



The life-course approach: from theory to practice.
Case stories from two small countries in Europe

Abstract

The life-course approach takes a temporal and societal perspective on the health and well-being of individuals and generations, recognizing that all stages of a person's life are intricately intertwined with each other, with the lives of others born in the same period, and with the lives of past and future generations. Adopting a life-course approach involves taking action early in the life-course, appropriately during life's transitions, and together as a whole society. The approach is a cornerstone of policy frameworks focused on improving health and health equity, and is recognized as being central to the implementation of Health 2020 and the 2030 Agenda. However, there are recognized challenges in translating the evidence and principles of the approach into policy and practice. The small countries of the WHO European Region are strongly committed to adopting the life-course approach and to serving as models of best practice and innovation in this area. This publication presents case stories on life-course actions taken by two of the small countries, Iceland and Malta. The stories explore these countries' translation of life-course principles and evidence into their lifecourse actions, with a focus on addressing health inequities and monitoring and evaluation. The key messages from the case stories discuss the potential enablers and barriers to progression through a cycle required for the advancement of the life-course approach as a policy framework for public health. Finally, the conclusions highlight the importance of strengthening intersectoral partnerships and support for the life-course approach across government and society; ensuring that life-course actions are equity-sensitive and gender-responsive; and prioritizing monitoring, evaluation and knowledge exchange for life-course actions.

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Foreword

It is a pleasure for me to present this publication, which showcases the inspiring actions taken by two small countries in Europe – Iceland and Malta – in translating the life-course approach to health and well-being into policy and practice.

The life-course approach is a cornerstone of policy frameworks focused on improving health and health equity in Europe and around the world. It is a key pillar of Health 2020 and recognized as being central to the achievement of the 2030 Agenda for Sustainable Development. This centrality is reflected in the aim of Sustainable Development Goal (SDG) 3 to ensure health and well-being "for all at all ages". In adopting the Minsk Declaration in 2015, the Member States in the WHO European Region acknowledged the critical role of the life-course approach for implementation of Health 2020 and the 2030 Agenda and committed themselves to acting early, appropriately and together. The eight countries participating in the WHO Small Countries Initiative have illustrated their strong commitment to the life-course approach: in 2015, they adopted the Andorra Statement, pledging to adopt the life-course approach and serve as settings for innovation and role models of good practice for other countries. The life-course approach is integral to the strategic priorities of WHO globally and is embedded in the Draft Thirteenth General Programme of Work (GPW 13) (2018). which sets the direction of WHO's work with Member States and other partners from 2019 to 2023.

The importance of the life-course approach in achieving our shared vision of better health and well-being for all and at all ages is clear. There are recognized challenges, however, in translating the evidence and principles of the life-course approach into policy and practice. There is a need for more knowledge on how to put the approach into practice and how to do so well. The small countries are, as always, a valuable source of practical know-how, their openness to innovation and strategic agility making them ideal settings for policy experimentation in the life-course approach. Building on a previous compilation of case studies from the eight small countries on what their adoption of the life-course approach looks like, this publication focuses on how two of these countries have translated life-course evidence and principles into practice, and on the outcomes of their work. While the life-course actions of Iceland and Malta differ in their focuses and approaches,

both are exemplars of good practice in the life-course approach, and their in-depth case stories provide valuable insights into the challenges and enablers of adopting it at the country level.

While there are inherent complexities and limitations associated with assessing the outcomes and impacts of policies, which necessitate considerable caution, it is critical that we pursue this as a goal. The importance of monitoring and evaluation is reflected in GPW 13, which has a clear focus on tracking the outcomes and impacts of the work of WHO at the country level. This publication aims to contribute to the discussion around this issue through the lens of the life-course approach. It recognizes, simultaneously, the critical role of robust evidence on the outcomes and impacts of life-course actions for the advancement of the life-course approach, and the work needed to overcome the barriers to and challenges of generating this evidence.

I hope this publication will be a valuable resource for Member States in developing, implementing, monitoring and evaluating life-course actions to improve health and health equity at the country level. I trust that it will serve to facilitate the work of WHO in supporting countries in this critical work, by sparking discussion on how we can all work together to facilitate the advancement of the life-course approach and achieve our shared goals of better health and well-being for all at all ages.

Piroska Östlin

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The publication was written by Anita van Zwieten, PhD Candidate, Sydney School of Public Health, University of Sydney, during an internship with the WHO European Office for Investment for Health and Development. Anita van Zwieten did an outstanding job of collecting information and interpreting the findings, conceptualizing the processes involved in the adoption of the life-course approach in Iceland and Malta, designing their presentation and drafting and critically revising the publication. Her commitment to this work, much of which was done in her personal time, is greatly appreciated. Leda Nemer (Consultant,

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The structure and content of the publication were informed by a previous WHO publication (*How small countries are improving health using the life-course approach*), which was written by Leda Nemer, Francesco Zambon, and Gunta Lazdane (Programme Manager, Division of Noncommunicable Diseases and Promoting Health through the Life-course (until September 2017)).



Executive summary

This publication explores the application of the life-course approach to health and well-being in Iceland and Malta, two of the countries participating in the WHO Small Countries Initiative. The life-course approach is a cornerstone of policy frameworks seeking to improve health and health equity, globally and in the WHO European Region. It is embedded in the priority areas for action of *Health 2020: the European policy for health and well-being* and central to the implementation of the 2030 Agenda for Sustainable Development. In signing Health promotion and disease prevention throughout the life-course. The Andorra Statement, the small countries affirmed their commitment to adopting the life-course approach and serving as models of best practice and innovation for other countries. Sharing their stories through publications like this one is an important part of fulfilling this commitment.

The first section of the publication outlines the principles and evidence underpinning the life-course approach and what adopting it entails. As outlined in the Minsk Declaration on the Life-course Approach in the Context of Health 2020, the approach recognizes that all stages of a person's life are intricately intertwined, not only with each other, but also with the lives of family members (past, present and future) and other people in society. Thus, it takes a temporal and societal perspective of the health of individuals and generations and acknowledges that health and well-being depend on interactions between risk and protective factors throughout people's lives. Adopting a life-course approach involves investing in actions that are taken early in the lifecourse, appropriately during life's transition periods, and together as a whole society. The first section also explains the importance of equity in the life-course approach, and the need for monitoring, evaluation and knowledge exchange to expand the evidence base on the translation of the life-course principles into practice. Finally, it discusses the political momentum for adoption of the approach.

The second section presents two case stories, showing the application of the life-course approach in Iceland and Malta. They build on previous work carried out by the WHO Regional Office for Europe on life-course actions in the small countries, which resulted in the publication, *How small countries are improving health using the life-course approach* (2017). The present publication explores the translation of life-course

evidence and principles into action in Iceland and Malta, focusing on health inequities and monitoring and evaluation. WHO collected information for the case stories from questionnaires completed by and interviews with country representatives, the previous WHO publication, and secondary sources. Although different in their goals and nature. both case stories are exemplars of good practice in using the lifecourse approach and illustrate its flexibility. In response to the country's financial crisis in 2008, Iceland developed the Welfare Watch initiative to monitor the welfare of various population groups and propose measures to protect it. The platform involved an intersectoral steering committee and working groups on specific social groups or issues. Welfare Watch reflected the application of life-course principles in terms of: taking early action to protect children from adversity; taking appropriate action to promote positive trajectories among adolescents and young adults; focusing on intergenerational factors within families; integrating equity into the work of all groups with an emphasis on addressing the social determinants of health; and focusing on a wholeof-society approach through intersectoral collaboration. Malta's lifecourse action is reflected in the publication, A Healthy Weight for Life: a National Strategy for Malta, an umbrella policy framework designed to guide the development and implementation of initiatives to tackle overweight and obesity across the life-course. The Strategy comprises action areas across three domains - healthy eating, physical activity and health services - which are being translated into policies and programmes. Structured around the life-course, it includes initiatives designed to promote healthy weight in each stage of life or transition period and delivered in settings where people spend most of their time during that stage of life. The use of settings-based approaches and the involvement of a range of sectors in developing and implementing the Strategy reflect the principle of acting together as a whole society. It also includes initiatives that focus on acting early to promote the best possible start in life in terms of nutrition and physical activity, acting appropriately to promote the adoption of healthy lifestyles during transition periods, and addressing intergenerational factors by working with families.

The third section discusses the key messages of the case stories in the light of a model of the cycle required for the advancement of the life-course approach as a policy framework. The model describes the progression of the approach through each step of the cycle: from the life-course evidence base to the principles of the life-course approach, to their inclusion in policies and then in actions, to monitoring and evaluation results of these actions, which finally feed back into the lifecourse evidence base. The key messages focus on the barriers to and enablers of progress through each step of the cycle.

Finally, three conclusions are presented, including proposed action areas for countries, WHO and other partners to facilitate the adoption and advancement of the life-course approach.

1. Intersectoral partnerships and support across government and society must be strengthened

In both Iceland and Malta, the life-course action taken had clearly benefitted from the diverse perspectives of actors from different levels and different sectors of governance and society (including the public, the media, and nongovernmental actors), as well as from the resources gained by bringing them together. The small size of a country may be an enabler of such intersectoral action by making it easier to identify and connect with a range of actors.

Action areas for countries include: establishing intersectoral groups to drive policy development, implementation, monitoring and evaluation; ensuring that diverse perspectives are sought in monitoring and evaluation; and fostering support for the life-course approach across government and society.

Action areas for WHO and other partners include: advocating the adoption of whole-of-government and whole-of-society approaches; and raising awareness of the life-course approach and its importance.

2. Life-course actions must be equity-sensitive and gender responsive

There is synergy between principles of equity and the life-course approach, as health inequities are rooted in the complex processes of disadvantage across life stages and generations. The case stories show that it is possible to integrate the principles of health equity into every stage of life-course actions, through endeavours to assess, address, monitor and evaluate unfair differences in health and the social determinants across social groups. They also show that this can be challenging.

Action areas for countries centre on: prioritizing health equity and gender responsiveness at all stages of life-course actions (development, implementation, monitoring and evaluation); and putting structures in place to support this (for example, whole-of-government and whole-of-society approaches, and robust data on the social determinants and health inequities).

Action areas for WHO and other partners relate to advocating health equity in all policies, supporting countries in tackling the social determinants, and evaluating progress.

3. Monitoring, evaluation and knowledge exchange must be prioritized

The life-course evidence-base is unbalanced: it is heavy on life-course epidemiology and light on the implementation, outcomes and impact of life-course actions. Monitoring, evaluation and knowledge exchange on life-course actions are, therefore, crucial in "closing the loop" to ensure the continued advancement of the life-course approach. There are, however, potential barriers, including the complexity of monitoring and evaluating life-course actions and the lack of suitable data, standardized methods, time, and resources. These issues can be particularly challenging for small countries where resources may be limited.

Action areas for countries include: incorporating monitoring and evaluation into all life-course actions in order to generate evidence on what works best; including relevant indicators in population-based data collections to enable monitoring and evaluation; and capitalizing on existing networks for knowledge exchange.

Action areas for WHO and other partners include: generating and synthesizing evidence on the implementation of the life-course approach and on the outcomes and impacts of life-course actions to identify the most effective and cost-effective options; advocating the prioritization of robust population-based data collections and monitoring and evaluation; advancing the development and uptake of indicators and evaluation methods; and establishing and supporting networks for knowledge exchange.

Aims of the publication

The life-course approach takes a comprehensive, temporal and societal perspective on the health of individuals and generations (1,2). It is a cornerstone of policy frameworks that seek to improve health and reduce health inequities, both globally and in the WHO European Region. This publication explores the application of the life-course approach in Iceland and Malta, two of the countries participating in the WHO Small Countries Initiative (3).

The Small Countries Initiative (3) is a platform through which eight Member States in the WHO European Region with populations of less than one million (Andorra, Cyprus, Iceland, Luxembourg, Malta, Monaco, Montenegro and San Marino) can share their experiences in implementing Health 2020 (4) and the 2030 Agenda for Sustainable Development (5). The Initiative strives to foster political commitment to and good practice in the implementation of these frameworks. It is hoped that the experiences of the small countries will serve to motivate and inform action to this end in other countries. The WHO European Office for Investment for Health and Development, Venice, Italy, of the WHO Regional Office for Europe coordinates the Small Countries Initiative (3).

This publication builds on previous work carried out by WHO in documenting life-course actions in the small countries, which resulted in the publication, How Small Countries are improving health using the life-course approach (6). The latter-mentioned features case stories on action taken in each of the small countries in implementing the life-course approach, the triggers for adopting it, and the mechanisms that facilitated its adoption.

The present publication explores in depth the experiences of Iceland and Malta in translating the life-course principles into practice, with a special focus on monitoring and evaluation and on addressing inequities. It aims specifically to:

- update and expand on the life-course actions in these countries described in the WHO publication, How small countries are improving health using the life-course approach (6);
- examine the role of the life-course approach in the development, implementation, monitoring and evaluation of these actions;

- describe the approaches taken and the countries' experiences in monitoring and evaluating the actions (including process evaluation; short-term, intermediate and long-term outcomes; outcomes related to health equity; and economic evaluation);
- discuss whether the actions taken sought to address the perpetuation of health inequities across the life-course and generations, and describe the countries' experiences in addressing health inequities.

Ultimately, the publication aims to inform the future actions of Member States and WHO in adopting and advancing the life-course approach.



Section 1. The life-course approach: evidence, principles, policy, action and evaluation

1.1 What adopting a life-course approach means and why it matters

1.1.1 Life-course principles

The key principles of the life-course approach and an agenda for action according to them are set out in the *Minsk Declaration on the Life-Course Approach in the Context of Health 2020* (hereafter, the Minsk Declaration) (2) adopted by all Member States in the WHO European Region at the WHO European Ministerial Conference on the Life-Course Approach in the Context of Health 2020 in Minsk, Belarus, on 21–22 October 2015 (WHO Regional Office for Europe, unpublished conference material, 2017) (see section 1.4) The key principles of the Declaration are summarized in Box 1.1 (2).

Box 1.1 Essentials of the life-course approach according to the Minsk Declaration

Adopting a life-course approach means:

- recognizing that all stages of a person's life are intricately intertwined with each other, with the lives of other people in society, and with past and future generations of their families;
- understanding that **health** and **well-being** depend on interactions between **risk** and **protective factors** throughout people's lives;
- taking action:
 - early to ensure the best start in life;
 - appropriately to protect and promote health during life's transition periods; and
 - together, as a whole society, to create healthy environments, improve conditions of daily life, and strengthen people-centred health systems.

Source: Minsk Declaration on the Life-Course Approach in the Context of Health 2020 (2).

According to the Minsk Declaration (2), the life-course approach recognizes that all stages of a person's life are not only intricately intertwined with each other, but also connected with the lives of others born in the same period, and with the lives of past and future

generations of their families. It acknowledges that the health and well-being of both individuals and communities depend on interactions between multiple risk and protective factors throughout life. The approach, therefore, takes a temporal and societal perspective on the health of individuals and generations (1,2).

1.1.2 Acting early, appropriately and together

Adopting a life-course approach involves investing in actions that are grounded in these principles of interdependence between a person's life stages, the lives of others of the same generation, and the lives of other generations.

In this publication, the term "life-course actions" is used in referring to initiatives that put the principles of the life-course approach into practice. The approach encompasses taking action early in the life-course, appropriately during life's transition periods, and together as a whole society (2, WHO Regional Office for Europe, unpublished conference material, 2017).

Acting early to ensure the best possible start in life

Recognizing that early-life experiences have life-long health and social implications means acting early to promote healthy cognitive, psychosocial and physical development and provide protection from harmful exposures from preconception through to childhood. Children who experience a positive start in life have a better prospect of becoming healthy adults and achieving socioeconomic success (7-9). For example, breastfeeding is associated with positive outcomes across the life-course, including a lower risk of infection in early childhood and higher cognitive ability in later childhood and adolescence (10). Breastfeeding may also provide protection against overweight and obesity later in life (10). Lower socioeconomic status (SES) during childhood is a predictor of cardiovascular disease and mortality in adulthood, as well as all-cause mortality and mortality from a number of other causes (11). The life-long costs of inaction in early childhood are high. For example, in low- and middle-income countries, stunting and poverty - two key risk factors for poor childhood development - were estimated to be associated with an average deficit in adult annual income of 27% per child in 2010, through schooling deficits in attainment and performance (with a 95% confidence interval (CI) of 8-44% showing uncertainty in the estimate) (12).

Given the life-long associations between prenatal factors, health and socioeconomic status, life-course actions must start at the preconception and pregnancy stages and be sustained throughout childhood (2,13–15). Acting early includes:

- minimizing childhood exposure to poverty and health inequalities, adverse childhood experiences, poor nutrition, mother-to-child transmission of infection, and environmental hazards;
- maximizing cognitive stimulation, positive caregiver interactions, physical activity, social participation, and vaccination coverage; and
- ensuring equal access to quality education and child care, and to health, social and child-protection services (2, WHO Regional Office for Europe, unpublished conference material, 2017).

An example of the potential benefits of acting early through investment in early childhood development (ECD) is given in Box 1.2.

Box 1.2. The potential benefits of acting early through investment in ECD

Interventions in the area of ECD are diverse, but generally focus on the multidisciplinary provision of health and educational and social services to young children and/or their families (16). Investment in ECD has the potential to produce considerable health and social benefits and economic returns. A review of the evidence relating to low- and middle-income countries found that enrolment in preschool (early childhood education) is associated with better cognitive functioning, school readiness and performance. The benefits were greater for higher-risk or more disadvantaged children, suggesting that attending preschool may have the potential to reduce inequities in development. The review also showed evidence of sustained benefits, with some studies revealing that children who had attended preschool did better academically in later childhood and adolescence than children who had not. The review also demonstrated benefits of parenting education and support for children's cognitive and psychosocial development, again with some evidence that the benefits were greater for the more disadvantaged children (17). Similarly, a review of various ECD interventions in high-income countries revealed a range of beneficial childhood outcomes across health, socioemotional, cognitive and socioeconomic domains. It also showed that programmes combining home visitation or parent education with early-childhood education may have sustained benefits later in the life-course for some socioeconomic outcomes (for example, criminal behaviour, educational attainment, employment and income). Longer-term health outcomes were not evaluated in the studies included in this review. In terms of cost-effectiveness. returns for each dollar invested in the ECD programmes included in the review ranged from \$1.26 to \$17.07. While the results clearly varied, they indicate on the whole that investment in ECD has the potential to produce very favourable returns (16).

Acting appropriately to promote health throughout life's transitions

Recognizing that risk and protective factors act independently, interactively and cumulatively across the entirety of people's lives means acting appropriately to promote health across the whole lifespan, with a special focus on transition periods, such as preconception and pregnancy, entry into early learning settings, adolescence, young adulthood, and changes in employment, functional, or relationship status (2,13). Periods of biological and social transition, when sensitivity to risk and protective factors may be enhanced, are critical and may present unique opportunities to make a positive shift in the trajectory of a life or a generation (2,14,18–20). Not only is there a clear moral obligation to promote health and well-being for all across the lifecourse, but there are also potential social and economic benefits to doing so: better adult health is associated with increased labour supply and productivity (7,21) and, in older age, with later retirement and greater social participation (7,21,22).

Acting appropriately includes, for example (2, WHO Regional Office for Europe, unpublished conference material, 2017):

- ensuring access to quality preconception services and pregnancy care for all women, including measures to promote healthy lifestyles;
- promoting, supporting and protecting breastfeeding and the timely introduction of appropriate complementary feeding;
- building parenting capacity;
- ensuring access to quality education for all and minimizing dropout;
- promoting health and resilience in adolescence, and creating health-promoting environments for this age group;
- promoting sexual and reproductive health, mental health and healthy ageing throughout the lifespan; and
- promoting universal health coverage for youth-friendly services, mental-health services and sexual- and reproductive-health services.

Action should be tailored to the needs and resources available in each period without losing sight of their interconnectedness and the need to plan ahead. For example, the promotion of healthy ageing involves facilitating social engagement, providing adequate social protection, targeting supportive interventions to high-risk individuals, and preventing and managing conditions that cause disability in older people. At the same time, it requires action at all the preceding life

stages to address the risk and protective factors that influence well-being, physical and cognitive capability, disease and disability in old age (2,14,20,23,24).

Box 1.3 provides an example of the benefits of acting appropriately during the transition period of adolescence. It shows the potential economic and social returns on a range of policy investments during this period in low- and middle-income countries. From a life-course perspective, action during adolescence is critical in the light of the potential impact of adolescent risk and protective factors on adult health and social flourishing (including the establishment of health-related behaviours), and the potential for intergenerational effects from adolescent pregnancy (25). Effective investment in adolescence, therefore, has the potential of delivering a triple dividend – during adolescence, into adulthood, and for the next generation (26).

Box 1.3 The potential benefits of acting appropriately to promote health in adolescence

Recent modelling shows impressive economic and social returns on several groups of investments in adolescence in low- and middle-income countries (27). For example, across countries, unweighted mean benefitto-cost ratios (with 95% CI to show uncertainty in the estimates) were: 5.9 for interventions related to road-traffic accidents (95% CI: 5.8-6.0); 10.2 for health interventions, including maternal, newborn and reproductive health, HIV/AIDS, malaria, nutrition and noncommunicable diseases (NCDs) (95% CI: 9.9-10.5); 11.8 for interventions related to secondary education (95% CI: 11.6-12.0); and 17.0 for human papilloma virus vaccination programmes (95% CI: 16.7–17.3). The benefits were calculated at a 3% discount rate in terms of increased gross domestic product (GDP) and averted social costs. These included: reduced rates of death, disability and unplanned pregnancy and increased numbers of healthy life years through health interventions; increased school attainment, employment and productivity through education-related interventions; and reduced death and disability through interventions related to roadtraffic accidents. The conclusion was that investment in adolescence is "an essential element in life-course and intergenerational strategies for health and wellbeing" (27, p.1803).

Acting together to improve conditions of daily life and create healthy environments

Recognizing the interdependence of lives within and across generations means acting together as a whole society to improve the conditions of

daily life and create healthy environments. Collective action to this end is essential to promoting health and reducing health inequities in each cohort and generation throughout the life-course, and to minimizing the intergenerational transmission of disadvantage (2, WHO Regional Office for Europe, unpublished conference material, 2017).

It is known that social, economic and environmental conditions have an important impact on health across the lifespan (4). For example, adults with secure employment and quality work experience social and financial benefits and better physical and mental health (7,9). Meanwhile, exposure to adverse childhood experiences is associated with increased risks for a range of negative outcomes in adulthood, such as violence perpetration, mental-health problems and problematic substance use. These outcomes could, in turn, serve as adverse childhood experiences for the following generation, thus potentially perpetuating the intergenerational transmission of disadvantage (28–30).

In recognition of this, acting together involves strengthening and developing healthy and health-promoting settings that allow people to be born, grow, live, work and age in the best possible conditions. This includes, for example:

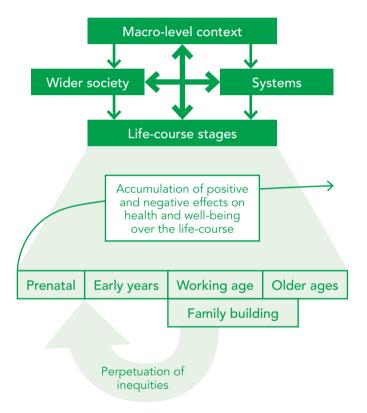
- strengthening local action for healthy cities;
- tackling unhealthy food environments;
- creating opportunities for physical activity in everyday life;
- ensuring possibilities for secure employment and quality work;
- providing ample social protection;
- improving access to and the coordination of long-term care for older people; and
- providing protection from environmental hazards across the lifecourse (2, WHO Regional Office for Europe, unpublished conference material, 2017).

Resolving these issues requires complex and far-reaching action, spanning the social, economic, environmental and political contexts in which people live, which cannot be achieved by the health sector alone. Thus, **action** taken **together**, through whole-of-government and whole-of-society approaches (2,4,7) is essential and includes:

 coordinated action involving all sectors of government and all levels of governance, from local to global; • collective solutions developed through collaboration among diverse actors, including civil society, academia, the private sector and the media.

Acting together to improve the conditions of daily life is essential not only to improving overall health, but also to tackling the perpetuation of health inequities across the life-course and across generations (Fig. 1.1).

Fig. 1.1. Perpetuation of health inequities across the life-course and across generations



Source: reproduced from Review of social determinants and the health divide in the WHO European Region: final report (2014) (7).

Health inequities are systematic differences in health between social groups, such as gender, race/ethnicity and socioeconomic status, that are avoidable by reasonable means (7). The conditions in which people are born, grow, live, work and age (known as the social determinants of health), and their distribution within and between societies, are key determinants of health inequities (7). Poor conditions of daily life can

lead to poor health, which in turn can compromise socioeconomic flourishing, and both health and social disadvantages can accumulate, all of which can ultimately lead to inequitable trajectories across a life-course. These disadvantages can also be transmitted across generations, leading to the intergenerational perpetuation of inequities. It is crucial, therefore, to work towards increasing the level and equitable distribution of the social determinants across the life-course, especially in the earliest years, and addressing the factors that perpetuate the intergenerational transmission of disadvantage (2,7,8,31–33).

