



# BE HE@LTHY BE MOBILE

A handbook on how  
to implement mAgeing



World Health  
Organization



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# Executive Summary



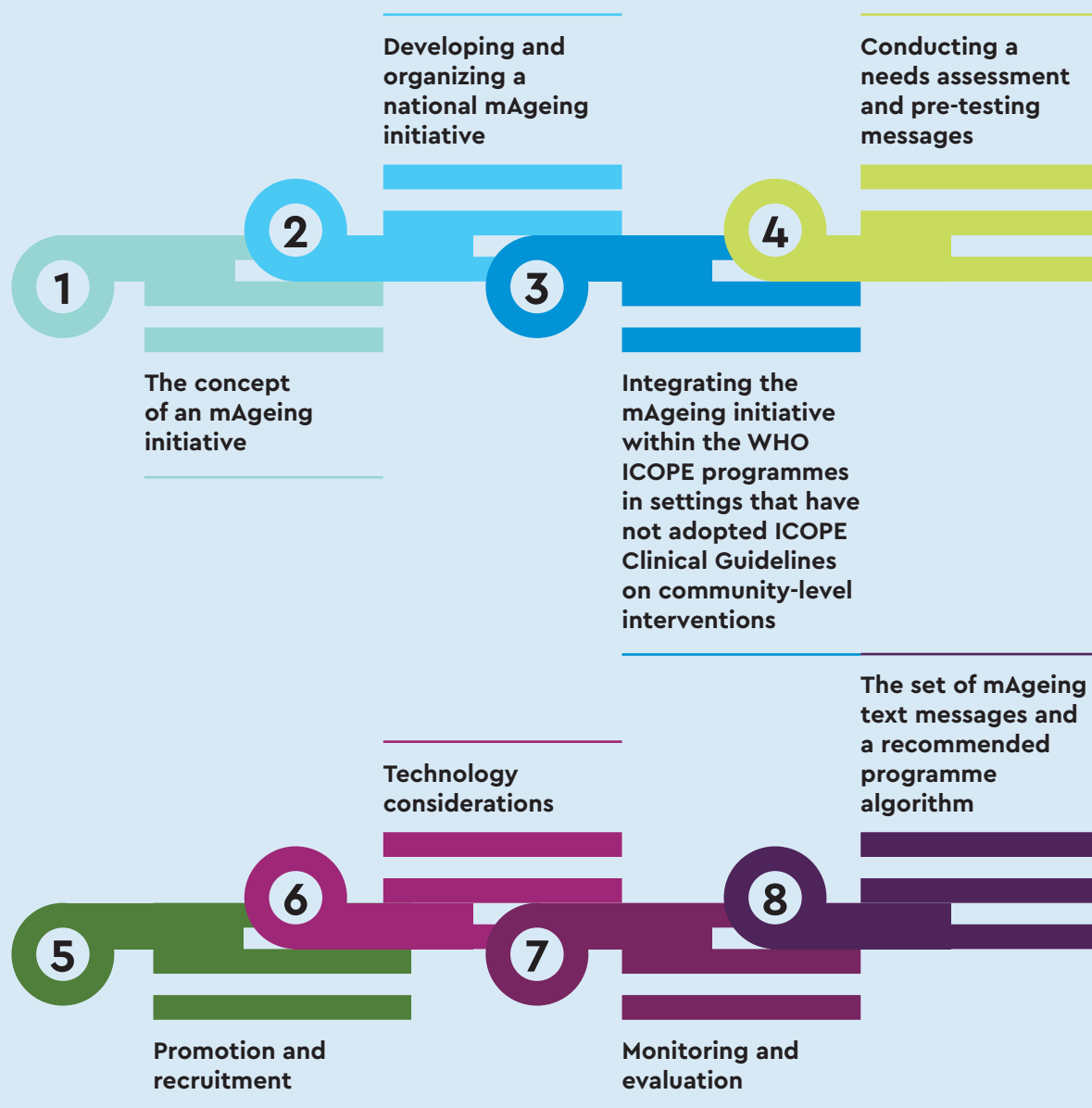
The Be He@lthy, Be Mobile initiative is a global partnership led by the World Health Organization (WHO) and the International Telecommunication Union (ITU), representing the United Nations agencies for health and information and communications technologies (ICTs). The initiative supports the scale up of mobile health technology (mHealth) within national health systems to help combat noncommunicable diseases (NCDs) and support healthy ageing.

