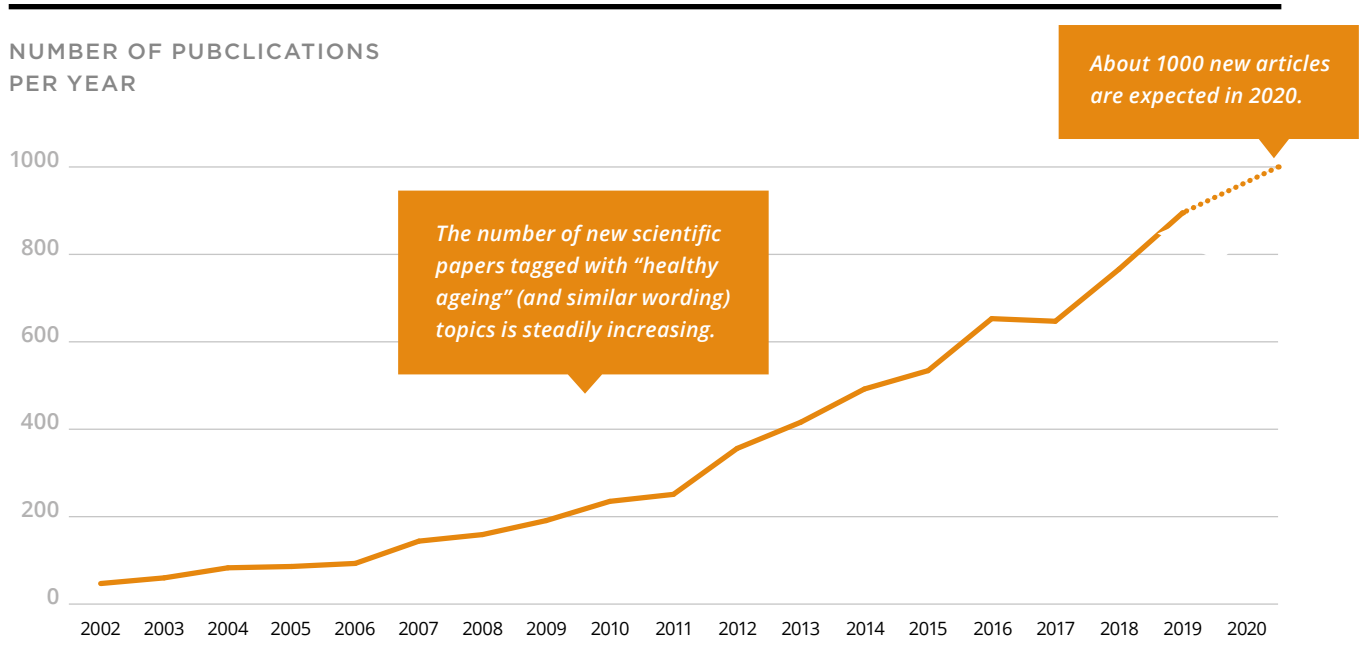
Since the endorsement of the Madrid International Plan on Action on Ageing in 2002, and more recently the WHO Global Strategy and Action Plan on Ageing and Health in 2016, the number of new scientific papers tagged with "healthy ageing" (and similar wording) topics is steadily increasing within PubMed, the largest search and retrieval database of biomedical and life sciences literature **(Figure 4.3)**.[179] About 1000 new articles are expected in 2020. This remains, however, a small proportion of all scientific articles in the health literature. Publishing articles in open access journals is likely to lead to faster accessibility and use, needed to accelerate impact.

In addition to articles in peer-reviewed journals, it is important to examine and evaluate all sources of knowledge that may have value for healthy ageing. This includes knowledge generated by a wider range of stakeholders, and not only scientists, that can inform the process of putting actions into place with impact. Moreover, much more needs to be done in the area of innovation to accelerate that impact. This is a vast agenda in an emerging field and is gaining momentum across public and private research and development sectors.

FIGURE 4.3

Scientific articles addressing healthy ageing

2002-2020, in PubMed



SYNTHESIZE RESEARCH ADDRESSING HEALTHY AGEING

Enhanced approach by Cochrane Campbell Global Ageing Partnership

Key steps to enhance evidence synthesis on research related to healthy ageing outcomes, defined with public panels including older people:[180]

- **Align concepts, outcomes and metrics –** intrinsic capacity, functional ability, and enabling environments.
- **Encourage and formulate evidence synthesis** addressing topics identified as a priority relevant to healthy ageing or older populations.
- **Question development –** specific issues related to healthy ageing and older people must be considered, with the possibility to extrapolate to diverse populations and settings.
- **Interventions and intervention complexity –** map interventions onto the constructs of healthy ageing (typically abilities or environment and its domains), as most relevant interventions comprise more than one component (complex interventions).
- **Determine appropriate study designs –** through a preliminary scoping search that will aid the identification of types of study designs.
- **Appropriate outcomes for healthy ageing and older populations –** older populations' outcomes are determined in advance, with increasing focus on what people do in their environment.
- **Identification of evidence –** search a combination of general and specialized databases and employ a range of search terms since "healthy ageing" is broad.
- **Appraisal of evidence –** assess methodological quality and reporting quality at same standard as other reviews.
- **Synthesis of evidence –** encourage use of mixed methods, including qualitative methods to understand the characteristics of populations, interventions, settings and context of included studies.
- **Interpretation of evidence –** consider key ethical, legal, political, epidemiological, geographical, socioeconomic and sociocultural barriers and facilitators to intervention implementation and sustainability.
- **Next steps –** establish agreement on "core outcome sets" for healthy ageing, based on WHO guidance, to reflect an agreed standardized set of outcomes representing the minimum that should be measured and reported in research on a specific condition, population or context.

4.5

REVIEW EVIDENCE AND IDENTIFY GAPS

Focus on optimizing functional ability

Cochrane Campbell Global Ageing Partnership has created an "evidence and gap map" to identify existing primary studies and systematic reviews of health and social support services, as well as of assistive devices designed to support functional ability among older people who live in the community.[181]

The evidence and gap map is a result of a comprehensive search that included 11 databases and grey literature up to August 2018. The map includes 548 studies (120 systematic reviews and 428 randomized controlled trials), and classifies interventions and outcomes by using domains from the International Classification of Disability, Health and Functioning framework that are aligned to the domains of functional ability.

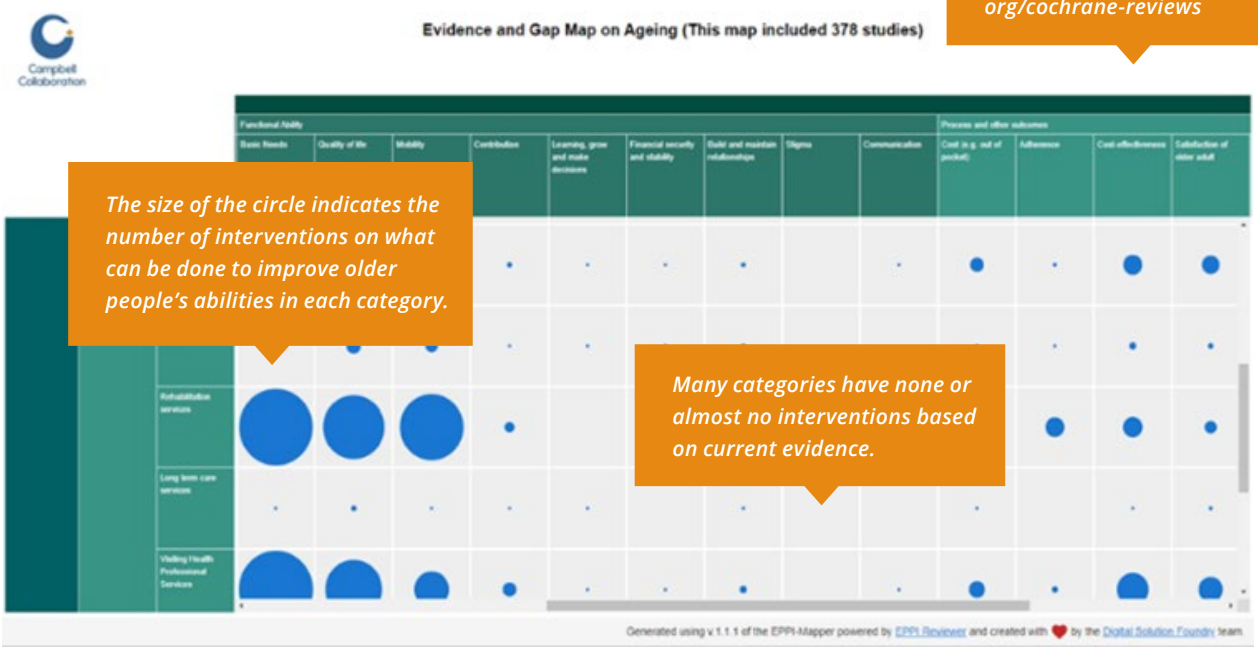
The most common interventions are home-based rehabilitation for older people and home-based health services for disease prevention, mostly delivered by visiting professionals. Few studies synthesize interventions to improve personal mobility, building adaptations, family support or personal support. The most commonly measured domains of intrinsic capacity are cognitive capacity and physical capacity; whereas for functional ability, some aspects of meeting basic needs and mobility are addressed. This corroborates the data that were used across 42 countries in Section 2.

Most systematic reviews (some 60%) were rated low or critically low for quality of methods. Few studies evaluate outcomes in domains such as social participation, financial security or communication. Assessments in other domains need to be strengthened – particularly interventions to enable a person to be mobile; to learn, grow and make decisions; and to build and maintain relationships.

FIGURE 4.4

Interactive evidence gap map

https://globalageing.cochrane.org/cochrane-reviews



4.6

ENGAGE A WIDE RANGE OF STAKEHOLDERS

Assess strategies and interventions

The International Federation of Ageing has put together lessons on ways to improve vaccination communication strategies that reach older people.

Immunization is one of the most effective public health interventions against infectious diseases, second only to clean water and sanitation.[182] Despite national vaccination programmes and campaigns timed to optimize protection across all ages, coverage rates among older people remain generally poor. Given the underuse of vaccination among the general public – and most importantly among those at greatest risk – there is an urgent need to improve messages and campaigns for people taking actions to be vaccinated.

Changing the conversation on adult vaccination is a body of work in the Vaccines4life.com programme that analysed message content, structure and methods of dissemination of influenza vaccination campaign messages in 10 countries in response to what appears to be a relative lack of attention to communicating with the most at-risk target groups.[183]

The IFA Framework for effective adult vaccination campaigns aims to inform policy-makers and other stakeholders about more effective public health communication on adult vaccination, and thus help to improve uptake rates.

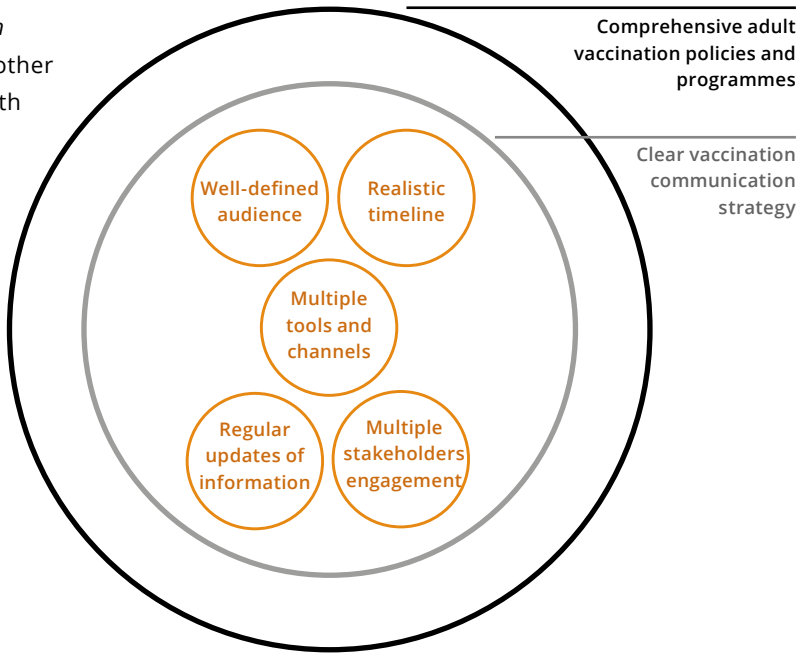
One of the most important observations is the "universality of messages", especially from government portals, to the persons most at risk. The sameness of messages and the tendency to have most information distributed through online channels does not account for varying levels of risk, health literacy nor populations who do not have access to the Internet. *Tailored messages* to individual or group needs are largely ignored by campaigns. Most audiences passively receive information from a variety of channels but have little opportunity to ask personal questions interactively.

Learning from this multi-country study will contribute to guidance on vaccination strategies for reaching older people not only for influenza, but also for other vaccine-preventable diseases in older age.

INSIGHTS

FIGURE 4.5

Framework for effective adult vaccination campaigns[183]



ACCELERATING IMPACT REQUIRES

LEARNING FROM PRACTICES IN COUNTRIES

Although concepts and strategies endorsed at the global level are important, the focus should be on real actions in countries and communities that engage older people. This is central to WHO's call to deliver interventions that have measurable impact on people's lives, and the Decade's goal to optimize the functional ability of older people.

Applying the **transformative pathway** (Figure 1.2) to optimize functional ability introduced in Section 1, evidence, cases and programmes gathered from around the world are used to illustrate each of the pathway's components.

How were these narratives put together?

Proposed from across WHO and many partners, evidence and cases for each component were selected through a 3-step process:[33]

1. identification and collation by stakeholders including over 350 cases;
2. expert review and selection reflecting agreed criteria; and
3. refinement in line with the ability and component illustrated.

The Cochrane Campbell Global Ageing Partnership identified existing evidence reviews and mapped these to disease burden (Annex 6), the five domains of functional ability and each of the Decade's four priority action areas as examples of current evidence (Annex 7).

The focus is five narratives on accelerating the abilities of older people for each domain of functional ability, namely:

- Ability to meet basic needs
- Ability to learn, grow and make decisions
- Ability to be mobile
- Ability to build and maintain relationships
- Ability to contribute to society.

The evidence and cases highlight actions across stakeholders. Many actions are led by civil society, some by the health sector, and many by other sectors or by multiple sectors, including health, that have shared goals and objectives.

Although these are not WHO recommendations, each narrative illustrates an array of commitments, activities and impacts and acknowledges that the five domains of functional ability are interrelated. There are many gaps, and there are many relevant programmes that previously excluded older people but are now enlarging their scope. Some cases are pilots or programmes that remain to be evaluated.

Cases along this pathway do not necessarily reflect a linear process. Overall, programmes or other interventions focusing on older people's functional ability are relatively new.

ABILITY TO MEET **BASIC NEEDS**

The inability of older people to meet their basic needs can be both a cause and an effect of reduced capacity. But their environments, too, play a crucial part.

1

CLARIFY
areas of action

Important areas for action include:

- **Ensure financial security**
- **Ensure appropriate housing**
- **Ensure an appropriate diet**
- **Ensure access to health and social care services**
- **Ensure means and support to complete basic tasks**
- **Meet the need for personal security (able to avoid injury and harm).**

2

IDENTIFY
the interventions and evidence to support

Focusing on one area, ensuring appropriate housing and the feeling of safety in one's own home, is an important component of meeting and managing the basic needs of older people. Home modifications are an evidence-based method for reducing hazards in the home environment and enabling older people to age in place safely. Common home modifications include fitting grab rails, adapting bathrooms and installing smart home technology. Modifications should be affordable.

A recent review (2017) of 36 home modification studies found strong evidence that modifications can improve mobility, enabling people to complete daily activities with fewer difficulties.[184] Where older people had greater declines in capacities, home modifications were found to reduce the rate of declines over a two-year period.

Strong evidence also exists that home modifications can reduce the risk and fear of falls for older people. One study which combined occupational therapy with assessing and removing hazards from the home found a 36% reduction in falls. Home modifications not only benefit older people; they can also boost caregivers' coping strategies, resulting in fewer hours spent caring for their loved ones and a greater sense of self-efficacy and satisfaction. Older people must be part of the decision and agree with the changes. Once home modifications are installed, older people are likely to make full use of them, with 70–80% adherence rates.[184]

Interventions are most effective when combined with a comprehensive assessment of a person's needs, goals and environment, a plan to reduce barriers, and training with ongoing support for using the modifications.[184]

3

DESIGN & ASSESS
what can be done

Households with older people are at greater risk of catastrophic health spending (when out of pocket payments are greater than or equal to 40% of a household's income after basic needs have been met) compared with those without.[185,186,187] **Figure 4.6** documents this in Latvia[188] where more than 40% of households include at least one older person. The incidence of catastrophic spending is greatest in households that have only older persons (32%), followed by households with one adult above and one below age 60 (22%),[162] thus contributing to their impoverishment.[189] Catastrophic expenditures can force older people to reduce other basic expenses such as food or shelter. Universal approaches combined with targeted policy and financing are necessary in order to ensure financial security and equitable access to health services. This information points to an area for action and older people should be integrated within national programmes including UHC.

The importance of including older people in UHC to enable access to effective health services without incurring financial hardship is relevant to all countries.[190]

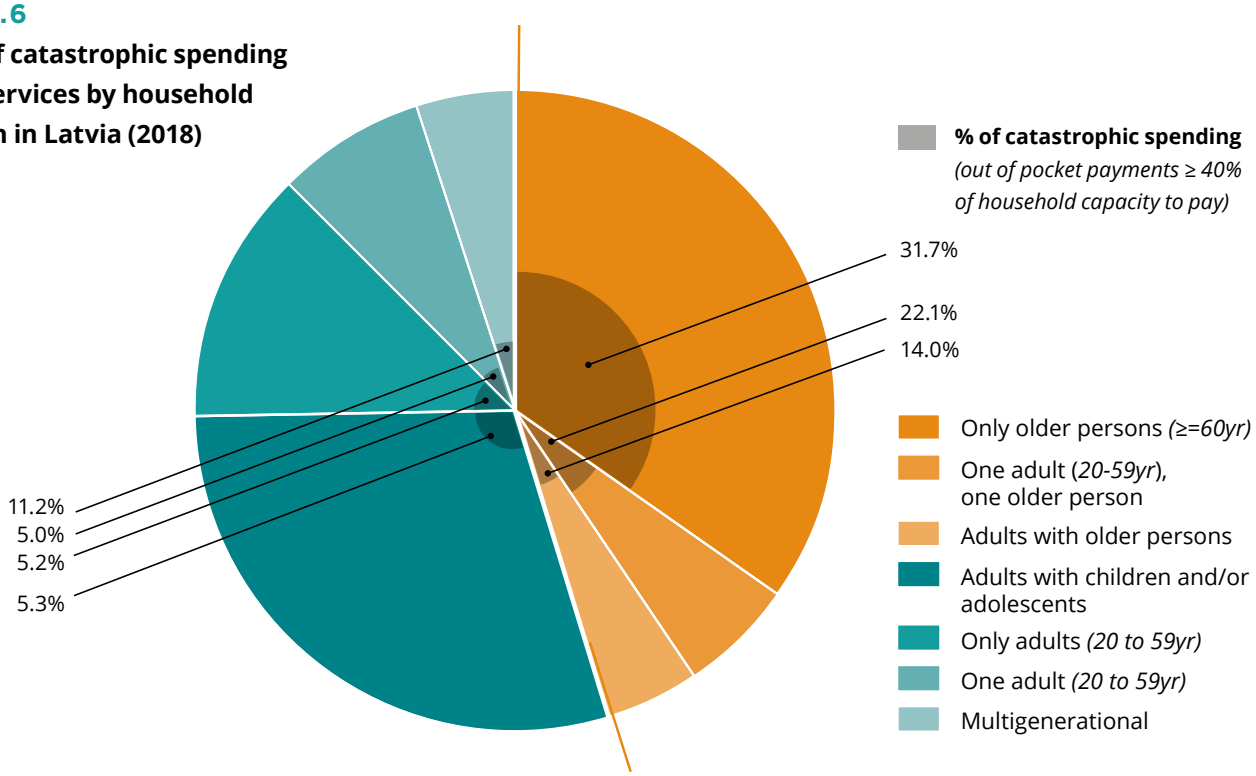
Senegal introduced Plan Sesame which aims to provide access to publicly provided health-care services to all Senegalese citizens aged 60 years and over without additional user fees. Almost half of all Senegalese older people are enrolled in Plan Sesame[191] and have access to consultations, medicines and hospital services.