In recognition of the interdependence of lives across generations, acting together also involves investing in sustainable development to promote equity from generation to generation. It also includes strengthening health systems to provide people-centred services, from health-promotion and disease-prevention measures to diagnosis, treatment, management and palliative care WHO Regional Office for Europe, (2, WHO Regional Office for Europe, unpublished conference material, 2017).

1.2 The centrality of equity in the life-course approach

As illustrated in section 1.1, equity and life-course principles are closely intertwined. It is critical that the latter are central to action for health equity, and vice versa.

Firstly, as highlighted in the WHO Review of Social Determinants of Health and the Health Divide: final report, the life-course approach is a key framework for action on health inequities (7). Life-course principles are essential to understanding how health inequities emerge, accumulate throughout people's lives and are transmitted across generations. They are also needed in developing strategies that aim to prevent and interrupt these unfair trajectories through early, sustained and intergenerational action across all sections of society (1,7,8,34).

Secondly, equity is a cross-cutting issue relevant to all life-course actions and, as such, should be a guiding principle in developing, implementing, monitoring and evaluating them to ensure that no one is left behind. This means taking action to address the social determinants and their consequences across the life-course, with a focus on: identifying the groups with greater needs; tailoring the scale and intensity of universal interventions relative to need; adopting

participatory approaches that involve more disadvantaged groups in decision-making; adapting policies to sociocultural, economic and political contexts; and monitoring and evaluating the impact of initiatives on equity (7,35–37). Life-course actions should take a gender-responsive approach, striving to facilitate the highest attainable level of health and well-being for women and men across the life-course, and to address gender-based health inequities (4). This requires initiatives tailored to the needs of both genders across the life-course and to transforming harmful gender norms, roles and relations, and differences in access to power and resources (38). It also necessitates sensitivity to the complex interactions between gender-based and other types of health inequity. This includes considering gender differences in the level, distribution and impact of the social determinants, as well as the ways in which interactions between gender and social determinants can differ across the life-course and among cohorts (7,39–42).

1.3 The importance of monitoring, evaluation and knowledge exchange for life-course actions

As highlighted in section 1.1, life-course principles are supported by an extensive body of evidence on the risk and protective factors that influence health and well-being across the life-course and across generations, and the processes through which this occurs. This evidence - from life-course epidemiology and other fields, such as sociology and psychology - has informed the development of the life-course approach for decades (19,20). As the evidence base has grown and evolved, so has the life-course approach. For example, this has included moving: (i) beyond focusing only on risk and protective factors in prenatal and early life to considering these factors across the life-course; and (ii) beyond considering a small number of risk and protective factors and outcomes, to taking account of a wide array across biological, psychosocial and socioeconomic domains (19,20). The evidence-base still has gaps in important areas, such as life-course processes during childhood and adolescence, and in the contexts of communicable diseases and low- and middle-income countries, and it is important to work towards filling these gaps (43,44).

Life-course principles and evidence then need to be translated into policies and actions that put them into practice. As illustrated above, some actions have already been developed and have provided strong or promising evidence of the health, social and economic benefits

of adopting the life-course approach (9,33). In other areas, however, there is limited evidence on how to translate life-course principles into practice and on which life-course actions work best to improve health and health equity (20,43,44). It is, therefore, crucial that countries systematically monitor (during each initiative) and evaluate (after each initiative) their life-course actions, and share their implementation processes and outcomes (44). A recent review identified the life-course approach as being central to the implementation of the 2030 Agenda (5), but noted that:

the predominant themes [of studies on the life-course approach] were theoretical, epidemiological, research-based and clinical, with limited application to policy, planning and programme implementation (44, p.42).

As observed in the review, there is an urgent need to enhance the translation of life-course principles into practice through implementation research, knowledge exchange, monitoring and evaluation (44). Evidence on the implementation of the life-course approach has also been identified as a priority in other reviews on the approach and on specific areas, such as early childhood development, adolescent health, and healthy ageing (20,23,26,45). Monitoring and evaluation are also important because they facilitate transparency and accountability for policy investment – two of the values underpinning Health 2020 – which are an important part of good governance (4,46). Monitoring has the added value of allowing countries the flexibility of adapting policy as new evidence arises, which is a key part of smart governance for health in the context of complex and dynamic problems (4,46,47).

Monitoring and evaluating life-course actions can be challenging, and there is at present a lack of specific frameworks to guide these processes. Some issues have been discussed, however, in the context of evaluating complex interventions more broadly (48). One of the challenges revealed is the breadth and complexity of the outcomes to be measured (48), especially when seeking to go beyond economic value to environmental and social benefits, such as well-being, sustainability, and social inclusion, that are so central to the life-course approach yet so difficult to operationalize (47). It can also be difficult to assess the potentially long and complicated causal pathways between actions and outcomes, the influence of the context in which the initiatives are implemented, and the extent to which measured outcomes can be regarded as impacts attributable to the initiative (47–49).

As proposed in the context of another complex policy framework, Health in All Policies (HiAP) (50), it may be useful to adopt a complex programme-evaluation approach (49). A logic model should be constructed for mapping expected associations between policy



inputs, activities, outputs and outcomes. This facilitates planning for different evaluation phases, from process evaluation of implementation (activities and outputs) to reporting on the short-term, intermediate and long-term outcomes. Careful consideration must be given from the start of planning to the causal chain, running from the activities to the outputs to the short-term and intermediate outcomes (for example, changes in the environment, knowledge or behaviour) and finally to the long-term outcomes (for example, changes in health or health equity) (48,49). It is also important to think about the potential influence of context on the implementation and outcomes of an initiative (47,48). Finally, seeking to understand the actual impact of an initiative on population health or health equity requires going beyond measuring outcomes and considering issues, such as: whether the outcomes might have occurred anyway (deadweight); whether the benefits to

one group might have come at a cost to others (displacement); and whether the benefits gained might diminish over time (drop-off) (47). In this publication, the evaluation indicators observed are, therefore, referred to as "outcomes", although the potential of attributing them as "impacts" is also discussed. These considerations can be integrated into an impact-map model, illustrating the theory of change for the action (47), as shown in Fig. 1.2.

Context

Target group characteristics

Input (resources)

Side-effects

Concept (objectives and activities)

Process activities

Output Initial outcome outcome

- Deadweight, displacement, drop-off

Initial impact Intermediate impact Intermediate outcome

- Deadweight, displacement, drop-off

Programme evaluation Process evaluation

Outcomes and impact measurement

Outcomes and impact analysis

Fig. 1.2. Example of an impact-map model for monitoring and evaluation

Source: reproduced from Hammelman, Turatto F, Then V, Dyakova M (47).

1.4 Political momentum for the life-course approach: importance in global and regional health-policy frameworks and commitment of Member States

As illustrated above, the life-course approach is a set of flexible principles that can serve as an overarching framework for action to promote health and well-being across a range of issues. The approach also represents a key framework for tackling health inequities, which are rooted in complex processes of disadvantage across the lifespan and across generations. It is, therefore, a cornerstone of WHO global and regional policy frameworks, and recognized as being central to the implementation of Health 2020 and the 2030 Agenda in Member States (4,5). This section explores the political momentum for the life-course approach, considering WHO policy frameworks and the commitment of the Member States, including the small countries, to the life-course approach.

1.4.1 Life-course principles in global and regional health-policy frameworks

Health 2020 and the 2030 Agenda for Sustainable Development

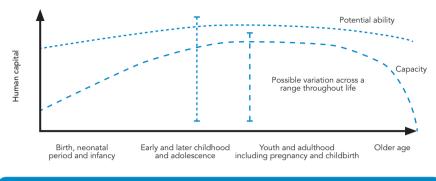
Investing in health through a life-course approach and empowering people is the first priority area for policy action in Health 2020 (4), the policy framework adopted by all Member States in the WHO European Region in 2012. Life-course principles also underpin the other three mutually supportive action areas of Health 2020 (4), which focus on: NCDs and communicable diseases; people-centred health systems, public health capacity and emergency preparedness, surveillance and response; and resilient communities and supportive environments.

The life-course approach is also central to the implementation of the United Nations 2030 Agenda and is naturally aligned with many of its Sustainable Development Goals (SDGs), especially SDG 3, which aims to ensure healthy lives and promote well-being for all at all ages (12,27, 44). This is not only because both are focused on maximizing human potential across the life-course, but also because they share core values and means of implementation (44). The life-course approach is grounded in the same principles of equity and sustainability that guide the 2030 Agenda (5); each strives to prevent cycles of disadvantage and promotes investment in early and timely action to maximize economic and social benefits across the life-course and into future generations (2,12,27,44). In addition, they both recognize the importance of acting across multiple determinants to promote health and wellbeing, the interconnectedness of economic, social and environmental development (44), and the importance of acting in partnership by adopting whole-of-society and whole-of-government approaches (2,5).

This synergy is reflected in the *Draft Thirteenth General Programme* of Work (GPW 13) of WHO, which sets the direction of its work with Member States and other partners in 2019–2023 (51). GPW 13 is grounded in the SDGs (5) and outlines three interconnected strategic priorities that aim to achieve its ultimate goal of ensuring healthy lives and well-being for all at all ages by achieving universal health coverage, addressing health emergencies, and promoting healthier populations (51). Work in the third area will be supported by five platforms, one of which focuses on improving human capital across the life-course. It aims to do so by identifying an integrated set of evidence-based interventions that target risk and protective factors at key points in the life-course and facilitating their implementation with the involvement

of health systems, individuals, families and communities (Fig. 1.3).

Fig.1.3. Integrated action involving health systems, individuals, families and communities to maximize human capital across the life-course



HEALTH SYSTEMS – PRIORITIZED, INTEGRATED SET OF AGE-APPROPRIATE INTERVENTIONS AT CRITICAL PHASES

Immunization; nutrition; physical activity; mental health; assistive technologies; contraception
(interventions for country-specific leading disease burden for females)

INDIVIDUALS, FAMILIES, COMMUNITIES – PRIORITIZED, INTEGRATED SET OF INTERVENTIONS AT CRITICAL PHASES Health literacy, health and community engagement

Source: reproduced from GPW13 (51).

In 2017, the WHO Regional Office for Europe developed the Roadmap to implement the 2030 Agenda for Sustainable Development, building on Health 2020, the European policy for health and well-being, with the ultimate goal of achieving better, more equitable and more sustainable health for all at all ages (4.5.52). The roadmap highlights the importance of the life-course approach, stating that achieving the goals of the 2030 Agenda (5) will require policies that "address health, well-being and all their determinants throughout the life-course and across all sectors of government and society" (52, p.1). The relevance of life-course principles is shown in their integration across the five strategic directions of the roadmap (52) by, for example, adopting a lifecourse approach to health inequities (strategic direction 2: leaving no one behind), preventing disease and addressing health determinants by promoting multi- and intersectoral policies throughout the lifecourse (strategic direction 3), and creating everyday environments that meet people's needs throughout the life-course (strategic direction 4: establishing healthy places, settings and resilient communities).

WHO European strategies and action plans

As shown in Box 1.4, the life-course approach also underpins the interdependent network of strategies and action plans that have been developed to facilitate the implementation of Health 2020 (4) and the 2030 Agenda (5) in the WHO European Region. Their diversity reflects the encompassing nature of the life-course approach as a guiding framework.



Box 1.4. Examples of WHO European strategies and action plans underpinned by life-course principles

The following WHO European strategies and action plans emphasize the importance of the life-course approach.

- Investing in children: the European child and adolescent health strategy 2015–2020 (53) recognizes that early-life experiences have an impact on adult health and the intergenerational transmission of disadvantage. It recommends that countries adopt the life-course approach as a guiding principle for national child- and adolescent-health strategies.
- The Strategy and action plan for healthy ageing in Europe 2012–2020 (24) takes a life-course perspective on healthy ageing, recognizing that health and capability in old age reflect experiences across the lifespan. The first strategic priority area for action focuses on disease-prevention and health-promotion strategies for healthy ageing within a life-course framework.
- The Strategy on women's health and well-being in the WHO European Region (54) promotes the adoption of a life-course approach to women's health. It outlines priorities and action areas that recognize the complex interactions between sex, gender and the social determinants across the lifespan, and the accumulation of their health impacts across lives and generations.
- The draft strategy on the health and well-being of men in the WHO European Region takes a life-course approach. Life-course principles underpin all five of its priority action areas: strengthening governance; engaging men in achieving gender equality in health; creating gender-responsive health systems; improving health promotion; and building a strong evidence base. The draft strategy will be presented for the endorsement of the WHO Regional Committee for Europe in September 2018.
- The Action plan for the prevention and control of noncommunicable diseases in the WHO European Region (55) recognizes that many NCDs have a long course of development, their risk and protective factors accumulating across the life-course. It emphasizes that NCD prevention and management must start in preconception and pregnancy and be sustained through all life stages.
- The European mental health action plan 2013–2020 (56) recognizes the complex interactions between the social determinants and physical and mental health across the lifespan. Its first core objective is to create equal opportunities for all to realize mental well-being across the lifespan.
- The Action plan for sexual and reproductive health (57) is also underpinned by the life-course principles. They inform the three key goals related to enabling informed decisions and upholding human rights, ensuring attainment of the highest degree of sexual and reproductive health and well-being, and guaranteeing universal access to sexual and reproductive health without inequities.

1.4.2 Member States' commitment to the life-course approach

The Minsk Declaration on the Life-course Approach in the Context of Health 2020

Commitment to the life-course approach among the Member States in the WHO European Region is highlighted in the Minsk Declaration (2). By signing the Declaration at the WHO European Ministerial Conference on the Life-Course Approach in the Context of Health 2020 in 2015 (Box 1.1), the Member States confirmed their conviction that the life-course approach is essential to the implementation of Health 2020 (4) and the 2030 Agenda (5), and committed to taking early, appropriate, timely and collective action. The resolution on the Minsk Declaration on the life-course approach (2) in the context of Health 2020 (4) was endorsed by the Regional Committee for Europe at its 66th session in 2016 (58). It urges Member States to use the life-course approach in choosing and implementing interventions, monitoring the effect of policies and programmes, and defining vulnerability and groups in need (58).

The Andorra Statement on Health Promotion and Disease Prevention throughout the Life-course

Member States participating in the WHO Small Countries Initiative (3) are strongly committed to the life-course approach. Health promotion and disease prevention throughout the life-course were a focus of the second high-level meeting of the small countries in 2015. On this occasion, the countries shared their experiences in adopting the approach and reflected on the importance of investing in early development and preventing the intergenerational transmission of disadvantage. They noted the usefulness of settings approaches to life-course actions and the role of intersectoral collaboration in identifying entry points for intervention (59). At this meeting, the countries adopted the Andorra Statement on Health Promotion and Disease Prevention throughout the Life-course (60) (hereafter the Andorra Statement). In doing so, they reaffirmed their commitment to implementing the life-course approach as proposed by Health 2020 (4), starting health promotion and disease prevention activities with early action (in preconception and pregnancy) and continuing with appropriate action across the whole lifespan. The Andorra Statement underlines the importance of taking intersectoral action on the social determinants to address the perpetuation of inequities across the lifespan and across generations, and of monitoring and evaluating lifecourse actions (60).

Section 2. The life-course approach in practice: case stories from Iceland and Malta

2.1 Why it is important to share these stories

In the Andorra Statement, the small countries committed to serving as pioneers of innovative approaches and role models of best practice in the translation of life-course principles into practice (60). This reflects their broader commitment to capitalizing on their strategic agility as small countries in functioning as settings for policy innovation related to the implementation of Health 2020 (4) and the 2030 Agenda (5). Part of this responsibility involves sharing their experiences in taking life-course actions in order to facilitate improvement, adaption and uptake in other contexts and, ultimately, to facilitate advancement of the life-course approach (44). Knowledge exchange is useful not only for countries, but also for WHO in identifying ways to support them.

To facilitate knowledge exchange, in 2016, the WHO Regional Office for Europe published a collection of case stories demonstrating the application of the life-course approach in each of the small countries (6). This work revealed that the triggers of life-course actions in these countries included data and evidence, political vision and policy frameworks. Facilitators included: political commitment; supportive legislation and policies; evidence (to inform and evaluate action); intersectoral approaches (with the early and sustained involvement of diverse stakeholders); effective leadership; strong communication; working groups; public consultation and engagement; and resources (6). The case stories illustrated that, in adopting a life-course approach, countries need to see the big picture, consider the broader determinants of health in addressing inequities, and think long-term across the lifespan and across generations. They also highlighted the importance of whole-of-government and whole-of-society approaches, and of monitoring and evaluation (6).

The current publication builds on this work, focusing in depth on life-course actions taken in Iceland and Malta. It explores their experiences of translating the life-course principles into practice, with a special focus on monitoring and evaluation and on addressing inequities. These actions differ greatly in terms of the issues addressed and measures taken to deal with them, but both exemplify good practice

in the use of the life-course approach. In Iceland, the life-course action takes the form of a platform developed during a period of financial crisis to monitor the welfare of various groups and propose measures to the authorities to protect and promote welfare. In Malta, the life-course action is an umbrella policy framework designed to guide the development and implementation of a range of initiatives to tackle overweight and obesity across the life-course.

Documenting how countries have translated life-course principles and evidence into practice is key to advancing the life-course approach. In addition, gaining an understanding of the enablers and barriers they encountered is important to working out how best to support this process of knowledge translation. Because of the need to enhance the monitoring and evaluation of life-course actions, the publication includes a special focus on the countries' approaches to, results of and experiences in conducting these exercises. As already mentioned, equity is central to both Health 2020 (4) and the 2030 Agenda (5). Countries have a responsibility to develop and implement life-course actions that address health inequities across the life-course and generations, and to monitor and evaluate equity-related outcomes of their actions. Understanding how this has been done in some countries, and the barriers and enablers encountered in the process, may help other countries in their efforts to incorporate equity into their lifecourse actions. It is hoped that the experiences of the small countries presented both in the previous publication (6) and in this one will serve to motivate and inform life-course actions in other countries and to facilitate the work of WHO in supporting them.

2.2 Methodology used in compiling the case stories

As a first step, WHO prepared a questionnaire aimed at expanding on the information included in the previous publication (6) and gathering new information relevant to the focus areas of the present publication. Representatives of Iceland and Malta updated information from the previous publication and responded to questions regarding:

- the translation of life-course principles into practice, including:
 - the role of the life-course approach in the development, implementation, monitoring and evaluation of their life-course actions (initially the focus was on the life-course framework of the Minsk Declaration (2) and related policies, but as the life-course

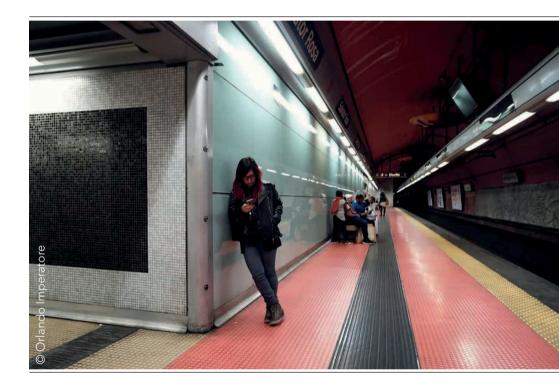
- actions of Iceland and Malta were developed before the Minsk Declaration was published, the focus was extended to the lifecourse approach more broadly);
- the benefits and challenges of using the life-course approach;
 and
- ways in which WHO could facilitate adoption of the life-course approach;
- monitoring and evaluation, including process; short-term, intermediate, and long-term outcomes; health-equity-related outcomes; and economic evaluations, with a focus on:
 - the nature of the monitoring and evaluation activities undertaken;
 - the results;
 - the countries' overall experiences in monitoring and evaluation (for example: timing of planning; benefits, challenges and facilitators; ways of differentiating between outcomes and impacts; and ways in which the results were being used);
- health inequities, including:
 - whether and how the action had sought to address health inequities;
 - whether the more socially disadvantaged groups had been involved in the decision-making processes;
 - the challenges to and facilitators of addressing health inequities;
 - whether and how the action had taken a gender-responsive approach;
 - the challenges to and facilitators of taking a gender-responsive approach.
- civil-society involvement (added in the stakeholder section given its importance to Health 2020 (4) and the 2030 Agenda (5)), including:
 - whether and how members of civil society were involved in development, implementation and/or monitoring and evaluation;
 - benefits, challenges and facilitators related to this involvement.

Numerous sources guided the development of the questions, including the previous publication (6), reviews, checklists and other questionnaires (7,36,38,61–63).

After reviewing the completed questionnaires, two WHO staff

discussed follow-up questions with the country representatives¹ during WebEx interviews, which were recorded (with prior permission). The interviewers took notes, and one interviewer listened to the recordings to ensure that all the relevant information had been included. The country representatives¹ were then involved in reviewing and editing the case stories, which were compiled on the basis of their responses.

Numerous other relevant resources also informed the case stories, as cited in the publication.



2.3 Iceland's case story: Welfare Watch

This section describes Iceland's translation of the life-course principles into practice through the Welfare Watch initiative (2009–2013). Box 2.1 provides a brief overview of the initiative.

¹ Since it would not be possible to differentiate between the country representatives who completed the questionnaires and took part in the WebEx interviews and those who contributed by providing other relevant information, the term, "country representatives", in the body of the publication incorporates all categories.

Box 2.1. A brief overview of the Welfare Watch initiative in Iceland

The issue (section 2.3.1)

Iceland experienced a devastating financial crisis in late 2008, and there were serious concerns about its consequences for the welfare of the population.

The action (section 2.3.2)

The Government established the Welfare Watch initiative in 2009 to monitor the social and financial consequences of the crisis (analyst role), recommending to the authorities – the Government, local authorities, institutions – measures to protect people's welfare (advisory role).

Welfare Watch comprised a steering committee and multiple working groups, which focused on different population groups or issues (for example, children and families with children, youth, unemployed people, financial positions of households). One of the working groups was responsible for developing social indicators to monitor welfare. All of the working groups were charged with being equity sensitive in the course of their work.

The overall aim was to protect the more vulnerable groups, with a focus on children, families with children and youth (adolescents and young adults). The initiative took an intersectoral approach, involving representatives of Government, social partners and nongovernmental actors.

How Welfare Watch reflects the life-course principles (section 2.3.7) The focus on **children** reflects the principle of **acting early** in the life-course to protect them from adversity that could have a lifelong impact on their flourishing.

The focus on families reflects the intergenerational perspective of the life-course approach and recognition of the interconnectedness of lives within households.

The focus on **youth** reflects the principle of **acting appropriately** to promote positive trajectories during the **transition periods** of adolescence and young adulthood.

Mandating the working groups to ensure that **equity** was given due consideration in the course of their work, and the establishment of working groups on various social determinants, reflects the **integration** of **equity** and **life-course** principles.

The use of **intersectoral groups** reflects the principle of **acting together** as a whole society.

2.3.1 The public health issue

Welfare Watch was established in response to the financial crisis that hit Iceland in October 2008 with the collapse of the three major Icelandic banks. The crisis was devastating, the three banks having been responsible for around 90% of the country's banking activities, and their combined insolvency being one of the largest in world history (64,65). Along with the banking crisis came a currency crisis, the collapse of the stock market, and an economic crisis. GDP decreased by around 10% between 2009 and 2010 and the currency was devalued by around 50% between the start of 2008 and 2009 (65). With the collapse came widespread socioeconomic hardship, 27.5% of households being in distress as a result of debt in 2009 (compared to 12.5% in 2007) and unemployment rising from 2.3% in 2007 to 7.2% in 2009 (65). There was also a political crisis, involving a loss of trust in the Government, which was reflected in mass protests. The Government resigned in January 2009 and was replaced in February of the same year (66). The new Government committed to pursuing the Nordic welfare model of egalitarian policies and protecting the welfare and social-security system (64,65).

The economic crisis also represented a potential public health crisis. As discussed in section 1.1, conditions of daily life have important associations with health and well-being across the life-course (7). For example, living in poor socioeconomic conditions in childhood is associated with increased risks of mortality and a range of health problems in adulthood (8) and, in adulthood, unemployment is associated with a range of adverse outcomes, including mental-health problems and mortality (67). There is also evidence that increased rates of unemployment are associated with increased rates of homicide, as well as increased rates of suicide among adults of working age, especially in the context of inadequate employment protection (68).

2.3.2 The life-course action

The creation of Welfare Watch in February 2009 was one of the first measures taken by the Ministry of Social Affairs and Social Security (later merged with the Ministry of Health to form the Ministry of Welfare) as part of the new Government (69). Welfare Watch was established with the dual objectives of monitoring the social and financial consequences of the financial crisis for individuals and

families, and proposing measures to the authorities (government and local authorities and institutions) regarding assistance to households. Thus, its role would be to act as analyst and advisor, keeping watch on the welfare of various groups (especially the more vulnerable), and recommending strategies to protect them. The main focus was on the welfare of children, families with children, and young people (including their participation in education and employment). Welfare Watch also conducted a number of projects, studies and forums. Although appointed by the Government, Welfare Watch was established as an independent body (66).