Mobile health, or mHealth, is defined as "medical and public health practice supported by mobile devices, such as mobile phones, patient monitoring devices, personal digital assistants, and other wireless devices" (1). The Be Healthy, Be Mobile initiative uses basic technologies common in most mobile phones. The BIBM initiative has overseen the development and implementation of several mHealth programmes, including mTobaccoCessation (2), mDiabetes, and mCervicalCancer. The mHealth programme-specific handbooks act as aids to policy-makers and implementers of national or large-scale mHealth programs. See Annex 1 for further information on the Be He@lthy, Be Mobile initiative.

mHealth for Ageing, or mAgeing is a new programme under the initiative, the central objective of which is to assist older persons (a person whose age has passed the median life expectancy at birth) in maintaining functional ability and living as independently and healthily as possible through evidence-based self-management and self-care interventions.

This handbook provides guidance for national programmes and organizations responsible for the care of older persons to develop, implement, monitor, and evaluate an mAgeing programme. The text messaging communication provided uses evidence-based behaviour change techniques to help older persons prevent and manage early declines in intrinsic capacity and functional ability. The mAgeing programme is based on WHO's Integrated Care for Older People (ICOPE): Guidelines on community-level interventions to manage declines in intrinsic capacity (3) which include interventions to prevent declines in intrinsic capacity and functional abilities in older people, namely: mobility loss, malnutrition, visual impairment and hearing loss; as well as cognitive impairments and depressive symptoms. The messages are designed to encourage participation in activities, and to prevent, reduce, or even partly reverse, significant losses in capacity. The content of the mAgeing programme will complement routine care offered by health care professionals by supporting self-care and self-management. All content in this handbook is based on the WHO ICOPE Guidelines and other relevant WHO recommendations. The ICOPE Guideline recommendations were reached by the consensus of a guideline development group, convened by WHO, which based its decisions on a summary of systematic reviews of the best quality evidence most relevant to community-level care for older people, as well as the most up-to-date research on the effectiveness of mHealth.

## THIS HANDBOOK COVERS THE FOLLOWING TOPICS:



# Background

Over the past 50 years, socioeconomic development in most regions has been accompanied by large reductions in fertility and equally dramatic increases in life expectancy. This phenomenon has led to rapid changes in population demographics the world over: the proportion of older people in general populations has increased substantially within a relatively short period of time.

Numerous underlying physiological changes occur with increasing age, and for older people the risks of developing chronic disease and care-dependency increase. By the age of 60 years, the major burdens of disability and death arise from age-related losses in hearing, seeing and moving, and conditions such as dementia, heart disease, stroke, chronic respiratory disorder, diabetes and osteoarthritis. The onset of ageing-related physiological changes and chronic disease have remained static over the last generation (4). Many health problems experienced by older people are related to chronic diseases, which can be delayed or prevented through engaging in healthy behaviours (5). While disease management remains essential to healthy ageing, health interventions should also be targeting the older person's physical and mental capacities.

The WHO's World Report on Ageing and Health defines healthy ageing as "the process of developing and maintaining the functional ability that enables wellbeing in older age" (5). The report shifts focus from typical ageing care of disease management to maximizing functional ability and preventing care dependence (6). Interventions that focus on intrinsic capacity and the environment in which an older person lives will help to ensure that health services have an impact on the outcomes most relevant and beneficial to their daily lives.

## INTEGRATED CARE FOR OLDER PEOPLE

The WHO's public health framework for healthy ageing identifies three phases of the intrinsic capacity trajectories across the second half of the life course: high and stable capacity, declining capacity, and significant loss of capacity. Figure 1 shows that intrinsic capacity and functional ability declines with increasing age owing to underlying diseases and the ageing process. Intervening at an early stage of functional decline is essential as the process of becoming frail or care-dependent can be delayed, slowed or even partly reversed (7-9).

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