Botswana has taken a different approach to reducing catastrophic health spending in multigenerational households by allowing public employees to include older parents in their government health insurance schemes.[192] This has been rolled out nationally.

Further evaluation of these programmes, and those in other countries, would be helpful to understand who is not enrolled or covered by services (such as older people in rural areas).

FIGURE 4.6

Incidence of catastrophic spending on health services by household composition in Latvia (2018)



4

LEARN
how it can be done

Many countries are implementing long-term care systems which can optimize the functional ability of people with reduced intrinsic capacity while maintaining their dignity and human rights. Piloting a new system of care on a small scale with a robust evaluation gives an understanding of what works and what doesn't work before rolling it out nationally.

Piloting a new system of care on a small scale with a robust evaluation gives an understanding of what works and what doesn't work before rolling it out nationally.

In 2018, the Russian Federation launched a pilot long-term care system in six regions. After learning from the initial phase, the pilot was expanded to 18 regions. Government departments have collaborated with a specialist ageing charity Starost v Radost to implement and evaluate the pilot.[193]

More than 54 600 people in the pilot regions have received support from the system, 13 regions have revised service delivery standards and adopted updated regulations, and more than 5000 people have been trained at the school of nursing.

Basic steps for implementing long-term care in Russia include:

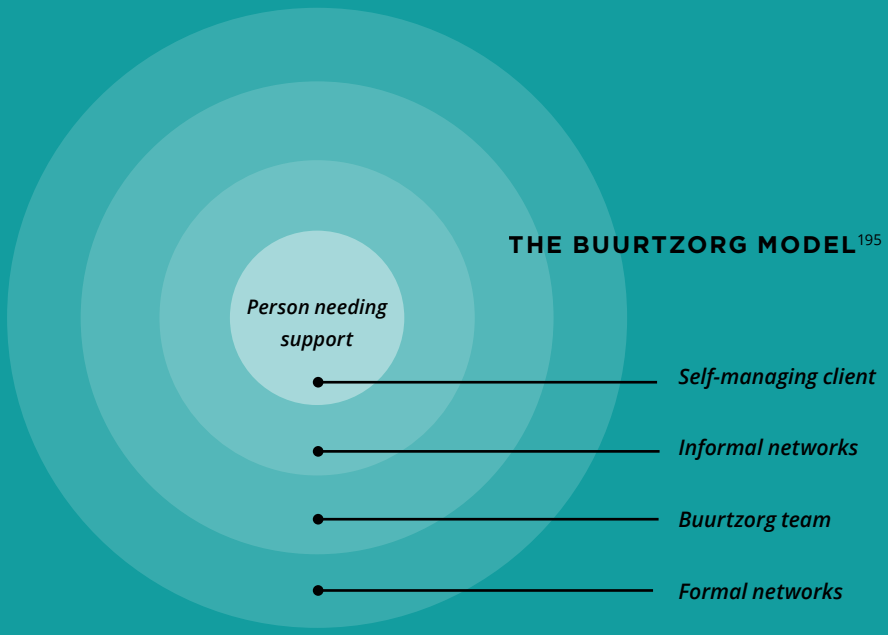
- identifying people who need long-term care;
- assessing the degree of need for care and assigning a corresponding package of care;
- training health and social care workers and volunteers to deliver new packages of care;
- supporting relatives by informing them of the care services and teaching the basics of home care.

As long-term care programmes expand, it is important that people have equal access irrespective of where they live, ensuring no one is left behind.[194]

5

REACH

scaling up and leaving no one behind



New and innovative models of home care can improve the functional ability of older people while keeping costs low. Home care can ensure that older persons can age in place while their basic needs, including nutrition, are met.

Buurtzorg (or "neighbourhood care") is a Dutch organization that arranges for **teams of 12 nurses who provide care to a neighbourhood of 50–60 people.**[195] Set up as autonomous teams, nurses complete all care tasks, including those that are traditionally assigned to lower-paid care workers, and create partnerships with community services and general practitioners. Nurses in the programme cost more per hour than traditional care (e.g. home care services provided through home care organizations contracted with government-funded insurance companies). However, fewer hours are needed, resulting in savings. Older people have higher levels of satisfaction than with traditional care and are less likely to use emergency hospital services.

Buurtzorg started with a team of four nurses in one neighbourhood. They now employ over 10 000 nurses in 800 teams. New teams are established by nurses who apply to Buurtzorg to set up a team in their neighbourhood, akin to a franchise. New teams are given intensive support with the guidance of a specialist coach to ensure they share the organization's vision and have a sense of ownership.

Buurtzorg started with a team of four nurses in one neighbourhood. They now employ over 10 000 nurses in 800 teams.

The organization has expanded its reach in the Netherlands by adding services for older people with varying needs – including domestic care, physiotherapy, occupational therapy, community mental health services, and support for families and young people. These initiatives are created in response to local needs and have been spearheaded by Buurtzorg nurses, staff and clinicians themselves. Additionally, the model has been rolled out in other parts of Europe (e.g. Austria, Germany, Russia, Sweden, the United Kingdom), Asia (e.g. China, India, Japan) and the USA.

The model contains four key components (see above) and has demonstrated that a collaborative bottom-up approach can result in scale-up of home care services.

ACCELERATE IMPACT
meet objectives within a time-frame

The Republic of Ireland intends that "every county in Ireland will be a great place in which to grow old'.' Its Age Friendly Ireland Programme was launched in 2018, when Ireland became the first age-friendly country to be recognized by WHO.[196]

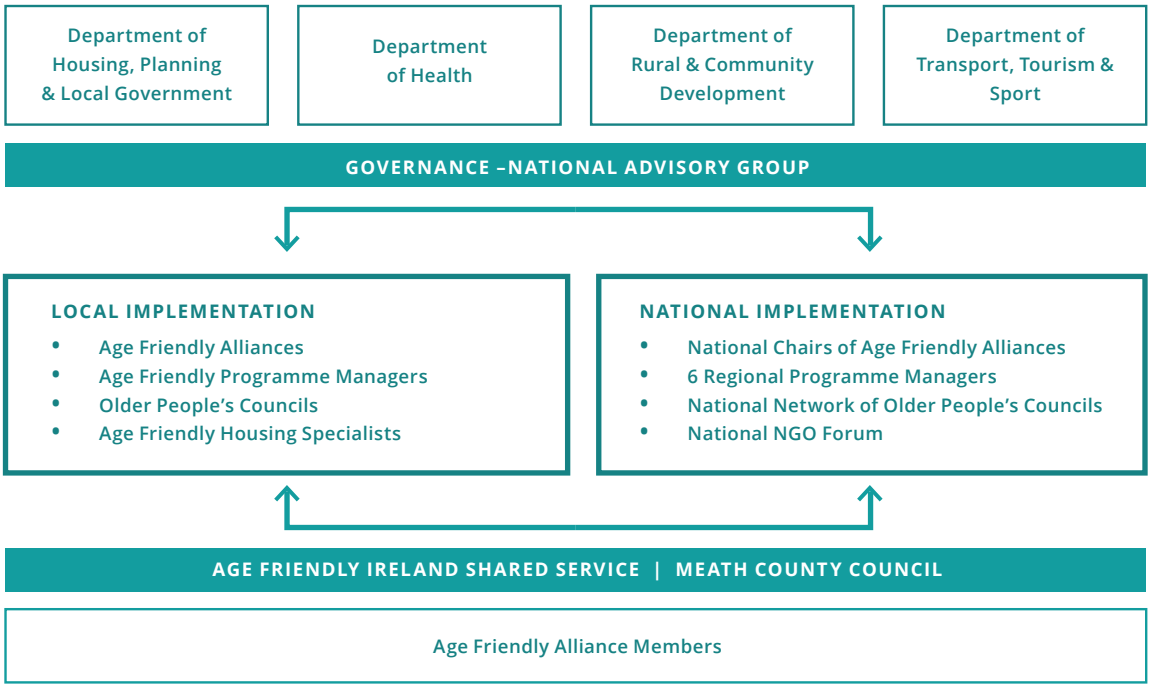
The age-friendly programme addresses eight key areas for living well in older age, namely:

- housing,
- transport,
- social participation,
- inclusion,
- civic participation,
- communication,
- community support and health services, and
- outdoor spaces and buildings.

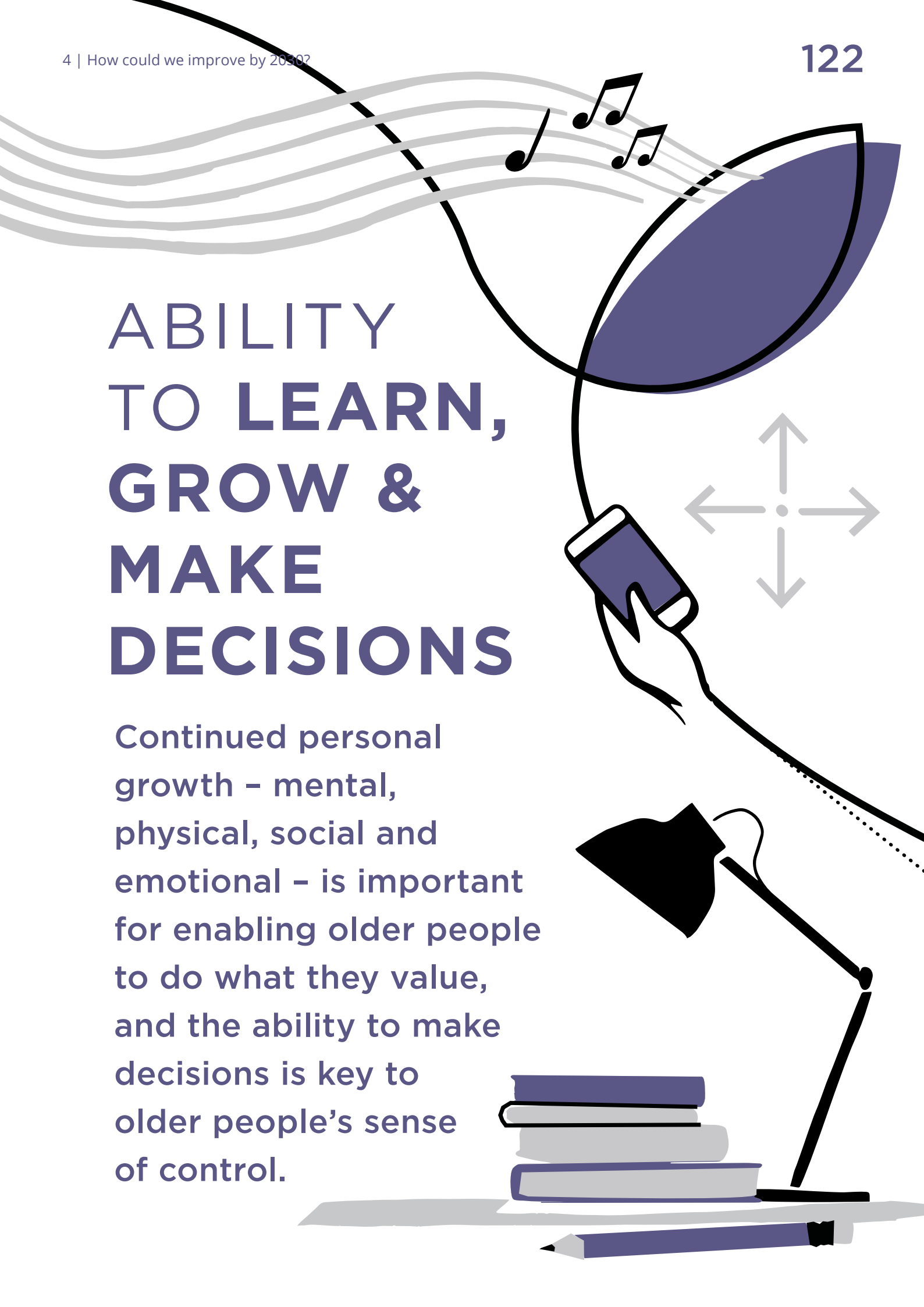
All 31 local authority areas in the Republic of Ireland have committed to creating an inclusive, equitable society in which older people can live full, healthy lives. Age Friendly Ireland supports and provides technical guidance to each local authority. It is responsible for strengthening and embedding local programmes; scaling up and repeating best practice; measuring, monitoring and sharing learning; and creating national policy.

The Age Friendly Ireland model combines a bottom-up participatory approach at local and community levels with top-down political and agency-led commitment and resources **(Figure 4.7)**. The views of older people are at the core of this programme, with older people's councils represented at local and national levels.

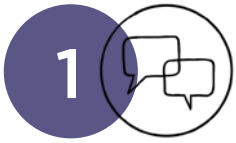
FIGURE 4.7
Structure of Age Friendly Ireland



ABILITY TO **LEARN, GROW & MAKE DECISIONS**



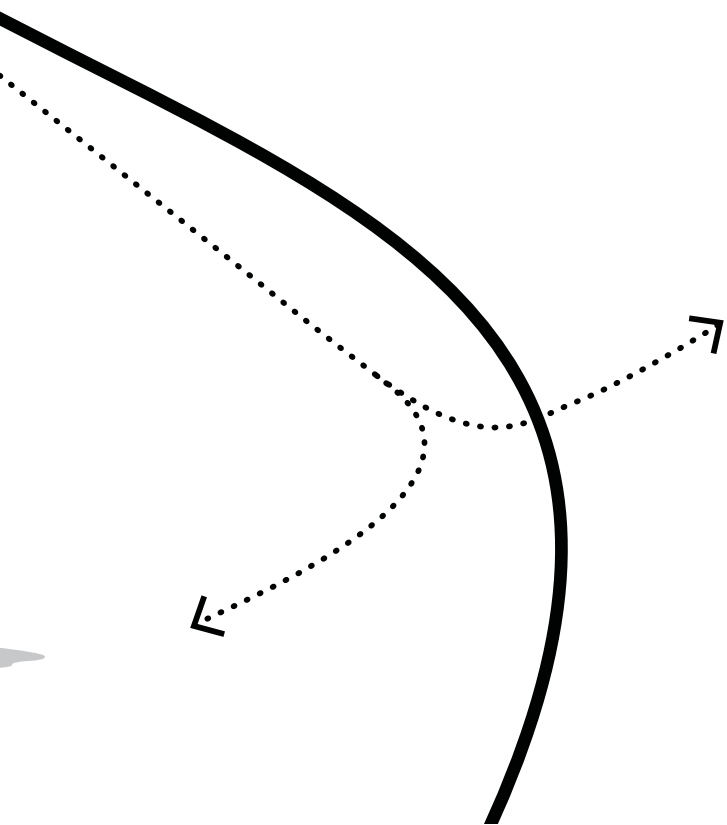
Continued personal growth – mental, physical, social and emotional – is important for enabling older people to do what they value, and the ability to make decisions is key to older people's sense of control.



CLARIFY
areas of action

Important areas for action include:

- **Challenge negative attitudes and stereotypes**
- **Improve literacy in older people**
- **Invest in accessible opportunities for lifelong learning and growth**
- **Facilitate choice and control.**



IDENTIFY
the interventions and evidence to support

Promoting lifelong learning may improve older people's well-being, social connectedness, and physical and mental health, as well as other outcomes. Benefits also include pursuing personal interests and goals – a key element in healthy ageing. A scoping review of later-life learning programmes worldwide identified many informal learning programmes and activities such as Universities of the Third Age (U3A).[197]

Programmes had evidence of **improvements in older people's life satisfaction, quality of life, health status (including physical fitness and psychological well-being), extent of social support networks, coping strategies, and other meaningful outcomes**[197] –such as decreases in depressive symptoms,[198] and negative affect,[199] reduced instances of neglect,[200] improved information-seeking, improved emotional balance, increased social activities,[199] and improved quality of life.[201] Lifelong learning opportunities may combat older people's own negative attitudes to ageing, and increase positive self-perception – a key impact for the Decade.[199]

There is also evidence on ways to enable older people to make decisions about their health. A Cochrane review of three studies on interventions aimed at involving older people with several conditions found that participants were more likely to perceive their care to be aligned with their priorities (moderate level of evidence).[202] Further evaluations across a wide range of contexts will enhance global understanding of how to extend lifelong learning and maintain older people's independence and autonomy.

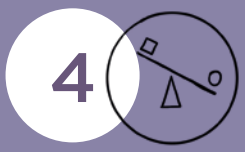
3

DESIGN & ASSESS
what can be done

Some cities are piloting creative ways for older people to learn and grow. In Gothenburg, Sweden, the Life Filming project explores the stories and perspectives of older people while teaching technological literacy.[203] Through a five-week workshop, older participants become filmmakers: learning to use a tablet and camera and employ photography and film techniques. They use this knowledge to **create and discuss their own short films and photographs which depict the world through their perspectives.** Some 120 older people have participated in the workshops so far.

Life Filming also provided Gothenburg with a unique source of feedback on ways the city could become more age-friendly.[204] In 2016, in partnership with the city's development centre (Senior Gothenburg) and the health promotion unit, older people shot images and films on the theme of "outdoor environment". **The images and films they created portrayed difficulties they encountered in their own urban environments and how these could be improved.** Life Filming takes a creative approach to the lifelong learning model which can also empower older people's voices and enhance other domains of functional ability. Innovative approaches should be encouraged when designing lifelong learning programmes. Programmes should be evaluated from the perspective of older people and how they are enabled to contribute to society.

Older people are not the subject of the films, but the film-makers, giving them the opportunity to present their points of view.



LEARN
how it can be done

Evidence-based practices from other settings can provide insights on how best to facilitate choice and autonomy for older people including managing self-care and using health services. However, these must be evaluated for effectiveness in every new setting. The Department of Public Health in the Kingdom of Saudi Arabia implemented "older people's health passports" across primary health care centres. The experiences of some 2000 older people, between September 2019 and February 2020, have contributed to evaluations.

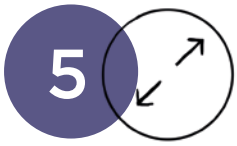
Based on the concept of health passports used in other settings, the older people's health passports contain individual:[205,206]

- health and care management plans;
- health assessment results (e.g. vital signs, geriatric assessment, etc.);
- summaries of health management/care;
- messages for caregivers;
- spaces for personal notes or questions about their health;
- information about geriatric health;
- general information (e.g. emergency phone numbers).

By putting this information into one convenient "passport" that older people carry, **the project aims to help older people discuss their health and care plans with providers, family and friends, make their own decisions about their health, and learn about healthy lifestyle practices.**

Facilitating choice and autonomy for older people can often be learned by drawing on evidence-based practices from other settings. However, these must be evaluated for effectiveness in every new setting.