Welfare Watch comprised a core steering committee and multiple working groups. The steering committee was responsible for overseeing the initiative, coordinating data collection and communicating proposals to the authorities. Membership was diverse and included representatives of various government ministries, local authorities, nongovernmental organizations, interest groups, institutions and social partners. The steering committee grew over time from 15 to 22 members (66). It set up working groups to focus on specific population groups and issues, each of them chaired by a member of the steering committee and including a range of experts. The working groups were responsible for assessing the circumstances of the population group in their focus (which included identifying gaps in the available data), summarizing measures that had been taken to mitigate the effects of the crisis on the group, and recommending further actions to protect their welfare. The working groups were instructed to be equity sensitive and consider the impacts of the crisis on both sexes, immigrants and other minority groups. They presented their recommendations to the steering committee, which in turn submitted selected proposals to the relevant authorities (6,66).

The working groups evolved over time, the main groups focusing on (66):

- children and families with children;
- youth and young people aged 15–25 years;
- **unemployed people** (this group was eventually merged with the former group);
- people at risk before and after the crisis;
- financial positions of households;

- public health consequences of the crisis;
- basic services;
- establishing social indicators; and
- addressing welfare issues in the Suðurnes region (which was hit particularly hard by the crisis).

The last two groups differed from the others in that they were responsible for implementing specific projects, whereas the others acted only as analysts and advisors (66).

The following examples illustrate the roles of two of the working groups.

The working group on children and families with children was tasked with monitoring the circumstances of these population groups, particularly the more vulnerable, and ensuring that they had sufficient access to relevant services. Among the working group's key recommendations to the steering committee were to: monitor changes in the welfare of children; monitor the welfare of children in fringe groups; focus on the education of children in step families and children of immigrants; coordinate parenting education; standardize age criteria for the pricing of services to children; provide support to children whose parents were unemployed, or in financial difficulty; ensure immediate access to professional services for children and families; focus on family work in health-care centres; ensure access to psychiatric services for children with mental-health problems; consider Child Protection Services' support for children being raised by only one parent; encourage the use of paternity leave; and coordinate the provision of school meals, with a view to free meals. The outcomes of these proposals are discussed in section 2.3.6 (66).

The working group on social indicators was responsible for establishing a set of social indicators that could be used to track welfare across social groups and over time to facilitate monitoring and inform policy and services. It was established in response to the observation by members of the Welfare Watch steering committee that it was often difficult to make recommendations due to a lack of data on changes in the welfare of different population groups over time. A set of social indicators was developed by statistical and academic experts in working groups. As will be discussed in section 2.3.6, the first set of indicators was published in 2012 and updates have since been published annually by the country's statistics office, Statistics Iceland (66).

The Icelandic Welfare Watch initially ran from February 2009 to December 2013. Even though the crisis in Iceland had subsided, it was reestablished in June 2014 in recognition of its important work (69). The new Welfare Watch focuses on the welfare of low-income families with children and people living in severe poverty (6). Iceland's case story in the present publication relates to the initial Welfare Watch (2009–2013) as it was the focus of Iceland's case story in the previous publication, How small countries are improving health using the lifecourse approach (2017) (6) and of the published evaluation of the initiative (2015) (66).

Welfare Watch has been a role model for the Nordic countries. It led to the establishment of Nordic Welfare Watch, a research and leadership programme carried out from 2014 to 2017 as part of the Icelandic presidency of the Nordic Council of Ministers. Nordic Welfare Watch aimed to strengthen and promote the sustainability of Nordic welfare systems through three projects, involving research, collaboration and knowledge exchange (69), as follows.

- The "Nordic Welfare Watch in response to crisis" project focused on understanding the role of the welfare state in crises and disasters, especially in relation to social services at the local level, and on considering whether a Nordic Welfare Watch platform should be created based on the Icelandic model. One of the outcomes was an evaluation of the Icelandic Welfare Watch initiative (66). The project also examined emergency-response systems in the Nordic countries and mapped future risks to their welfare systems.
- The "Welfare consequences of financial crises" project examined different countries' experiences of financial crises, extracting key lessons learnt about protecting welfare and recovering well.
- The "Nordic welfare indicators" project focused on defining a set of indicators to monitor welfare across time and population groups in the Nordic countries.

Among the key outcomes of these projects were two proposals to the Nordic Council of Ministers for Health and Social Affairs and the Nordic Committee of Senior Officials for Health and Social Affairs (69). These were to:

 establish a set of Nordic welfare indicators, based on the model of social indicators developed by the Icelandic Welfare Watch; establish a Nordic welfare forum, based on the Icelandic Welfare Watch, which would hold multidisciplinary meetings every two years to discuss welfare challenges in the Nordic countries with a view to making welfare systems more sustainable.

Discussions on the indicators are ongoing. The first meeting of the Nordic Welfare Forum will be held in Stockholm, Sweden, in December 2018, as a pilot project, with a view to its becoming a regular event.

2.3.3 Involvement of different sectors, including civil society

Sectors involved

Welfare Watch is a great example of collaboration across sectors and levels to address complex problems, including socioeconomic inequities and their consequences for health and well-being (70). As shown in Table 2.1, Welfare Watch membership was very diverse, and the representatives of each group of actors played an important role. The active participation of governmental ministries and agencies in the Welfare Watch dialogue meant that they were on hand to hear the solutions proposed by other actors and could promptly provide relevant information. This also facilitated work at the ministerial level to the benefit of people at risk. The local authorities led various initiatives, such as those related to school meals. Nongovernmental actors were often in direct contact with the population groups whose welfare was being discussed, and were able to provide an insight into their experiences and perspectives (6).

Table 2.1. Sectors involved in the Welfare Watch steering committee and working groups

Sector	Examples of actors involved	
Governmental ministries	Ministry of Welfare	
	 Ministry of Education, Science and Culture 	
	 Ministry of Industries and Innovation 	
	Ministry of the Interior	
Governmental agencies	Directorate of Health	
	 Gender Equality Council 	
	Directorate of Labour	
	Debtors' Ombudsman	

Sector	Examples of actors involved	
Local authorities	Association of Local Authorities in Iceland	
	City of Reykjavik	
Social partners	SA-Business Iceland	
	 Federation of State and Municipal Employees 	
	• Icelandic Confederation of Labour	
	 Association of Academics 	
	Icelandic Teachers' Union	
Nongovernmental actors	 Icelandic Disabled Person's Organization and Disabled Help (interest group) 	
	 National Federation of Senior Citizens (interest group) 	
	The Icelandic Red Cross (interest group)	
	 Bishop's Office of the Church of Iceland (interest group) 	
	 Icelandic Human Rights Centre (nongovernmental organization) 	

Sources: How small countries are improving health using the life-course approach (6); Assessment of the work of the Welfare Watch (66).

Participation of civil society

The Government established Welfare Watch and the Ministry of Social Affairs and Social Security led the development and appointment of the steering committee, the Chairman of which was from the Ministry. As discussed above, membership of the committee was diverse and included a range of nongovernmental actors, many of whom were working at the grassroots level and, thus, in contact with individuals and communities in civil society. The committee led the ongoing development of Welfare Watch, setting up working groups in which nongovernmental actors also participated. In this way, civil society had a voice (through the work of these nongovernmental actors) in the implementation and monitoring of Welfare Watch. These nongovernmental actors were thus also involved in the evaluation of the initiative, as steering-committee and working-group members were asked to provide their perspectives through interviews, focus groups and surveys. The public was also given the opportunity to contribute to the evaluation by means of a survey (see section 2.3.6).

In terms of the **facilitating** the participation of civil society, the country representatives reflected that there had been an understanding from

the outset of the importance of involving civil society. This was also noted in the evaluation report where Ásta Ragnheiður Jóhannesdóttir, former Minister of Social Affairs and Social Security, was quoted as saying:

"I think it was right to have many people around the table and to include not just the public sector, but also independent organizations and others involved in welfare matters" (66, p.30).

In addition, the country representatives felt that the involvement of independent organizations might also have been influenced by the turbulent political context. Involving civil society was important in building public trust and ensuring the credibility of and support for Welfare Watch as a politically neutral initiative in which those working at the grassroots level had a voice.

There were **no barriers or challenges** noted regarding the participation of civil society in Welfare Watch.

The country representatives felt that including nongovernmental actors who were connected to civil society in the steering committee and working groups had been **beneficial** because it had facilitated collaboration between the authorities and the public in tackling the crisis. In the evaluation, ministry representatives reflected the view that the intersectoral nature of Welfare Watch had been important in ensuring diverse input. This was illustrated by Guðbjartur Hannesson, former Minister of Welfare:

"Very different groups were represented in the Welfare Watch, including small groups, some of which could also be defined as pressure groups. I felt it was important because then you get a number of different perspectives" (66, p.32).

2.3.4 Political support and policies

Welfare Watch received high-level **political support** from the Government from the outset. The country representatives and the evaluation report (66) suggested that a few factors relating to the sociopolitical context might have contributed to this. As they watched people losing their jobs and families being disrupted, the politicians became concerned about the potential impact of the crisis on the more vulnerable groups (66). As mentioned above, protecting welfare and vulnerable groups were priority areas for the Government (6). Establishing an independent and intersectoral body (Welfare Watch)

to monitor and protect welfare had the added advantage of helping to rebuild public faith in the future. The development of Welfare Watch also appears to have been influenced by Finland's experience of a devastating financial crisis in the early 1990s (71). As concerns mounted around the impact of the Icelandic crisis on society, the authorities collected data on the Finnish crisis. The findings were worrying, especially in terms of increases in the numbers of people on disability pension and the effects of the crisis on children. Thus, the Government was keen to identify a solution to prevent their repetition in Iceland (66). Ásta Ragnheiður Jóhannesdóttir, former Minister of Social Affairs and Social Security expressed the following.

"It is slightly reminiscent of [...] a country finding itself at war – such a major shock for so many. People losing their jobs, relatives of all those in trouble, not least children, suffering from the situation, and so on. The shock needs to be worked through. This sort of thing has never happened to us before. This was an extraordinary new situation and a reaction had to be found. Particularly in order to avoid the same problems experienced in Finland" (66, p.25).

2.3.5 Financing

Operational costs for Welfare Watch were very low and related mostly to staffing, conferences and reports, which were funded by the Ministry of Welfare through the state budget (6). Members of the steering committee and working groups were not paid although, since meetings were held during working hours, they were indirectly supported by their employers (66). Costs for the implementation of initiatives proposed by Welfare Watch were generally covered by the relevant authorities (6).

Furthermore, in response to a proposal put forward by Welfare Watch, a counterbalance fund of ISK 30 million (around US\$ 250 000) was established in 2009 with Treasury funding to cover specific projects, such as: developing social indicators; conducting studies on welfare issues; coordinating projects run by affiliated organizations; supporting staff working with at-risk population groups; and implementing initiatives for specific groups most affected by the crisis. The fund was managed by members of the steering committee and overseen by the Ministry of Social Affairs and Social Security (66). As the number of suitable projects proposed did not require all of the funding, the remainder was used for the evaluation of Welfare Watch (66).

2.3.6 Monitoring and evaluation: approach, results and experiences

As mentioned in section 1.3, monitoring and evaluation are generally structured around a logic model flowing from inputs to activities, outputs and outcomes. Process evaluation focuses on the activities and outputs involved in implementing an initiative. It considers issues, such as uptake, compliance, and perceived benefits, barriers and challenges from the perspective of stakeholders. The expectation is that these activities and outputs will result in short-term and intermediate changes in knowledge, behaviour and the environment and, eventually, long-term outcomes (such as changes in health or health inequities). It can be challenging to define the logic model for an initiative like Welfare Watch, which was a platform set up to monitor welfare and recommend future policies across multiple areas. In this publication, the proposals developed by the working groups, and their progress to the steering committee and the relevant authorities, will be considered as process indicators reflecting the activities and outputs of Welfare Watch. Their translation into policies and actions by external authorities will be considered as short-term outcomes since this reflects external change following the proposals (the outputs). Welfare is a broad construct that includes both well-being and living conditions (69); in this publication, changes in the social determinants of health will be considered as intermediate outcomes (since they reflect changes in the socioeconomic environment), while changes in health and health equity will be considered as long-term outcomes.

Implementation and short-term policy outcomes: approach and results

A process-monitoring survey was conducted in May 2009 to assess, among other issues, the relevance of the goals and priorities of Welfare Watch. Directors of local social services were asked what they felt Welfare Watch should focus on. The issues raised were in alignment with the emerging focus of Welfare Watch (for example, children, families, more disadvantaged groups, household finances, basic services) (66).

An **evaluation** of Welfare Watch was conducted in 2014 by the Social Science Research Institute of the University of Iceland along with several consultants, some of whom were involved in Welfare Watch. The information in this section is from the evaluation report, which was published in 2015 (66).

The aim of the evaluation was to examine:

- the establishment, organization and role of Welfare Watch and the work of its steering committee and working groups;
- the nature of the working groups' proposals, their progress from working groups to the steering committee, whether proposals had been submitted to the authorities, and their eventual translation into external policy or action.

Therefore, according to the logic model defined above, the evaluation considered inputs, activities and outputs (process evaluation) and policy-related outcomes (short-term outcome evaluation).

The evaluation involved the following components.

- Interviews were held with the Chair of Welfare Watch, a Welfare Watch employee, three members of the Welfare Watch steering committee, and three consecutive Ministers of Welfare. They covered the development, purpose, importance, organization, procedures, collaboration and results of the initiative.
- Focus-group meetings were conducted with members of the Welfare Watch working groups to discuss the strengths, weaknesses, development, purpose, organization, procedures, collaboration and results of the initiative.
- Surveys were conducted among members of the working groups (some of whom were also members of the steering committee), staff of agencies and organizations affiliated with Welfare Watch, and members of the public.
 - Members of the working groups were asked questions on various issues, such as: how well Welfare Watch had achieved its goals; how well the goals of the working groups had been defined and achieved; the operations of the working groups, including allocation of responsibilities, task prioritization, management, and communication within the working groups and with the steering committee; the satisfaction of the working groups with decisions of the steering committee; the benefits of Welfare Watch to their main work and themselves.
 - Affiliates and the members of the public were asked about: their awareness of and familiarity with Welfare Watch; how they perceived the emphasis of the Government on the priorities of Welfare Watch; and their views on the importance of Welfare Watch to Icelandic society.

• A content analysis of steering-committee and working-group reports, minutes and other material, and documentation from relevant authorities (for example, the Parliament, local authorities) was carried out to assess the organization of Welfare Watch and track the progress of proposals from the working groups to the relevant authorities. Researchers mapped out the proposals of each working group, assessing whether they had been submitted to the steering committee and whether the steering committee had incorporated them into their proposals to relevant authorities (indirectly, based on similarity of content). They also identified proposals of the steering committee that were separate from those of the working groups, and then indirectly assessed the outcome of all steering-committee proposals by comparing similarities between these proposals and welfare-related policies developed by various authorities during the Welfare Watch period (2009–2013).

Given the comprehensiveness of the evaluation, it is beyond the scope of this publication to discuss all the results. Instead, some key findings are presented to illustrate the knowledge that can be obtained from such an evaluation.

In terms of how well Welfare Watch had reached its goals, 84% of the respondents in the working-group survey felt it had fulfilled its "analyst" role of monitoring social and financial consequences very well, or rather well, while 63% felt it had fulfilled its "advisory" role of submitting recommendations to protect welfare very well, or rather well. It was noted from the content analysis that proposals and recommendations from the steering committee often focused on children, families and young people, which is in accordance with the intended focus of the initiative.

Interviews about the operations of the steering committee revealed strengths (for example, cooperation among members, expertise of the chairperson) and weaknesses (for example, long agendas and meetings). It was also noted that the political neutrality of Welfare Watch seemed to facilitate consensus within the group. There was a sense of frustration among the steering-committee members about not being able to ensure that their recommendations would be implemented; as one steering committee member reflected:

"We could have an opinion and make suggestions, but there were no guarantees that they would be implemented. [...] I really wanted to just go in and talk to the minister face to face, say, my friend, such is the situation, as politicians what are you going to do?" (66, p.34).

Focus-group meetings and surveys on working-group operations revealed some areas for improvement, such as group management, division of tasks, clarity about the role of each group, and communications with the steering committee. As a working-group member reflected:

"I strongly agree that the overall objectives were both clear, noble and very good. [...but] there was perhaps a certain insecurity or dissatisfaction within the group because we didn't really know what was expected of us, how we should deliver it and what the time limits were; yes, that is what it was like. We felt the objectives were rather vague" (66, p.32).

In terms of the societal benefits of Welfare Watch, surveys showed that 79% of the surveyed affiliates and 24% of the surveyed public had heard of Welfare Watch. Of those who had heard of it, around 50% felt the initiative had been important for Icelandic society in the first few years after the economic collapse. The reasons cited for its importance centred mostly on its roles in monitoring welfare, highlighting important issues and vulnerable groups, and proposing solutions. Those who did not find it important generally felt it had failed to achieve tangible results or mentioned a lack of transparency and public visibility. Discussions with Welfare Watch members and ministers indicated additional perceived benefits, including the facilitation of informed debate about the crisis in society, and raising public awareness to encourage action by other actors.

In terms of the benefits of Welfare Watch for the Government, ministers found that Welfare Watch had played an important role in helping to prioritize issues and direct funding. Members of the working groups felt that the initiative had played a part in protecting welfare from budget cuts.

There was also evidence of benefits for Welfare Watch members: 73% of the working-group respondents agreed that their participation had expanded their professional contacts. Similarly, steering-committee and working-group interviewees felt that their participation had facilitated intersectoral collaboration. It had also resulted in knowledge exchange and learning that would benefit their future welfare-related work.

The evaluation also considered key lessons for the future. Interviewees felt that Welfare Watch should continue to operate to protect disadvantaged groups. As Ásta Ragnheiður Jóhannesdóttir, former

Minister of Social Affairs and Social Security, observed:

"One has worked in welfare services during times of economic prosperity and seen that such prosperity does not always reach everyone. This is why there is always a need for something to point out to the authorities existing problems and shortcomings in the welfare services even if everything appears to be going swimmingly for the majority. Then it is important to have individuals and such a body that knows what is going on" (66, p.113).

It was also noted, however, that Welfare Watch – developed in response to the crisis – had in some ways been a reactive initiative, which had evolved over time, and that if Welfare Watch were to continue, it should have a clear framework from the outset. This would need to include defined objectives, roles, and systems of disseminating information and monitoring outcomes (66).

As discussed above, policy-related outputs and outcomes of Welfare Watch were also assessed by tracking the progress of proposals from working groups to the steering committee, to the relevant authorities, and eventually to the development of policies and/or action by the relevant authorities. The results of two working groups (those discussed in section 2.3.2) are summarized in Boxes 2.2 and 2.3; other results are covered in the evaluation report (66). During the evaluation, steering-committee members reflected that the recommendations of Welfare Watch concerning school lunches and the social indicators were among the most important made (Boxes 2.2 and 2.3) (66).



Box 2.2. Evaluation results: policy-related processes and outcomes of recommendations by the Welfare Watch working group on children and families

This working group was set up to monitor and make proposals to **protect** the welfare of children and families with children. It made more than 60 proposals to the steering committee. Of these, 12 (listed in section 2.3.2) appeared to have been incorporated in the steering committee's proposals to the authorities (66). The researchers also assessed action taken and policies developed by the authorities to see how they related to the recommendations of the steering committee. Their observations were as follows.

- In the case of school meals, the steering committee put forward the working group's recommendation that all children should receive lunch at school. This idea was taken up in the Government's action plan and, in 2009, in collaboration with the Association of Icelandic Local Authorities, Welfare Watch requested municipalities and school boards to ensure and monitor the provision of daily lunches to all children. Schools and authorities adopted the proposal, some reportedly also offering porridge for breakfast, although this initiative has not been evaluated. Welfare Watch repeated this request annually until 2011 (66).
- Other policy outcomes related to this group's proposals were a parliamentary resolution on health care for, and the health of, young people and an agreement on a project to support children with chronic conditions and attention deficit hyperactivity disorder (66).

Recommendations did not always appear to be heeded. For example, the maximum for maternity-leave payments was reduced in 2008–2009 despite warnings from Welfare Watch. The payments were, however, marginally increased again in 2012 (there had been a recommendation by Welfare Watch in 2011 to stop reductions and increase payments) (66).

The country representatives also emphasized the importance of social indicators as a tool for monitoring conditions and well-being in a crisis, both overall and with respect to specific groups. They can also be used to evaluate how well policies mitigate the consequences of a crisis, and to inform future actions.

Box 2.3. Evaluation results: policy-related processes and outcomes of recommendations by the Welfare Watch working group on social indicators

This working group was set up specifically to establish a set of **Icelandic social indicators**, as proposed by Welfare Watch in March 2009 (66). Accordingly:

- the group achieved its goal with the publication of the first set of social indicators in 2012 (66);
- a set of around 150 social indicators was established, covering welfare issues across: demographics (for example, population age distribution, fertility); equality (for example, income, household debt, families in financial difficulty); sustainability (for example, preschool attendance, school performance, school attendance, educational attainment, unemployment); health (for example, perinatal outcomes, overweight and obesity in children and adolescents, self-rated health, chronic conditions, elderly people in nursing homes, use of health services, including dental care for children and adolescents); and solidarity (for example, trust in the Government, adolescent health-risk behaviours, child-protection notifications) (72);
- the indicators were disaggregated across some social groups (for example across sex and age for consideration across the life-course) (72):

Welfare Watch continued to work on the social indicators after their publication and, in 2012, the Government committed to funding them and commissioned Statistics Iceland to compile updates, which have been **published annually** since (66). Statistics Iceland also regularly publishes statistics and reports on specific welfare issues related, for example, to children, living conditions, housing, health, employment and social networks (73.74).

Short-term, intermediate and long-term outcomes: approach and results

Welfare indicators were monitored throughout the course of Welfare Watch to inform its ongoing work. It is complex to discuss the monitoring of an initiative like Welfare Watch, for which one of the objectives was actually monitoring. On the other hand, the monitoring that was performed as an objective of Welfare Watch can also be seen as a form of in-built quality assurance and quality improvement, as is the case for monitoring in other initiatives. The working groups and steering committee used monitoring to assess the welfare needs of various groups over time, identify at-risk populations, and consider

what actions were needed and whether those already taken appeared to be having an effect. Monitoring helped them direct their focus and develop proposals as issues were raised both internally and by external stakeholders (66).

Various welfare indicators were monitored, including social and economic conditions, such as unemployment, children with unemployed parents (across different family structures), children attending school in grades 8 to 10, the provision of hot meals in schools, rent benefits, local government assistance and minimum wages. Where data permitted and depending on their relevance to the population group whose welfare was being considered, indicators were disaggregated across social groups (for example, age, sex and family structure). Indicators were monitored across various life stages (for example, childhood, adolescence, young adulthood, working-age adulthood). As the available data were rather limited, disaggregation was not always possible (for example, across SES) and, in general, monitoring was quite challenging until the social indicators were in place. Welfare Watch identified their data needs and worked with Statistics Iceland to collate those that would be most useful for their goals. This involved collating existing indicators, disaggregating indicators across groups or regions, and seeking additional indicators from various sources, such as government surveys.

While welfare was monitored to inform the work of Welfare Watch, there was no evaluation of short-term, intermediate or long-term welfare outcomes. Welfare Watch was established as an urgent response to a critical problem. The country representatives reflected that the pressure to act quickly would have made it difficult to plan a systematic evaluation. At the time, baseline welfare data for evaluation were also limited, as the social indicators were not established until 2012. Once these were in place, baseline data became available and could theoretically have been used to conduct a retrospective evaluation of welfare outcomes. Such an evaluation was not carried out, and the country representatives indicated that this was largely because of the scale of resources required for such a complex evaluation (in terms of time, money and people), the acquisition of which can be especially challenging in small countries. They found that, because resources are limited, there is often a tradeoff between the evaluation of existing initiatives and the development of new initiatives. They felt that for initiatives that are clearly seen to be successful, like Welfare Watch, it could be difficult to justify the former. In addition, for Welfare Watch, it would have been difficult to attribute the

outcomes as impacts of the initiative. This was because of the breadth of its proposals and the complex context in which it was implemented, which included numerous other actions being taken by the authorities to protect and promote welfare during the financial crisis. The Nordic Welfare Watch project, "Welfare consequences of financial crises", is considering the effectiveness of various countries' responses to financial crises (69,75), including that of Iceland. While the Nordic Welfare Watch will not specifically assess the outcomes and impacts of the Icelandic Welfare Watch, the latter has been discussed in some of their working papers as part of Iceland's response to the financial crisis (76,77). These papers reflect on the challenges of assessing the impact of Welfare Watch on policy (76).

Health equity-related outcomes: approach and results

Outcomes related to health equity include the social determinants of health and health outcomes disaggregated across social groups. Many of the welfare indicators monitored throughout the initiative were equity-related outcomes in that they assessed the social determinants (for example, unemployment). As discussed above, there was no formal evaluation of these indicators. Moving forward, the established social indicators could be used for monitoring and evaluating the equity-related outcomes of policy and programme initiatives as these indicators include social determinants (for example, income, unemployment, educational attainment), social determinants disaggregated across social groups (for example, unemployment across educational attainment and gender, income poverty across immigrant status and location of residence), and health outcomes disaggregated across social groups (for example, gender) (73). The social indicators are also disaggregated across age to facilitate the consideration of differences across the life-course.

Economic evaluation: approach and results

There was no economic evaluation of Welfare Watch. Country representatives noted that, since one of the aims of the initiative was to facilitate the development of a large number of policies, it would have been very difficult to evaluate its costs and benefits comprehensively.

Overall experiences of monitoring and evaluation

While monitoring Welfare Watch was planned from the outset as one of the objectives of the initiative, the evaluation (66) was not. The

country representatives reflected that it had seemed natural, however, to conduct an evaluation at the end of the first era of the initiative (2009–2013) to gain an indication of whether it should continue in Iceland and how it should operate if it were to continue. Furthermore, the evaluation was carried out as part of the Nordic Welfare Watch research and leadership project established during the Icelandic Presidency of the Nordic Council of Ministers in 2014 (section 2.3.2). Knowledge exchange with the other Nordic countries about successful and innovative practices (like Welfare Watch) is an important aspect of the Presidency of the Nordic Council of Ministers, and evaluating Welfare Watch helped Iceland assess whether a platform like Welfare Watch should be established for the Nordic countries (66,69).

The country representatives reflected on a few benefits of the monitoring and evaluation of Welfare Watch and the use of the results. Monitoring welfare was an integral part of adapting the actions of the initiative to the changing needs of various population groups over time and had helped to direct Iceland's efforts during an extremely pressured period. The evaluation had also been beneficial. During the implementation of Welfare Watch, it was difficult to pause and take a "big-picture" perspective of the immense amount of work that was being done, especially as times were so difficult. The evaluation had allowed them to "zoom out", making it possible to see more clearly what had been done. It had also allowed them to gather information about the aspects of Welfare Watch that stakeholders had found useful. This information had informed decisions about the focus of the second era of the Icelandic Welfare Watch and of the Nordic Welfare Watch.

Numerous barriers and challenges to the monitoring and evaluation of the initiative have been noted above (for example, time pressure vis-à-vis the urgency of the situation, the lack of suitable indicators, the complexity of the evaluation and the resources required). The country representatives also mentioned some of the general obstacles to monitoring welfare, such as:

- lack of disaggregation of indicators across relevant social groups;
- absence or poor quality of data on certain aspects of welfare, such as mental health, homelessness, domestic violence, integration and segregation, and children's well-being;
- lack of coverage of subgroups of the population in surveys measuring indicators;

• collection of indicator data too infrequently to be useful for the rapid identification of and response to a crisis.

As discussed above, attributing outcomes as impacts was a challenge in evaluating welfare and policy outcomes. The evaluation noted that it had been difficult to assess the policy impacts of Welfare Watch, acknowledging that it was not possible to determine whether the authorities would have taken action without Welfare Watch, and that it was likely that there were impacts of Welfare Watch that it had not been possible to identify (66).

Monitoring and evaluation were **facilitated** by the expertise and commitment of the working groups and steering committee, as well as the University of Iceland and the consultants who conducted the evaluation. The counterbalance fund also facilitated the evaluation (section 2.3.5).

2.3.7 The life-course approach in development, implementation, monitoring and evaluation

How the life-course approach informed Welfare Watch

Development

The life-course approach informed the development of Welfare Watch. As noted in the report on Welfare Watch by Joint Action on Chronic Diseases and Promoting Healthy Ageing Across the Life-Cycle (JA-CHRODIS), the aim of the initiative was to promote welfare across the life-course, from pregnancy through to childhood, adolescence, young adulthood, working-age adulthood to old age (78). There was a specific focus, however, on children, families, and young people (adolescents and young adults), facilitated through working groups on these life-stages (66). This reflects the life-course principle of acting early to promote the best possible start in life, and appropriately to protect health during the transition periods of adolescence and young adulthood. Its focus on families reflects the intergenerational perspective of the approach. The evaluation revealed that Welfare Watch's decision to focus on children and youth was based partly on the desire to prevent future problems, which echoes the longterm mindset of the life-course approach (66). Similarly, the country representatives reflected that the focus had been on acting early in the life-course with a view to strengthening the effectiveness and efficiency of investments

Implementation

The country representatives noted that life-course principles had informed the proposals made by Welfare Watch in that they focused on optimizing functional capacity across the lifespan, promoting growth and development in early life, and maximizing function and independence while preventing disability in later life. These aspects were reflected in the proposals. One example is the school-lunches initiative proposed by the working group on children and families, which recognized the importance of education for life-long flourishing and was based on evidence that good nutrition is associated with better academic performance in children (6,79). Since this proposal was inspired by the focus placed on providing school lunches during the economic crisis in Finland (66), it also shows the importance of exchanging experiences gained in taking life-course action. The social indicators also illustrate life-course principles through their disaggregation by age to capture differences across the life-course, and their relevance to critical lifecourse processes or life-course actions. Examples of life-course-focused indicators are: preschool education and child protection notifications (related to the principle of acting early to promote health and prevent adverse experiences); school attendance and health-risk behaviour (related to the principle of acting appropriately to promote resilience during adolescence); unemployment and poverty rates (related to the principle of acting together to create healthy conditions of daily life). The creation of diverse groups to carry out the work of Welfare Watch, with input from actors from a range of sectors, is also an example of acting together as a whole society to improve health and well-being across the life-course.

Monitoring and evaluation

The life-course approach was also reflected in monitoring activities in that welfare indicators were monitored for specific life-stages (for example, childhood) and transition periods (for example, pregnancy and adolescence) and disaggregated across age, facilitating consideration of welfare across the life-course.

Triggers for adopting a life-course approach

The country representatives observed that it was difficult to pinpoint why the life-course approach had been adopted. At the time, there was a broad knowledge base on the approach, which was gaining international momentum, although it had not yet been synthesized

into the structured format of the Minsk Declaration for the European Region (2). For example, Iceland was aware of evidence on the impact of early-life experiences on outcomes later in life, and the benefits of acting early in the lifespan. The life-course approach developed in Iceland in tandem with the development of the primary health care services after the adoption of the Alma Ata Declaration (1978) (80). An understanding of the importance of the influence of early-life experiences on adult health in Iceland is reflected in the emphasis placed on maternal and newborn care in primary health care. The country representatives considered it likely that the shared vision of the health and social sectors of the benefits taking a life-course approach. and their collective knowledge base on the approach, had facilitated its adoption. They also felt that the evidence collected by the Commission on Social Determinants of Health (CSDH) (chaired by Michael Marmot) and WHO's advocacy for addressing the social determinants across the life-course had fuelled the growing international momentum for a lifecourse approach.

As discussed above, Finland's experience of financial crisis appears to have been a trigger for establishing Welfare Watch in Iceland. The evaluation of Welfare Watch (66) suggests that Finland's experience also influenced the adoption of a life-course approach in terms of the focus on children, families and young people. This reflects the life-course approach in terms of taking early and appropriate action and thinking long-term across lives and generations. Members of the Welfare Watch steering committee felt that the decision to focus on these issues had been influenced by the desire to learn from Finland's experience in protecting the education, health and welfare of children and young people during the crisis to prevent problems later in life (66). One committee member stated the following.

"Personally, I found it very positive, that there was so much focus on families with children and poverty because... we can use Finland as an example, by not looking at it [poverty, and families], we are just creating problems for the future" (66, p.42)

Mechanisms that facilitated a life-course approach

The country representatives reported that intersectoral action had been an important mechanism for the life-course action taken by Welfare Watch; the different stakeholders recognized the value of the approach and worked together to identify welfare risks and develop solutions. This collaboration was achieved through the steering

committee and working groups (6). As discussed in section 2.3.2, some working groups were responsible for welfare at certain stages of the life-course, including early life (children and families) and transition periods (youth and young adults).

Benefits of using a life-course approach

The country representatives highlighted the benefits of taking a comprehensive approach to welfare across the whole life-course rather than focusing on a single point, thus avoiding "problem shifting" from one life stage to another.

Challenges and barriers to using a life-course approach

The country representatives reported that potential barriers to using the life-course approach include a lack of:

- understanding of the need for a life-course approach;
- information on how to implement the life-course approach in practice;
- evidence on which life-course actions work best to improve health outcomes in different populations and contexts;
- expertise;
- funding;
- support in appropriate methods to evaluate outcomes of life-course actions; and
- appropriate data to evaluate the outcomes of life-course actions.

Ensuring that older people are not left behind, given the emphasis on acting early in the life-course, can be a challenge.

What WHO can do to facilitate adoption of the life-course approach

The country representatives, recognizing that adopting new practices is a gradual process that requires persistence, likened it to the expression "the constant dripping of water wears a stone away". They suggested that WHO "keep the message alive" by continuing to disseminate the key concepts of the life-course approach and collecting case studies that illustrate best practice in adopting it.

Other proposals for facilitating adoption of the life-course approach were to:

- develop an overview of simple life-course actions;
- determine "best-buy" actions in each life stage;
- identify key partners in the development of interventions for each life stage;
- build networks of experts in the life-course approach; and
- facilitate knowledge exchange on adopting the approach.

2.3.8 Considering and addressing health inequities across the life-course and across generations: approach and experiences

How health inequities were considered and addressed

Development

Having been established to monitor and protect welfare, with a focus on the most vulnerable groups, Welfare Watch was clearly grounded in equity. As welfare encompasses socioeconomic living conditions and well-being, both socioeconomic and health equity were key considerations for Welfare Watch. The focus of the initiative on protecting the welfare of families, children and young people reflects a striving towards minimizing the perpetuation of inequities across the life-course and generations, from parental economic hardship to children's health and socioeconomic disadvantage. The working groups focused not only on the different life stages (for example, childhood and vouth) but also on the different social determinants of health (for example, unemployment and financial difficulties of households). Furthermore, each working group was required to take an equity-sensitive perspective in considering the impacts of the crisis on each of the sexes and on minority groups (section 2.3.2). This reflects the integration of health equity, which is central to the life-course approach and life-course principles (section 1.2).

Implementation

The focus on equity was also reflected in the recommendations of Welfare Watch. For example, the recommendation of the working group on children and youth to provide free school lunches sought to ensure that children living in financial hardship would not experience disadvantage in relation to health and academic achievement. This working group also made numerous other recommendations on protecting the welfare of disadvantaged children. These included:

monitoring the situation and prioritizing the education of children in fringe groups, and supporting the children of unemployed parents and parents in financial difficulties. Another key Welfare Watch recommendation was to ensure that children in more disadvantaged circumstances would receive dental care. This recommendation was taken up and dental subsidies for children were introduced (66). These are just a few of the multitude of equity-sensitive recommendations of Welfare Watch.

Monitoring and evaluation

The monitoring activities that informed the work of Welfare Watch examined equity-relevant indicators, including both the social determinants of health and health across social groups. Many of these were measured at specific life stages or in transition periods. These monitoring activities helped to identify the groups that were most at risk, establish a baseline for inequities, monitor changes over time, and make recommendations for action. Naturally, equity was also included in the evaluation as it considered the degree to which Welfare Watch had achieved its goals in protecting welfare.

Participatory processes

The more disadvantaged groups were not specifically represented in decision-making processes although, as noted above, various nongovernmental actors working at the grass-roots level took part.

Challenges and barriers to addressing health inequities

Having good data on health inequities is important in developing strategies to address them. The country representatives observed that it can be challenging to monitor health inequities in a small country, as small population size makes it difficult to use conventional methods of disaggregating and analyzing the data. Conversely, having a small population can, in some ways, make it easier to tackle health inequities.

Facilitators for addressing health inequities

Welfare Watch was established in response to concerns about the social and financial consequences of the economic crisis. Given the body of evidence on associations between lower SES and poorer health outcomes, it was natural to focus attention on protecting the welfare of the most vulnerable groups and addressing the social determinants of health. The country representatives also mentioned the importance

of the mentality shift among policy-makers and the public from the responsibility to ensure that everyone gets the same share (equality) to a focus on a fair share (equity). They felt this shift had been partly facilitated by the work of WHO and CSDH, which highlighted the importance of socioeconomic inequities in health. This work also facilitated action on health inequities in that it changed people's perspectives concerning the interrelationships and overlap between health, social and environmental issues and sectors. People began to realize that these sectors had been considering similar problems through different lenses, and that there was a need for the non-health sectors to consider health impacts, in line with HiAP (50) and whole-ofgovernment approaches. Such coherent intersectoral action, which is essential in tackling health inequities (7), was exemplified in the work of the steering committee and working groups of Welfare Watch. The importance of learning from other countries' experiences in tackling health inequities was also highlighted by Iceland, in that the work of Welfare Watch was informed by other countries' actions to mitigate the health impacts of economic crises.

How the action took a gender-responsive approach

Development and implementation

In early 2009, the Government appointed a working group (equal rights monitoring), independent of Welfare Watch, which was given the responsibility of considering the impacts of the economic crisis on men and women and ensuring that gender equality was integrated into Iceland's response. This working group produced a report highlighting the importance of ensuring the equal representation of men and women in decision-making processes, and considering other issues, such as unemployment among men and women and the roles of men and women in restructuring the economy. In late 2009, the role and recommendations of this working group were integrated into Welfare Watch (66,81).

Welfare Watch incorporated gender equity into its work in several ways.

- An expert from the Gender Equity Council was included in the Welfare Watch steering committee and was thus involved in the development and implementation of the initiative from late 2009 (66).
- All working groups were tasked with considering the impacts of the crisis on the welfare of both sexes and on minority groups (66).

- Several of the working groups produced recommendations specific to the welfare needs of men or women. The working group on children and families, for example, produced recommendations on maternity and paternity leave (66).
- In 2010, Welfare Watch decided that equal-rights policies should be integrated into all of its work (66). This decision was reflected in the disaggregation of indicators in monitoring (as discussed below) and in a report produced by Welfare Watch in 2011. The report, entitled Women in crisis? Summary of official statistical data on the impact of economic hardship on women's welfare (82), sought to understand the impacts of the crisis on women. It collated data from multiple sources to examine issues, such as the status of parents with young children, household financial difficulties for men and women, impacts of the crisis on the participation of men and women in the labour market and on their health, and gender-based violence (66).

Monitoring and evaluation

Iceland also sought to incorporate gender equality into the monitoring of Welfare Watch by disaggregating indicators across sex and age to allow consideration of the differing welfare needs of men and women across the life-course. The evaluation acknowledged the importance of gender-responsiveness in its discussion on the integration of equal-rights policies into Welfare Watch (66).

Challenges and barriers to adopting a gender-responsive approach

The country representatives mentioned the lack of evidence about the impacts of the crisis across genders as a barrier to taking genderresponsive action.

Facilitators of adopting a gender-responsive approach

The country representatives noted that gender equality had been prioritized as a key principle in the political and economic responses to the crisis. They highlighted the importance of supportive legislation as a facilitator for a gender-responsive approach. Gender equality is embedded in the *Constitution of the Republic of Iceland*, which is the highest legal instrument in the Icelandic system and stipulates that men and women must have equal rights in all respects (81,83). Legislation to protect gender equality has been present in Iceland

since 1976. Currently, this is in the form of the 2008 Act on the equal status and equal rights of women and men, which aims to create and maintain equal rights and opportunities for men and women and so promote gender equality in all parts of society (81,84). The equal rights monitoring group also enabled the use of a gender-responsive approach through its work in promoting and facilitating the integration of gender equality into the Government's response to the financial crisis.

2.3.9 Lessons learnt

Welfare Watch is a powerful example of working together as a society to manage unexpected challenges and protect welfare during times of crisis. Government support and the multidisciplinary nature of Welfare Watch were essential to the success of the initiative in seeking to mitigate the consequences of the crisis. This is also true of the dedication and hard work of its members (6).

This case story illustrates that a network like Welfare Watch can serve to foster collaboration between a diverse range of stakeholders, including Government ministries and agencies, local authorities, labour-market partners and nongovernmental actors. Welfare Watch became an instrument, which enabled these actors to join forces towards the common goal of monitoring and protecting welfare (6). Not only did their diversity serve as a strength in identifying problems and developing solutions, but their collaborative work also allowed members of Welfare Watch to gain expertise for the future (66).

Iceland's advice to other countries seeking to implement similar actions would be to involve as many stakeholders as possible in the decision-making processes, and to ensure that there is a clear vision from the outset of how decisions will be implemented.

2.4 Malta's case story: the Healthy Weight for Life strategy (2012–2020)

This case story outlines Malta's translation of the life-course principles into practice through the national Healthy Weight for Life strategy (HWL) (85). A brief overview of the issue addressed, action taken, and role of the life-course principles in HWL is given in Box 2.3.

Box 2.3 A brief overview of the role of the life-course principles in HWI.

The issue (section 2.4.1)

Overweight and obesity are an immense problem in Malta. They are associated with physical and psychosocial problems for individuals, and economic burdens on society.

The action (section 2.4.2)

HWL was initiated in 2012 and will run until 2020. It is an umbrella policy framework, designed to guide the development and implementation of initiatives to address overweight and obesity across the life-course.

HWL includes action areas across three domains – healthy eating, physical activity and health services – which are being translated into policy and programme initiatives.

The strategy is led by an intersectoral committee and a diverse range of sectors have been involved in the planning and implementation of its initiatives.

How HWL reflects the life-course principles (section 2.4.7)

HWL was structured around the **continuum of the life-course**, with initiatives designed to address barriers to and enablers of a healthy weight at each **life stage** or in each **transition period** and delivered in **settings** where people spend most of their time (for example, preschools/schools in childhood and adolescence, workplaces/communities in adulthood, and rest homes/day centres in old age).

Initiatives focusing on nutrition and physical activity in the **prenatal period** and childhood reflect the life-course principle of acting early to promote the best possible start in life.

Initiatives addressing parents and children together reflect the intergenerational perspective of the life-course approach and the interconnectedness of lives within households.

Initiatives focusing on transition periods, such as adolescence and pregnancy, reflect the principle of acting appropriately to promote the adoption of healthy lifestyles during sensitive periods.

Settings-based initiatives focusing on creating **healthy environments** (for example, in schools and workplaces) reflect the principle of **acting together** to ensure the best possible conditions for daily life.

The focus on **intersectoral action** reflects the principle of **acting together** as a whole society.

2.4.1 The public health issue

HWL (85) was put in place in 2012 to address the growing problem of overweight and obesity in Malta. These conditions constitute a large problem across life stages and have been a priority for Malta since the Member States in the WHO European Region committed to strengthening action in this area by adopting the European Charter on Counteracting Obesity at the WHO European Ministerial Conference on Counteracting Obesity in Istanbul, Turkey, in 2006 (86,87).

In a cross-country comparison of the first round of the WHO European Childhood Obesity Surveillance Initiative (COSI) in 2007-2008, the directly measured prevalence of overweight and obesity among 6-7 year olds in Malta was 34% for boys and 29% for girls (using WHO cut-offs). The prevalence of obesity was 15% for boys and 12% for girls. These rates were among the highest of the countries included in the Initiative (88). Follow-up rounds of COSI were conducted in 2009–2010, 2012–2013 and 2015–2016, and their results are discussed in the monitoring and evaluation section of this case story (section 2.4.6). The self-reported prevalence of overweight and obesity among adolescents has been assessed in the cross-national Health Behaviour in School Aged Children study (HBSC), using WHO cut-offs. In the 2006 HBSC (89), the prevalence of overweight and obesity in Malta, for boys and girls, respectively, was 30% and 25% in 11 year-olds, 31% and 31% in 13 year-olds, and 32% and 28% in 15 year-olds. Malta was above the HBSC average for all ages. Follow-up rounds of HBSC were conducted in 2010 (89) and 2014 (90), as discussed under monitoring and evaluation in section 2.4.6.

Obesity is also a problem among adults in Malta. Self-reported data from the National Health Survey (2002) and European Health Interview Surveys (EHIS) (2008 and 2015) show that the prevalence of overweight and obesity among adults over 15 years of age was approximately 57% in 2002, 58% in 2008 and 60% in 2015. Most of the increases related to obesity, which went from 23% in 2002, to 22% in 2008, then up to 25% in 2015 (91–93). The rates for directly measured overweight and obesity would likely have been even higher, as self-reported data generally tend to underestimate prevalence (91). A 2016 study using direct measures among adults aged 18–70 years in Malta found that nearly 70% were overweight or obese (34% were obese) (94).

Overweight and obesity have a considerable impact on health and well-being. Obesity is associated with increased risk of a range of NCDs,

such as type II diabetes and cardiovascular disease, and with reduced life expectancy (95). Obesity is also associated with mental-health problems, such as depression (91,96), and with reduced quality of life (97). The potential health and well-being consequences of the stigma and discrimination that obese individuals are faced with are also cause for concern (98). Childhood obesity carries the risk of adverse life-long consequences: not only are overweight and obese children more likely to grow up into overweight and obese adults (99), but the evidence suggests that they are also at increased risk of premature mortality and cardiometabolic diseases later in life (100).

Obesity also carries an enormous economic burden. A recent study estimated the costs of adult obesity in Malta in 2016 to be at least € 36 million (using the 2015 EHIS prevalence of 25%), representing 0.4% of Malta's GDP, and estimated that 5.6% of the national health expenditure in 2015 was attributable to obesity (91). The analysis included numerous costs, both direct (for example, for pharmaceuticals; hospital, primary and specialist care; allied health care; and weight-loss and public interventions) and indirect (for example, those resulting from reduced productivity, government subsidies, foregone earnings and taxes). This cost rose to €56 million when measured obesity prevalence was used (34% in 2016). These estimates are likely to be conservative as the analysis could not account for the many other important costs of obesity, such as those associated with mental-health problems, reduced quality of life and survival. Furthermore, the estimates consider only costs for adult obesity.

2.4.2 The life-course action

HWL (85) (2012–2020) was developed to tackle the burden of overweight and obesity across life stages in Malta. It is an umbrella strategy designed to serve as an overarching framework for the development and implementation of a range of initiatives to reduce the prevalence of overweight and obesity and promote a healthy weight for life. The vision is for healthy lifestyle choices, in terms of nutrition and physical activity, to be the norm and accessible to all (85). HWL involves prevention for the whole population and risk-based initiatives for people who are overweight or obese (6,85). The strategy is structured around three domains, each including a number of action areas (Table 2.2). Each action area is being translated into one or more policy or programme initiatives (85).

Table 2.2. HWL domains and examples of priority action areas

	HWL domains				
	Healthy eating	Physical activity	Health services		
Examples of priority action areas	Develop policies across Government to promote healthy diets Promote breastfeeding Support schools and families in providing healthy meals and snacks for children	Develop policies across Government to promote physical activity Ensure three hours of physical activity a week for schoolchildren Support local councils in creating environments that promote physical activity	Increase and improve adult weight-management and physical-activity classes Increase and improve parentcraft and breastfeeding classes Establish multidisciplinary clinics for the management of excess weight in adults and children		

Part of the work in HWL (85), as an umbrella strategy, is to facilitate the development and implementation of an interconnected network of policies, strategies and action plans that are needed to promote healthy eating and physical activity. One of the HWL healthy-eating action areas was to update, implement and monitor the national breastfeeding strategy (85). In 2015, the National Breastfeeding Policy and Action Plan (2015-2020) was put in place (101). Malta is currently developing a national health-enhancing physical-activity plan, which was a physical-activity action area in HWL (85). HWL has also facilitated updating the national Food and nutrition policy and action plan for Malta (2015-2020) (85,102). The plan takes a life-course approach, recognizing the accumulating impacts of nutrition across the lifespan and the importance of addressing health inequities (102). Another HWL action area was to facilitate the implementation and monitoring of the Healthy Eating Lifestyle Plan (HELP) for schools (85,103). The Ministry of Education, Youth and Employment developed HELP in 2007 with the aim of creating supportive school environments for healthy lifestyles, especially healthy eating (103). HWL also sought to facilitate implementation of the national whole-school policy (85,104), which superseded HELP (103) in 2015. This policy takes a wholeschool approach to promoting healthy eating and physical activity by engaging pupils, parents, teachers and other members of the school community. It aims to empower children to make healthy choices

throughout the life-course and to create a supportive environment that helps the whole school community to adopt a healthy lifestyle. Several of the programmes outlined below aim to contribute to this vision of health-promoting schools.

As illustrated in the following examples, HWL has also resulted in numerous programme initiatives, many of which target specific stages in the life-course and are being delivered in settings relevant to these periods.

- The Kinder educational programme for **children of preschool age** is provided in 20 preschools. The programme focuses on nutrition, physical activity, oral health and assertiveness, and is delivered by teachers, who receive training based on a teacher-training toolkit (6).
- The Lunchbox Programme, delivered in schools, aims to promote healthy eating by educating **primary-school-aged children** and their parents. It includes cooking lessons for children, parental information sessions, theatrical educational sessions for children, and mass-media campaigns (6).
- The 2017 Healthy Children Campaign aimed to promote healthy lifestyles for primary-school-aged children through an advertising campaign across the media, including television, radio, social media, and outdoor advertisements. The campaign aimed to convey the message that healthy children are positive, active and happy. It highlighted the importance of a healthy diet, daily physical activity and limited screen and sedentary time. Messages targeted children and adults and were delivered by local brand ambassadors to foster public support.
- The Schools on the Move programme (105) aimed to promote physical activity among adolescents in secondary school, particularly those living in areas of SES. It involved mass-movement dance sessions conducted by professionals over a 7-month period during recess breaks in secondary schools. It was supported by a 2-month-long mass-media campaign, targeting adolescents and families. Sustainability was ensured by training some of the adolescents as peer leaders, so that they could continue the sessions after completion of the programme.
- Actions targeting all children in all schools have been taken to create an environment conducive to healthy eating and physical

activity, such as the development of standards of permissible and prohibited foods and beverages for school tuck shops. Compliance is assessed through external audits (6). In addition, all new school infrastructures are designed to support a healthy lifestyle through the provision of open spaces, gym facilities and an accessible supply of potable water. These actions are all linked to the national policy on a whole-school approach to a healthy lifestyle (104).