A team of clinical and research professionals was formed to develop versions of the health passport and a team of primary care physicians and nurses was trained to distribute passports.[207] Both before and after implementation, semi-structured questionnaires were administered to older people and care providers. They evaluated older people's experience with health services and knowledge of their health and identified any barriers or facilitators in in using the services. The point is to support older people to make decisions regarding their own health.



REACH
scaling up and leaving no one behind

Investing in programmes that teach digital literacy skills to older people can provide opportunities for lifelong learning and growth. Many older people identified this as a research priority in WHO's 2017 global consultation.

+Simple is a digital literacy programme in Buenos Aires, Argentina, that provides older people with online and in-person courses on digital skills, as well as free tablets with the +Simple platform. This is an age-friendly interface to access news, play games, connect to social networks, communicate with family and friends, take classes and date online.[208] Users can also use +Simple to learn about their health and manage medications and appointments, making it easier to make decisions about their health care. Older people attend a 2-hour digital literacy training course at one of the 40 digital classrooms to learn how to use tablets and applications on the +Simple platform.[209]

Between 2016 and mid-2020 the programme had distributed over 130 500 tablets and trained almost 65 000 older people reaching 21% of the 60+ population.[210] The rapid scale-up was facilitated through government funding and partnerships, including with private companies that developed and delivered the products, and local institutions that provided spaces for digital training. The programme promoted the aim of leaving no one behind in the scale-up.

Based on constant feedback from users, the platform has been scaled up to meet additional needs of older people.[210] It includes **features such as popular card games, a recipe-sharing application, an online dating application and a map of accessible locations in the city and nearby pharmacies**.[208,210,211] Partnerships between different government ministries (e.g. social, development, education, science and technology) and stakeholders made these innovations possible. The +Simple digital classrooms have also used simulations on tablets to teach older people to use ATMs to withdraw money from their pension accounts.[212]

In 2019, +Simple was released as an Android application so that more older people can access it on their smartphones, resulting in wider use.[213]

ACCELERATE IMPACT
meet objectives within a time-frame

Evaluations of programmes of Universities of the Third Age (U3As) show positive impact on older people's well-being and quality of life.[197] The programmes have the potential to accelerate impact by 2030. For example, the University for Seniors (UfS) programme at the American University of Beirut (AUB) in Lebanon began in 2010 following extensive research into U3A programmes in France and the USA and in response to the needs of older people in Lebanon. Since then, UfS has grown from 100 to 600 members per year, enabling some 2000 older people to attend lectures, travel on cultural programmes, and connect intergenerationally with younger students. UfS students are aged 50-95 years and have various backgrounds and educational levels. In a qualitative study of the programme, attendees described the many social, cognitive and psychological benefits they had experienced, including increased motivation and happiness.[214]

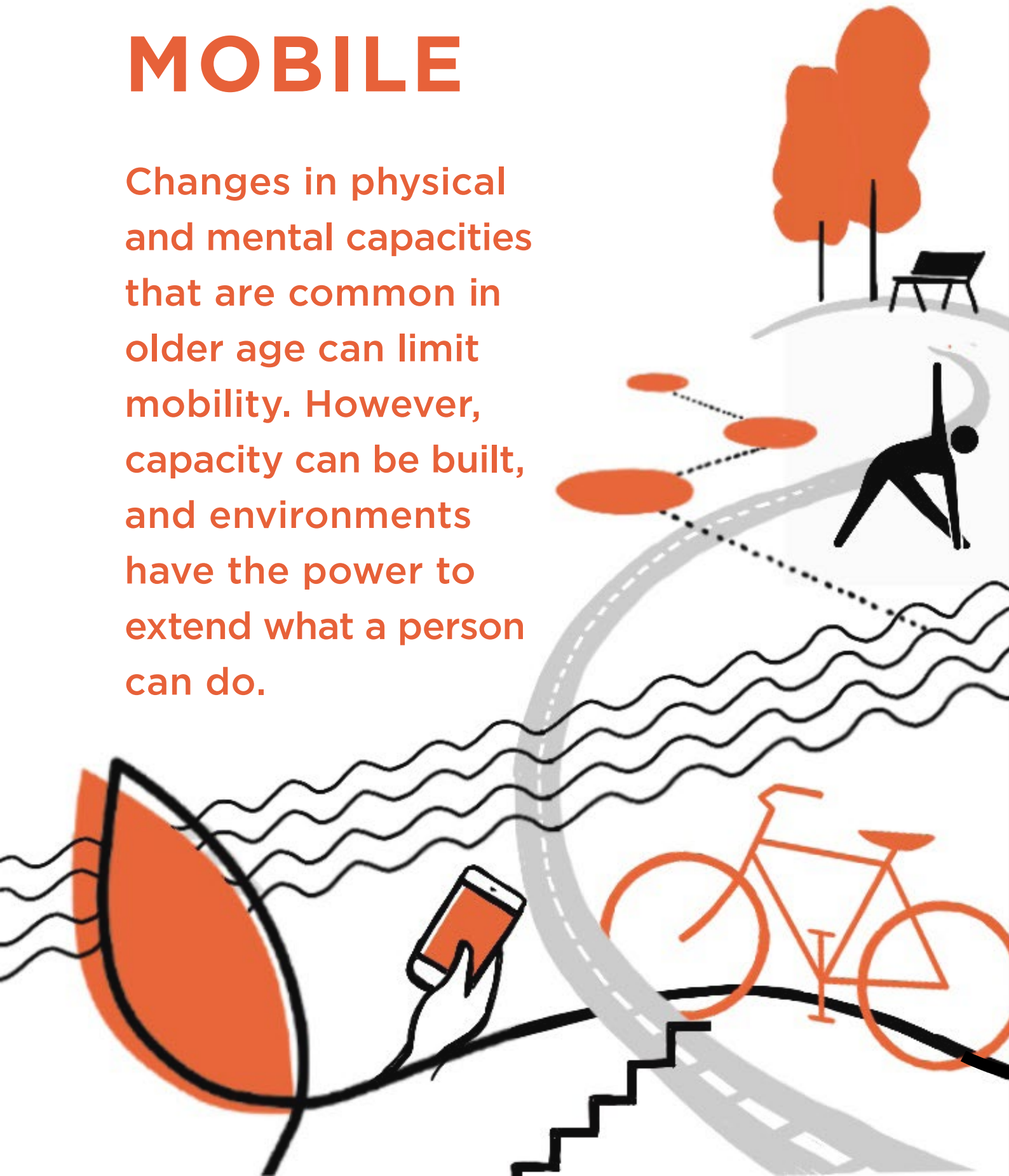
The UfS programme involves stakeholder collaboration with AUB administrators and staff members, experts on ageing and lifelong learning, and committees of UfS member representatives – older people themselves – all of whom provide input on policies and procedures. By officially institutionalizing UfS through these policies and fully integrating UfS members into AUB's campus and community life, the programme ensures its sustainability. Because of UfS's intergenerational engagement, AUB students have enrolled their own parents and older relatives in UfS; as a result, older people are welcomed into spaces that were previously designated for the young. The UfS programme, including its social media outreach, has been replicated and adapted to create a UfS in Bethlehem.

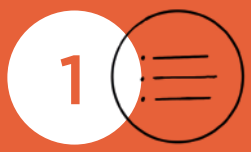
NEXT STEPS

UfS is working to further scale up its activities with a national anti-ageism campaign and outreach to older people in assisted living communities or who are unable to leave their homes.

ABILITY TO BE **MOBILE**

Changes in physical and mental capacities that are common in older age can limit mobility. However, capacity can be built, and environments have the power to extend what a person can do.





CLARIFY
areas of action

Important areas for action include:

- Strengthen what older people can do – their intrinsic capacity to move
- Provide assistive technology to aid mobility
- Reduce barriers in the built environment
- Design housing and neighbourhoods to enable ageing in place
- Improve the availability and accessibility of sustainable transportation
- Create opportunities for older people to participate.

IDENTIFY
the interventions and evidence to support

One of the first ways to enable people to get where they need to go is to strengthen their capacity to move. This includes preventing falls and injuries from falls and addressing the fear of falls, as all of these can limit older people's mobility. Generally, older people should have the ablility to drive, walk or take public transportation to where they want to go.

The interventions often include exercise such as building strength, balance, coordination, flexibility and aerobic fitness. Exercises can be supervised, unsupervised or blended, delivered by health professionals, exercise professionals or trained volunteers and **evaluation shows high impact in reducing falls and related injuries**. For example, balance and functional exercises reduce the rate of falls by 24% and the number of people experiencing one or more falls by 13%. Tai Chi may also reduce the number of people who experience falls by 20%.[215]

The Cochrane Campbell Global Ageing Partnership purposive search reveals moderate-to-strong evidence reviews of exercise programmes, home modification interventions, home- and community-based occupational therapy, and early supported discharge schemes → 4.5.

WHO plans to release Step safety in 2021, an update of evidence on falls prevention and management, including older people and a practical toolkit.

3

DESIGN & ASSESS
what can be done

Many countries are making strides to improve older people's access to transport and to reduce barriers in the built environment. Although some cities have piloted and implemented programmes, very few provide specific information on the size of the effect – or measurable impact – on older people's abilities. Information on impact would be useful for other areas wishing to implement similar programmes. Nevertheless, several programmes demonstrate that it is feasible to provide a safe, secure, accessible and well-connected environment for older people. For instance:

HADANO CITY, JAPAN

created the "Tochicubo Shopping Club" offering transportation to a supermarket once a week for adults aged 60 years and over.[216]

RENNES, FRANCE

Le mobilier urbain au banc d'essai in Rennes, France, engaged older people and people with disabilities to examine public seating in Rennes and to recommend how to adapt it to the needs of persons with decreased capacity. The recommendations were integrated into the city budget and adjustments are being made.[217]

VALPARAISO, CHILE

The Gerópolis Center of the University of Valparaiso, Chile, is partnering with the health authority of the municipality and older people to create the "Community Observatory of Management and Control of Territorial Information". The result of this collaboration is a crowdsourcing platform called DIMEapp (see below), where older people can report environmental problems affecting mobility and accessibility and create an overview of the municipal environment. **This is an example of real-time use of data and geotagging to facilitate functional ability, as older people are involved in all steps of the process from environmental accessibility mapping to app development.**[218] The information is used to help streamline the prioritization, case management and monitoring of accessibility concerns by local government and the community. The goal is to ensure that environments are more accessible for older people and the wider community. The intention is that the app and the information it contains will empower older people to push for changes in environmental issues that affect them.

EVALUATE
how it can be done in practice

Countries are assessing the needs of older people and putting in practice evidence-based programmes, while engaging stakeholders, including older people. For example, Tajikistan has developed a National List of Priority Assistive Products (APL).[219,220] Access to affordable, appropriate and quality assistive technology is fundamental for maintaining and improving older people's functional ability, including mobility.

Previously in **Tajikistan**, only registered disabled persons could access government-funded assistive products; older persons were not entitled to benefit from such financing schemes. To amend this situation, several steps were taken, namely:[220]

- a rapid survey of 200 disabled and older persons from different regions of the country;
- 12 focus groups of over 100 disabled and older people across Tajikistan; and
- a systems analysis of government bodies and nongovernmental organizations (NGOs) that provide assistive technology, including policies, provision, products, procurement, financing and personnel.

The results were then discussed at a consensus meeting with decision-makers from relevant ministries, user groups (including older people), development partners, professionals, UN agencies, and national and international NGOs. The outcome was an amended priority list, **increasing the number of essential products, many of which improve mobility, from the original 12 to 30**, which is also applicable to older people.

The government has adopted this list and has taken action to implement this new policy, including drafting the eligibility criteria, expanding assistive technology centres in several cities and training local staff. WHO assisted in establishing a relationship between the Ministry of Health and the China Assistive Devices and Technology Centre (CADTC) for product procurement. The impact assessment of the National APL on the relevant population is in progress. Lessons learned from Tajikistan will be useful to other countries that plan to develop a national APL that is inclusive of older people in low-resource settings – a national progress indicator that all countries have committed to as part of the Decade.

5

REACH

scaling up and leaving no one behind

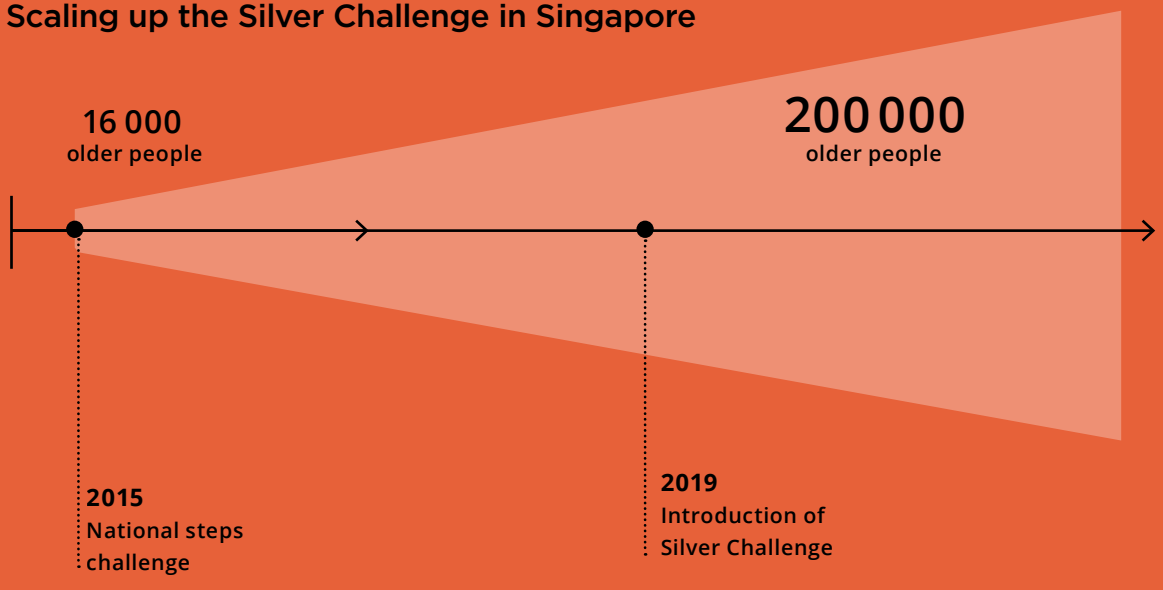
Promoting a healthy and active lifestyle is key to Singapore's Action Plan for Successful Ageing (2015). The Health Promotion Board (HPB) launched the National Steps Challenge™ in 2015, incorporating smart, wearable devices and typical elements of game playing to encourage residents to stay active.[114] Free step trackers (which eventually included a heart-rate monitoring function) and a dedicated mobile app ("Healthy 365") were offered to all residents to track activity. The programme successfully nudged over 1.3 million adults towards higher levels of physical activity, with an average improvement of 3950 steps per day.

Riding on this remarkable success, HPB introduced the **National Steps Challenge – Silver Challenge** in 2019 to further boost older people's participation in physical activity aligned to their specific interests. This dedicated challenge promotes physical activity through guided interactive walking trails across Singapore. Older people are encouraged to sustain their healthier lifestyles through participation in Active Ageing Programmes such as group exercises and health workshops in their communities. The reach of the challenge increased through helpdesks that effectively integrate older people with lower IT literacy.

The number of older people participating in the National Steps Challenge has **grown more than 11 times**, from 16 000 people in 2015 to over 200 000 people in 2020. The daily average number of steps recorded by those over age 60 rose from 6900 in 2015 to 10 500 in 2019, a remarkable success (Figure 4.8).[114,221]

FIGURE 4.8

Scaling up the Silver Challenge in Singapore



6

ICOPE

ACCELERATE IMPACT
meet objectives within a time-frame

To enhance intrinsic capacity, promote functional ability (including mobility) and minimize care dependency, WHO released guidelines on Integrated Care for Older People (ICOPE) in 2017. The evidence-based recommendations were reached by consensus with over 100 experts from 85 countries.[222]

The first phase of the ICOPE implementation pilot programme has started in France, Andorra, China, India, Italy, Kenya, Mexico, Qatar and Viet Nam in order to assess feasibility and acceptability. In the Occitania region, France, the programme has been added to the daily clinical routine for people aged 60 and above.[223,224] Extensive engagement of regional authorities, the community health workforce and hospitals is credited for the success.

The ICOPE care pathways have five steps:

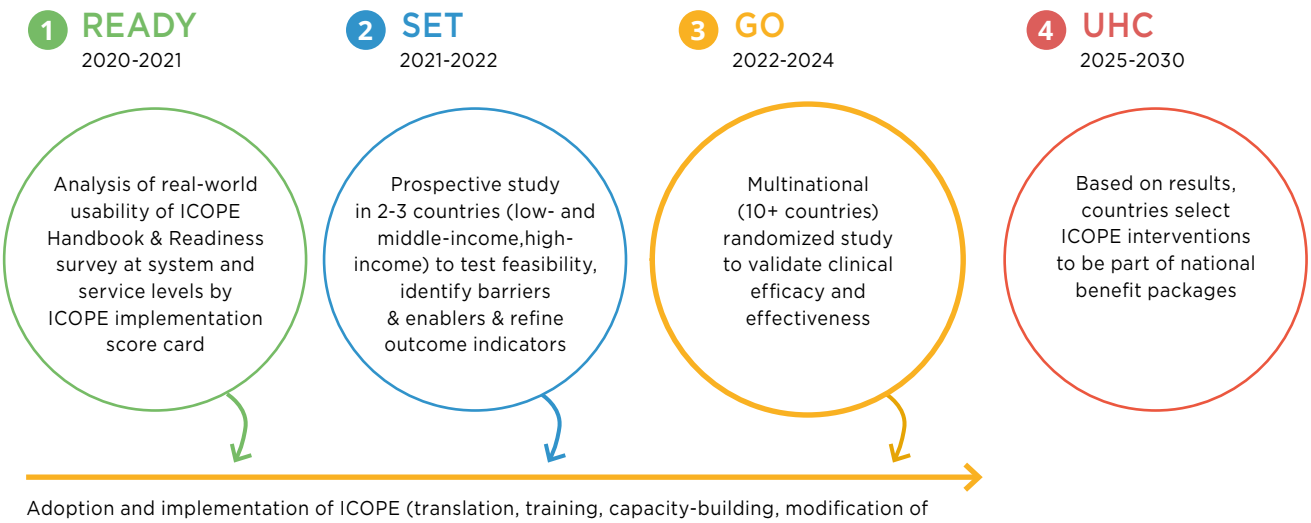
1. screen for losses in intrinsic capacity;
2. person-centred assessment in primary care;
3. develop personalized care plan;
4. ensure referral pathway and monitor the care plan; and
5. engage communities and support caregivers.

The training in implementation is required for all stakeholders – including older people and their caregivers – in order to ensure smooth transition through each step.

ICOPE's Ready-Set-Go approach to test and learn from feasibility and acceptability pilots as well as studies to evaluate clinical effectiveness and efficacy are planned to be completed by 2024 **(Figure 4.12)**. From 2025, ICOPE will be rolled out within primary health care in a wider range of countries. With favourable cost-effectiveness information, ICOPE will be adapted and included in UHC benefit packages by countries.