• In the case of working-age adults:

- workplaces have been used to deliver information sessions, cooking classes and weight-management programmes;
- community-based initiatives have been delivered, including cooking classes and weight-management programmes, lifestyle clinics and a variety of physical-activity programmes, including swimming, water aerobics and Pilates;
- updated food-based dietary guidelines have been launched, using a plate as the visual instead of the traditional food pyramid (6).
- For older adults, a number of initiatives have been carried out in rest homes. These include the implementation of dietary guidelines in the preparation of daily meals, and the provision of information sessions on healthy eating. Talks on healthy lifestyles, as well as physical-activity sessions, have been held in day centres (6).

2.4.3 Involvement of different sectors, including civil society

Sectors involved

Intersectoral collaboration was embedded in HWL (85) from the outset. After the WHO European Conference on Counteracting Obesity in Turkey in 2006 (86,87) (section 2.4.1), Malta set up the Intersectoral Committee to Counteract Obesity (ICCO) to develop a strategy. ICCO included representatives of numerous government ministries (for example, those for health, education, agriculture, finance, transport, environment and urban development), authorities (for example the Malta Broadcasting Authority) and associations (for example, those related to diabetes and hotels and restaurants). ICCO drove the development of HWL and set up subgroups to work on drafting and implementing the strategy (85). HWL also included an action area on strengthening the intersectoral collaboration initiated by ICCO and

appointed focal points in key sectors for the implementation and monitoring of HWL (85).

While the **health sector** has taken the lead in developing the strategy, it has also facilitated ownership in other sectors (6). Some of their diverse roles are outlined below.

The Ministry for Education and Employment has played a central role in the implementation of initiatives in school settings. The education sector has led the Kinder project, developing the teacher toolkit with input from the health sector (6). The education and health sectors have often worked together to make school-based initiatives possible. For example, they worked with the owners of tuck shops to identify barriers to providing healthy foods, advise them on how to improve the nutritional quality of foods, and train them on permissible and prohibited foods.

The **sports sector** (through Sport Malta, which is under the Ministry of Education and Employment) has helped to provide opportunities for physical activity at all ages (6).

The Ministry for Finance has been involved in making recommendations on budget submissions and developing economic incentives, such as the tax on non-alcoholic beverages (apart from water and milk) introduced in November 2016 (6).

The Ministry for Home Affairs and National Security has been involved in developing relevant legislation (for example, the Healthy Lifestyle Promotion and Care of Non-communicable Diseases Act (106) (Box 2.4)) (6).

Central Government (the Prime Minister and the Ministry for Health) has facilitated the implementation of HWL (85) by establishing an advisory council on healthy lifestyles and NCDs, which takes a lifecourse approach (Box 2.4) (6).

The media and nongovernmental actors have been important in disseminating HWL campaigns (6,85).

Local councils and **community groups** are helping to deliver community-based initiatives.

In the **private sector**, restaurants are being encouraged to provide healthy options, and weight-loss programmes are being delivered through workplaces (for example, hotels and banks) (6).

Box 2.4 Legislation supporting a life-course approach to tackling NCDs in Malta

The Healthy Lifestyle Promotion and Care of Non-communicable Diseases Act (106) was passed in January 2016 to establish and ensure an interministerial approach to reducing NCDs across all ages through the promotion of healthy lifestyle, favouring physical education and a balanced diet

The Act established the Advisory Council on Healthy Lifestyles, comprising:

- a chairperson nominated by the Prime Minister;
- a public health consultant, acting as Secretary to the Council; and
- representatives of the ministries of health, education, finance, social policy, sports, local government and home affairs.

The Advisory Council on Healthy Lifestyles:

- advises the Minister for Health on any matter related to health, physical activity or nutrition;
- advises the Minister for Health on policies, action plans and regulations on the reduction of NCDs:
- encourages an interministerial approach to issues related to physical activity and a healthy lifestyle;
- encourages the promotion of a lifelong approach to physical activity and a healthy lifestyle across all life stages, from pregnancy to old age.

After consulting the Advisory Council, the Minister for Health may introduce regulations to support implementation of the Act in areas related, for example, to:

- education and the promotion of healthy lifestyles and physical activity across all life stages;
- food consumption in and around schools;
- investment in healthy lifestyles and expenditure by local councils to promote them;
- the nutritional quality of food in institutions licensed by public authorities (for example, rest homes for older people);
- an integrated approach to the promotion of food for healthy lifestyles;
- the marketing of products that may adversely affect health; and
- other issues related to promoting healthy lifestyles.

Source: How small countries are improving health using the life-course approach (6).

Participation of civil society

Civil society has been directly involved in the development and implementation of some HWL initiatives (85), through monitoring activities. For example, as discussed in section 2.4.6, adolescents were involved in the planning and improvement of the Schools on the Move programme (105). This took the form of participation in focus groups where they provided input on the design and ongoing improvements of the programme. Similarly, teachers' feedback on the Kinder project is being used to enhance the educational resources for its future implementation. Malta has also sought to involve civil society indirectly via nongovernmental actors. While there are no NGOs for overweight and obesity, there are a number of professional associations, student associations and interest groups that do relevant work. Examples of these are sports organizations, interest groups related to physical activity (such as cycling), and the physiotherapists and diabetes associations. Some of these nongovernmental actors were involved in the consultation process on the development of the overall strategy (85). They are also involved in the implementation of HWL through their advocacy role in lobbying for action on obesity and putting HWL initiatives into action (for example, by providing professional advice and services, and disseminating campaigns). So far, civil society has not been involved in evaluation of the strategy.

The country representatives observed that indirect civil-society participation had been **facilitated** through ongoing partnerships between the health sector and the associations and groups mentioned above, as a result of previous collaborative work. They felt that, with respect to overweight and obesity, civil-society participation can be **challenging** because of the stigma and "blame attitude" that is often directed at people with these conditions. There is a need to overcome the public perception that addressing overweight and obesity is the sole responsibility of the individual.

The country representatives considered the participation of civil society beneficial in that individuals and communities can influence behaviour, mobilize the public agenda, create action groups and campaigns, and provide valuable contributions to human resources and the evidence base. Existing networks of people involved can also be used for promoting health and implementing initiatives.

2.4.4 Political support and policies

Political support has been pivotal to the success of HWL. The strategy has had high-level government support from the outset. The Minister for Health launched the strategy and ongoing initiatives, and the health sector has led its development, implementation, monitoring and evaluation, in partnership with other sectors (6,85).

Malta also has a network of mutually supportive **policies**, **strategies** and action plans that facilitate a life-course approach to promoting healthy lifestyles and tackling overweight and obesity. As mentioned in section 2.4.2, the development and implementation of policies and action plans has been an important part of the work carried out. These policies were designed to complement HWL and enable progress towards its goals by informing work in specific areas or life stages. These include, for example, the promotion of breastfeeding to ensure the best start in life (101), the organization of school-based initiatives to promote healthy lifestyles in childhood and adolescence (104), and the adoption of healthy diets across the life-course (102).

There are also synergies with other policies, strategies and action plans that address healthy lifestyles and NCDs, such as the *Strategy for the Prevention and Control of Noncommunicable Diseases in Malta* (2010–2020) (107) (which predates HWL (85)), and the recently adopted national strategy for diabetes (2016–2016) (108), which takes a lifecourse approach. The work of HWL in taking a life-course approach to overweight and obesity is also supported by Malta's overarching national health systems strategy, which was launched in 2014 (109). Its strategic directions and actions were informed by Health 2020 (4) and various other policies, including HWL (85), and it also takes a lifecourse approach. The first objective of the health systems strategy (109) focuses on promoting health and well-being throughout life and paying special attention to vulnerable groups.

HWL implementation has also been supported by **legislation**, specifically the *Healthy Lifestyle Promotion and Care of Non-communicable Diseases Act*, which was passed in January 2016, and takes a life-course approach to the promotion of healthy lifestyles (106). The Act established the Interministerial Advisory Council on Healthy Lifestyles, which advises the Minister for Health (Box 2.4) (106) (section 2.4.3). It aims to establish and ensure an interministerial lifelong approach to reducing NCDs across ages.

2.4.5 Financing

HWL initiatives (85) have been financed through direct budgets with obesity as a line item. In addition to the health budget, the education budget has been used for school-based initiatives, the sports budget for physical activity initiatives, and so on. There has not been any direct financial support from public–private partnerships, although in-kind contributions have been received, for example, in the form of the distribution of free fruit (6). As discussed in section 2.4.8, new measures to tackle the social determinants of health will be funded partially by the European Social Fund.

HWL (85) has also been facilitated by support from the EU platforms, Obesity Prevention Through European Network (OPEN) and Joint Action on Nutrition and Physical Activity (JANPA). OPEN aims to support best practice in the prevention of child and adolescent obesity by strengthening and scaling up community-based initiatives and broadening their scope to include adolescents in the more disadvantaged areas (105). This platform provided technical support and funding for the sessions and media campaign of the Schools on the Move programme (105). JANPA is focused on synthesizing evidence and sharing best practice to facilitate action on child and adolescent overweight and obesity. It takes a life-course approach and recognizes the importance of equity-sensitive and multisectoral action (110). JANPA provided technical support for the Schools on the Move programme (105) and funding to cover the participation of its representatives in meetings. Both platforms facilitate knowledge exchange on best practice, and have highlighted Schools on the Move as an example of this (105,110,111).

2.4.6 Monitoring and evaluation: approach, results and experiences

There are multiple levels of monitoring and evaluation in an umbrella framework like that of HWL (85), which serves to facilitate the development and implementation of numerous initiatives (policies and programmes) across an issue. It is important to consider implementation and outcomes for both the overarching framework and the individual initiatives that come out of it. At the framework level, the development and implementation of policies and programmes will be considered as process indicators for HWL. To ensure consistency

with the strategy (85), behavioural changes in nutrition and physical activity will be considered as long-term outcomes, in addition to health outcomes (such as changes in overweight and obesity). At the initiative level, outcomes will be defined according to section 1.3 (that is, activities and outputs in implementation will be considered as process indicators, changes in the environment or knowledge or behaviour will be considered as short-term and intermediate outcomes, and changes in health or health equity will be considered as long-term outcomes).

Implementation: approach and results

Monitoring and evaluation of implementation has been carried out for several **HWL initiatives**.

The Schools on the Move programme (105) was monitored through focus groups both at the outset (to inform planning) and during implementation. The goal of the programme was to increase physical activity among adolescents, especially those living in the more disadvantaged areas. With the aim of maximizing participation, the organizers wanted to find out what kind of activity students found most attractive. They had considered dance but were concerned that the boys might not be interested due to social norms. Therefore, they held focus-group meetings with the students to discuss what type of activity they would be interested in joining, and how it should work. These discussions indicated that the boys would be happy to participate in dance, if certain music were played. This feedback was taken on board. Focus-group meetings were also conducted throughout implementation to seek the students' perspectives on how to encourage attendance and improve the programme.

Process evaluation of the project has also been carried out, using measurements of school uptake and attendance and questionnaires (which were also used to assess short-term and intermediate outcomes) (105). A random sample of students from a random sample of participating schools were asked to complete a questionnaire at the start of the project and a second random sample were asked to do so at the end of the school year. Post-intervention questionnaires were used to cover a number of process indicators, such as the students' reasons for participation or non-participation, how much they had enjoyed the sessions, the positive and negative aspects of the sessions, and ways in which they might wish to improve the sessions. As discussed below, an analysis of the results is currently being conducted. In terms of uptake

and attendance, 600 adolescents from 6 schools participated and 15 underwent the student trainer programme.

In the Kinder project, monitoring of implementation, through existing management structures in schools, has been used to facilitate quality improvement. Schools in Malta have education officers who have regular management meetings with the teachers. A year after the initiation of the Kinder project, the education officers asked the teachers whether they felt the toolkit could be improved and provided their feedback to the programme organizers. The teachers responded mainly that the material needed to be better tailored to the children's age levels. A working group, including representatives of the health and education sectors, is currently revising the toolkit to make it more age appropriate. It is the intention to have it ready for use at the start of the next year of the programme. This is a good example of using existing structures to enhance the efficiency of monitoring. It also shows the benefits of intersectoral collaboration, in this case between the health and education sectors. Measures to improve the quality of the project will continue throughout its course.

In terms of process indicators for the **overall HWL framework** (85), Malta is monitoring and evaluating the development and implementation of policies and programmes related to the action areas of the strategy. As discussed below, HWL planned two monitoring activities, in 2015 and 2018, to assess progress and inform future work. The final evaluation is planned for 2020 (85). The 2015 monitoring activity, which is in progress, includes the mapping of all progress made in translating the HWL action areas into programme and policy initiatives. This mapping exercise will also be used to identify synergies among the multiple initiatives so that the health professionals involved can receive training simultaneously.

Short-term and intermediate outcomes: approach and results

Evaluation of short-term and intermediate outcomes has been carried out for one of the HWL initiatives, namely the Schools on the Move programme (105). As mentioned above, this programme was evaluated using a before–after design with the questionnaires involved being completed by two samples of students in participating schools, one at the start and one at the end of the school year. Outcomes for evaluation included: attitudes (for example, towards physical activity and healthy eating); intentions (for example, to become physically

active); and behaviours (for example, related to physical activity and the consumption of junk food). Analysis of the results is in progress. The preliminary findings, according to students' responses to a follow-up question, indicated that 55% of the surveyed adolescents had been physically active before the start of the project and had continued to be active at the end, 17% had not been active at the start of the project but were active by the end, and 28% had not been active at the start and were still inactive at the end (105).

Outcome evaluation of the overall framework (85) is discussed below.

Long-term outcomes: approach and results

No long-term evaluations of **individual HWL initiatives** have been carried out yet.

For the **overall framework**, long-term outcome monitoring (2015 and 2018) and evaluation (2020) were built into the initial strategy across the **physical activity**, **nutrition**, and **overweight and obesity** domains. Indicators and targets for 2020 were set for each domain across multiple points in the life-course (childhood, adolescence and adulthood). To maximize efficiency and feasibility, indicators and targets were based on data in existing surveys, and efforts were made to maximize overlap with the NCD strategy (the evaluation of which is also planned for 2020) (107). As mentioned above, analysis of the monitoring results for 2015 is in progress. Some preliminary results are provided below, although it is important to bear in mind that they represent trends in proportions over time, without indication of statistical uncertainty (for example, confidence intervals, p-values). Full results will be available in Malta's 2015 monitoring report.

For **physical activity**, three targets were set (85) (two of which used surveillance data) to:

- (1) increase the proportion of adults doing moderate or high-level physical activity daily or on most days from 43.5% to 70%, using 2008 EHIS data (85);
- (2) reduce the proportion of adolescents who never exercise by 5%, using 2006 HBSC data (85);
- (3) increase the proportion of young people who exercise regularly from 37% to at least 50% by 2015 and to 80% by 2020, using data from a study of university students in 2008–2009 (112).

As mentioned above, analysis of the monitoring results is in progress.

For nutrition, indicators and targets covered six domains: processed meat, fish, vegetables, sugar-sweetened products, salt and animal fat. Baseline levels were defined using surveillance data, mostly for adults, from the 2002 National Health Interview Survey (NHIS) (85,93) with one indicator each from the 2008 EHIS (85,92) and the 2005 FAOSTAT survey of the United Nations Food and Agricultural Organization (85). An evaluation of these outcomes is not yet available. The country representatives noted that the nutrition indicators available in surveillance data are limited and they are keen to have more detailed data available for future monitoring and evaluation. Therefore, Malta has established a new national food-consumption survey, which includes two 24-hour food recalls using the GloboDiet method developed by the International Agency for Research on Cancer. GloboDiet is a standardized computer-based recall method, which codes foods and recipes to calculate nutrient composition (113). The survey also includes a food-frequency questionnaire, and an assessment of physical activity, using the standardized WHO Global Physical Activity Questionnaire (114,115). The questionnaire will inform the development and implementation of future HWL (85) and other initiatives on healthy lifestyles, for example, data on commonly consumed foods will inform media campaigns and food reformulation initiatives. The survey will also provide data on nutrition and physical activity for the monitoring and evaluation of future initiatives. The fieldwork for the baseline survey is complete: around 1000 responses have been received from adults and children aged 7 and older, and data cleaning is underway.

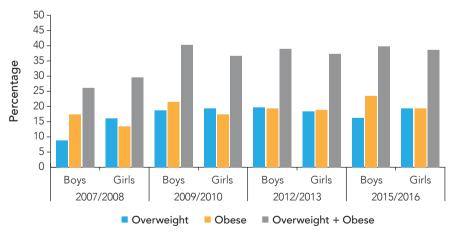
For **overweight and obesity**, four targets were set using existing surveillance data (85). These were to:

- (1) reduce self-reported **overweight in adults** from 36% to at least 33% (using 2008 EHIS data *(92)*);
- (2) reduce self-reported **obesity in adults** from 22% to at least 18% (using 2008 EHIS data *(92)*);
- (3) reduce measured **overweight and obesity in 7 year-olds** from 32% to 27% (using 2007–2008 COSI data (88)); and
- (4) maintain self-reported **obesity in 13-year-olds** below 15% (using 2006 HBSC data (85)).

Analysis of the 2015 monitoring data is in progress. In terms of preliminary results, for targets 1 and 2, the most recent data available are those from the 2015 EHIS (91). According to these data, overweight had decreased very slightly, from 36% in 2008 to 35% in 2015, whereas obesity had increased from 22% to 25% in the same timeframe (91,92).

For target 3, overweight and obesity are being monitored across gender and in the entire COSI data set, which includes all children in year 3 (rather than just the 6-7 years-olds as per the target and section 2.4.1). As shown in Fig. 2.1, there was a sharp rise in combined overweight and obesity for boys and girls between 2007-2008 and 2009-2010, prior to the introduction of HWL. Since then, the prevalence has largely remained stable at around 40% both in 2012–2013 (when HWL was introduced) and 2015–2016 (when implementation had been in process for a few years). While the ultimate goal of HWL and related policies is to reduce the prevalence of overweight and obesity, Malta has been encouraged to see that they appear to have halted its increase. Patterns of overweight versus obesity have been fairly consistent, although evidence from the most recent round of COSI (2015-2016) shows a switch from overweight to obesity among boys (Ferrugia Sant'Angelo, Ministry for Health of Malta, unpublished data provided by Principal Investigator of COSI Malta to the Superindendent of Public Health, 2017).

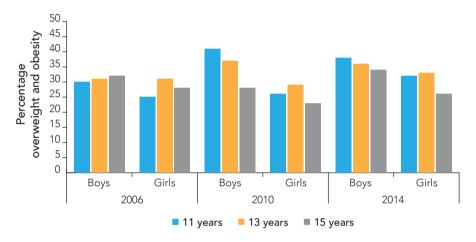
Fig. 2.1. Prevalence of overweight and obesity, and overweight and obesity combined, in children aged 6–7 years across COSI rounds in 2007–2008, 2009–2010, 2012–2013 and 2015–2016, Malta.



Source: adapted from Ferrugia Sant'Angelo, Ministry for Health of Malta, unpublished data provided by Principal Investigator of COSI Malta to the Superindendent of Public Health, 2017.

For target 4, prevalence data for obesity alone are not available in the 2010 and 2014 rounds of HBSC. For monitoring, Malta is considering trends in the prevalence of overweight and obesity combined, across age groups, from 2006 to 2014 (Fig. 2.2). The 2014 data (90) showed that, compared to the 2010 rates (89), the rates for boys of 11 and 13 years had decreased, whereas they had increased for boys of 15 years and girls of all ages.

Fig. 2.2. Prevalence of overweight and obesity combined in boys and girls aged 11, 13 and 15 years across HBSC rounds in 2006, 2010 and 2014, Malta.



Source: Health Behaviour Study in School-Aged Children. World Health Organisation (WHO) Collaborative Cross-National Survey: Malta, 2010 (89); Growing up unequal: gender and socioeconomic differences in young people's health and well-being health behaviour in school-aged children (HBSC) study: international report from the 2013/2014 survey (90).

Health equity-related outcomes: approach and results

Health equity-related outcomes are being considered in HWL monitoring and evaluation through disaggregation of intermediate and long-term health outcomes across social groups. At the **initiative level**, equity-related outcomes are being considered in the Schools on the Move (105) evaluation. The intermediate outcomes (behaviours, attitudes, intentions) discussed above will be disaggregated across household educational attainment and sex. Results are not yet available. At the **framework level**, overweight and obesity outcomes across the life-course will be disaggregated across social groups where possible. For adults, EHIS outcomes will be assessed across age, sex and educational attainment. For adolescents, HBSC outcomes will be examined across age, sex and family affluence. For children, COSI

outcomes for 7-year-old children will be examined across sex only as SES data have not been collected. As mentioned above, the analysis is in progress.

Economic evaluation: approach and results

There has been no economic evaluation of any HWL initiatives, or the overall strategy (85). The country representatives noted that limited resources were a barrier. An assessment of the costs of obesity in Malta was recently conducted by a professional services company (section 2.4.1) (91), which initiated the work as part of its corporate social responsibility. The company worked with the Government to identify a priority area for investigation, develop research questions and gather data. The evidence has been used by the health sector to advocate investment in the prevention of obesity and illustrates the benefits of collaboration between public and private bodies in generating evidence for advocacy.

Overall experiences of monitoring and evaluation

With indicators and targets embedded in the HWL policy document, monitoring and evaluation were **planned** from the outset (85). As mentioned above, this has posed some challenges due to changes in the availability of relevant indicators in surveillance data. The monitoring and evaluation of some initiatives (such as Schools on the Move (105)) were planned from the start; for others (such as the Kinder project), they arose in response to issues identified during implementation.

In terms of **benefits** of monitoring and evaluation, the country representatives reported that it was critical to conduct a formal evaluation of the overall implementation of the strategy to assess its effectiveness and identify areas for improvement. Monitoring and evaluating individual initiatives is important to identifying how the initiative, or its links to other services and stakeholders, can be enhanced. As mentioned above, the monitoring results for individual HWL initiatives have been **used** to assess progress and inform ongoing work; the results for the overall implementation of HWL (85) will be used in a similar way. The final evaluation of the framework will inform future work on overweight and obesity in Malta by highlighting progress achieved and areas in which further actions are needed. The evaluation results for the Schools on the Move programme (105) have been disseminated as an example of good practice through the JANPA and OPEN networks (105,111) and it is planned to publish them.

A number of barriers and challenges to evaluation have been mentioned above, including the lack of relevant indicators in surveillance data and limited resources. A challenge mentioned by the country representatives was that of assessing the actual impact of initiatives as so many external factors can influence the outcomes measured, especially for a complex issue like obesity. They felt it would be ideal to be able to account for other factors contributing to obesity at multiple levels, including individual, environmental and socioeconomic barriers to lifestyle change. The country representatives also reported that it was difficult, in conducting process evaluations, to measure all the inputs and activities attributable to each initiative when many were running at once. This is one of the challenges of an umbrella framework.

The country representatives noted that complex evaluations are facilitated by the involvement of experts and the use of different methodologies, including qualitative approaches. HWL (85) is a good example of combining the insights of different approaches, including both qualitative data (for example, focus groups for the Schools on the Move programme (105)) and quantitative data (for example, epidemiological data on obesity for the evaluation of the overall framework). They also stressed the importance of involving different stakeholders in monitoring and evaluation and of ensuring that people involved in planning and implementation, as well as people participating in the initiative, are given the opportunity to present their perspectives. For example, it is important for a school-based programme to consider the views of school authorities, teachers, parents, children and others involved in its implementation.

2.4.7 The life-course approach in development, implementation, monitoring and evaluation

How the life-course approach informed HWL

Development

Malta used the life-course approach as the overarching framework in developing HWL (85). The strategy is structured around the life-course, with action areas starting from preconception and pregnancy and moving through the life stages and transition periods into old age. HWL was guided by the epidemiology of overweight and obesity and the benefits and impacts of various interventions across the life-course (6,85). HWL incorporates the principle of acting early through

its emphasis on action in the prenatal period and early childhood. It also includes action areas focused on appropriate actions during transition periods, such as adolescence and pregnancy. The country representatives reflected that transition periods constitute a focal point for interventions, as they are often sensitive periods in which the potential to influence future health is considerable. For example, pregnancy can be a window of opportunity for improving the health of women and their families. One of HWL's priority action areas is to support pregnant women and new mothers in adopting healthy eating habits for themselves and their families through education and community initiatives (85). The strategy is also guided by whole-ofgovernment and whole-of-society principles, reflecting the importance of acting together to promote a healthy weight across the life-course. This is illustrated in the intersectoral membership of the HWL working groups. HWL recognizes the interconnectedness of lives in families through its emphasis on interventions involving parents and children. It also reflects the interconnectedness of lives in communities and the importance of acting together to create healthy environments through its emphasis on settings-based initiatives, such as the whole-school approach to healthy lifestyles.

Implementation

The life-course approach has also been central to the implementation of HWL. Settings for intervention delivery were often identified based on where people spend most of their time during a given life stage or transition period (for example, preschool-based for early childhood, school-based for childhood and adolescence, community- and workplace-based for adulthood, rest-home and day-centre-based for old age). Furthermore, implementation of HWL initiatives has often involved an intersectoral approach, reflecting the importance of acting together. For example, the health and education sectors have collaborated to ensure the success of school-based initiatives. Similarly, the local councils and the sports, education, and health sectors have worked together to promote and provide opportunities for physical activity.

Monitoring and evaluation

The life-course principles have also informed HWL monitoring and evaluation: the indicators were selected to cover the different life stages, using data from existing surveys across the life-course (for

example, COSI for children, HBSC for adolescents and EHIS for adults).

Triggers for adopting a life-course approach

Malta's adoption of a life-course approach in HWL (85) predates the Minsk Declaration (2). The country representatives reflected on a number of factors that triggered adoption of the approach in Malta. These include the impact of the technical assistance provided by WHO and its advocacy of the life-course approach. They also mentioned that they had adopted the approach because they had seen its value as an evidence-based guiding framework (for example, there is evidence to support the use of early intervention to prevent obesity across the lifecourse) and because, in looking at strategies in other countries, they found that the life-course approach was very practical. Considering the life-course as a series of life stages and transitions from preconception to old age facilitates the development of interventions that slot into each of these periods. At each life stage, barriers to and enablers of healthy weight can be identified and targeted, and action can be taken in each transition period to promote positive trajectories. These interventions can be delivered through settings that are relevant to the life stage in question, based on where people spend most of their time

Mechanisms that facilitated a life-course approach

Several mechanisms have facilitated the use of a life-course approach in HWL implementation. Epidemiological evidence about overweight and obesity and the effectiveness of interventions to prevent these conditions throughout the life-course was essential to its development. This evidence informed the emphasis placed on early intervention, parental involvement and community interventions (6). The Healthy Lifestyle Promotion and Care of Non-communicable Diseases Act (106) (Box 2.4) was another key mechanism, supporting use of the life-course approach in promoting physical activity and healthy nutrition, which is essential for HWL implementation. Finally, intersectoral working groups have been key in the development and implementation of HWL (6,85).

Benefits of using a life-course approach

Malta believes the life-course approach is practical and useful because it serves as a framework for the development and delivery of relevant interventions at different life stages and in settings suited to that life-stage. The approach can also be used to direct the development of guidelines for the different stages of the life-course.

Challenges and barriers to using a life-course approach

The country representatives reflected that the adoption of a life-course approach in policy requires the adoption of a "HiAP mindset" across government to help non-health sectors see that they can incorporate health in their workplans. Until this occurs, the non-health sectors may consider that health issues are not their responsibility and do not warrant time and resources. This mentality serves as a barrier to implementing actions intersectorally, which is so integral to the life-course approach. For example, the successful implementation of school-based initiatives depends on the willingness of the education sector to incorporate health into their workplans. The country representatives also noted that resources are never sufficient enough to tackle issues as big as obesity and that this often acts as a barrier to adopting a life-course approach.

What WHO can do to facilitate adoption of the life-course approach

The country representatives observed that it would be helpful if WHO could create a compendium of good practice in taking life-course actions across the life-stages.

2.4.8 Considering and addressing health inequities across the life-course and across generations: approach and experiences

How health inequities were considered and addressed

Development

As discussed earlier, epidemiological evidence relating to overweight and obesity was central to the development of HWL (85). It was used in identifying relevant dimensions of inequity and gaps at the outset of the strategy. The strategy cites European evidence that the prevalence of overweight and obesity is often higher among people of lower SES (income and educational attainment), especially in high-income countries and among women (85,116,117). It also provides evidence about educational inequities in overweight and obesity in Malta: lower educational attainment was associated with higher body mass index (BMI) among adults in the 2008 EHIS (92), and these gaps appeared to have widened since the 2002 NHIS (85). HWL also highlights educational inequities in food consumption found in the 2002 NHIS (85).

The strategy (85), therefore, recognizes the need for initiatives to address socioeconomic inequities in overweight and obesity through multifaceted, intersectoral action. It cites evidence that certain interventions (for example, health education) may not reduce inequities and might even increase them (116), and acknowledges that there is a need to identify initiatives that benefit lower socioeconomic groups. It recognizes financial barriers to participation in organized physical activity (such as fitness classes), which may impact people of lower SES. One of the HWL action areas is, therefore, to provide stakeholders (for example, owners of workplaces and gyms) with opportunities and incentives to provide the public with affordable and accessible means to physical activity, active play and sports. Similarly, in recognizing the potential differential impacts of economic incentives for healthy lifestyles across socioeconomic groups, another action area was set up to investigate the impact of taxes and subsidies on behaviour and income redistribution. In terms of health services, the strategy recognizes the need to ensure access to personalized services for overweight and obese people of all ages, particularly vulnerable groups, such as people of lower SES. Another priority action area was to establish community initiatives with a focus on lower SES groups.

Implementation

As mentioned above, health equity was incorporated into various HWL action areas during development, and is, therefore, reflected in the initiatives that are being implemented to address these areas (85). For example, the Schools on the Move programme (105) aimed to increase physical activity in adolescents living in the more disadvantaged areas.

Furthermore, work on health inequities will be facilitated by the recently established Unit for Social Determinants of Health in the Superintendence of Public Health within the Ministry for Health. The Unit will run a 5-year project on issues raised by the *Review of Social Determinants and the Health Divide in the WHO European Region (7)*, which are pertinent to Malta. This €2.9 million project will be funded by the European Social Fund and involves:

- research to identify priority areas for action on the social determinants in Malta and gauge understanding of the social determinants among government and civil-society professionals;
- training and capacity-building, based on research findings, including training on the social determinants of health (for personnel working

in the Unit and relevant personnel from other ministries), training on taking intersectoral action to promote HiAP (50), the creation of capacity-building tools, and information sessions for stakeholders; and

• awareness-raising campaigns among the more vulnerable population groups identified in research studies.

The Unit will continue to operate after completion of the project with a focus on developing HiAP (50), training personnel in various ministries, and advising the Minister for Health on issues related to the social determinants through a national platform under the Lifestyles Advisory Council. The Unit was not established specifically for HWL and its focus includes health equity across policies. However, since overweight and obesity are among the Unit's target areas, its work in these areas will also be used to facilitate the implementation of HWL. Evidence generated on the social determinants of overweight and obesity in Malta will inform HWL actions.

Monitoring and evaluation

As discussed in section 2.4.6, health inequities will be considered in monitoring and evaluating individual initiatives and the overall implementation of HWL through disaggregation of intermediate and health outcomes across social groups, such as age, gender, education and family affluence.

Participatory processes

Decisions about the overall framework did not specifically involve the more disadvantaged groups; however, focus groups in the Schools on the Move programme (105) included students from a range of socioeconomic strata. These groups were integral to decision-making as they informed planning and improvements.

Challenges and barriers to addressing health inequities

The country representatives mentioned that one of the challenges in addressing health inequities had been gaining access to the more disadvantaged populations.

Facilitators of addressing health inequities

Working in specific settings was mentioned as a facilitator of action to address health inequities, for example the Schools on the Move programme reached out to adolescents in lower SES areas through school settings (105).

How the action took a gender-responsive approach

Development

In developing HWL, Malta gathered epidemiological evidence on differences between the sexes regarding overweight and obesity to consider how best to address the health needs of men and boys and women and girls. This evidence showed a higher prevalence of overweight and obesity among adult men than adult women (2008 EHIS (92)), while differences between boys and girls varied across age (85). The strategy acknowledges that the gap in the prevalence of overweight and obesity between men and women had widened since the 2002 NHIS (85,92). It also outlines the interactions between sex and the other determinants of overweight and obesity, such as age and SES, noting differences between men and women regarding the age at which these conditions peak and the strength of educational inequities. Differences in physical activity and lifestyle risk factors observed in the 2008 EHIS were also considered (85).

Implementation

In HWL implementation, Malta also sought to address the health and health-service needs of men and women. One of the HWL action areas focuses on increasing the provision of weight-management programmes for overweight and obese adults in a range of settings. Of particular concern was ensuring the participation of men in these programmes, given the higher prevalence of overweight and obesity among them. However, the rates of men's participation in community-based programmes were low. Given the evidence that the rates of help-seeking behaviour for men are often lower than those for women (118), Malta decided to deliver these programmes in workplace settings in an attempt to increase men's attendance. Unfortunately, Malta has found that attendance in these classes is still lower for men than for women and is working to identify the reasons for this (for example, gender norms) and develop strategies to address them.

Monitoring and evaluation

As discussed in section 2.4.6, Malta will monitor and evaluate intermediate and health outcomes across sex for individual HWL

initiatives (such as the Schools on the Move programme (105)) and the overall HWL framework (85).

Challenges and barriers to adopting a gender-responsive approach

The country representatives found that ensuring accessibility of health services and health messages for men and women was a key challenge to adopting a gender-responsive approach.

Facilitators of adopting a gender-responsive approach

The country representatives noted that implementing actions in specific settings helped them address the needs of men and women, for example, delivering weight-loss programmes in workplaces to reach men.

2.4.9 Lessons learnt

Malta believes that it makes sense to use a life-course approach. Not only is it evidence-based, but it is also practical, making it easier to take action on public health issues. It helps to identify intervention periods that can be linked to targeted risk and protective factors, settings for intervention delivery, and stakeholders for collaboration (6). It can also be used to direct the development of guidelines across life stages.

HWL (85) demonstrates the importance of a solid evidence base in planning life-course actions. Evidence was critical in identifying the extent of the problem of overweight and obesity in Malta and selecting appropriate interventions to address it. Malta recognizes the importance of continuing to track evidence while implementing life-course actions, through systematic monitoring and evaluation, and of sharing their experiences with other countries (6).

Malta also reflected on the importance of intersectoral action and the use of the HiAP approach (50). They found that achieving HiAP (50) was still a challenge and that it was easier to work with some sectors than others. Working groups were an important mechanism for intersectoral collaboration. The country representatives felt that that Malta's small size facilitated collaboration, making it easier to contact and build relationships with key people and the public. They stressed the importance of involving the target population and other stakeholders from civil society as early as possible, and throughout implementation (6).

Limited resources are always a challenge. Malta has been working to address this through collaborative ventures and participation in EU-funded projects (6). Another challenge Malta faces as a small country is the influence of external factors; for example. Malta is highly dependent on the international food sector as most of their food is imported. During the country's recent EU presidency (January-June 2017), Malta focused on childhood obesity in Europe. Action areas included food reformulation, labelling, taxation, marketing, and informing and empowering families. Malta also took this opportunity to highlight the challenges faced by small countries and led the development of the Malta statement on ending childhood obesity: promoting healthy weight and well-being throughout the life-course, in conjunction with the WHO Regional Office for Europe. The Member States in the WHO European Region signed the statement at the fourth high-level meeting of small countries in 2017 (3). It expresses the small countries' commitment to tackling childhood obesity and sharing their experiences in this area and outlines a set of areas for action. In line with HWL (85), the statement takes a life-course approach, recognizing the importance of acting early and acting together through whole-ofgovernment and whole-of-society approaches, and of addressing the perpetuation of inequities across generations (3).

Section 3. Key messages, conclusions and implications

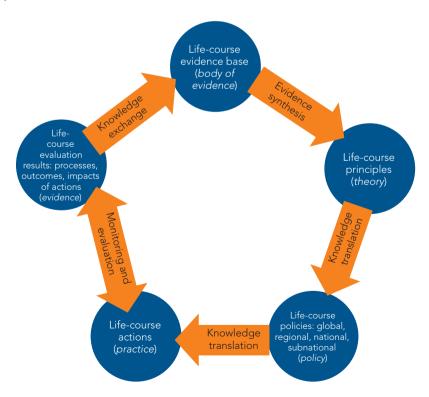
3.1 The cycle of the life-course approach: from evidence to practice

The case stories of Iceland and Malta illustrate what it looks like to adopt a life-course approach in practice. They demonstrate the process of translating life-course evidence and principles into policies and actions that address challenging public health issues. While they represent the experiences of only two countries, and there are limitations in terms of generalizability, they are nonetheless rich in key messages. This section will explore some of these key messages through a conceptual model of the cycle from life-course evidence to principles, policies, actions and evaluation that is based on the information in section 1.



As shown in Fig 3.1, the model proposes that the advancement of the life-course approach requires progression through a cycle of stages (blue circles), starting from the body of life-course evidence and moving through to life-course principles, life-course policies, lifecourse actions, and evidence resulting from life-course actions (on implementation, impacts and outcomes), which then feeds back into the life-course evidence base. As discussed in section 1, continuous progression through these stages is needed for the life-course approach to continue to move forward in terms of increased uptake and ongoing improvement. Progression from one stage to the next involves processes (orange arrows), such as "evidence synthesis". "knowledge translation" and "monitoring and evaluation". Each process has several factors and mechanisms that can serve as potential enablers/facilitators or barriers/challenges to progression. These will be highlighted in the key messages drawn from the sources discussed in section 1 and the case stories.

Fig. 3.1 Conceptual model of the cycle for advancement of the life-course approach



The discussion will also highlight actors with key roles in and responsibilities for facilitating progression in the cycle. Examples of these are Member States (at both the government and society levels), WHO and other partners, such as academia. Just as individual lifecourse actions require collaboration among diverse actors, so does the advancement of the life-course approach as a framework for public health.

The model recognizes that the stages and processes involved in the cycle often occur at multiple levels; including global, regional, national, subnational and local. Processes may occur independently across levels, or interactively through coordinated efforts. An example of multiple levels is the translation of the life-course principles into policy in the development of Health 2020 (4) at the regional level (Europe), HWL (85) at the national level (Malta), and school policies for healthy lifestyles at the local level (Malta). Furthermore, the model recognizes that advancing the process from one stage (for example, the generation of evidence by monitoring and evaluating a life-course action at the national, subnational or local level) to the next stage may necessitate moving upwards to another level (for example, this evidence needs to be shared through regional or global knowledge exchange in order to be added to the evidence base and, in turn, inform future actions in other countries).

The model is intended to serve as a tool for synthesizing the conclusions of this publication and does not seek to encompass the full complexity of the life-course approach. In practice, progression through the stages (blue circles in Fig. 3.1) does not always comprise single, forward-moving steps, and there may be additional steps to those illustrated by the orange arrows in Fig 3.1. For example, evidence might lead directly to policy or practice and bypass theory (life-course principles).

From evidence to theory

The first step involves a critical appraisal of the **evidence** on risk and protective factors and the processes through which they impact health and well-being across the life-course and generations, and the translation of this evidence into life-course **principles**, forming the theory underpinning the life-course approach. This involves the process of **evidence synthesis** (Fig 3.1). This process was not involved in the case stories, which start from life-course principles, but was discussed in sections 1.1 and 1.2. Based on the literature reviewed in

those sections, a few general comments about the barriers/challenges to and facilitators/enablers of this step follow.

Facilitators/enablers

The relevance of the life-course approach to important public health issues, such as the growing burden of NCDs, may generate the interest of policymakers and so facilitate the synthesis of evidence into principles (19,43).

Barriers/challenges

The complexity of the evidence base, which considers diverse exposures and their interactions across lifespans and generations, can make it challenging to synthesize the evidence into practical principles for translation into policies and programmes (43).

Limited evidence on life-course processes in some areas, for example, in low- and middle-income countries, in connection with communicable diseases and during childhood and adolescence, is a challenge in setting up frameworks that are broadly relevant (43).

The diversity of life-course models in the epidemiological literature may make synthesizing the evidence a challenge as these models need to be prioritized and integrated into a single framework for application to policy (43).

The limited discussion in the epidemiological literature on applying evidence to policy and programmes makes it challenging to synthesize it into policy-relevant principles (43).

From theory to policy

This step involves the translation of life-course **principles** into **a policy** that takes a life-course approach to a public health issue, and involves the process of **knowledge translation** (Fig 3.1). This is reflected in the development of the Welfare Watch platform (66) in *Iceland*, and in the development of HWL (85) in *Malta*.

Facilitators/enablers

Important public health issues can serve as a trigger for developing a life-course policy addressing health or health inequities. *Iceland's* actions were triggered by concerns about the welfare consequences of the financial crisis, particularly for children and young people (sections

2.3.1, 2.3.4, 2.3.8); in *Malta*, actions were triggered by concerns about the burden of overweight and obesity across life stages (section 2.4.1).

National and international evidence on the magnitude or consequences of the issue is important in creating momentum, as shown in the roles played by evidence on social inequities in health and the welfare consequences of financial crises elsewhere in motivating actions in *Iceland* (sections 2.3.4, 2.3.7, 2.3.8). In *Malta*, data on overweight and obesity, including social inequities, were important in creating momentum (sections 2.4.1, 2.4.8, 2.4.9).

International recognition of the importance of an issue can also facilitate momentum, as illustrated in the importance of the European Charter on Counteracting Obesity (2006) (87) to Malta's action on obesity (section 2.4.1).

International momentum for a life-course approach to health and health inequities can encourage adoption as noted by *Iceland* (sections 2.3.7, 2.3.8).

Political commitment is important to ensure prioritization of lifecourse principles in policy development. Government support was key to the development of Welfare Watch (66) in *Iceland* (section 2.3.4) and the development of HWL (85) in *Malta* (section 2.4.4).

An understanding of the key concepts of the life-course approach is necessary. *Iceland* proposed that WHO disseminate information about these concepts widely to create awareness of the approach (section 2.3.7).

Awareness of the evidence-base and the potential benefits of adopting a life-course approach can motivate adoption and create political support. *Iceland* and *Malta* both referred to the importance of the body of life-course evidence in triggering the use of a life-course approach (sections 2.3.7, 2.4.7). In terms of benefits of the approach, Iceland mentioned the potential for strong returns through early investment and for avoiding "problem shifting" by looking at the life-course as a whole (section 2.3.7). *Iceland* reported that the vision of the importance of a life-course approach shared by the health and social sectors might have facilitated the adoption of the approach (section 2.3.7). *Malta* also mentioned the benefits of early investment, as well as the advantages of the life-course approach as a practical framework that guides the development of interventions at each stage of the life-

course and the delivery of interventions in settings relevant to each life stage (section 2.4.7).

Advocacy for the life-course approach may raise awareness of the evidence-base and its potential benefits. *Malta* and *Iceland* both mentioned the influence of advocacy for the life-course approach by actors, such as WHO (sections 2.3.7, 2.3.8, 2.4.7) and CSDH (sections 2.3.7, 2.3.8).

Knowledge exchange through networks of countries can raise awareness of the importance of a life-course approach. Finland's response to a financial crisis both influenced and informed the life-course approach taken by Welfare Watch (66) in dealing with the financial crisis in Iceland (section 2.3.7).

The provision of technical support facilitates adoption. *Malta* underlined the role of WHO technical support in enabling the adoption of a life-course approach to HWL development (85) (section 2.4.7).

Intersectoral collaboration (for example, through working groups) facilitates the translation of life-course evidence and principles into policy. This was the case in *Malta* where intersectoral collaboration was enabled through ICCO, which drove the development of HWL (85) (sections 2.4.3, 2.4.7, 2.4.9).

Barriers/challenges

Gaps in the knowledge base on the translation of life-course principles into policy may be a barrier to adoption of the life-course approach (43,44).

Decision-makers' lack of understanding of the need for a life-course approach may be a barrier to adoption of the life-course approach (as noted by *Iceland*) (section 2.3.7).

Lack of political commitment to adopting a life-course approach could also be a barrier. This is especially relevant in the contexts of frequent shifts in political priorities and short-term funding cycles, given that the life-course approach has a long-term view, and returns on investment may be future focused (20,43).

Countries may not have a window of opportunity for application of the life-course approach.

From policy to practice

This step involves the translation of life-course **policies** into **actions** that put the life-course approach into practice, through the process of **knowledge translation** (Fig 3.1). In *Iceland*, this step was reflected in the work of Welfare Watch (66) in monitoring welfare and making recommendations; in *Malta* it is illustrated in the translation of HWL (85) into policy and programme initiatives.

Facilitators/enablers

Political commitment and support are essential in ensuring sustainable action. In *Iceland*, relevant authorities at the political level supported Welfare Watch operations (66) and the translation of its recommendations into action (section 2.3.6). In addition, *Iceland* recognized the importance of political support in ensuring that actions are gender-responsive (section 2.3.8). In *Malta*, there was intersectoral government support of the translation of HWL action areas (85) into initiatives (section 2.4.3).

A supportive network of policies and legislation can facilitate the implementation of a life-course policy. In *Iceland*, supportive policies and legislation were important to taking a gender-responsive approach (section 2.3.8). In *Malta*, a network of policies and legislation supports using the life-course approach for the promotion of healthy lifestyles and tackling NCDs; this support is strengthened by the overarching national health systems strategy (109) (sections 2.4.4, 2.4.7).

Evidence from life-course epidemiology, and on which life-course actions work best to improve health and reduce health inequities, is important for informing the translation of policy into initiatives. *Iceland* suggested that there is a need to evaluate and synthesize "best-buys" for life-course action in each life stage (section 2.3.7). The school-lunch initiative in *Iceland* was informed by evidence of the association between healthy lifestyles and academic achievement in schoolchildren (section 2.3.7). Evidence of the benefits of early interventions for obesity, social inequities in overweight and obesity, and the effectiveness of various interventions in addressing inequities, has informed *Malta's* implementation of HWL (85) (sections 2.4.2, 2.4.7).

Knowledge exchange can provide examples of best practice in implementation of the life-course approach. For example, *Iceland's* school-lunch initiative was inspired by a similar action in Finland

(section 2.3.7). Knowledge exchange can be facilitated by networks of countries (for example, the Nordic Co-operation (119)) and by mediating actors, such as WHO. Both *Iceland* and *Malta* suggested that WHO should collate examples of best practice in taking lifecourse actions and share them with countries (sections 2.3.7, 2.4.7).

Intersectoral collaboration supports the translation of policy into practice. In the case of *Iceland*, this is illustrated by the work of the diverse Welfare Watch groups in monitoring welfare (66) and proposing recommendations for action (sections 2.3.2, 2.3.3, 2.3.7). Iceland reflected that it was important for the different sectors to develop a "HiAP mindset" to facilitate action on health inequities (section 2.3.8). In the case of Malta, intersectoral collaboration is illustrated by the support provided by ICCO in translating HWL action areas into initiatives, the collaboration between various government and nongovernment sectors in the implementation of the initiatives, and the involvement of civil society in developing and improving them (85) (sections 2.4.3, 2.4.6, 2.4.9). Iceland suggested that future life-course actions could be facilitated by identifying key partners to support the development of actions in each life stage (section 2.3.7). Malta reflected that the small size of a country can enable collaboration, making it easier to develop relationships with a range of actors, including the public. Working groups had facilitated collaboration in both countries.

Cross-country networks and collaboration can facilitate action on complex issues, especially in small countries. Small countries might be strongly influenced by external factors. *Malta* used the opportunity of its recent EU presidency to work on childhood obesity with other countries in the European Region. *Malta* is also working with the other small countries to implement the Malta statement on ending childhood obesity, which takes a life-course approach (section 2.4.9).

Malta identified the settings-based approach as an enabler of translating life-course policies into practice, addressing health inequities and taking a gender-responsive approach (section 2.4.8).

Iceland mentioned building networks of experts on the life-course approach as a potential enabler of life-course actions (section 2.3.7).

HWL initiatives in *Malta* illustrated that **technical support facilitates implementation**. These initiatives were supported by the EU platforms, JANPA and OPEN (85,105,111) (section 2.4.5).

Funding enables action, as seen in *Iceland* through the use of the counterbalance fund for the work of the social indicators group (section 2.3.5). In *Malta*, the support of government budgets and EU funding for HWL initiatives (85) (section 2.4.5, 2.4.9) and EU funding for the Unit for Social Determinants of Health illustrated this principle (section 2.4.8).

Evidence of the burden of a problem can be used for advocating funding. This was illustrated in *Malta's* use of data on the economic burden of obesity (section 2.4.7).

Barriers/challenges

Iceland highlighted lack of information on how to implement the life-course approach in practice and lack of evidence on which life-course actions work best as barriers to translating policies into action (section 2.3.7). These were also discussed in reviews on the life-course approach (20,43,44).

Iceland mentioned lack of understanding of the importance of a lifecourse approach and lack of expertise as potential barriers to lifecourse actions (section 2.3.7).

Malta noted the lack of "HiAP mentality" across sectors as a barrier (section 2.4.7). As intersectoral action is critical to the implementation of life-course actions, it is important that sectors do not work in siloes, that the health and non-health sectors can collaborate, and that the non-health sectors are willing to incorporate health into their work. Lack of coordinated action across sectors was also noted as a barrier in reviews (44).

Lack of resources, including funding, was noted by both *Iceland* (section 2.3.7) and *Malta* (sections 2.4.7, 2.4.9) as a barrier to taking life-course actions.

Lack of data on health inequities was noted by *Iceland* as a barrier to taking equity-sensitive and gender-responsive life-course actions (section 2.4.8).

Difficulties in accessing the more disadvantaged populations were noted by *Malta* as a barrier to addressing health inequities in lifecourse actions (section 2.4.8).

Ensuring that older people are not left behind was noted by *Iceland* as a potential challenge in taking life-course actions, given the emphasis on acting early (section 2.3.7).