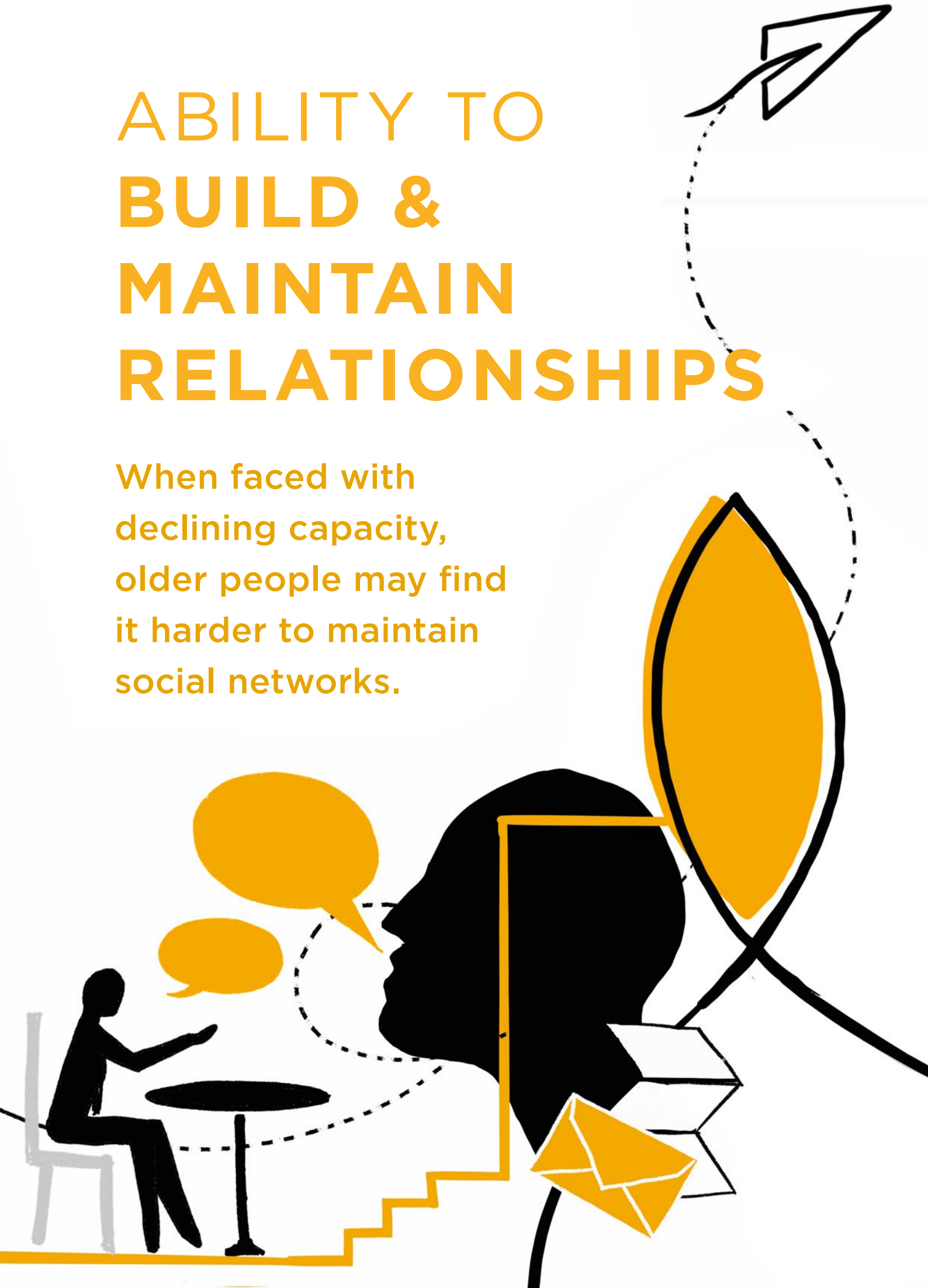
FIGURE 4.9

Steps to evaluate and scale up ICOPE



ABILITY TO **BUILD & MAINTAIN RELATIONSHIPS**

When faced with declining capacity, older people may find it harder to maintain social networks.



CLARIFY
areas of action

Important areas for action include:

- **Identify and tackle loneliness and social isolation**
- **Create opportunities for meaningful social roles and reciprocal relationships**
- **Consider the impact of public buildings, transport, housing and medical facilities on social networks**
- **Improve access to information and communications technologies.**

IDENTIFY
the interventions and evidence to support

Social isolation (the objective lack of social interactions) and loneliness (the subjective appraisal of insufficient social contact) constitute two major problems for older people with negative consequences for mental and physical health.[77]

Various interventions can be implemented to tackle loneliness and social isolation in older people – including psychological therapies, health and social care provision, animal interventions, befriending interventions, and leisure/skill development interventions.[225]

Adaptability to the local context, productive rather than passive activities, and community development approaches were common characteristics identified as effective. A Cochrane review found that participation in environmental enhancement and conservation activities[226] are beneficial not only for the environment and skill development but also for fostering a sense of self-worth and belonging to the community.

Older people seek relationships and thrive with friends, families and intimate relationships. Ageist misconceptions, including stereotypes around older people's sexual interactions, often result in lack of sufficient support for the prevention of sexually transmitted infections (STIs). Sexual activities are an important but often ignored part of older people's interpersonal activities. A recent systematic review on interventions – not based on drugs – to prevent STIs in older people[227] shows that face-to-face workshops can be helpful to increase short-term knowledge on STIs. The review also highlights the lack of high-quality evidence on interventions with long-term effects or behavioural changes in sexually active older populations.

3

DESIGN & ASSESS
what can be done

Intergenerational programmes can constitute an effective way of engaging older people with opportunities for developing meaningful social roles and reciprocal relationships, while learning, developing and participating in the community. These can also combat ageism by changing how we feel and act towards people on the basis of their age.

In **Jacó, Costa Rica**, a programme was developed to provide the means for older people in day care and living in the community to transfer their knowledge of traditional agriculture to others. Younger participants join older people in the crop fields, where they learn traditional procedures by observation and receive instruction from older people. The programme collects and preserves the traditional knowledge of these older experts, while **providing opportunities for social interaction and connectedness with other older and younger people.**

In **Noida, India**, an intergenerational approach is in place to provide support to students who are economically disadvantaged. Educated and functionally independent older people have been trained by educational experts to provide engaging coaching classes to these students. The programme was piloted over a year, showing that older people participating appreciated the opportunity to give back to the community and felt a sense of belonging – and students' performance increased.

While these interventions show promise, further evaluation of the impact on older people's social networks, connectedness, feeling of contribution, usefulness and satisfaction is necessary in order to document their effectiveness and help allocate resources to replicate these interventions in new areas.

Older people were engaged in the project development from the very beginning by assessing their preferences and interests, and by making them co-designers of the activities.

4

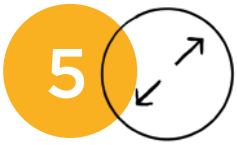
EVALUATE
how it can be done in practice

Green and Growing, a therapeutic horticulture intervention implemented in Salford, United Kingdom, **brought together older people living in sheltered housing, supported living, and independent accommodation**. Older people are provided with both resources and facilitators, who in turn provide information and guidance, when needed, to teach how to grow different plants throughout the year.[228,229]

The project was developed in collaboration with older people, the public sector and voluntary organizations. Older people were engaged in the project development from the very beginning by assessing their preferences and interests and by making them co-designers of the activities.

Participants stated that being part of the gardening groups gave them a sense of meaning. In addition, they were able to establish new connections and meet new people, and reported having a sense of camaraderie and fun which extended to older people outside the active gardening group (for instance, older people with declines in intrinsic capacity were present in the garden).[230]

A frequent barrier in launching similar community programmes is funding. A local community interest company, Incredible Education, created a toolkit with tips for launching a community growing programme so any individual (including older people) or small group can start a similar project with little to no funds.[228,231] The toolkit includes information on the tasks to be done throughout the year, a checklist with the suggested equipment, a glossary with terms relevant for the learning process, as well as practical ideas on how to replicate the idea in other communities.



REACH
scaling up and leaving no one behind

In Viet Nam, Intergenerational Self-Help Clubs (ISHCs) are an effective and sustainable model providing opportunities for social and intergenerational bonding, as well as enhancing other functional ability domains. These clubs are community-based organizations **implemented, managed, monitored and owned by their members, who are mainly older people**. The ISHC members choose a management board, which is responsible for identifying the members' interests and needs, and designing activities and interest groups to address these. The activities help older people to socialize, generate income, promote health, continue learning and remain active. They also mobilize resources so those in need (whether ISHC members or not) are not left behind. The provision of companionship to those in need is an example of services provided to the community.[232]

The clubs are designed to promote equity by serving those who are more disadvantaged – mainly older people at lower income levels, living alone or with an older spouse, experiencing disabilities, or being a primary caregiver with no access to respite care.

As noted in the *World Report on Ageing and Health*[13] in 2015, 700 ISHCs were established in 13 provinces/cities. Subsequently, a national replication project was set up to scale up the model across the country, further supported by older people, the Vietnam Association of the Elderly and local authorities. International funding projects, managed by HelpAge International, have supported capacity-building initiatives with expansion to new areas. As a result, by the end of 2019 the number of ISHCs had more than quadrupled to 2900 and the number of provinces/cities with ISHCs had increased to 60.

The ISHCs approach has proven to be sustainable, serving people in both urban and rural settings, and including ethnic minority populations as well as people with different backgrounds and beliefs. A country-wide replication project aims to add another 3000 ISHCs between 2021 and 2025.[232] HelpAge will continue to provide support to existing ISHCs to better meet the needs of their members, and to local associations of older persons in order to build their capacity to establish, operate and manage ISHCs.

The clubs are designed to promote equity by serving those who are more disadvantaged.

By volunteering, older people are engaged and empowered to grow from being service users to being coproducers of the organization and delivery of programmes and activities.

6

ACCELERATE IMPACT

meet objectives within a time-frame

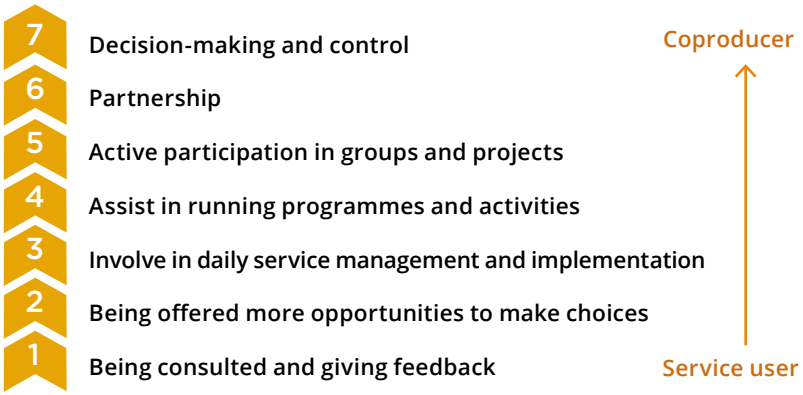
Singapore's *Action Plan for Successful Ageing*, launched in 2015, invests 2.2 billion (US$) in its national blueprint for ageing to ensure that older people stay active and meaningfully engaged, be part of a caring and inclusive society, and age confidently in place – a collaborative effort between government agencies and multiple sectors.[114] Several initiatives foster social innovations that activate the community, increasingly engage new stakeholders and support older people to build strong connections and relationships.

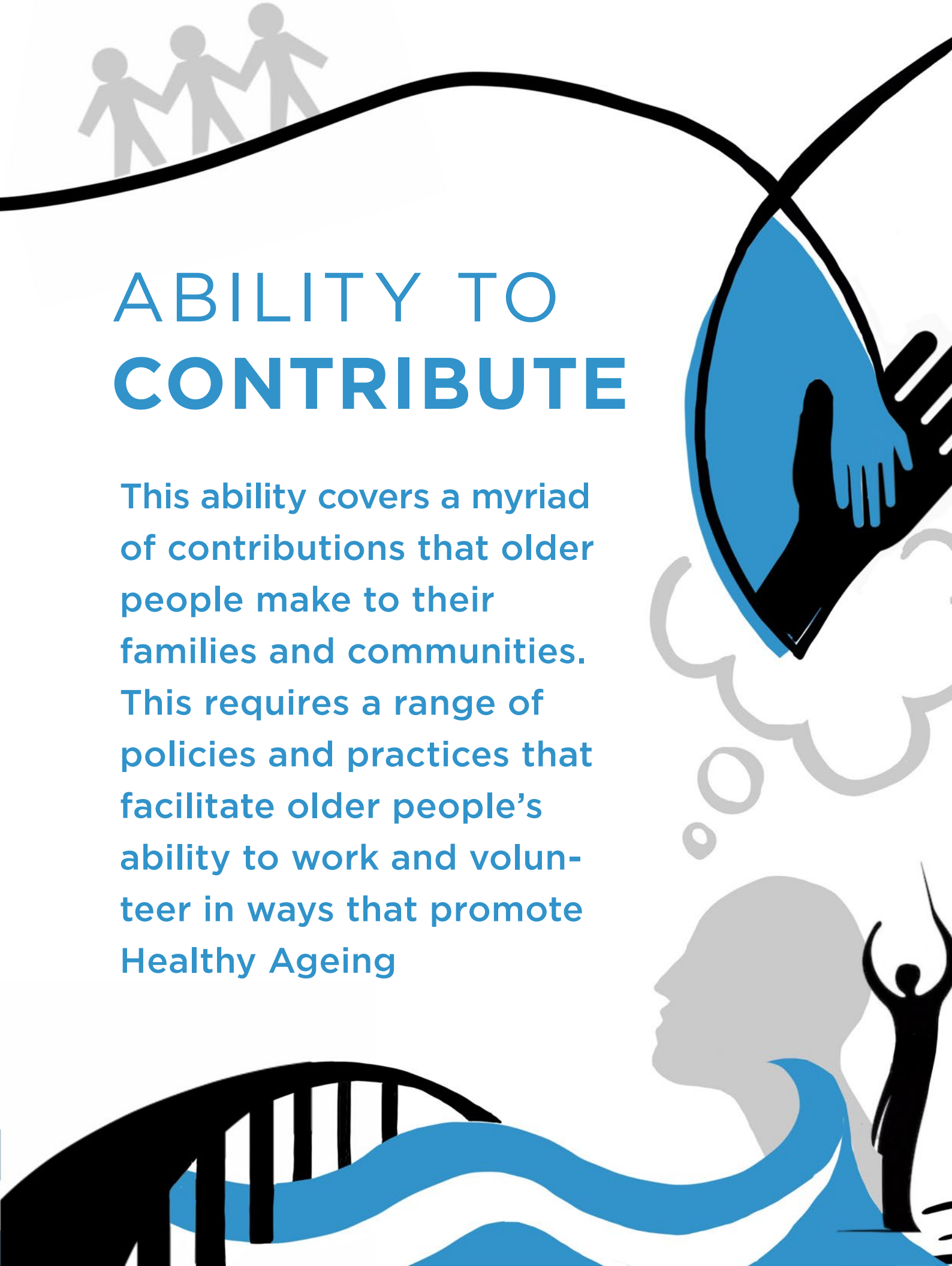
Recognising the importance of preventing social isolation, the Community Networks for Seniors (CNS) initiative connects stakeholders within neighbourhoods, to deliver social support services to older persons jointly. Community volunteers with the Silver Generation Office conduct outreach to older people to understand proactively their needs. The CNS initiative, informed by easy-to-use information dashboards, promotes preventive health and active ageing programmes, befriends lonely older persons who live alone, and connects social and health support services for older persons who experience complex social-health needs.

The Community Befriending Programme taps older people to serve as volunteer befrienders to visit socially isolated and lonely older people in their homes and follow up with regular phone calls.[233] This programme recognizes the valuable role and skills that older people can bring to community support efforts. By volunteering, older people are engaged and empowered to grow from being service users to being coproducers of the organization and delivery of programmes and activities, as shown in the steps of **Figure 4.10**.

FIGURE 4.10

Ladder of user participation in senior services, from service user to coproducer





ABILITY TO **CONTRIBUTE**

This ability covers a myriad of contributions that older people make to their families and communities. This requires a range of policies and practices that facilitate older people's ability to work and volunteer in ways that promote Healthy Ageing

1

CLARIFY
areas of action

Important areas for action include:

- **Challenge ageism, create inclusive environments that embrace age diversity and listen to diverse voices**
- **Abolish mandatory retirement ages**
- **Reform pension systems that incentivize early retirement or penalize a return to work**
- **Support gradual retirement options and flexible work arrangements** → 2.12
- **Consider incentives that encourage employers to retain, train, hire, protect and reward older workers**
- **Help older people plan for the second half of life and invest in lifelong learning**
- **Invest in health and functioning**
- **Create the conditions for volunteerism.**

2

IDENTIFY
the interventions and evidence to support

One key approach is to support employment participation in older age, addressing both individual factors such as financial and health conditions, and environmental factors such as working conditions and job control at workplaces.[234] Experts from 11 European countries created the Joint Platform Initiatives Understanding of Employment Participation of older workers and identified knowledge gaps using the lidA (leben in der Arbeit) framework on work, age and employment. The framework illustrates an interplay of 10 key determinants of work participation among older workers, namely: labour market, legislation and its implementation, financial, social position, domestic, human resources, work, health, work ability, and motivation.[235]

Studies from many high-income countries identify interventions that promote work participation in employees aged 45 years and above.[236] The findings suggest that multicomponent interventions may prevent job loss and early retirement among older workers. The interventions include at least two components of health service delivery (e.g. rehabilitation counselling for chronic conditions), coordination of services (e.g. involvement of employers and health professionals) and work modifications (e.g. assessment of barriers and adaptations in the workplace). However, less evidence supports isolated interventions.

The Health Council of the Netherlands identified interventions to support the employability of older workers. Interventions could comprise career development workshops, worksite health promotion, occupational consultations and web-based health risk assessment.[237] More evidence is needed to recommend the most effective interventions for specific people and working situations.

3

DESIGN & ASSESS
what can be done

Many organizations encourage older persons to participate in voluntary activities and post-retirement employment. The balance between voluntary and paid work is important, and more evaluation would be helpful to assess the ways to facilitate and enhance the ability to contribute in older age. Two cases from the Age Friendly World global database of age-friendly practices illustrate ways in which older people are engaged and contribute their knowledge, talents and skills to their communities and broader society:

Many organizations encourage older persons to participate in voluntary activities and post-retirement employment.

Elderly Council[238] **(Antalya, Turkey):**
Established in 2019, the Elderly Council is for people aged 60 years and above to have a voice about the city they live in. The Council incorporates the perspectives and views of older residents to make their environment more age-friendly. The Council has 60 voluntary members (30 men and 30 women) and includes seven subcommittees: on the rights of older persons, sustainable and accessible city, environment, intergenerational relationships, healthy ageing, lifelong learning, and culture and art. Older people involved in the Council have said they felt valued and productive as they were able to express themselves and contribute to their community.

BABA Trondheim[239,240] **(Trondheim, Norway):**
BABA is a local organization that enables older persons to contribute to cultural activities. The members, including both older immigrants and older Norwegians, have regular meetings and workshops to create music, dance and theatre performances with younger people. The cultural activities show the diversity of the Trondheim community and provide opportunities for intergenerational interaction.

4

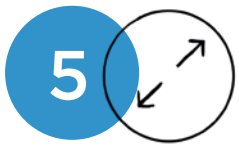
LEARN
how it can be done

Technology can provide novel approaches to create opportunities for older people to find voluntary roles or employment that match their interests. The Active Assisted Living (AAL) Programme – Ageing Well in the Digital World is a European funding programme that seeks to strengthen technology and innovation in support of healthy ageing. The AAL has funded a wide range of projects designed to facilitate volunteering, employment, intergenerational programmes and promotion of a healthy working life.[241]

Tested in community organizations in Germany, Ireland, Poland and Switzerland, the Active Retiree and Golden Workers Gate (ActGo-Gate) project is an ICT-based marketplace that enables older persons and people with needs to find voluntary short-term and long-term occupations that promote self-fulfilment and social participation. The ActGo-Gate application and business model is an example of a sustainable project that could be encouraged – with demand from older people themselves.[242,243,244,245]

This marketplace platform brings together older people, potential employers (organizations for care provision, unpaid volunteering and employment) and Integrators (people who support older people in use of the platform and provide job counselling and training).[246] The app was developed in Germany, Switzerland and Poland by partners that included social care and research institutes, a volunteer organization, and a group promoting innovation in business and commerce.

Three occupational modules were tested: the **"serve the community"** (informal volunteering work), the **"flexible occupation"** (part-time jobs) and the **"get involved with organizations module"** (social projects). Potential employers showed positive feedback. Further evaluation would show the impact of the application on matching older people's needs and goals, with opportunities to contribute.



REACH
scaling up and leaving no one behind

Valuable experience in local areas can be a foundation for scaling up plans at national level.

In the Republic of Korea, the Seoul Metropolitan Government launched the Seoul 50 Plus Policy Initiative in 2016 to ensure that people aged 50 or above remain active and engaged in society. The initiative aims to provide a supportive environment for older people to transition to post-working life and pursue new interests, learn new skills, and find new opportunities for employment and social engagement – **a positive trajectory of healthy ageing**. The policy process applied a variety of methods to obtain evidence on characteristics and needs of the 50 Plus generation and to involve multiple stakeholders, experts, policy-makers and nonprofit organizations.[247,248]

The Seoul 50 Plus Foundation coordinates the 50 Plus campuses and centres which offer education, counselling and job networking. Public- and private-sector partnerships promote the business operation of "Boram jobs". These are paid voluntary jobs, allowing adults aged 50 years and over to contribute their knowledge and experience to different roles, such as providing welfare services, mentoring younger generations and other community support, while receiving financial compensation. Up to August 2017, the 50 Plus campuses provided more than 300 courses, with 600 people participating in Boram jobs. To reach all older people, the Foundation plans to have at least one campus or centre in 25 administrative districts, with each centre reflecting the characteristics and needs of the local area. The aim is to scale up to 12 000 Boram jobs in collaboration with public and private sectors.[247] The national government has also planned to scale up the 50 Plus Policy beyond Seoul across the country. The Seoul example and its connected programmes will be used as a benchmark for other cities and municipalities in the Republic of Korea.

The initiative aims to provide a supportive environment for older people to transition to post-working life and pursue new interests, learn new skills, and find new opportunities for employment and social engagement – a positive trajectory of healthy ageing.

ACCELERATE IMPACT
meet objectives within a time-frame

Building a collaborative volunteering network across different stakeholders can accelerate older people's ability to contribute to their families, communities and society. Auser, a National Network for Active Ageing, is an Italian association of approximately 46 000 volunteers with close to 8 million donated hours per year, focusing on social rights and community welfare. AUSER promotes a variety of voluntary work that engages people of all ages – with the overwhelming majority over the age of 60. Older people are also responsible for Auser's management and have created an enabling environment for older people to contribute – to support older people who are alone and engage in community activities such as social services, lifelong learning, support for migrants and dialogue between generations.[249]

Established in 1989 by a group of women based in Turin, the Auser volunteer group initially focused on addressing loneliness in older persons via telephone contact services. Over the past three decades, Auser has gradually expanded its mission and geographical reach throughout Italy and has participated in several nationwide activities for social care and service. In particular, Auser has responded to the national summer assistance programme for older people that was launched by the Ministry for Family and Social Solidarity. Since 1994, it has developed a country-wide network to reduce risk of heat stroke and loneliness in older people via 24-hour telephone contact, home services, monitoring vulnerable groups and organizing recreational activities in air-conditioned centres. The association is actively involved in the international networks of the University of the Third Age and NGOs. Volunteers participate in research relevant to healthy ageing: in 2020 this included TAPAS (Time and Places and Space in Ageing) that investigated the well-being of older people during the COVID-19 pandemic.

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September–October 2020


UERM
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SPEED / TIME
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ACCELERATING IMPACT REQUIRES

LEARNING FROM DISEASE-BASED PERSPECTIVES

Accelerating impact requires that all good ideas and programmes are considered, and those evaluated as impactful are applied in new locations. This spirit calls for learning from those focusing on diseases, and particularly approaches to reduce risks, manage disease and promote secondary prevention of NCDs among older people. **Given that chronic and noncommunicable disease conditions make up the 10 major causes of disability-adjusted life years (DALYs) in older people globally, these merit special attention** (Annex 6). The prevalence of people living with NCDs reflects the accumulated effects of:

- their behaviours, vulnerabilities and exposures to risks (e.g. tobacco-smoking, malnutrition or air pollution);
- the health and social care services they receive (e.g. diagnostics, treatment and long-term care and rehabilitation services); and
- the context of social, physical and natural environments and socioeconomic conditions (e.g. national progress towards UHC, policy decisions to strengthen health and social systems, and policies to build healthy and inclusive environments).

Moreover, the COVID-19 pandemic reveals the importance of underlying conditions,[250] mostly NCDs, as they increase the risk of severity of disease and death which are concentrated or elevated among older people in many countries.[251]

Effective learning is a two-way street with shared goals. Most health systems are designed to address individual acute health conditions rather than conditions of older age. **Those advocating for healthy ageing should influence those who are responsible for disease prevention, management and rehabilitation.** This includes testing the benefits of person-centred, integrated care and comprehensive primary health services that are responsive to older people. Appropriate services, medications and assistive devices, along with fair financing, will also move countries closer to ensuring that more older persons benefit from UHC by 2030.

Moreover, leveraging and tapping into other ideas and resources can spur innovation. Increasing policy coherence across global and national strategies and action plans (including dementia,[252] NCDs,[253] rehabilitation[254] and vaccines[255]) so that these support healthy ageing and are inclusive of older people, will also speed up action.

Together, these efforts will advance a key action of the Decade, namely: scaling up age-friendly primary care services for older people, covering a comprehensive set of services, including vaccination, screening, prevention and management of NCDs and communicable diseases as well as age-related conditions. Research and innovation are equally important to all the Decade's actions: reducing age-based discrimination, fostering age-friendly communities, and strengthening long-term care.

A final narrative addressing the prevention and management of NCDs highlights progammes that might have started as disease-based but are transforming into person-centred, integrated approaches inclusive of older people. This is a trend to be encouraged.[253]

ADDRESSING NCDS FROM A PERSON-CENTRED, INTEGRATED APPROACH

CLARIFY
areas of action

NCDs can affect people of any age, sex or region but are especially common in older age groups. NCDs can affect a person's physical and mental capacities (intrinsic capacity) and functional ability.

Reducing risk factors and providing high-quality health services can prevent and help manage NCDs. Promoting healthy ageing across the life course and for older people can build up and maintain older people's intrinsic capacity and reduce susceptibility to communicable diseases and NCDs.

Healthy ageing does not mean that people need to be disease-free.

Healthy ageing in the presence of disease reflects a focus on living well and optimizing functional ability, but it also means ensuring coordinated care that manages disease with a focus on individuals' personal goals.

As life expectancy increases around the world, some older people will live longer with NCDs.[256] It is vital that older people receive continuous and integrated care that spans health promotion, prevention, treatment, rehabilitation and palliative services. Communicable disease programmes will also benefit from adopting a healthy ageing approach.

Governments can reduce exposures that lead to greater risks for NCDs – such as air pollution. They can also integrate NCD treatment and management into UHC and alleviate individual and societal burdens.[257] Investments in people's health and well-being and that of their families also offer significant benefits.

To achieve the goal of Healthy Ageing – optimizing functional ability – and promoting well-being in the presence of risk for NCDs and their progression, existing WHO strategies and guidance highlight the importance of actions across high-, middle- and low-income countries in the following areas:[253,258]

- risk reduction, including primary and secondary prevention of environmental, metabolic and behavioural risk factors;
- support for NCD management within person-centred and integrated care for older persons;

- integration of NCDs in the defined package of services within national UHC schemes through effective screening, diagnosis, prevention of risk factors, treatment and management of conditions over time and across providers and levels of the health system;

- inclusion of older people in health promotion efforts by addressing preventable risk factors and adverse social determinants; and

- evaluating programmes for improvement and innovation towards healthy ageing.

These actions become even more critical at times when the risk of communicable disease is high. Pandemic conditions not only have a direct negative impact on the capacity of health systems to care for people living with NCDs, but they also undermine health systems' ability to enable older people to access the care they were receiving prior to the pandemic. Disruption of services can hinder screening, diagnosis and treatment procedures, as documented during 2020 in relation to the COVID-19 pandemic.[259]

IDENTIFY
the interventions and evidence to support

Many NCDs are closely interrelated. They are most effectively prevented and managed by applying a bundle of health interventions from a person-centred perspective – what's good for your heart is also good for your brain.

The global evidence on promoting and protecting cardiovascular health (in Annexes 6 and 8) shows that multiple conditions – including coronary heart disease, stroke, hypertension, diabetes, chronic obstructive pulmonary disease (COPD), cancer, cognitive impairment and dementia – may be prevented by promoting healthy behaviours (e.g. healthy diet, avoiding smoking and the harmful use of alcohol, maintaining regular physical activity).[260] **Enabling older people to make these choices, however, requires the social determinants of health to be addressed to widen the opportunities for healthy ageing.** Increasing evidence documents the effective management of risks factors and conditions well after the age of 65 or 70.

Healthy ageing has multiple determinants. →1.4 For a particular region or country, strategies can be informed by the top DALYs for older people, the evidence base to address these, and the commitment of stakeholders in that jurisdiction. The top DALYs (e.g. cardiovascular disease, stroke, COPD, cancer, Alzheimer's disease and other dementias, diabetes) and related evidence on addressing these conditions specifically among older people, is in Annex 6.[261] Public policies and population-based health interventions can avert many NCDs, including among older people.[262]

3

DESIGN & ASSESS
what can be done

Best evidence can benefit older people, their families and communities if it is assessed in real-world practice. It can answer questions such as “how can this be done?,” “who should be involved?” and “what resources are needed?” to achieve the best possible outcomes that leave no one behind.

FINGER: a Finnish Geriatric Study

Although not inevitable, as results in Section 2 indicate, a decline of cognitive functions with age occurs at different rates for different people in different environments. The FINGER study, developed for persons aged 60–77 years at risk of dementia, demonstrated that cognitive impairment can be prevented through a multidomain lifestyle intervention[263] and can be effective in practice.[264,265] Finnish and Swedish researchers tested the effects of an intervention that included “nutritional guidance, physical exercise, cognitive training, social activities, and management of vascular and metabolic risk factors” for the intervention group and regular health advice for the control group. Cognitive outcomes improved by 25–150% in 24 months for the intervention group.[264]

The FINGER intervention has been tested with populations from different backgrounds and with different characteristics.[264] FINGER was most beneficial for older people at highest risk of cognitive decline because of age and cognitive mental status and those with vascular risk factors.[265]

Since 2018, several countries[266] have implemented and evaluated an adapted version of FINGER through multilevel partnerships between ministries, community representatives, researchers, health providers, and older people and their families. These include several countries in Europe and in Central and South America, along with Australia, Canada, China, India, Japan, Malaysia, Republic of Korea, Singapore and the United States.

The study demonstrated that cognitive impairment can be prevented through a multidomain lifestyle intervention.

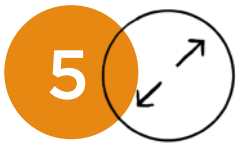
EVALUATE
how it can be done

Many governments are empowering diverse sectors and communities in their grassroots efforts to implement research to optimize older people's functional ability in the presence of disease.

CARE OF PERSONS WITH DEMENTIA IN THEIR ENVIRONMENTS (COPE)

Care of Persons with Dementia in Their Environments (COPE) is a programme developed and implemented in the United States to improve the health of middle-aged and older persons and their families. COPE is a four-month integrated multidomain intervention that includes in-home assessment, education and training by home health providers on ways to reduce environmental stressors and enhance caregiver knowledge and skills.[267] COPE was implemented for 170 homes in **Pennsylvania, USA** for older people with dementia and their family caregivers. Compared to controls, the recipients of COPE had significantly higher well-being (increased independence, activity, quality of life and fewer neuropsychiatric symptoms) and their caregivers had higher confidence in addressing dementia.[268]

In partnership with government health services, NGOs, private practitioners, communities and researchers, COPE was adapted to publicly funded home-care context in Connecticut, and implemented for 290 homes that indicated potential financial benefits, feasibility and acceptability for scale-up. COPE was also adapted and implemented for use in Australia.[269,270,271]



REACH
scaling up and leaving no one behind

DIABETIC RETINOPATHY REFERRAL NETWORK, LA LIBERTAD REGION, PERU

The global increase in the number of diabetic retinopathy cases shows the urgent need for early detection, proper diagnosis and timely treatment to reduce and avert vision loss.[272] Improved vision supports all functional ability domains. The Pan American Health Organization and Peru's Ministry of Health supported a project on early detection and referral for diabetic retinopathy after a national population-based survey identified that the key barriers to averting preventable blindness and poor eye health were cost (26%) and lack of knowledge about treatments (24%).[273]

The Diabetic Retinopathy Referral Network's coordinated effort with government, NGOs, the health ministry, service providers and researchers considered all levels of health care (primary, secondary and tertiary) in assessing and treating diabetic retinopathy.[272] Through a referral and treatment network in Peru, over 11 000 older persons with diabetes were screened at their point of primary care, and nearly 1000 eligible patients received treatment.[274] The programme showed that effective and timely treatment for diabetic retinopathy is possible when education, screening and care are fully integrated into the health system.

Peru is expanding the programme to include persons living in rural areas, aiming to promote equity by removing barriers to access.

ACCELERATE IMPACT
meet objectives within a time-frame

Providing basic screening, diagnosis and treatment for people with a high risk of NCDs offers an opportunity to reduce the burden of NCDs significantly.[260] Efforts need to be accelerated as NCD Countdown research shows that only 17 of 194 countries are currently on track to meet SDG target 3.4 to "reduce by one third premature mortality from non-communicable diseases".[275,276] Evidence shows that preventing and managing NCDs continues to be relevant across older age groups.[260] As demonstrated below, the governments of India, Mexico and Vanuatu are reorganizing the provision of basic screening, diagnosis and treatment services through an integrated, multilevel approach that is inclusive of older people.

AYUSHMAN BHARAT, OR "HEALTHY INDIA"[112]

The National Health Protection Scheme and Health and Wellness Centres ("Healthy India") is a programme to accelerate health and wellness across the country by removing barriers to accessing comprehensive care services. The programme complements the National Programme for Health Care of the Elderly, delivered through dedicated facilities for older people, and financed by the central government.

Healthy India has two major components: universal primary care (through 150 000 subcentres offering services that include management and prevention of communicable diseases and NCDs) and financial assistance. It currently covers the medical costs and hospitalization expenses for 107.4 million families from both rural and urban settings by providing services such as cashless and paperless payment at public hospitals and selected private hospitals included in the programme. **One of the 13 modules covering different stages of the life course is "Healthy Ageing", aimed at supporting integrated care of older persons.** Importantly, this shifts the emphasis from disease to well-being. Additional services for palliative care and mental health services are being developed.

VANUATU HEALTHY AGEING

In Vanuatu, the government is taking steps to accelerate Ni-Vanuatu access to healthy ageing policies and programmes and to address NCDs that can lead to disability. This includes preventing foot amputation of diabetic older people who then become wheelchair-bound. Vanuatu is also refocusing its health-care system to promote functional ability and provide longer, healthier lives for older people through improved long-term care. This approach empowers local communities and villages through a whole-of-society approach with multilevel partnerships.

Health Ageing efforts launched in Vanuatu in 2019 include:

- mass screening for NCD risk factors and common NCDs;
- community involvement to identify family and community issues, risks and possible solutions;
- reaching unreached groups;
- leadership in engaging the whole community of a village or island.

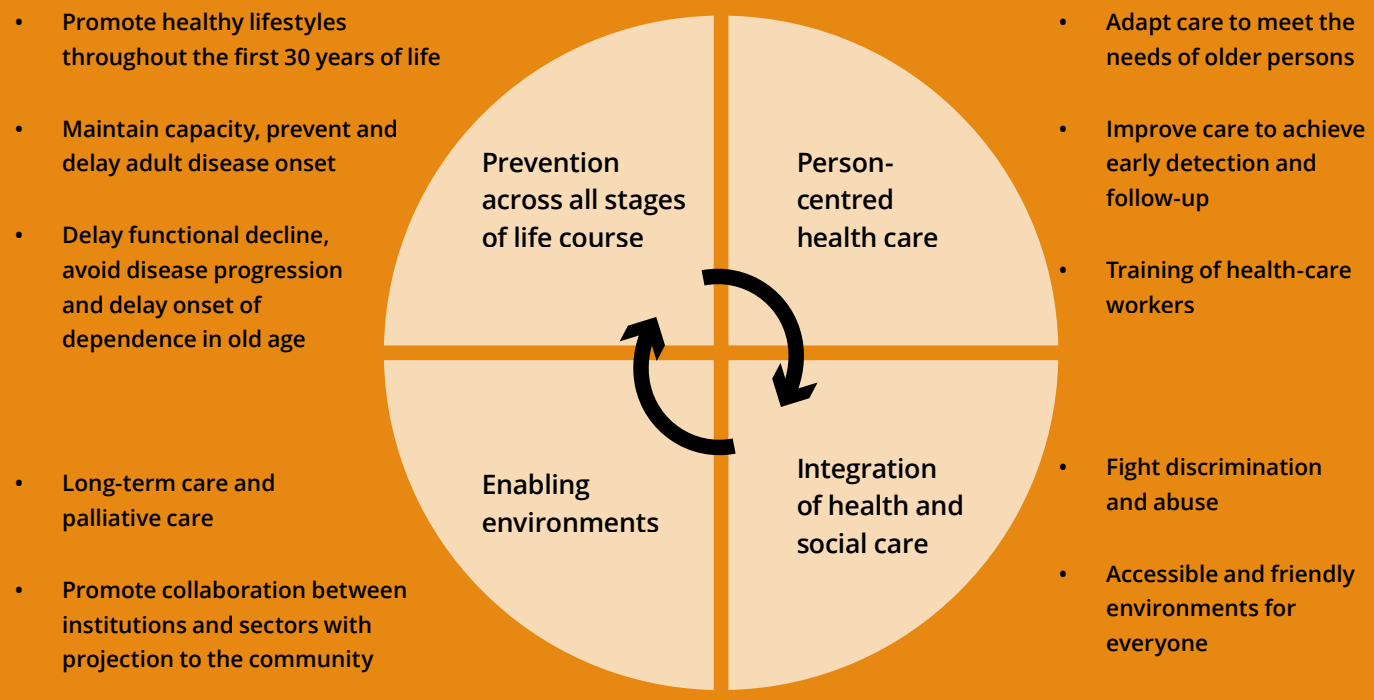
MEXICO'S NATIONAL PROGRAMME ON AGEING (2019-2024)[277]

Mexico has an integrated multisectoral partnership to mobilize national resources toward three focus areas:

- to improve access to and the quality of care for older persons;
- to abolish discrimination and violence against older persons;
- to improve the well being of older persons who are care dependent through a national long-term care system.

The programme **(Figure 4.11)** is designed to reach all older persons regardless of sex, socioeconomic status, housing status, ethnic background or disability – which is crucial to enable older people to meet their basic needs. Significant investments in social media campaigns are intended to raise awareness of discrimination in the health sector and increase older persons' awareness that their human rights must be respected. In addition, the programme is expanding the size of the trained health-care workforce for long-term care and approaches to enhance older persons' functional ability.