From practice to evidence

This step involves action by countries to generate **evidence** about the implementation, outcomes and impacts of their **actions**, through the process of **monitoring and evaluation** (Fig 3.1). For this step, a bidirectional arrow flows from practice to evidence and from evidence back to practice, as evidence from monitoring is often used to inform the ongoing improvement of initiatives (as shown in the case stories).

Facilitators/enablers

Existing governance structures and data were used to maximize the efficiency and feasibility of monitoring and evaluation. *Iceland* used surveillance data for monitoring welfare indicators (section 2.3.6) while *Malta* used these data (for example, COSI data on children, HBSC data on adolescents, and EHIS data on adults) for monitoring and evaluating indicators of nutrition, physical activity and overweight and obesity across different stages of the life-course (section 2.4.6). *Malta* also used existing governance structures (for example, regular management meetings between education officers and teachers) for monitoring the Kinder project (section 2.4.6).

The involvement of diverse stakeholders, including civil society, facilitates monitoring and evaluation. In *Iceland*, this involvement was exemplified by the monitoring carried out by intersectoral groups (sections 2.3.6, 2.3.3), and the steps taken to include the perspectives of politicians, working-group/steering-committee members, affiliates and the general public in evaluation (section 2.3.6). Working groups appear to have been useful in bringing diverse actors together. In *Malta* intersectoral collaboration is demonstrated in the monitoring of HWL initiatives (85), such as the Kinder project and the Schools on the Move programme (105), both of which consider the views of teachers and pupils (section 2.4.6).

Malta observed that combining quantitative and qualitative methods facilitates monitoring and evaluation, especially in the context of complex initiatives and issues (section 2.4.6). This gives a bigger picture than using a single method alone. *Iceland* combined qualitative approaches (for example, interviews, focus groups) and quantitative approaches (for example, surveys) in their evaluation (section 2.3.6). *Malta* is using both qualitative (for example, focus groups) and quantitative (for example, epidemiological surveys) approaches in monitoring and evaluation (section 2.4.6).

Expertise was noted by both *Iceland* and *Malta* as a facilitator (sections 2.3.6, 2.4.6).

Funding was an enabler of the evaluation of Welfare Watch (66) in *Iceland* (sections 2.3.5, 2.3.6).

Awareness about the usefulness of monitoring and evaluation data might motivate countries to undertake these processes. In *Iceland*, monitoring data were useful in informing ongoing Welfare Watch operations, and the evaluation data (66) proved valuable in decision-making about the second era of Welfare Watch and the establishment of the Nordic Welfare Watch (section 2.3.6). In *Malta*, monitoring data have been used to inform the ongoing development of individual HWL initiatives and the overall HWL framework (85) (section 2.4.6).

A commitment to knowledge exchange appears to have motivated *Iceland* to evaluate Welfare Watch (66). The evaluation was carried out with a view to sharing the experiences of the platform with members of the Nordic Co-operation (119) (section 2.3.6).

Barriers/challenges

Lack of data on relevant indicators, or indicators disaggregated across social groups, was a key barrier to the monitoring and evaluation of health and health inequities in *Iceland* (sections 2.3.6, 2.3.7) and *Malta* (section 2.4.6). To maximize efficiency, both countries used existing population-based data (for example, surveillance data and health surveys), but found that these did not always meet their needs. *Iceland* also noted general issues in this area, including poor quality data, data that do not include all population subgroups, or data that are collected too infrequently to facilitate rapid response to a problem. In recognition of the critical importance of data, both countries have set up new data collections to address future needs: *Iceland* has established the social indicators and *Malta* has developed a nutrition and physical-activity survey.

The complexity of evaluating the policy or health-related impacts of the action was a challenge in both *Iceland* and *Malta* (sections 2.3.6, 2.4.6). Issues, such as the breadth of the initiatives (and hence of their potential outcomes) and the confounding impacts of the simultaneous occurrence of contextual factors and initiatives, were mentioned as problematic.

Lack of resources (financial and human) was reported as a barrier to evaluation by both *Iceland* (section 2.3.6) and *Malta* (section 2.4.6). Iceland highlighted the trade-off between allocating limited resources to the evaluation of existing initiatives and developing new initiatives.

Lack of time and the pressure to act quickly in the context of an urgent social problem constituted a barrier to planning an evaluation from the outset in *Iceland* (section 2.3.6).

Lack of support in the use of appropriate methods of monitoring and evaluating life-course actions was raised by *Iceland* as a potential barrier to generating evidence (section 2.3.7).

In general, assessing outcomes over the long periods of multiple life stages or generations that are relevant to the life-course approach can be challenging. If long-term monitoring is impracticable, it may be necessary to focus on short-term or intermediate indicators that are linked to long-term outcomes in the hypothesized causal chain (43,120).

Identifying outcome indicators that are relevant to and feasible for life-course actions is another general challenge (120). There is a recognized need to develop core indicators that can be used universally for monitoring and evaluating life-course actions (adapted to context, type of action, etc.), and to incorporate them in population-based data collections (43-45). Work to this end is in the preliminary stages (43,121,122).

From evidence to the evidence-base

This step involves progression from life-course evaluation results (implementation, outcomes and impacts) (evidence) to their incorporation into the evidence base, through a process of knowledge exchange among countries (Fig. 3.1). This is essential in closing the cycle for advancement of the life-course approach, because it means that information on the implementation and outcomes of life-course actions can be added into the body of life-course evidence alongside epidemiological evidence.

Facilitators/enablers

Networks of countries can facilitate knowledge exchange, sometimes with the help of external actors (such as EU and WHO). The Nordic Co-operation (119) facilitated information sharing about *Iceland's*

Welfare Watch (sections 2.3.2, 2.3.6). Networks can enable a cycle of knowledge exchange as exemplified in that of Finland's response to a financial crisis, which informed Iceland's life-course action through Welfare Watch, which was then followed by the evaluation of Welfare Watch, and finally the establishment of the Nordic Welfare Watch and Nordic welfare indicators (66,69) (sections 2.3.2, 2.3.6). EU networks, such as OPEN (105) and JANPA (110), facilitated information sharing about HWL in *Malta* (85) (sections 2.4.5, 2.4.6). The Small Countries Initiative also facilitates knowledge exchange through meetings and publications.

The active participation of *Malta* and *Iceland* in the above networks illustrates that **commitment to knowledge exchange** is an enabler of it (sections 2.3.2, 2.3.6, 2.4.6).

Barriers/challenges

In general, countries may not be aware of the value of sharing their evidence and experiences or may have competing time and resource demands.

While the breadth of the approach is a strength in terms of its relevance to a range of issues, it may represent a challenge to synthesizing evidence on life-course actions (given their diversity) and to determining which initiatives should be classified as life-course actions.

Another general challenge relates to moving beyond evaluating the outcomes of individual life-course actions to considering the broader impact of the life-course approach, namely, its advantages and disadvantages for policy and programme development, implementation, monitoring and evaluation. Doing so will require synthesis across multiple actions.

3.2 Conclusions and implications

These case stories highlight some of the numerous strengths of the life-course approach, including: its relevance to diverse issues; its practicality in guiding the development of interventions that slot into each life stage, and their implementation in relevant settings; its comprehensive perspective across different health determinants; its synergy with the principles of health equity; its grounding in epidemiological evidence;

its long-term view across lifespans and generations; and its potential for strong returns on investment. They also highlight some of the key challenges to adoption of the life-course approach and to its broader advancement. This section presents some conclusions and implications that may be useful to Member States that are considering use of the life-course approach, and to WHO and other partners (for example, academia) in supporting its advancement.

3.2.1 Intersectoral partnerships and support across government and society must be strengthened

Life-course actions strive to be comprehensive, addressing public health issues with a long-term, wide-lens view across health determinants. This perspective is inherently complex, and complex issues are often best tackled by diverse teams. There are clear strengths in the different perspectives and resources gained through whole-of-government and whole-of-society approaches, which bring together actors from all levels and sectors of governance and all parts of society, including the public. Furthermore, it is known that health, economic, social and environmental flourishing are intricately intertwined across the lifespan and across generations. Not only does this mean that improving health and health equity will require the involvement of a range of sectors, but also that collaboration among the sectors can bring about mutual investment benefits (44). As the case stories from Iceland and Malta show, support across a range of government sectors and society is critical to enabling the translation of the life-course principles into policy and practice and in sustaining action during implementation (43,120). The small size of a country may be an enabler of such intersectoral action by making the identification of and connection among a range of actors easier. GPW 13 (51) emphasizes the importance of action across all sectors of government and society to achieving the goals of the 2030 Agenda (5).

Therefore, it is critical to work together in strengthening intersectoral partnerships and promoting support for the life-course approach across all of government and society.

Countries may consider:

• establishing collaborative groups, comprising representatives of a range of sectors (including civil society) to drive policy development, implementation, monitoring and evaluation;

- ensuring that in monitoring and evaluating life-course actions, the perspectives of different actors are considered, including civil society and individuals involved in development and implementation; and
- fostering support of the life-course approach across government and society.

WHO and other partners may consider:

- advocating the adoption of whole-of-government and whole-ofsociety approaches to life-course actions (51); and
- widely disseminating the key concepts of the life-course approach and information about its importance for the promotion of health and well-being.

3.2.2 Life-course actions must be equity-sensitive and gender-responsive

There is a natural synergy between the life-course approach and the principles of health equity, as health inequities are rooted in complex processes of disadvantage across life stages and generations. The case stories of Iceland and Malta show that the principles of health equity can be integrated into life-course actions, through their endeavours to assess, address, monitor and evaluate unfair differences in health and social determinants across social groups. The stories also highlight a few challenges to and facilitators of addressing health inequities, many of which overlap with the challenges to and facilitators of the life-course approach in general. For example, a lack of quality data for assessing the size of the problem, or for monitoring and evaluating improvements, is a key challenge, while intersectoral collaboration is a key enabler for action on the social determinants. Equity is recognized in GPW 13 as being central to the work of WHO (51).

Therefore, it is necessary to work together to ensure that life-course actions are gender-responsive and address health inequities across the life-course and generations.

Countries may consider:

• prioritizing health equity and gender-responsiveness in the development, implementation, monitoring and evaluation of all life-course actions (7,38); and

• setting up the necessary structures to support equity-sensitive and gender-responsive actions, such as whole-of-government and whole-of-society approaches and the collection of robust data on social determinants and health inequities (7).

WHO and other partners may consider:

- advocating HiAP (50) and the adoption of whole-of-government and whole-of-society approaches (7); and
- supporting countries in the development of policies addressing the social determinants of health, the monitoring of social determinants and health inequities, and the evaluation of the effectiveness of action taken to address health inequities (7).

3.2.3 Monitoring, evaluation and knowledge exchange must be prioritized

Monitoring and evaluation are critical to generating evidence on the implementation, outcomes and impacts of life-course actions. Knowledge exchange is key to ensuring that this information is integrated into the evidence base and disseminated to motivate and inform actions in countries. These processes are crucial to "closing the loop" in the cycle of the life-course approach to ensure its ongoing advancement. At present, the evidence-base is unbalanced in that it is "heavy" on life-course epidemiology and "light" on the implementation, outcomes and impacts of life-course actions (43,44). It is not enough to have robust evidence on how a risk or protective factor impacts health and well-being throughout the life-course. It is also critical to have a strong evidence base, which can guide actions to intervene in this process and ultimately improve health and wellbeing in a feasible, effective and cost-effective way (16). There are, however, potential barriers to developing this evidence base, including the complexity of monitoring and evaluation and the lack of suitable data, standardized methods, time and resources. These issues can be particularly challenging for small countries where resources may be more limited. Monitoring and evaluation have been identified as key enabling factors for the implementation of Health 2020 (4) and the 2030 Agenda (5,52). Furthermore, driving impact in every country will be central to GPW 13, which emphasizes the importance of supporting the collection and use of robust data, as well as monitoring, evaluation, research and innovation (51).

Therefore, it is important to work together in **prioritizing and supporting monitoring**, **evaluation and knowledge exchange**.

Countries may consider:

- incorporating robust monitoring and evaluation processes into all their life-course actions to generate evidence on which work best;
- integrating relevant indicators for life-course actions into populationbased data collections so that the monitoring and evaluation of health and health-equity-related outcomes is feasible (121,122); and
- capitalizing on existing networks for knowledge exchange, which
 involves sharing information on the process of implementing their
 life-course actions and on the outcomes and impacts, so that other
 countries are informed about what works best in putting the lifecourse approach into practice.

WHO and other partners may consider:

- generating and synthesizing evidence on the implementation of the life-course approach (with examples of life-course actions) to address knowledge gaps about how to translate the life-course principles into policy and practice (43,44);
- generating and synthesizing evidence on the outcomes and impacts of life-course actions to identify the most effective and cost-effective options, acknowledging the limitations and uncertainty of evidence on complex interventions (43,44);
- advocating the prioritization of quality population-based data collections and monitoring and evaluation at the political level, and the allocation of sufficient resources by countries and external funding partners (44);
- advancing the development of recommended indicators for monitoring and evaluating life-course actions, and promoting their integration into population-based data collections (43,44,122);
- advancing the development and dissemination of methods of monitoring and evaluating life-course actions, and evaluating complex programmes in general (122); and
- establishing and supporting networks for the exchange of knowledge among countries (44).

References

- Glossary of life-course terms. WHO European Ministerial Conference on the Life-course Approach in the Context of Health 2020. 21–22 October 2015, Minsk, Belarus. Copenhagen: WHO Regional Office for Europe; 2015 (http://www.euro.who.int/__data/assets/pdf_file/0009/289539/ Glossary-Life-course-Terms.pdf?ua=1, accessed 2 May 2018).
- The Minsk Declaration. The Life-course Approach in the Context of Health 2020. Copenhagen: WHO Regional Office for Europe; 2016 (http://www.euro.who.int/__data/assets/pdf_file/0009/289962/The-Minsk-Declaration-EN-rev1.pdf?ua=1, accessed 2 May 2018).
- Boosting implementation of Health 2020 and the 2030 Agenda: the WHO Small Countries Initiative. Copenhagen: WHO Regional Office for Europe; 2017 (http://www.euro.who.int/__data/assets/pdf_ file/0010/347950/malta-20170830-h1000-web.pdf?ua=1, accessed 2 May 2018).
- Health 2020. A European policy framework and strategy for the 21st century. Copenhagen: WHO Regional Office for Europe; 2013 (http:// www.euro.who.int/__data/assets/pdf_file/0011/199532/Health2020-Long.pdf, accessed 2 May 2018).
- Transforming our world: The 2030 Agenda for Sustainable
 Development. New York: United Nations; 2015 (https://
 sustainabledevelopment.un.org/content/documents/21252030 Agenda
 for Sustainable Development web.pdf, accessed 2 May 2018).
- How small countries are improving health using the life-course approach. Copenhagen: WHO Regional Office for Europe; 2017. (http://www.euro.who.int/en/publications/abstracts/how-small-countries-are-improving-health-using-the-life-course-approach-2017, accessed 2 May 2018).
- 7. UCLO Institute of Health Equity. Review of social determinants and the health divide in the WHO European Region: final report. Copenhagen: WHO Regional Office for Europe; 2014. (http://www.euro.who.int/__ data/assets/pdf_file/0004/251878/Review-of-social-determinants-and-the-health-divide-in-the-WHO-European-Region-FINAL-REPORT.pdf, accessed 2 May 2018).
- 8. Braveman P, Barclay C. Health disparities beginning in childhood: A life-course perspective. Pediatrics. 2009;124(Supplement 3):S163–S75.
- 9. Dyakova M, Hamelmann C, Bellis MA, Besnier E, Grey CNB, Ashton K, et al. Investment for health and well-being: a review of the social return

- on investment from public health policies to support implementing the Sustainable Development Goals by building on Health 2020. Copenhagen: WHO Regional Office for Europe; 2017 (Health Evidence Network (HEN) synthesis report 51; http://www.euro.who.int/__data/assets/pdf_file/0008/345797/HEN51.pdf, accessed 2 May 2018).
- Victora CG, Bahl R, Barros AJD, França GVA, Horton S, Krasevec J, et al. Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. Lancet. 2016;387(10017):475–90 (https://www.thelancet. com/journals/lancet/article/PIIS0140-6736(15)01024-7/abstract, accessed 2 May 2018).
- Cohen S, Janicki-Deverts D, Chen E, Matthews KA. Childhood socioeconomic status and adult health. Ann N York Acad Sci. 2010;1186(1):37–55 (https://nyaspubs.onlinelibrary.wiley.com/doi/full/10.1111/j.1749-6632.2009.05334.x, accessed 2 May 2018).
- Richter LM, Daelmans B, Lombardi J, Heymann J, Boo FL, Behrman JR, et al. Investing in the foundation of sustainable development: pathways to scale up for early childhood development. Lancet. 2017;389(10064):103–18 (https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(16)31698-1.pdf, accessed 2 May 2018).
- 13. Kuh D, Shlomo YB, editors. A life course approach to chronic disease epidemiology. Second edition. Oxford: Oxford University Press; 2004 (https://books.google.com.au/books?hl=en&lr=&id=o_CFOTYglHsC &oi=fnd&pg=PR17&dq=a+life-course+approach+to+chronic+diseas e+epidemiology+2004&ots=gLry2B9g3n&sig=wBta_lkNB8_PL-kN6_WayQqV6vl#v=onepage&q=a%20life-course%20approach%20to%20 chronic%20disease%20epidemiology%202004&f=false, accessed 7 May 2018).
- 14. Halfon N, Hochstein M. Life course health development: an integrated framework for developing health, policy, and research. Milbank Q. 2002;80(3):433–79,iii (https://www.ncbi.nlm.nih.gov/pubmed/12233246, accessed 2 May 2018).
- 15. Lynch J, Davey Smith G. A life course approach to chronic disease epidemiology. Annu Rev Public Health. 2004;26(1):1–35 (https://www.ncbi.nlm.nih.gov/pubmed/15760279, accessed 2 May 2018).
- McDaid D, Sassi F, Mercur S, editors. Promoting health, preventing disease. The economic case. Copenhagen: World Health Organization (on behalf of the European Observatory on Health Systems and Policies); 2015 (European Observatory on Health Systems and Policies Series; http://www.euro.who.int/__data/assets/pdf_file/0006/283695/

- Promoting-Health-Preventing-Disease-Economic-Case.pdf?ua=1, accessed 2 May 2018).
- 17. Engle PL, Fernald LCH, Alderman H, Behrman J, O'Gara C, Yousafzai A, et al. Child Development 2: Strategies for reducing inequalities and improving developmental outcomes for young children in low-income and middle-income countries. Lancet. 2011;378(9799):1339–53.
- Viner RM, Ross D, Hardy R, Kuh D, Power C, Johnson A, et al. Life course epidemiology: recognising the importance of adolescence. J Epidemiol Community Health. 2015;69(8):719–20 (http://jech.bmj.com/ content/69/8/719, accessed 2 May 2018).
- 19. Halfon N, Larson K, Lu M, Tullis E, Russ S. Lifecourse health development: past, present and future. Matern Child Health J. 2014;18(2):344–65 (https://www.ncbi.nlm.nih.gov/pubmed/23975451, accessed 2 May 2018).
- 20. Ben-Shlomo Y, Cooper R, Kuh D. The last two decades of life course epidemiology, and its relevance for research on ageing. Int J Epidemiol. 2016;45(4):973–88 (https://academic.oup.com/ije/article/45/4/973/2951730, accessed 2 May 2018).
- 21. Suhrcke M, McKee M, Stuckler D, Sauto Arce R, Tsolova S, Mortensen J. The contribution of health to the economy in the European Union. Public Health. 2006;120(11):994–1001 (https://www.ncbi.nlm.nih.gov/pubmed/17027052, accessed 2 May 2018).
- 22. Bukov A, Maas I, Lampert T. Social participation in very old age: cross-sectional and longitudinal findings from BASE. Berlin Aging Study. J Gerontol B Psychol Sci Soc Sci. 2002;57(6):510–7.
- Sadana R, Blas E, Budhwani S, Koller T, Paraje G. Healthy ageing: raising awareness of inequalities, determinants, and what could be done to improve health equity. The Gerontologist. 2016;56(Suppl 2):S178– S93 (https://academic.oup.com/gerontologist/article/56/Suppl_2/ S178/2605347, accessed 2 May 2018).
- 24. Strategy and action plan for healthy ageing in Europe, 2012–2020. Copenhagen: WHO Regional Office for Europe; 2012 (http://www.euro.who.int/__data/assets/pdf_file/0008/175544/RC62wd10Rev1-Eng.pdf, accessed 2 May 2018).
- Sawyer SM, Afifi RA, Bearinger LH, Blakemore S-J, Dick B, Ezeh AC, et al. Adolescence: a foundation for future health. Lancet. 2012;379(9826):1630–40 (https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(12)60072-5/abstract, accessed 2 May 2018).
- 26. Patton GC, Sawyer SM, Santelli JS, Ross DA, Afifi R, Allen NB, et al.

- Our future: a Lancet commission on adolescent health and wellbeing. Lancet. 2016;387(10036):2423–78 (https://www.ncbi.nlm.nih.gov/pubmed/27174304, accessed 2 May 2018).
- 27. Sheehan P, Sweeny K, Rasmussen B, Wils A, Friedman HS, Mahon J, et al. Building the foundations for sustainable development: a case for global investment in the capabilities of adolescents. Lancet. 2017;390(10104):1792–806.
- Hughes K, Bellis MA, Hardcastle KA, Sethi D, Butchart A, Mikton C, et al. The effect of multiple adverse childhood experiences on health: a systematic review and meta-analysis. Lancet Public Health. 2017;2(8):e356–e66 (http://eprints.uwe.ac.uk/32407/11/PIIS2468266717301184.pdf, accessed 2 May 2018).
- 29. Gilbert R, Widom CS, Browne K, Fergusson D, Webb E, Janson S. Burden and consequences of child maltreatment in high-income countries. Lancet. 2009;373(9657):68–81 (https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(08)61706-7/fulltext, accessed 2 May 2018).
- 30. Sethi D, Bellis M, Hughs K, Gilbert R, Mitis F, Galea G, editors. European report on preventing child maltreatment. Copenhagen: WHO Regional Office for Europe; 2013 (http://www.euro.who.int/__data/assets/pdf_file/0019/217018/European-Report-on-Preventing-Child-Maltreatment. pdf, accessed 2 May 2018).
- 31. Graham H, Power C. Childhood disadvantage and health inequalities: a framework for policy based on lifecourse research. Child Care Health Dev. 2004;30(6):671–8.
- 32. Adler NE, Stewart J. Health disparities across the lifespan: meaning, methods, and mechanisms. Ann N York Acad Sci. 2010;1186(1):5–23 (https://nyaspubs.onlinelibrary.wiley.com/doi/full/10.1111/j.1749-6632.2009.05337.x, accessed 2 May 2018).
- Saunders M, Barr B, McHale P, Hamelmann C. Key policies for addressing the social determinants of health and health inequities. Copenhagen: WHO Regional Office for Europe; 2017 (Health Evidence Network (HEN) synthesis report 52; http://www.euro.who.int/__data/ assets/pdf_file/0009/345798/HEN52.pdf, accessed 2 May 2018).
- 34. Braveman P. What is health equity: and how does a life-course approach take us Further toward it? Matern Child Health J. 2014;18(2):366–72.
- 35. Boyce T, Brown C. Reducing health inequities: perspectives for policy-makers and planners: engagement and participation for health equity. A core principle of Health 2020 is reducing health inequities

- across the population, along with the importance of participation and responsiveness, with the full engagement of people. Copenhagen: WHO Regional Office for Europe; 2017 (http://www.euro.who.int/__data/assets/pdf_file/0005/353066/Engagement-and-Participation-HealthEquity.pdf, accessed 2 May 2018).
- 36. Loring B, Robertson A. Obesity and inequities: guidance for addressing inequities in overweight and obesity. Copenhagen: WHO Regional Office for Europe; 2014 (http://www.euro.who.int/__data/assets/pdf_file/0003/247638/obesity-090514.pdf, accessed 2 May 2018).
- 37. Carey G, Crammond B, De Leeuw E. Towards health equity: a framework for the application of proportionate universalism. Int J Equity Health. 2015;14(1):81 (https://equityhealthj.biomedcentral.com/track/pdf/10.1186/s12939-015-0207-6, accessed 2 May 2018).
- 38. Gender mainstreaming for health managers: a practical approach. Participant's notes. Geneva: WHO; 2011 (http://apps.who.int/iris/bitstream/10665/44516/2/9789241501064_eng.pdf, accessed 3 May 2018).
- 39. Moss NE. Gender equity and socioeconomic inequality: a framework for the patterning of women's health. Soc Sci Med. 2002;54(5):649–61.
- 40. Beyond the mortality advantage. Investigating women's health in Europe. Copenhagen: WHO Regional Office for Europe; 2015 (http://www.euro.who.int/_data/assets/pdf_file/0008/287765/Beyond-themortality-advantage.pdf?ua=1, accessed 3 May 2018).
- 41. Sen G, Östlin P, George A. Unequal, unfair, ineffective and inefficient. Gender inequity in health: why it exists and how we can change it. Final report to the WHO Commission on Social Determinants of Health of the Women and Gender Equity Knowledge Network. Bangalore: Indian Institute of Management/Stockholm: Karolinska Institute; 2007 (http://www.who.int/social_determinants/resources/csdh_media/wgekn_final_report_07.pdf, accessed 3 May 2018).
- 42. Matthews S, Manor O, Power C. Social inequalities in health: are there gender differences? Soc Sci Med. 1999;48(1):49–60.
- 43. Pratt BA, Frost LJ. The life course approach to health: a rapid review of the literature. White paper. Geneva: WHO; 2017 (http://www.who.int/life-course/publications/life-course-approach-literature-review.pdf?ua=1, accessed 3 May 2018).
- 44. Kuruvilla S, Sadana R, Montesinos EV, Beard J, Vasdeki JF, Carvalho IA de, et al. A life-course approach to health: synergy with sustainable development goals. Bull World Health Organ. 2016;96:42–50 (http://apps.who.int/iris/bitstream/handle/10665/272223/PMC5791871.