FIGURE 4.11
Mexico's national programme on ageing

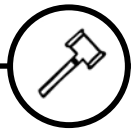


THE INTERVENTIONS CONSIDERED MOST APPROPRIATE OR URGENT WILL DEPEND ON THE CONTEXT.

What needs to be done, and in what order, will depend very much on the national context and priorities. All activities must nevertheless be conducted in ways that engage older people and overcome inequity and age-based discrimination.

Unequal access to the benefits of these interventions may be due to individual factors such as gender, ethnicity, level of education, civil status, place of residence or health conditions. It may also be due to the environment that includes broader social determinants of health. Together, these will shape who has opportunities and who will be able to optimize functional ability.

4



POLICY IMPLICATIONS

- Cases from around the world highlight what can be done and what we can learn from each other. WHO would appreciate being informed of other initiatives or research to promote healthy ageing addressing intrinsic capacity, functional ability or environments.
- Both evidence and cases highlight approaches to research, knowledge translation, programme development and scale-up that engage older people, enable them to use their skills and talents and focus on furthering their abilities and well-being.
- Some promising interventions will require further evaluation and review, while in other areas new knowledge is needed. Further building up recommendations addressing all components of healthy ageing that are relevant to older people, will contribute to policy dialogues during the Decade.
- Multiple activities involving older people are underway in many countries, underlining the need for such engagement to be recognized and evaluated. These will inform national and local actions to accelerate impact.
- Healthy ageing in the presence of disease, including NCDs, reflects a focus on optimizing functional ability, but it also means ensuring coordinated care that manages disease with a focus on individuals' personal goals. The emerging trend to transform disease-based approaches into person-centred programmes inclusive of older people should be encouraged and evaluated – with multiple sectors and partners, including civil society.
- Research on healthy ageing should focus not only on health issues. New knowledge is needed to link the social, biological, economic and environmental determinants of healthy ageing throughout the life course. This should reflect learning from multicountry studies, and experiences that capture the diverse needs and expectations of older people.
- Evidence syntheses that capture what works to enhance all domains of functional ability, intrinsic capacity and environments, are also needed.
- Understanding what can be done and what we can learn from across the life course will contribute to improving healthy ageing trajectories that are inclusive of all ages. During the course of the Decade, WHO, with partners including older people, expects to have a suite of evaluated interventions and programmes that further demonstrate impact with details on what works and why.

As the Decade of Healthy Ageing begins, active engagement of older people should be the new normal. Cases from around the world show that older people are driving change and their contributions benefit their families, communities and society as well as their own well-being. We now have a baseline and we must act quickly to put us on track for the improvements we want to see by the end of the Decade in 2030. As the final section of this report emphasizes, we have an opportunity to boost partnerships for change and accelerate impact by the next reporting period, 2023.

5

A NEW DECADE OF ACTION

What are the next steps?

"To foster healthy ageing, we need to work together. This must be our new normal."

WHO Director-General, Dr Tedros Adhanom Ghebreyesus, 28 July 2020

Healthy Ageing is about creating the opportunities that enable people to be and do what they value throughout their lives. This report is a baseline, setting the stage for the Decade. Cases throughout the report show how older people and policy-makers, governments and civil society, families and communities, health facilities and municipalities, researchers and entrepreneurs, and other collaborators and stakeholders are learning and working together in countries around the world.

But we need to accelerate actions to reach all older people and accelerate impact to optimize functional ability. Urgent action is needed to ensure that all older people are able to meet their basic needs. The Decade identifies four priority areas for action – 1) change how we think, feel and act towards age and ageing; 2) ensure that communities foster the abilities of older persons; 3) deliver person-centred, integrated care and primary health services responsive to older people; and 4) provide access to long-term care for older people who need it.

Sustained commitment and partnerships for change are also needed to realize the improvements we want to see by 2030. The Decade identifies four enablers – 1) listening to diverse voices and enabling meaningful engagement of older people, family members, caregivers and communities; 2) nurturing leadership and building capacity at all levels to take appropriate action that is integrated across sectors; 3) connecting diverse stakeholders around the world to share and learn from the experience of others; and 4) strengthening data, research and innovation to accelerate implementation. The pathway introduced in this report describes steps to bring these enablers together, to accelerate implementation and to optimize functional ability.

Accelerating impact requires learning from practices in countries. Healthy ageing is a dynamic process that embraces all older people and requires a whole-of-society approach. Narratives along the pathway address each domain of functional ability (i.e. meeting basic needs, learning and making decisions, being mobile, building and maintaining relationships, and contributing to families, communities or society) and learning from disease-based approaches. The narratives illustrate what can be done with older people driving change, what needs to be evaluated, and how countries and other stakeholders are scaling up actions to increase impact.

2023 IS THE NEXT MILESTONE FOR THE DECADE

Acceleration of impact requires policy coherence throughout WHO and alignment with those across the United Nations shaped by the vision of a world in which all people can live long and healthy lives. This includes coordination based on shared values and goals, and collaboration to support governments and stakeholders, to implement the UN Decade for Healthy Ageing 2021-2030 with actions that reach all older people.

WHO's mission to promote health, keep the world safe, and serve the vulnerable has three bold targets within its current General Programme of Work to improve the health of billions of people. This is an important milestone towards Agenda 2030.[44,120,145,146]

The Triple Billion indices are also highly relevant to our collective efforts to foster healthy ageing and accelerate measurable impact on older people's lives. Achieving the Triple Billion targets will accelerate irreversible and measurable gains, boosting the transformation envisioned during the Decade and working closely with the UN at all levels. Opportunities to strengthen older people's visibility in each billion are outlined.[145,146]

WHO's mission to promote health, keep the world safe, and serve the vulnerable has three bold targets to improve the health of billions of people.

ONE BILLION MORE PEOPLE BENEFITING FROM UHC

For programmatic relevance to reaching **one billion more people benefiting from UHC**, accelerating impact requires scale-up of interventions that reach all older persons who would benefit. Cooperation with countries to advance UHC for people of all ages is also stressed in the Global Action Plan for Healthy Lives and Well-being, and in the Political Declaration of the High-level Meeting on Universal Health Coverage.

Actions led by health and social care systems are highlighted in the narratives in Section 4. To support system-level changes, practical tools that take account of older people are needed well before 2023 to design and track delivery of services that address intrinsic capacity and that contribute to optimizing functional ability.[278] One tool, the UHC Compendium → 5.1, is being launched in December 2020. Mechanisms to finance these services must be strengthened without further burden on older people and their families. In consequence, sustainable national public financing mechanisms and, when needed, development assistance that recognizes every age group should have a fair share of resources → 5.2.[279]

5.1

UHC COMPENDIUM

Services to benefit more people, including older people

The UHC Compendium provides a comprehensive list of some 5000 health interventions in a standardized format.[280] **Countries can look at this catalogue and be encouraged to expand their UHC benefit packages towards a comprehensive set of services for older people.** The Compendium is based on existing WHO guidance, and features interventions to address common conditions and needs across the life course. It includes information on beneficiary groups, effectiveness and resource implications, and will provide guidance for countries in developing service and benefits packages. For older people's health and social care needs, the Compendium includes services that reflect an integrated approach to promoting healthy ageing.

The structure of the UHC Compendium allows users to map interventions and their associated actions according to the local context and across different delivery platforms. Actions described in the Compendium are linked to products and health workforce competencies as well as to resource allocation requirements across the health system. Evidence-based recommendations to address the specific health needs of older people – including WHO's Integrated Care for Older People (ICOPE) interventions – can be easily accessed in the Compendium. By including the ICOPE interventions, the Compendium supports healthy ageing by addressing priority conditions associated with declines across all domains of intrinsic capacity, including hearing and vision loss. The Compendium also includes entries specific to the management of chronic diseases, and injuries – which are also relevant to older people.

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5.2

Development assistance by age groups, in relation to burden of disease

The flow of development assistance for health (DAH) targeting age groups or specific conditions could be better matched to the disease burden (morbidity and mortality) across age groups (Figure 5.1).[281] DAH does benefit older people.[282,283] However, it targets younger more than older age groups, relative to their disease burden. Without coordinated efforts, this disparity is projected to increase further by 2030–2040.[284]

This mismatch is within the broader context of the flow of international development assistance for health. Of the total US$ 40.6 billion in DAH for 2017, 32% went to maternal, newborn and child health; 25% to HIV/AIDS; just over 6% to malaria and 4% to tuberculosis, with almost 6% to other infectious diseases and under 2% to NCDs. Less than 14% was allocated to health system strengthening or sector-wide support.

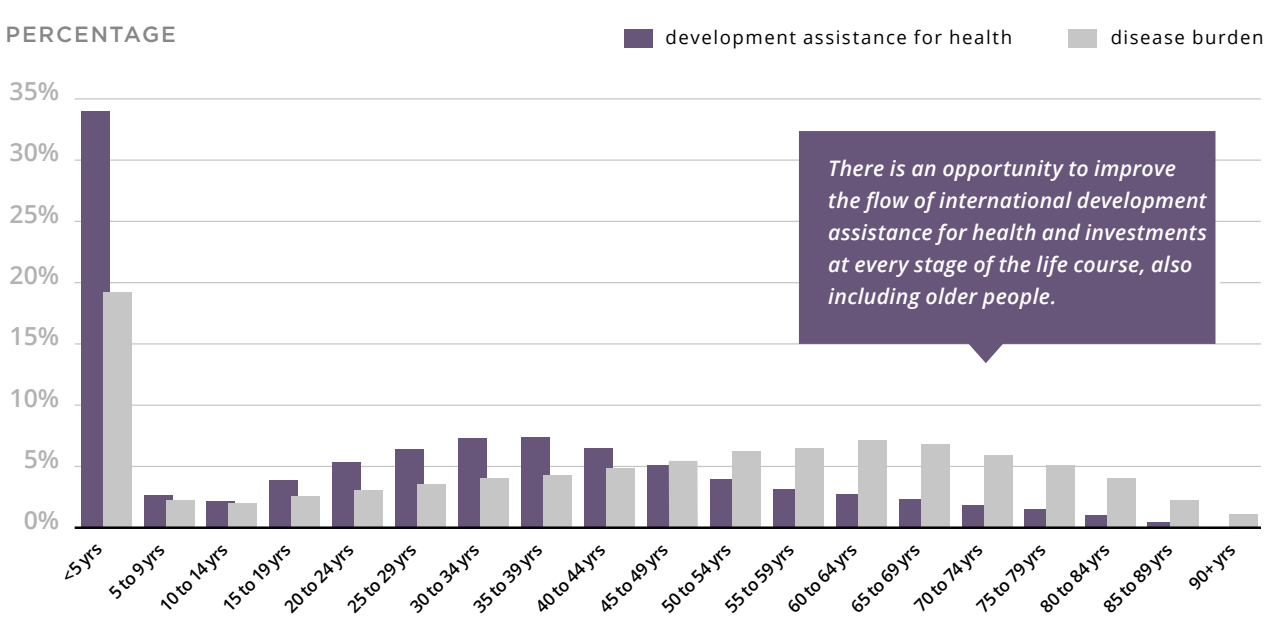
Further insights on investment opportunities at every stage of the life course can identify which actions encourage positive trajectories of development and healthy ageing (e.g. building intrinsic capacity early in life, including reserves, and approaches to delaying declines and slowing the rate of eventual declines).

Every country can use information on the disease burden across age groups as part of describing the national context and identifying what can be done – including reducing financial hardship. This can be discussed with development partners and national stakeholders in order to ensure that data and information are integrated into national planning processes, budgets, resourcing and setting of milestones.

FIGURE 5.1

Development assistance for health and disease burden

in 2017, by age groups[283]



ONE BILLION MORE PEOPLE BETTER PROTECTED FROM HEALTH EMERGENCIES

For programmatic relevance to **one billion more people better protected from health emergencies**, acceleration of impact must include how we anticipate and respond to natural and manmade emergencies and other environmental factors.

The start of the Decade has brought into focus the strengths of older people in addressing the COVID-19 pandemic. This highlights the need to address the deleterious combination of age-based discrimination, ageism and underlying health conditions that has increased older people's susceptibility to, and the severity of, the disease for many older persons and resulted in the substantially higher mortality rates that they experienced up to November 2020. It also underlines the importance of learning from and

The relevance of the Decade's four action areas to COVID-19[285]

The pandemic at the start of this decade sharply underscores the importance of concerted, sustained focus, investment and action to foster healthy ageing. **What can we do?**

1

Changing how we think, feel and act towards age and ageing

Efforts should be increased to combat ageism in all policies, settings and practices. Attention should be drawn to negative stereotyping, prejudice and discrimination because of age, and to violence against older people, including during isolation and restricted movement. The Decade provides an opportunity to engage the media, update information and foster solidarity among generations, rather than pitching them against each other. "No person, young or older, is expendable."

2

Developing communities in ways that foster the abilities of older people

A fast response to the changing environment caused by COVID-19 will require us to leverage existing infrastructure in cities and communities in order to: 1) identify who is at risk; 2) disseminate information; 3) meet basic needs for food, money and medications; 4) put in place mechanisms for social support; and 5) maintain health and social care. Strategies should be developed in close collaboration with local service providers, businesses, civil society and community networks (including older people's associations) to determine effective action to interrupt local transmission of COVID-19 and to mitigate the secondary impacts of the pandemic.

influencing disease-based approaches and of assessing functioning more comprehensively to support prevention and management of disease. To prepare for the next challenge we must incorporate learning from this pandemic. The Decade's four priority actions areas can help to develop an accelerated response and recovery that engages older people and their families → 5.3. A boost by 2023 could put us on track to see improvements by 2030, whereas neglect is this area may contribute to stagnation or deterioration.

3

Delivering person-centred, integrated care and primary health services responsive to older people

Person-centred, non-discriminatory, accessible and integrated primary health care and social care should support communities to promote and maintain the capacities of older people, both during the pandemic and beyond. Scaling up integrated care for older people will require investment in and transformation of health systems. This requires involving older people in clinical trials, developing new technologies and practical application of telehealth/medicine, as well as working with non-health sectors to create opportunities for people to build and maintain their capacities and abilities.

4

Providing older people who need it with access to long-term care → 3.3

To increase the availability of long-term care, activities during the Decade will: 1) accelerate the development of relevant guidelines, toolkits and good practice; 2) advocate for more human resources and funding, and for accommodation standards and governance in such settings; and 3) intensify efforts for better disaggregated data on long-term care services and facilities. The Decade can draw lessons from the pandemic – including how to prioritize the testing of susceptible people in such settings – and lead to concrete actions to realize sustainable, equitable long-term care services including at home and in communities.

ONE BILLION MORE PEOPLE ENJOYING BETTER HEALTH AND WELL-BEING

For programmatic relevance to **one billion more people enjoying better health and well-being**, a wide range of determinants can be addressed from the perspective of older people. These include clean air and water, safe roads, nutrition, domestic violence and elder abuse. As cases in this report illustrate, impact requires multisectoral coordination and uptake of innovation, with the health sector often but not always in the lead.

Ensuring the engagement of decision-makers, older people and stakeholders in each country is fundamental to accelerating actions and impact that leave no one behind. Actions must strengthen the connections between different activities in each jurisdiction. One opportunity is to seek synergies between different networks of cities and communities in regard to what these commitments can do to foster healthy ageing → 5.4.

Other opportunities to align commitments to those in the Decade should be relentlessly pursued.

5.4

Empowering cities and communities to foster the health and well-being of older people

Several city and community networks exist globally, regionally and within individual countries. Synergies should be pursued to accelerate impact on older people's lives in each community and reach people in all countries. Networks at global level include:

- **WHO Age-friendly Cities and Communities**[286] Fosters the full participation of older people in community life and promotes healthy and active ageing → 2.14.
- **WHO Healthy Cities**[287] Works to put health high on the social, economic and political agendas of city governments.
- **Partnership for Healthy Cities**[288] Commits to saving lives by preventing NCDs and injuries through 14 interventions.

Other global networks relate to UN Sustainable Development Goal 11[120] on sustainable cities (e.g. environmental, social and economic). There are also smart cities networks that emphasize the role of technology and design in enhancing the interaction between people and their environments as central to optimizing functional ability. Ensuring that these networks include older people is vital → 2.15.

WHO provides guidance[173] to many networks and engages through different initiatives, such as dementia-friendly initiatives[289] that enable people with dementia and their carers to fully participate in society and have a place in it, encouraging a dementia-inclusive society.

NEXT STEPS

The mandate of the Decade recognizes that what is measured drives action.

Tracking progress throughout the Decade will take stock of the vision and the action areas, and will continue to extend other WHO and UN global policy instruments to include older people. WHO with partners will offer innovative tools, including an online platform[290] to share knowledge and support diverse stakeholders to interact and implement actions and a data portal[291] including information on global indicators focusing on older people, healthy ageing and national commitments.

Member States will be encouraged to produce and disseminate data, share reports and organize events to discuss progress and adapt plans. Progress reports will also draw on the reporting mechanism for the Madrid International Plan of Action on Ageing,[292] national monitoring of healthy ageing, and national reviews on progress in achieving the SDGs, including age-disaggregated reporting of the SDG indicators and targets. Progress reports on the implementation of the UN Decade of Healthy Ageing will be compiled by WHO in collaboration with the United Nations Department of Social and Economic Affairs, the United Nations Population Fund, other UN offices, departments and specialized agencies, and relevant stakeholders including international and regional organizations, civil society, the private sector, academia and the media.

The next (2023) report is expected to coincide with the conclusion of WHO's Thirteenth General Programme of Work and will be aligned to the Fourth Global Review of the Madrid International Plan of Action on Ageing.[293] Subsequently there will be a mid-term review in 2026 and a further review in 2029 before the end of the Decade. A final report will be aligned to the UN's 2030 Agenda.

The next step in tracking progress will increase the visibility of older people within the SDGs, and in the SDG indicators and targets, by producing a framework and analytical approach that draws on a wide range of information sources. Expected in 2021, this framework will reflect the perspective of older persons. The framework will be developed with UN partners, national institutions, including national statistics offices,[294] and civil society organizations.

The baseline estimates indicate that at least 142 million older people currently do not have the ability to meet their basic needs.

We must work together to ensure that all basic needs are met, and to foster all abilities that contribute to older people's well-being. This is what healthy ageing is about and what we are collectively committed to accelerate during the Decade in order to achieve inclusive societies where older people are drivers of change.

The number of older people will steadily increase throughout the Decade. As individuals, we encourage and support our aunts and uncles, parents and grandparents, to experience longer lives that are meaningful and dignified, and expect the same for ourselves and our sisters and brothers. We hope for this destiny for our children, nieces and nephews and their children – to live in a world where all people are accepted at every age and all are able to be and do what they value throughout their lives.

We have committed, within the Decade, to work together, with older people leading the way, to transform societies to achieve the same freedom for all people.

Our vision
is a world in which
all people
can live long
and healthy lives.

ANNEX 1
Description of Healthy Ageing – each component and its domains

Functional ability combines the intrinsic capacity of the individual, the environment a person lives in and how people interact with their environment. For the three components of healthy ageing, each of the five domains identified are described further below.

FUNCTIONAL ABILITY: FIVE INTERRELATED DOMAINS

Ability to meet basic needs

Perhaps the most fundamental of abilities is the ability of older people to manage and meet their immediate and future needs to ensure an adequate standard of living as defined in Article 25 of the United Nations *Universal declaration of human rights*. This ability includes older people being able to afford an adequate diet, clothing, suitable housing, and health-care and long-term care services. It also extends to having support to minimize the impact of economic shocks that may come with illness, disability, losing a spouse or the means of livelihood.

The inability of older people to meet their basic needs can be both a cause and an effect of reduced capacity. But their environments also play a crucial part. "Poor social policies, unfair economic arrangements [where the already well-off and healthy become even richer and the poor who are already more likely to be ill become even poorer] and bad politics" make meeting basic needs in older age much harder and, hence, decrease what older people can and could do.

Ability to learn, grow and make decisions

The abilities to learn, grow and make decisions include efforts to continue to learn and apply knowledge, engage in problem-solving, continue personal development, and be able to make choices. Continuing to learn enables older people to have the knowledge and skills to manage their health, to keep abreast of developments in information and technology, to participate (e.g. by working or volunteering), to adjust to ageing (e.g. to retirement, widowhood or becoming a caregiver), to maintain their identity and to keep interested in life. Continued personal growth – mental, physical, social and emotional – is important for enabling older people to do what they value, and the ability to make decisions is key to older people's sense of control.

Age is associated with positive and negative changes in capacity (or the perceptions of them), which influence these abilities. Research has shown that with age a number of cognitive processes deteriorate, including the speed of processing, working memory, executive functions, attention and inhibition. In contrast, automatic, intuitive cognitive processes remain stable or even improve. Likewise, social and emotional growth typically increase with age. Investing in these abilities can have positive impacts on all aspects of life: health, recreation, relationships, and civic and work life. The abilities to learn, grow and make decisions are strongly associated with older people's autonomy, dignity, integrity, freedom and independence.

Ability to be mobile (getting around)

The ability to be mobile is important for Healthy Ageing. It refers to movement in all its forms, whether powered by the body (with or without an assistive device) or a vehicle. Mobility includes getting up from a chair or moving from a bed to a chair, walking for leisure, exercising, completing

daily tasks, driving a car and using public transport. Mobility is necessary for doing things around the house; accessing shops, services and facilities in the community (such as parks); and participating in social and cultural activities. The changes in physical and mental capacities that are common in older age can limit mobility. However, capacity can be built, and environments have the power to extend what a person can do. This is perhaps most easily illustrated by the ability to be mobile.

Mobility is influenced not only by older persons' intrinsic capacity and the environments they inhabit but also by the choices they make. Decisions about mobility are, in turn, shaped by the built environment, the attitudes of the older person and of others, and having both a motivation and the means to be mobile (such as by using assistive devices or transportation). Mobility through inclusive policies and sustainable services can enable mobility for people at all ages. Getting to where a person wants to go is relevant for all domains of functional ability, highlighting the inter-relationships.

Ability to build and maintain relationships

Maintaining relationships is often identified by older people as central to their well-being, and as people age, they may give increasing priority to this ability. A broad range of relationships are important to older people, including their relationships with children and other family members, intimate relationships, and informal social relationships with friends, neighbours, colleagues and acquaintances, as well as more formal relationships with community service providers.

This ability is also strongly interconnected with, and can have an impact on, all other abilities. For example, the quantity and quality of interpersonal relationships, the levels of trust within them, and the feeling of belonging to a network of people with shared interests can influence the enjoyment of other abilities, such as being mobile and contributing to the community. The ability to build and maintain relationships and social networks is closely related to a range of competencies, including the abilities to form new relationships and to behave in ways that are socially appropriate. It is also closely related to levels of intrinsic capacity. When faced with declining capacity, older people may find it harder to maintain social networks, which consequently often shrink.

Ability to contribute

This ability covers a myriad of contributions that older people make to their families and communities – such as assisting friends and neighbours, mentoring peers and younger people, and caring for family members and the wider community. The ability to contribute is closely associated with engagement in social and cultural activities.

Volunteering and working are two important ways in which adults find fulfilment in older age and are used in this section to illustrate the ability to contribute. The term "work" is used in its broadest sense and includes unpaid work in the home or in a family enterprise, paid work for another person or organization in the formal or informal economy, and self-employment. Volunteering is unremunerated work that older people choose to do for people outside their household and for the wider community.

Although the emphasis of policies in many countries is on extending older people's abilities to contribute, this requires other abilities to be enhanced as prerequisites. It also requires a range of policies and practices that facilitate older people's ability to work and volunteer in ways that promote Healthy Ageing.

INTRINSIC CAPACITY: FIVE INTERRELATED DOMAINS

Locomotor capacity (physical movement)

A person's physical capacity to move their body is termed locomotor capacity and is vital to enable people to be mobile, maintain independence and prevent dependence on care. Locomotor capacity is characterized by the functions of joints, bones, reflexes and muscle strength. Measures of locomotion include gait speed – i.e. the time someone takes to walk a specified distance, a balance test, a chair rise test, and other physical performance tests. Some medications can impair movement or interfere with balance, yet are sometimes unnecessary or ineffective for a specific person. Persistent pain can limit movement or even prevent exercise. It is important to recognize these factors when assessing locomotor capacity. Declines in locomotor capacity can occur due to changes in bone mass or density, and can progress to a point where the risk of fracture is significantly increased. Improvements can occur with exercise.

Sensory capacity (includes vision and hearing)

This refers to the capacity of the sensory nervous system to process information and respond to stimuli. It consists of functions of the senses, such as seeing, hearing, tasting, smell and sensation. Vision enables people to be mobile, to interact safely with the environment, and to maintain social contact and independence. Some common causes of visual impairment include: nearsightedness and far-sightedness, cataracts, glaucoma and macular degeneration. Hearing helps people to communicate, maintain autonomy, and sustain mental health and cognitive functions. Untreated hearing loss interferes with communication and can lead to social isolation. Sensory problems can generally be managed effectively by simple and affordable strategies.

Vitality (includes energy and equilibrium)

The term "vitality" is used to describe the biophysiological status of an individual and the capacity for maintaining homeostasis in the face of usual daily exposures, as well as more extreme and unusual or unexpected challenges such as injury or infection. Thus, vitality might be conceptualized as the amount of intrinsic capacity that can be retained and may be seen as underlying a person's resilience to challenges, vigour and stamina. Nutrition is one of the key factors in maintaining vitality in older age. Sensory impairments (e.g. a decreased sense of taste and smell), poor oral health, isolation, loneliness and depression – individually or in combination – can increase the risk of malnutrition in older people.

Cognitive capacity

Cognitive capacity refers to a person's capacity to perform a range of mental functions, including but not limited to functions for orientation, sustaining and shifting attention, psychomotor, memory, language, calculation, thought; and higher-level cognitive functions that involve decision-making, abstract thinking, making and carrying out plans, and deciding which behaviours are appropriate under what circumstances. The variation of cognitive functions and the heterogeneous patterns of modification with age are influenced by many factors, including socioeconomic status, lifestyle, the presence of chronic disease and the use of medication.

Psychological capacity

Psychological capacity is mostly related to emotional functions – i.e. the mental functions related to the feeling and affective components of the process of the mind. "Depressive symptoms" (low mood or sub-threshold depression), an important aspect of psychological capacity, applies to older people who have two or more simultaneous symptoms of depression for most or all of the time for at least two weeks but who do not meet the criteria for a diagnosis of major depression. Other aspects such as anxiety, personality characteristics, coping and mastery also require complex measures. Depressive

symptoms are more common in older people with long-term and disabling conditions, in social isolation or who are caregivers with demanding care responsibilities.

ENVIRONMENTS: FIVE INTERRELATED DOMAINS

Products and technology

This refers to the natural or human-made products or chain of products, equipment and technology in a person's immediate environment that are gathered, created, produced or manufactured. These may include products and technology for personal indoor and outdoor mobility and transportation and for personal sensory capacities. Examples of assistive products include hearing aids, wheelchairs, communication aids, eye-glasses, prostheses, pill organizers and memory aids. These aim to mitigate declines in capacities and optimize functional ability.

Natural and built environment

This refers to animate and inanimate elements of the natural or physical environment, and components of that environment that have been modified by people, as well as characteristics of human populations within that environment. These can include factors such as the climate, air quality, light and sound; as well as natural or human-caused events that cause disruption in an individual's physical environment and day-to-day lives. Neighbourhood environments encompass factors of the built environment and geographical elements that reflect degrees of inclusiveness, safety and security.

Support and relationships

People or animals may provide practical physical or emotional support, nurturing, welcoming, protection, assistance and relationships to other persons, in their home, place of work, or in other aspects of their daily activities. The environmental factor being described is not the person or animal, but the amount of physical and emotional support the person or animal provides.

Attitudes

Attitudes are the observable consequences of customs, practices, ideologies, values, norms, factual beliefs and religious beliefs. These attitudes influence individual behaviour and social life at all levels, from interpersonal relationships and community associations to political, economic and legal structures. Individual or societal attitudes may motivate positive, honorific practices or negative and discriminatory practices. The attitudes are those of people external to the person whose situation is being described. Ageism is the stereotyping, prejudice and discrimination towards people on the basis of age. Self-directed ageist attitudes also shape behaviours and choices made by people at all ages.

Services, systems and policies

Services provide benefits, structured programmes and operations, in various sectors of society, designed to meet the needs of individuals, including older people. Services may be public, private or voluntary, and may be established at a local, community, regional, state, provincial, national or international level by individuals, associations, organizations, agencies or governments. People who provide the services are also included.

Systems refer to the administrative control and organizational mechanisms established by governments at the local, regional, national and international levels – or by other recognized authorities – that are designed to organize, control and monitor services. The connection between health and social care systems is relevant for many older people.

Policies are constituted by rules, regulations, conventions, standards and financial mechanisms established by governments at the local, regional, national and international levels, or by other recognized authorities. Policies govern and regulate the systems. Policies should not codify age-based discrimination.

ANNEX 2

Countries with available scores or items, number of men and women included in sample, and country population

	Comparable data		People included in study sample			Country population totals	
	Some basic needs: 3 items	Hand grip strength/ delayed word recall	Men aged 60 years and over	Women aged 60 years and over	Total participants in country study sample	Population	Population aged 60 years and over
Austria	X	X	1 137	1 622	2 759	9 005 000	2 310 000
Belgium	X	X	1 706	2 026	3 732	11 591 000	2 969 000
Brazil	X	X	2 172	3 260	5 432	212 559 000	29 857 000
Bulgaria	X	X	611	830	1 441	6 949 000	1 959 000
Canada	X	X	8 950	8 899	17 849	37 742 000	9 398 000
Chile	X		1 390	2 119	3 509	19 116 000	3 321 000
China	X	X	4 814	4 923	9 737	1 439 323 000	249 777 000
Costa Rica	X		1 247	1 414	2 661	5 093 000	767 000
Croatia	X	X	828	956	1 784	4 105 000	1 161 000
Cyprus	X	X	401	551	952	1 206 000	238 000
Czechia	X	X	1 545	2 246	3 791	10 708 000	2 800 000
Denmark	X	X	1 119	1 283	2 402	5 791 000	1 513 000
England	X		3 234	3 867	7 101	67 887 000	16 569 000
Estonia	X	X	1 550	2 542	4 092	1 326 000	356 000
Finland	X	X	669	749	1 418	5 539 000	1 606 000
France	X	X	1 159	1 564	2 723	65 274 000	17 520 000
Germany	X	X	1 450	1 513	2 963	83 784 000	23 991 000
Ghana		X	1 012	1 256	2 268	31 070 000	1 642 000
Greece	X	X	1 161	1 427	2 588	10 423 000	3 000 000
Hungary	X	X	552	814	1 366	9 661 000	2 585 000
India		X	7 500	8 340	15 840	1 380 004 000	139 610 000
Ireland	X		2 136	2 517	4 653	4 940 000	970 000
Israel	X	X	820	1 050	1 870	8 658 000	1 425 000
Italy	X	X	1 716	1 961	3 677	60 463 000	18 043 000
Latvia	X	X	414	799	1 213	1 888 000	521 000
Lithuania	X	X	474	888	1 362	2 723 000	748 000
Luxembourg	X	X	445	482	927	625 000	124 000
Malaysia		X	1 027	1 204	2 231	32 367 000	3 549 000
Malta	X	X	433	521	954	442 000	126 000
Mexico		X	1 222	1 696	2 918	128 934 000	14 491 000
Netherlands	X	X	1 418	1 601	3 019	17 136,000	4 558 000
Poland	X	X	1 516	1 800	3 316	37 849 000	9 818 000
Portugal	X	X	197	229	426	10 195 000	2 994 000
Romania	X	X	653	802	1 455	19 238 000	4 990 000
Slovakia	X	X	554	583	1 137	5 460 000	1 273 000
Slovenia	X	X	1 335	1 745	3 080	2 078 000	576 000

	Comparable data		People included in study sample			Country population totals	
	Some basic needs: 3 items	Hand grip strength/ delayed word recall	Men aged 60 years and over	Women aged 60 years and over	Total participants in country study sample	Population	Population aged 60 years and over
South Africa		X	415	912	1 327	59 307 000	5 062 000
Spain	X	X	1 835	2 199	4 034	46 753 000	12 278 000
Sri Lanka	X		394	463	857	21 414 000	3 519 000
Sweden	X	X	1 381	1 567	2 948	10 098 000	2 620 000
Switzerland	X	X	970	1 108	2 078	8 657 000	2 189 000
USA	X		4 894	6 934	11 828	331 002 000	75 718 000
	37 countries with data on 3 items for functional ability		57 280	69 854	127 134	2 596 701 000	514 187 000
	36 countries with data on 2 items for intrinsic capacity		55 161	65 948	121 109	3 778 931 000	577 677 000
Total sample	42 countries with data on either functional ability or intrinsic capacity (31 countries have both)		68 456	83 262	151 718	4 228 383 000	678 541 000
2020 World Population Estimates[1]						7 794 799 000	1 049 748 000

This table does not include specific estimates for each country. The intent of this baseline (2020) was to identify existing data mapped to each domain of healthy ageing and determine comparability across the widest number of countries. At this stage, the intent was not to compare countries' current levels of abilities or capacities. In the next progress report (2023) WHO anticipates reporting country-specific estimates.

The estimates illustrated in section 2 of this report represent the best estimates of WHO, based on the evidence available to it up until July 2020, rather than the official estimates of Member States. They have been computed using standard categories, definitions and methods to ensure cross-national comparability and may not be the same as official national estimates produced using alternate, potentially equally rigorous methods.

ANNEX 3

Items shortlisted to measure each domain of intrinsic capacity or functional ability, as proposed by WHO technical experts

(Items in baseline analysis in bold)

Intrinsic capacity			**Functional ability**		
No.	**Items**	**Domain**	**No.**	**Items**	**Domain**
1	Memory: 10-word immediate recall	Cognitive	**1**	Difficulty or how much of problem is bathing	Basic needs
2	**Memory: 10-word delayed recall**	**Cognitive**	**2**	**Difficulty or how much of problem is dressing**	**Basic needs**
3	Orientation	Cognitive	**3**	Difficulty or how much of problem is toileting	Basic needs
4	Memory: 10-word delayed recall	Cognitive	**4**	Difficulty or how much of problem is eating	Basic needs
5	Orientation	Psychological	**5**	Difficulty or how much of problem is getting in or out of bed	Basic needs
6	Frequency wake-up during the night and then trouble falling asleep	Psychological	**6**	**Difficulty or how much of problem is taking medication**	**Basic needs**
7	Frequency wake up too early in the morning and not able to fall asleep again	Psychological	**7**	Difficulty or how much of problem is carrying out household work	Basic needs
8	Frequency feel unrested during the day no matter hours of sleep	Psychological	**8**	Difficulty or how much of problem is preparing hot meal	Basic needs
9	All 10 items of the CES-D 10-item questionnaire in separate variables	Psychological	**9**	**Difficulty or how much of problem do you have in managing money**	**Basic needs**
10	All 12 items of the EURO-D questionnaire in separate variables	Psychological	**10**	Difficulty or how much of problem do you have in shopping for groceries	Basic needs
11	Distance vision	Sensory	**11**	Difficulty or how much of problem do you have in walking across a room	Mobility
12	Near vision	Sensory	**12**	Difficulty or how much of problem is walking short distance	Mobility
13	Hearing for participants who do not wear hearing aid	Sensory	**13**	Children: frequency meet up (arranged and chance)	Maintain relationships
14	Hearing for participants who do wear hearing aid	Sensory	**14**	Children: frequency speak on the phone	Maintain relationships
15	Gait speed	Locomotor	**15**	Children: write or email	Maintain relationships
16	**Hand grip strength**	**Vitality**	**16**	Children: communicate by skype, Facebook or other social media	Maintain relationships

17	Forced breath: forced vital capacity (FVC)	Vitality	**17**	Relatives: frequency meet up (arranged and chance)	Maintain relationships
18	Forced breath: forced expiratory volume (FEV)	Vitality	**18**	Relatives: frequency speak on the phone	Maintain relationships
19	Forced breath: peak flow (PF)	Vitality	**19**	Relatives: write or email	Maintain relationships
20	Weight: measured	Vitality	**20**	Relatives: communicate by Skype, Facebook or other social media	Maintain relationships
21	Weight: self-reported	Vitality	**21**	Friends: frequency meet up (arranged and chance)	Maintain relationships
22	Height: measured	Vitality	**22**	Friends: frequency speak on the phone	Maintain relationships
23	Height: self-reported	Vitality	**23**	Friends: write or email	Maintain relationships
24	BMI: measured	Vitality	**24**	Friends: communicate by Skype, Facebook or other social media	Maintain relationships
25	BMI: self-reported	Vitality	**25**	Frequency care for sick or disabled adult or children	Contribution
			26	Employment status	Contribution
			27	Frequency attend meetings of non-religious organizations	Contribution

ANNEX 4

Anthropometric measures used for older people

Measure	Definition	Advantages	Disadvantages
Weight	• Measurement of person's weight	• Ubiquitous, cheap, accessible to the public • Useful as a measure of change when other factors are constant (i.e. height) • Weight changes may predict mortality in older people better than static measures do, including BMI at a single timepoint in the USA[295] • Weight changes are also associated with mobility (locomotor capacity)[296]	• When used alone at a single timepoint, there is no context of body shape, where weight is stored, or height • For older people with changes in height/bone density/etc., can be less reliable • Can change day by day (or within each day) • Scale accuracy can reduce validity
Body mass index (BMI)	• Calculated on the basis of weight and height. • Measure of nutritional status. Higher BMI is usually thought to indicate higher risk for certain diseases (e.g. cardiovascular diseases) because these are associated with higher adiposity[297,298]	• Standard used by many public health organizations (including WHO) and governments, particularly for measuring obesity rates in a population[298,299] • Common measurement for younger/ middle ages	• BMI may not be accurate for older people. This may be due to: – Height inaccuracies due to posture and higher rates of scoliosis[299,300] – Muscle loss at older age makes calculations less accurate (there is a higher fat percentage) • Associations are different for older people compared to other ages (e.g. lower BMI as a risk factor for mortality for older persons versus higher BMI as predicting mortality for middle-age)[301,302] • BMI can be highly affected by a person's quantity of muscle
Waist circumference	• Absolute measurement around waist • Used in conjunction with BMI[303,304]	• Easily interpreted in terms of simple threshold values[305] • Waist circumference predicts disability in older people in Latin America and the Caribbean[303] • Combining waist circumference with BMI can help to better identify obesity than either BMI or waist circumference alone[303,304] • Easy to do in clinic or at home	• When used alone, waist circumference does not account for body composition[302] • Varies by age, sex, ethnicity, and environment, making it difficult to determine standard values[306] • Differences in the waist circumference distribution in populations with different body sizes may create problems in arriving at appropriate cut-off points that would be similarly sensitive to health risk in all populations (e.g. the *NIH Practical guide to obesity* suggests that waist circumference cut-offs are useful only up to a BMI of 35, after which most individuals will exceed the cut-off points)[307]