- pdf?sequence=1&isAllowed=y&ua=1, accessed 5 May 2018).
- 45. Black MM, Walker SP, Fernald LCH, Andersen CT, DiGirolamo AM, Lu C, et al. Early childhood development coming of age: science through the life course. Lancet. 2017;389(10064):77–90 (https://www.ncbi.nlm.nih.gov/pubmed/27717614, accessed 5 May 2018).
- 46. Kickbusch I, Gleicher D. Governance for health in the 21st century. Copenhagen: WHO Regional Office for Europe; 2012 (http://www.euro.who.int/__data/assets/pdf_file/0019/171334/RC62BD01-Governance-for-Health-Web.pdf, accessed 5 May 2018).
- 47. Hamelmann C, Turatto F, Then V, Dyakova M. Social return on investment: accounting for value in the context of implementing Health 2020 and the 2030 Agenda for Sustainable Development. Investment for health and development. Discussion paper. Copenhagen: WHO Regional Office for Europe; 2017 (http://www.euro.who.int/__data/assets/pdf_file/0009/347976/20170828-h0930-SROI-report-final-web.pdf?ua=1, accessed 5 May 2018).
- Datta J, Petticrew M. Challenges to evaluating complex interventions: a content analysis of published papers. BMC Public Health. 2013;13(1):568 (https://bmcpublichealth.biomedcentral.com/ articles/10.1186/1471-2458-13-568, accessed 5 May 2018).
- Bauman AE, King L, Nutbeam D. Rethinking the evaluation and measurement of health in all policies. Health Promot Int. 2014;29(Suppl 1):i143-i51 (https://academic.oup.com/heapro/article/29/suppl_1/ i143/647862, accessed 5 May 2018).
- 50. Leppo K, Ollila E, Peňa S, Wismar M, Cook S, editors. Health in All Policies. Seizing opportunities, implementing policies. Helsinki: Ministry of Social Affairs and Health; 2013 (http://www.euro.who.int/__data/assets/pdf_file/0007/188809/Health-in-All-Policies-final.pdf, accessed 12 June 2018).
- 51. EB142/3 Rev.2. Draft thirteenth general programme of work 2019–2023: Promote health, keep the world safe, serve the vulnerable. Geneva: WHO; 2018 (http://apps.who.int/gb/ebwha/pdf_files/EB142/B142_3Rev2-en.pdf, accessed 5 May 2018).
- 52. Roadmap to implement the 2030 Agenda for Sustainable Development, building on Health 2020, the European policy for health and well-being. Copenhagen: WHO Regional Office for Europe; 2017 (EUR/RC67/9 + EUR/RC67/Conf. doc./4; http://www.euro.who.int/__data/assets/pdf_file/0008/345599/67wd09e_SDGroadmap_170638.pdf, accessed 5 May 2018).

- 53. Investing in children: the European child and adolescent health strategy 2015–2020. Copenhagen: WHO Regional Office for Europe; 2014 (EUR/RC64/12 + EUR/RC64/Conf.Doc./5; http://www.euro.who.int/__data/assets/pdf_file/0010/253729/64wd12e_InvestCAHstrategy_140440.pdf, accessed 5 May 2018).
- 54. Strategy on women's health and well-being in the WHO European Region. Copenhagen: WHO Regional Office for Europe; 2016 (http://www.euro.who.int/__data/assets/pdf_file/0003/333912/strategy-womens-health-en.pdf?ua=1, accessed 5 May 2018).
- 55. Action plan for the prevention and control of noncommunicable diseases in the WHO European Region. Copenhagen: WHO Regional Office for Europe; 2016 (http://www.euro.who.int/__data/assets/pdf_file/0008/346328/NCD-ActionPlan-GB.pdf?ua=1, accessed 5 May 2018).
- 56. The European mental health action plan 2013—2020. Copenhagen: WHO Regional Office for Europe; 2015 (http://www.euro.who.int/__data/assets/pdf_file/0020/280604/WHO-Europe-Mental-Health-Acion-Plan-2013-2020.pdf, accessed 5 May 2018).
- 57. Action plan for sexual and reproductive health. Towards achieving the 2030 Agenda for Sustainable Development in Europe leaving no one behind. Copenhagen: WHO Regional Office for Europe; 2016 (http://www.euro.who.int/__data/assets/pdf_file/0003/322275/Action-plansexual-reproductive-health.pdf, accessed 5 May 2018).
- 58. WHO Regional Committee for Europe resolution EUR/RC66/R3 on the Minsk declaration on the life-course approach in the context of Health 2020. Copenhagen: WHO Regional Office for Europe; 2016 (http://www.euro.who.int/_data/assets/pdf_file/0009/319095/66rs03e_Rev1_MinskDeclaration_160761.pdf, accessed 5 May 2018)
- 59. Report of the second high-level meeting of small countries. Taking forward Health 2020: Small at the forefront of whole-of-government approaches to health. Soldeu, Andorra, 2 –3 July 2015. Copenhagen: WHO Regional Office for Europe; 2015 (http://www.euro.who.int/__data/assets/pdf_file/0003/287274/Meeting-report-of-the-Second-High-level-Meeting-of-Small-Countries-Andorra.pdf?ua=1, accessed 5 May 2018).
- 60. Health promotion and disease prevention throughout the life-course. The Andorra Statement. Second high-level meeting of the WHO small countries initiative, Soldeu, Andorra. Copenhagen: WHO Regional Office for Europe; 2015 (http://www.euro.who.int/en/countries/malta/publications/health-promotion-and-disease-prevention-throughout-the-life-course.-the-andorra-statement-2015, accessed 5 May 2018).

- 61. Joint Action on Chronic Diseases & Promoting Healthy Ageing across the Life Cycle (JA-CHRODIS) Work Package 5 task 3. Good practices in health promotion and primary prevention of chronic diseases in Europe. Summary report. Brussels: Joint Action on Chronic Diseases & Promoting Healthy Ageing across the Life Cycle, Funded by the European Union in the framework of the Health Programme (2008–2013) (http://chrodis.eu/wp-content/uploads/2015/09/Summary-Report-CHRODIS-WP5-Task-3_Version-1.3.pdf, accessed 6 Jan 2018).
- 62. Introduction to program evaluation for public health programs: a self-study guide. Atlanta, GA: Centers for Disease Control and Prevention; 2011 (https://www.cdc.gov/eval/guide/cdcevalmanual.pdf, accessed 5 May 2018).
- 63. Checklist for assessing the gender responsiveness of sexual and reproductive health policies. Pilot document for adaptation to national contexts. Copenhagen: WHO Regional Office for Europe; 2010 (http://www.euro.who.int/__data/assets/pdf_file/0007/76525/E93584.pdf?ua=1, accessed 5 May 2018).
- 64. Gunnlaugsson G, Einarsdóttir J. 'All's well in Iceland?' Austerity measures, labour market initiatives, and health and wellbeing of children. Nordisk välfärdsforskning [Nordic Welfare Research]. 2016;1(01):30–42 (https://www.idunn.no/nordisk_valfardsforskning/2016/01/alls_well_in_iceland_austerity_measures_labour_market_, accessed 5 May 2018).
- 65. Eydal GB, Ólafsson S. Iceland: welfare in a deep economic crisis. In: Schubert K, Villota Pd, Kuhlmann J, editors. Challenges to European welfare systems. Switzerland: Springer International Publishing 2016.
- 66. Arnalds ÁA, Jónsdóttir V, Jónsdóttir HH, Víkingsdóttir AS, Jónsdóttir GA. Assessment of the work of the Welfare Watch. Reykjavík: Social Science Research Institute, University of Iceland; 2015 (https://www.stjornarradid.is/media/velferdarraduneyti-media/media/velferdarvakt09/Evaluation-of-the-welfare-watch.pdf, accessed 5 May 2018).
- 67. Karanikolos M, Mladovsky P, Cylus J, Thomson S, Basu S, Stuckler D, et al. Financial crisis, austerity, and health in Europe. Lancet. 2013;381(9874):1323–31.
- 68. Stuckler D, Basu S, Suhrcke M, Coutts A, McKee M. The public health effect of economic crises and alternative policy responses in Europe: an empirical analysis. Lancet.374(9686):315–23.
- Friðleifsdóttir S, Eydal GB, Jónsdóttir S, Ólafsson S. The Nordic Welfare Watch. Final report. Copenhagen: Nordic Council of Ministers; 2017 (http://norden.diva-portal.org/smash/get/diva2:1155301/FULLTEXT02. pdf, accessed 5 May 2018).

- 70. Joint Action on Chronic Diseases & Promoting Healthy Ageing across the Life Cycle (JA-CHRODIS) Work Package 5 task 3. Good Practice in Health Promotion and Primary Prevention of Chronic Diseases in Europe. Annex. Brussels: Joint Action on Chronic Diseases & Promoting Healthy Ageing across the Life Cycle, Funded by the European Union in the framework of the Health Programme (2008–2013) (http://chrodis.eu/wp-content/uploads/2015/09/Annex-Report-CHRODIS-WP5-Task-3_Version-1.3-.pdf, accessed 6 Jan 2018).
- 71. Honkapohja S. Financial crises: lessons from the Nordic experience. Journal of Financial Stability. 2014;13:193–201.
- 72. Félagsvísar [Social indicators]. Reykjavík: Ministry of Welfare; 2012 (https://www.stjornarradid.is/media/velferdarraduneyti-media/media/rit-og-skyrslur2012/Felagsvisar_20022012.pdf, accessed 5 May 2018).
- 73. Félagsvísar um tiltekin málefni [Social indicators on specific issues]. Reykjavík: Ministry of Welfare; 2017 (https://www.stjornarradid.is/verkefni/felags-og-fjolskyldumal/felagsvisar/, accessed 5 May 2018).
- 74. Quality of life. In: Statistics Iceland [website]. Reykjavík: Statistics Iceland; 2018 (http://www.statice.is/statistics/society/quality-of-life/, accessed 18 Feb 2018).
- 75. Ólafsson S, Helgason AF, Stefánsson K. Welfare and Nordic crisis management strategies a comparative project. Draft report for the Nordic Council of Ministers. Copenhagen: Nordic Council of Ministers; 2016 (https://www.government.is/media/velferdarraduneyti-media/media/velferdarvakt09/Welfare-and-Crisis-Management.pdf, accessed 5 May 2018).
- 76. Ólafsson S. Working paper no. 1: 2012. The Icelandic way out of the crisis. Welfarism, redistribution and austerity. Reykjavik: University of Iceland Social Research Centre; 2012 (http://welfarecrisis.hi.is/publications/, accessed 5 May 2018).
- 77. Ólafsson S. Working Paper no. 2: 2012. An overview of social inclusion developments in Iceland, from 2007 to 2012. Reykjavik: University of Iceland Social Research Centre; 2012 (http://thjodmalastofnun.hi.is/sites/thjodmalastofnun.hi.is/files/skrar/an_overview_of_social_inclusion_developments_in_iceland.docx, accessed 5 May 2018).
- 78. Joint Action on Chronic Diseases & Promoting Healthy Ageing across the Life Cycle (JA-CHRODIS): The Welfare Watch Iceland. Brussels: Joint Action on Chronic Diseases & Promoting Healthy Ageing across the Life Cycle, Funded by the European Union in the framework of the Health Programme (2008–2013) (http://chrodis.eu/wp-content/uploads/2017/03/the-welfare-watch.pdf, accessed 18 Feb 2018).

- 79. Sigfusdottir ID, Kristjansson AL, Allegrante JP. Health behaviour and academic achievement in Icelandic school children. Health Educ Res. 2007;22(1):70–80 (https://academic.oup.com/her/article/22/1/70/578861, accessed 5 May 2018).
- 80. Declaration of Alma-Ata. International Conference on Primary Health Care, Alma-Ata, USSR, 6–12 September 1978. Geneva: WHO; 1978 (http://www.who.int/publications/almaata_declaration_en.pdf, accessed 5 May 2018).
- 81. Gender equality in Iceland. Information on gender equality issues in Iceland. Akureyri: Center for Gender Equality Iceland; 2012 (https://www.althingi.is/pdf/wip/Gender_Equality_in_Iceland_2012.pdf, accessed 5 May 2018).
- 82. Bjarnadóttir E, Árnadóttir E. Konur í kreppu? Samantekt á opinberum tölulegum gögnum á áhrifum efnahagshrunsins á velferð kvenna (Women in crisis? Summary of official statistical data on the impact of economic hardship on women's welfare). Reykjavík: Ministry of Welfare; 2011 (https://www.stjornarradid.is/media/velferdarraduneyti-media/media/ritogskyrslur2011/konur_i_kreppu_22032011.pdf, accessed 5 May 2018).
- 83. Constitution of the Republic of Iceland (no. 33). Reykjavík: Government of Iceland; 1999 (https://www.government.is/library/01-Ministries/Prime-Ministrers-Office/constitution_of_iceland.pdf, accessed 6 May 2018).
- 84. Act on equal status and equal rights of women and men no. 10/2008. Reykjavík: Ministry of Welfare; 2008 (https://www.government.is/library/04-Legislation/Act on equal status and equal rights of women and men no 10 2008 as amended 0101 2018 final.pdf, accessed 6 May 2018).
- 85. A healthy weight for life: a national strategy for Malta. Valletta: Ministry for Health, the Elderly and Community Care; 2012 (https://deputyprimeminister.gov.mt/en/Documents/National-Health-Strategies/hwl_en.pdf, accessed 9 May 2018).
- 86. WHO European Ministerial Conference on Counteracting Obesity. Conference Report. Copenhagen: WHO Regional Office for Europe; 2007 (http://www.euro.who.int/__data/assets/pdf_file/0006/96459/E90143.pdf, accessed 5 May 2018).
- 87. European Charter on Counteracting Obesity. Copenhagen: WHO Regional Office for Europe; 2006 (http://www.euro.who.int/__data/assets/pdf_file/0009/87462/E89567.pdf?ua=1, accessed 5 May 2018).
- 88. Wijnhoven TMA, van Raaij JMA, Spinelli A, Rito Al, Hovengen R, Kunesova M, et al. WHO European Childhood Obesity Surveillance

- Initiative 2008: weight, height and body mass index in 6–9-year-old children. Pediatr Obes. 2013;8(2):79–97.
- 89. Health Promotion and Disease Prevention Directorate, Superintendence of Public Health, Ministry for Health. Health Behaviour Study in School-Aged Children. World Health Organisation (WHO) Collaborative Cross-National Survey: Malta, 2010. Valletta: Ministry for Health; 2013 (https://deputyprimeminister.gov.mt/en/health-promotion/Documents/library/publications/hbsc_final_report.pdf, accessed 6 May 2018).
- 90. Growing up unequal: gender and socioeconomic differences in young people's health and well-being health behaviour in school-aged children (HBSC) study: international report from the 2013/2014 survey. Copenhagen: WHO Regional Office for Europe; 2016 (Health policy for children and adolescents, no. 7; (http://www.euro.who.int/en/publications/abstracts/growing-up-unequal.-hbsc-2016-study-20132014-survey, accessed 12 June 2018).
- 91. Weighing the costs of obesity in Malta. Quormi: Price Waterhouse Coopers Malta; 2017 (https://www.pwc.com/mt/en/publications/assets/weighing-the-cost-of-obesity.pdf, accessed 6 May 2018).
- 92. European Health Interview Survey 2008. Summary statistics. Valletta: Ministry for Social Policy; 2008 (https://deputyprimeminister.gov.mt/en/dhir/Documents/ehis_eight__summ_stats.pdf, acessed 9 May 2018).
- 93. The First National Health Interview Survey (HIS Malta). Summary statistics. Guardamangia: Department of Health Information; 2003 (https://deputyprimeminister.gov.mt/en/dhir/Documents/national_his_a__summ_stats.pdf, accessed 5 May 2018).
- 94. Cuschieri S, Vassallo J, Calleja N, Camilleri R, Borg A, Bonnici G, et al. Prevalence of obesity in Malta. Obes Sci Pract. 2016;2(4):466–70 (https://onlinelibrary.wiley.com/doi/abs/10.1002/osp4.77, accessed 6 May 2018).
- 95. Cuschieri S, Mamo J. Getting to grips with the obesity epidemic in Europe. SAGE Open Med. 2016;4:2050312116670406 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5034461/, accessed 6 May 2018).
- 96. Luppino FS, de Wit LM, Bouvy PF, Stijnen T, Cuipers P,Penninx BW et al. Overweight, obesity, and depression: a systematic review and meta-analysis of longitudinal studies. Arch Gen Psychiatry. 2010;67(3):220–9 (https://www.ncbi.nlm.nih.gov/pubmed/20194822, accessed 6 May 2018).
- 97. Kolotkin RL, Andersen JR. A systematic review of reviews: exploring the relationship between obesity, weight loss and health-related quality of

- life. Clin Obes. 2017;7(5):273–89 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5600094/, accessed 6 May 2018).
- 98. Puhl RM, Heuer CA. Obesity stigma:important considerations for public health. Am J Public Health. 2010;100(6):1019–28 (https://www.ncbi.nlm. nih.gov/pmc/articles/PMC2866597/, accessed 6 May 2018).
- 99. Singh AS, Mulder C, Twisk JWR, Van Mechelen W, Chinapaw MJM. Tracking of childhood overweight into adulthood: a systematic review of the literature. Obes Rev. 2008;9(5):474–88 (https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1467-789X.2008.00475.x, accessed 6 May 2018).
- 100. Maffeis C, Tatò L. Long-term effects of childhood obesity on morbidity and mortality. Horm Res Paediatr. 2001;55(Suppl. 1):42–5.
- 101. National breastfeeding policy and action plan 2015–2020. Msida: Health Promotion and Disease Prevention Directorate; 2015 (https://deputyprimeminister.gov.mt/en/Documents/National-Health-Strategies/BF_EN.pdf, accessed 6 May 2018).
- 102. Health Promotion and Disease Prevention Directorate, Parliamentary Secretariat for Health. Food and nutrition policy and action plan for Malta 2015–2020. Msida: Health Promotion and Disease Prevention Directorate; 2014 (https://deputyprimeminister.gov.mt/en/Documents/ National-Health-Strategies/FNAP_EN.pdf, accessed 6 May 2018).
- 103. Healthy Eating Lifestyle Plan (HELP) Document. Floriana: Ministry for Education, Youth and Employment; 2007 (https://education.gov.mt/ en/resources/Documents/Policy%20Documents/healty%20eating%20 lifestyle%20plan.pdf, accessed 9 May 2018).
- 104. A whole-school approach to a healthy lifestyle: healthy eating and physical activity. Policy. Floriana: Ministry for Education and Employment; 2015 (https://education.gov.mt/en/resources/News/ Documents/Healthy Eating and Physical Activity Policy.pdf, accessed 6 May 2018).
- 105. OPEN Obesity Prevention through European Network: scaling up prevention. Cachan Cedex: Lavoisier Publishing; 2016 (http://mailings. relance.fr/Projet_Open/OPEN_Book_Web.pdf, accessed 6 May 2018).
- 106. Healthy Lifestyle Promotion and Care of Non-Communicable Diseases Act. Valletta: Government of Malta; 2016 (http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lom&itemid=12448&l=1, accessed 6 May 2018).
- 107. A Strategy for the Prevention and Control of Noncommunicable Disease in Malta. Valletta: Ministry for Health, the Elderly and Community Care; 2010 (https://extranet.who.int/nutrition/gina/sites/

- default/files/MLT 2010 Prevention and Control of NCDs.pdf, accessed 6 May 2018).
- 108. Diabetes: a national public health priority. A national strategy for diabetes 2016–2020. Valletta: Parliamentary Secretariat for Health; 2016 (https://deputyprimeminister.gov.mt/en/Documents/National-Health-Strategies/NDS-EN.pdf, accessed 27 Dec 2018).
- 109. A National Health Systems Strategy for Malta 2014–2020. Securing our health systems for future generations. Malta: Parliamentary Secretariat for Health, Ministry for Energy and Health; 2014 (https://deputyprimeminister.gov.mt/en/Documents/National-Health-Strategies/NHSS-EN.pdf, accessed 6 May 2018).
- 110. About JANPA. In: Joint Action on Nutrition and Physical Activity (JANPA) [website]. Maisons-Alfort: The French Agency for Food, Environmental and Occupational Health & Safety (ANSES); 2018 (http://www.janpa.eu/about/project.asp, accessed 6 May 2018).
- 111. Joint Action on Nutrition and Physical Activity (JANPA). JANPA Toolbox: Malta - OPEN - Schools on the Move. The French Agency for Food, Environmental and Occupational Health & Safety (ANSES); 2018 (https://janpa-toolbox.eu/files/Malta-SCHOOLS ON THE MOVE.pdf, accessed 6 May 2018).
- 112. Cefai C, Camilleri L. Healthy students healthy lives: the health of Maltese university students. Msida: European Centre for Educational Resilience and Socio-Emotional Health (University of Malta); 2009 (https://www.um.edu.mt/library/oar/handle/123456789/18935, accessed 5 May 2018).
- 113. Slimani N, Casagrande C, Nicolas G, Freisling H, Huybrechts I, Ocké MC, et al. The standardized computerized 24-h dietary recall method EPIC-Soft adapted for pan-European dietary monitoring. Eur J Clin Nutr. 2011;65(S1):S5–15 (https://www.nature.com/articles/ejcn201183, accessed 6 May 2018).
- 114. Armstrong T, Bull F. Development of the World Health Organization Global Physical Activity Questionnaire (GPAQ). J Public Health. 2006;14(2):66–70.
- 115. Global Physical Activity Surveillance. In: Noncommunicable diseases and their risk factors [website]. Geneva: WHO; 2018 (http://www.who.int/ncds/surveillance/steps/GPAQ/en/, accessed 6 May 2018).
- 116. Robertson A, Lobstein T, Knai C. Obesity and socio-economic groups in Europe: evidence review and implications for action. Brussels: European Commission; 2007 (http://ec.europa.eu/health/ph determinants/

- life_style/nutrition/documents/ev20081028_rep_en.pdf, accessed 6 May 2018).
- 117. The challenge of obesity in the WHO European Region and the strategies for response: Summary. Copenhagen: WHO Regional Office for Europe; 2007 (http://www.euro.who.int/__data/assets/pdf_file/0008/98243/ E89858.pdf, accessed 6 May 2018).
- 118. Galdas PM, Cheater F, Marshall P. Men and health help-seeking behaviour: literature review. J Adv Nurs. 2005;49(6):616–23 (https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1365-2648.2004.03331.x, accessed 6 May 2018).
- 119. The Nordic Co-operation [website]. Copenhagen: Nordic Council; 2018 (http://www.norden.org/en/om-samarbejdet-1, accessed 12 June 2018).
- 120. Pies C, Parthasarathy P, Posner SF. Integrating the Life Course Perspective into a Local Maternal and Child Health Program. Matern Child Health J. 2012;16(3):649–55.
- 121. Chittleborough CR, Baum FE, Taylor AW, Hiller JE. Review: a life-course approach to measuring socioeconomic position in population health surveillance systems. J Epidemiol Community Health. 2006;60(11):981–92 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2465478/, accessed 6 May 2018).
- 122. Callahan T, Stampfel C, Cornell A, Diop H, Barnes-josiah D, Kane D, et al. From theory to measurement: recommended state MCH life course indicators. Matern Child Health J. 2015;19(11):2336–47 (https://www.ncbi.nlm.nih.gov/pubmed/26122251, accessed 6 May 2018).

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The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

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The life-course approach takes a temporal and societal perspective on the health and well-being of individuals and generations, recognizing that all stages of a person's life are intricately intertwined with each other, with the lives of others born in the same period, and with the lives of past and future generations. Adopting a life-course approach involves taking action early in the life-course, appropriately during life's transitions, and together as a whole society. The approach is a cornerstone of policy frameworks focused on improving health and health equity, and is recognized as being central to the implementation of Health 2020 and the 2030 Agenda. However, there are recognized challenges in translating the evidence and principles of the approach into policy and practice. The small countries of the WHO European Region are strongly committed to adopting the life-course approach and to serving as models of best practice and innovation in this area. This publication presents case stories on life-course actions taken by two of the small countries, Iceland and Malta. The stories explore these countries' translation of life-course principles and evidence into their lifecourse actions, with a focus on addressing health inequities and monitoring and evaluation. The key messages from the case stories discuss the potential enablers and barriers to progression through a cycle required for the advancement of the life-course approach as a policy framework for public health. Finally, the conclusions highlight the importance of strengthening intersectoral partnerships and support for the life-course approach across government and society; ensuring that life-course actions are equitysensitive and gender-responsive; and prioritizing monitoring, evaluation and knowledge exchange for life-course actions.



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