Measure	Definition	Advantages	Disadvantages
Waist-to-hip ratio (WHR)	• Gives a measure of central adiposity (rather than BMI, which does not differentiate where body mass is stored/ proportions)[307]	• Easily measured • Easily interpreted in terms of simple threshold values[305] • Found to be a predictor of all-cause mortality for older people in the USA[308] • Predicts mortality (all-cause and circulatory deaths)[302] • Strong association with myocardial infarction[306]	• Varies by age, sex, ethnicity and environment[306] • Australian longitudinal study on ageing found no predictive relationship between WHR and limitation in locomotor capacity at two years[309]
Calf circumference	• Absolute measure around calf • Marker of muscle mass, as lower body skeletal mass is lost with age • Known to be associated with the nutritional status of older people[310]	• Measured with a tape measure, easily measured in clinical setting • In a study of older people in Republic of Korea, calf circumference was found to be an indicator of sarcopenia (low muscle strength/ muscle failure)[311] • When corrected (subtracting a medial calf skinfold measurement), calf girth may predict falls in older people in the United Kingdom[312] • Higher calf circumference associated with lower frailty (negative energy balance, sarcopenia, and diminished strength and tolerance for exertion) and higher physical performance/ mobility (locomotion) measures in Italy[313] • In a US study – had a significant inverse association with disability of people aged 60–84 years[310]	• Varies by age, sex, ethnicity and environment[311]
Other measures (examples)	• Stature can be estimated by other measures such as knee height (length from under the heel to behind the patella while the ankle and knee joints are held at right angles), forearm length (length of ulna) or demi-span (length from the ring finger root to the sternal notch), or half arm-span (length from the fingertip to the sternal notch)[314,315,316]	• Evidence shows that these measures are repeatable, reproducible and demonstrate high correlation coefficients with height.[316] • Better stature estimation in older people with kyphosis, scoliosis, who are bed- or chair-bound[315,316] • Can provide a fuller picture of an older person in combination with BMI and body weight measures[315] • Demi-span and half arm-span are fairly easy to measure in most patients[316]	• Knee height may be difficult to measure in patients in pain[316] • Equations predicting height may substantially differ according to the ethnicity of the study population[315,317] • Race, ethnicity and other context-specific factors can be determinants of differences in body height; this poses a challenge in obtaining referential normative data on the stature of the general population and changes during ageing; further work is needed to develop norms at country, regional and global levels[315]

ANNEX 5
National progress indicators

OVERALL NATIONAL COMMITMENT TO OPTIMIZE HEALTHY AGEING: INDICATORS 1-4

1. Number of countries with a **focal point on ageing and health** in the Ministry of Health

National focal points are key for the effective coordination and promotion of ageing-related activities and tasks at country level, for fostering communication with the international community, and for aligning national and international priorities.

2. Number of countries with **national policies, strategies and plans aligned to Healthy Ageing**

Effective governance of healthy ageing requires the development and implementation of evidence-based policies and plans that involve all stakeholders and that pay explicit attention to equity and the inherent dignity and human rights of older people.

3. Number of countries with a **national multi-stakeholder forum** or committee on ageing and health

These forums can document needs and expectations, and can facilitate the exchange of information, good practice and tools across sectors and different actors. The participation of both civil society and different government sectors is essential to the success of any policy and many actions on ageing.

CONTRIBUTION TO EACH OF THE DECADE'S PRIORITY ACTION AREAS: INDICATORS 5-8

4. Number of countries with national **legislation and enforcement strategies against age-based discrimination**

Combating ageism requires, at the institutional level, the adoption of laws to protect against age-based discrimination; the modification or repeal of existing laws, customs and practices that discriminate directly or indirectly; and the establishment of appropriate enforcement mechanisms.

5. Number of countries with legislation/regulations that support older people to **access assistive devices** from the WHO priority assistive products list[318]

Enhancing autonomy regardless of an older person's level of capacity can be achieved by giving older people access to appropriate assistive devices/products, including walking sticks, rollators, wheelchairs, hearing aids, spectacles and other devices.

6. Number of countries that have a **national programme to support activities** in line with the WHO Global Network for Age-friendly Cities and Communities[319]

Environments that are age-friendly help to foster healthy ageing by maximizing intrinsic capacity across the life course and by enabling greater functional ability, so that people with varying levels of capacity can be and do the things they value.

7. Number of countries with national policies in place to support **comprehensive assessments of the health and social care needs** of older people

This is key to achieving integrated care for older people[320] as it provides the information on multiple domains of intrinsic capacity, the environments in which older people live, and functional ability, which are needed to prioritize and tailor interventions to match an older person's needs, preferences and goals.

8. Number of countries that have a **long-term care policy**/plan/strategy/framework

These policies and systems enable older people who experience a significant ongoing loss in capacity, or who are at risk of such a loss, to receive the care and support of others consistent with their basic rights, fundamental freedoms and human dignity at home or, if needed, in institutions.

INCREASE NATIONALLY REPRESENTATIVE DATA ON HEALTHY AGEING FOCUSING ON OLDER PEOPLE: INDICATORS 9-10

9. Number of countries with **cross-sectional, nationally representative,** anonymous individual-level data on older persons and their health status and needs in the public domain

These data can help estimate the prevalence of different health characteristics, assess people's intrinsic capacity and functional ability, care needs, and burden of specific diseases or conditions. The data can also help document inequalities by age, sex, place of residence or other sociodemographic characteristics. Sufficient older people at every age need to be included to have a full understanding of the diversity of experience.

10. Number of countries with **longitudinal, nationally representative surveys** (cohort or panel) on older persons and their health status and needs available in the public domain

By observing the same group of people or sample from the same population over time, these data can be used to monitor trajectories of healthy ageing across the life course, analyse determinants and outcomes in older people, establish cause and effect, and evaluate the impact of programmes. Ensuring that sufficient older people are included at every age, over time, will enable a full understanding of transitions and the diversity of experience.

ANNEX 6

Evidence synthesis example interventions addressing major causes of DALYs for older people (Cochrane Campbell Global Ageing Partnership)

● high-income ● upper-middle-income ● middle-income

Causes of DALYs	# Cochrane reviews	Example intervention cited in WHO guidelines (or other guidelines)	Year	Population	Primary outcomes	Effectiveness	GRADE certainty	Studies from countries classified by World Bank World Development Indicators[321]
1. Ischaemic heart disease	121	Exercise-based rehabilitation for coronary heart disease[322]	2016	Age range 47.5 to 71 years	Total mortality	A ●	Moderate	● 57 studies
					Cardiovascular morbidity and mortality	G ●	Moderate	● 2 studies ● 3 studies
					Fatal or nonfatal myocardial infarction	A ●	Low	
					Coronary artery bypass graft	A ●	Moderate	
					Percutaneous coronary intervention	A ●	Low	
					Hospital admissions	G ●	Low	
2. Stroke	143	Organised inpatient (stroke unit) care vs alternative service for stroke[323]	2020	People with stroke, mean age 59–62 years (in the studies with age reported)	Poor outcome by the end of scheduled follow-up	G ●	Moderate	● 27 studies ● 5 studies ● 1 study
					Death by the end of scheduled follow-up	G ●	Moderate	
					Death or institutional care by the end of scheduled follow-up	G ●	Moderate	
					Death or dependency by the end of scheduled follow-up	G ●	Moderate	
					Subjective health status score	A ●	Very low	
					Patient satisfaction or preference	A ●	No data available	
					Length of stay (days) in a hospital or institution	A ●	Low	
3. COPD	72	Pulmonary rehabilitation following exacerbations of chronic obstructive pulmonary disease[324]	2016	Adults mean age 58–78 years, 70% men with COPD and recent exacerbation	Hospital readmission	G ●	Moderate	● 15 studies ● 1 study ● 2 studies 1 Taiwan
					Mortality	A ●	Low	
					Health-related quality of life after exacerbation	G ●	High	
					Exercise capacity	G ●	High	
4. Alzheimer's and other dementias	101	Exercise programmes for people with dementia[325]	2015	Over 65 years of age, diagnosed with dementia	Hospital readmission	A ●	Very low	● 17 studies
					Mortality	G ●	Very low	
					Health-related quality of life after exacerbation	G ●	Very low	

Causes of DALYs	# Cochrane reviews	Example intervention cited in WHO guidelines (or other guidelines)	Year	Population	Primary outcomes	Effectiveness	GRADE certainty	Studies from countries classified by World Bank World Development Indicators[321]
5. Diabetes Mellitus type 2	89	Diet, physical activity or both for prevention or delay of type 2 diabetes mellitus and its associated complications in people at increased risk of developing type 2 diabetes mellitus[326]	2017	Over 65 years of age, diagnosed with dementia	Diet + physical activity **versus** standard treatment			57 studies 9 studies
					All-cause mortality	A 🟠	Very low	
					Type 2 diabetes mellitus incidence	G 🟢	Moderate	
					Cardiovascular mortality	A 🟠	Very low	
					Nonfatal myocardial infarction	A 🟠	Low	
					Nonfatal stroke	A 🟠	Low	
					Health-related quality of life	A 🟠	Very low	
					Socioeconomic effects	A 🟠	Low	
					Adverse events	G 🟢	Low	
					Diet **versus** physical activity or standard treatment			
					All-cause mortality	A 🟠	Very low	
					Type 2 diabetes mellitus incidence	A 🟠	Very low	
					Cardiovascular mortality	A 🟠	Very low	
					Nonfatal myocardial infarction	N/A	Not reported	
					Nonfatal stroke	N/A	Not reported	
					Health-related quality of life	N/A	Not reported	
					Socioeconomic effects	N/A	Not reported	
					Adverse events	N/A	Not reported	
					Physical activity **versus** standard treatment			
					All-cause mortality	A 🟠	Very low	
					Type 2 diabetes mellitus incidence	A 🟠	Very low	
					Cardiovascular mortality	A 🟠	Very low	
					Nonfatal myocardial infarction	A 🟠	Very low	
					Nonfatal stroke	A 🟠	Very low	
					Health-related quality of life	N/A	Not reported	
					Socioeconomic effects	N/A	Not reported	
					Adverse events	N/A	Not reported	

Causes of DALYs	# Cochrane reviews	Example intervention cited in WHO guidelines (or other guidelines)	Year	Population	Primary outcomes	Effectiveness	GRADE certainty	Studies from countries classified by World Bank World Development Indicators[321]
6. Tracheal, bronchus and lung cancer	28	Chemotherapy for advanced non□small cell lung cancer in the elderly population[327]	2015	Patients aged 70 years or older with previously untreated and histologically confirmed non-small cell-lung-cancer	Platinum versus non-platinum therapies			42 studies 2 studies 1 study
					Overall survival	G	Moderate	
					1 year survival	G	Moderate	
					Progression-free survival	G	Low	
					Objective response rate	G	Moderate	
					Haematological adverse events - anaemia, neutropenia, thrombocytopenia	R	Low	
7. Low back pain	54	Multidisciplinary biopsychosocial rehabilitation for chronic low back pain[328]	2014	People with nonspecific chronic low back pain (> 18 years), 2 studies explicitly included older people, most studies had an average age in mid-to-late forties.	Multidisciplinary compared to **usual care** for chronic low back pain			37 studies 3 studies
					Back pain long-term	G	Moderate	
					Disability long-term	G	Moderate	
					Work long-term	A	Moderate	
					Adverse events	N/A	No evidence	
					Multidisciplinary compared to **physical treatment** for chronic low back pain			
					Back pain long-term	G	Moderate	
					Disability long-term	G	Moderate	
					Work long-term	G	Moderate	
					Adverse events	N/A	No evidence	
					Multidisciplinary compared to **surgery** for chronic low back pain			
					Back pain long-term	A	Low	
					Disability long-term	A	Low	
					Work long-term	A	Low	
					Adverse events		Low	
					Multidisciplinary compared to **wait list** for chronic low back pain			
					Back pain long-term	N/A	Not reported	
					Disability long-term	N/A	Not reported	
					Work long-term	N/A	Not reported	
					Adverse events	N/A	Not reported	

Causes of DALYs	# Cochrane reviews	Example intervention cited in WHO guidelines (or other guidelines)	Year	Population	Primary outcomes	Effective-ness	GRADE certainty	Studies from countries classified by World Bank World Development Indicators[321]
8. Lower respiratory infections	75	Antibiotics for community-acquired pneumonia in adult outpatients[329]	2014	Eligibility criteria were > 12 years, 3 studies included older people	Clinical response assessed as test of clinical cure	A 🟠	Insufficient evidence to differentiate among different antibiotics	🔵 9 studies 🔴 6 studies 🟡 3 studies
					Secondary outcomes were radiological response,	A 🟠		
					bacteriological response,	A 🟠		
					adverse effects	A 🟠		
9. Age-related hearing loss	9	Hearing aids for mild to moderate hearing loss in adults[330]	2017	Older people with the average age between 69 and 83 years	Listening ability	G 🟢	Moderate	🔵 5 studies
					Hearing-specific quality of life	G 🟢	Moderate	
					General health-related quality of life	G 🟢	Moderate	
10. Falls	11	Exercise for preventing falls in older people living in the community[215]	2019	People aged 60+ years living in the community, condition-specific trials were excluded.	Rate of falls (falls per person-years)	G 🟢	High	🔵 96 studies 🔴 3 studies 🟡 5 studies
					Number of people who experienced one or more falls	G 🟢	High	
					Number of people who experienced one or more fall-related fractures	A 🟠	Low	
					Number of people who experienced one or more falls that resulted in hospital admission		Very low	
					Required medical attention	A 🟠	Low	
					Health-related quality of life	A 🟠	Low	
					Adverse events	G 🟢	Low	

ANNEX 7

Evidence synthesis example interventions addressing the four priority action areas identified in the Decade of Healthy Ageing, by the 5 domains of functional ability

(Cochrane Campbell Global Ageing Partnership)

Area of action	Intervention	Strength of evidence	Ability to meet basic needs	Ability to be mobile	Ability to learn, grow and make decisions	Ability to build and maintain relationships	Ability to contribute to society (and to be valued)
1. Change how we think, feel and act towards age and ageing	Intergenerational programmes[331]	Moderate			• Personal development	• Interpersonal relations	• Emotional well-being
	University programmes for older people[332]	Emerging			• Increased knowledge	• Increased social relationships	
2. Ensure that communities foster the abilities of older people	Work modification and coordinated health services[236]	Moderate					• Work participation
	Technology-based social networking and video-conferencing[333]	Moderate				• Decreases loneliness and social isolation	
	Participation in environmental enhancement and conservation activities[226]	Emerging			• Increased discussion of older persons' (patients') priorities	• Increased social inclusion	• Improved sense of achievement and well-being

Area of action	Intervention	Strength of evidence	Ability to meet basic needs	Ability to be mobile	Ability to learn, grow and make decisions	Ability to build and maintain relationships	Ability to contribute to society (and to be valued)
3. Deliver person-centred integrated care and primary health services that are responsive to older people	Early discharge with health and social services for acute stroke[323]	Moderate	• Increased satisfaction with services	• Increased functional independence			
	Home modification and occupational therapy[184]	Moderate	• Increased activities of daily living and instrumental activities of daily living • Increased satisfaction with services	• Increased independent living, less fear of falling			
	Patient workshop and individual decision coaching[202]	Moderate			• Increased discussion of older persons' (patients') priorities		
	Exercise programmes for older people[215]	Strong		• Decrease falls and fear of falling			
4. Provide access to long-term care for older people who need it	Home or community-based occupational therapy[334]	Moderate	• Increased activities of daily living	• Increased functional independence and mobility		• Increased social participation	• Greater self-efficacy

ANNEX 8

Interventions that preserve cardiovascular health in older people aged 60 years and over[260]

Purpose	Action	Policy/Individual Intervention
Prevention: Prevent heart attacks and strokes by reducing exposure to behavioural risk factors that increase cardiovascular risk	Reduce tobacco use[335,336,337,338,339,340]	• Increase excise taxes and prices on tobacco products • Implement plain/standardized packaging and/or large graphic health warnings on all tobacco packages • Enact and enforce comprehensive bans on tobacco advertising, promotion and sponsorship • Eliminate exposure to second-hand tobacco smoke in all indoor workplaces, public places, public transport • Implement effective mass media campaigns that educate the public about the harms of smoking/tobacco use and second-hand smoke
	Promote physical activity[335,336,337,338,339,341]	• Implement community-wide public education and awareness campaign for physical activity, including a mass media campaign combined with other community-based education, motivational and environmental programmes aimed at supporting behavioural change of physical activity levels
	Promote healthy diet[335,336,337,338,339]	• Reduce salt intake through the reformulation of food products to contain less salt and the setting of target levels on the amount of salt in foods and meals • Reduce salt intake through the establishment of a supportive environment in public institutions to enable lower sodium options to be provided • Reduce salt intake through behaviour change communication and mass media campaigns • Reduce salt intake through the implementation of front-of-pack labelling
	Reduce harmful use of alcohol[335,336,337,338,339,340]	• Increase excise taxes on alcoholic beverages • Enact and enforce bans/comprehensive restrictions on exposure to alcohol advertising • Enact and enforce restrictions on the physical availability of retailed alcohol

Purpose	Action	Policy/Individual Intervention
Management: Management of people with high cardiovascular risk to reduce mortality and morbidity	Control hypertension,diabetes and hypercholesterolemia to reduce cardiovascular risk[335,336,337,338,339,342,343,344,345]	• Drug therapy (including glycaemic control for diabetes mellitus and control of hypertension using a total risk approach) and counselling to individuals who have had a heart attack or stroke and to persons with high risk (≥ 20%) of a fatal or nonfatal cardiovascular event in the next 10 years
Management of acute coronary syndromes to reduce mortality and morbidity	Treatment to save cardiac muscle[335,336,337,338,339,346]	• Aspirin • Thrombolytic therapy • Coronary revascularization
Management of acute stroke to reduce mortality and morbidity	Treatment to save brain tissue[335,336,337,338,339]	• Treatment of acute ischaemic stroke with intravenous thrombolytic therapy • Low-dose acetylsalicylic acid for ischaemic stroke
Management of people with atrial fibrillation to prevent stroke, heart failure, myocardial infarction and thromboembolism	Treatment of atrial fibrillation[335,336,337,338,339,347]	• Anticoagulation for medium-and high-risk non-valvular atrial fibrillation and for mitral stenosis with atrial fibrillation

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DECADE OF HEALTHY AGEING 2021-2030

BASELINE REPORT

- At least 142 million older persons worldwide are unable to meet their basic needs. Inequities of gender and education contribute to differences within and between countries.
- Governments and other stakeholders need to invest in data to monitor healthy ageing across the life course. Only 25% of Member States have limited, comparable data.
- Actions must be accelerated to make a measurable impact on older persons by 2030. Older people must be engaged at all stages.
- Optimizing functional ability is a key to healthy ageing.
- A wealth of evidence and cases from around the world highlight what can be done, and what we can learn from each other. This includes what we can evaluate better and how we can reach and engage more older people.

For more information, please contact:

Department of Maternal, Newborn, Child & Adolescent Health & Ageing

World Health Organization
Avenue Appia 20
CH-1211 Geneva 27
Switzerland

Fax: +41 22 791 4853
E-mail: healthyageing@who.int
https://www.who.int/teams/maternal-newborn-child-adolescent-health-and-ageing

9789240017900

World Health Organization