03

How we are getting there and what we value: the case for measuring well-being

As mentioned, WHO defines heath as "not merely the absence of disease or infirmity" but "physical, mental and social well-being" *(5)*. Nevertheless, for more than 60 years WHO has neither measured nor reported on well-being, focusing instead on death, disease and disability. While this monitoring function is clearly part of the Organization's core mandate, WHO needs to partner other institutions to describe populations' well-being in Europe and measure progress in enhancing it in the context of Health 2020. As described in Chapter 2, the Region has reached consensus on the long-range goal of improving the health and well-being of European populations by 2020. Moreover, well-being provides an important mechanism for creating an integrated vision of health, with an opportunity to link to governance and ensure that health remains on all policy agendas.

The WHO Regional Office for Europe convened an expert group in February and June 2012 to review, discuss and advise on the different definitions and frameworks for well-being *(59,60)*, on which there have been many complementary efforts and recent contributions. This chapter provides a roadmap for developing a European target and indicators on well-being and health, and lays out a process for advancing conceptual clarity and increasing the usefulness of information on health and well-being for policy-makers. It aims to answer the following questions.

- What do we mean by well-being?
- Why is it important for health?
- Why are governments and societies across Europe interested in health and well-being?
- How can we measure levels of well-being?
- What can we build on?
- What are the challenges in measuring health and well-being?
- Where are we now?
- How can this information be used to improve health and well-being?

What do we mean by well-being?

What makes up a good life is one of the basic moral discussions in all philosophical traditions. Across countries, people usually agree on the big picture, or minimum ingredients of well-being. What

matters to people's lives is also surprisingly constant, indicating that what we value does not change easily, even though the identification of important areas or components remains a normative exercise, drawing on different notions of the basic nature of well-being (its ontology) and on how knowledge can be gained about it (its epistemology). The first issue in defining well-being is to clarify these different concepts and their underlying assumptions.

Elements of objective well-being include people's living conditions and their opportunities to realize their potential: opportunities that in principle should be equitably distributed among all people, without discrimination on any basis. A fair chance at health is one part of objective well-being. Elements of subjective well-being include people's experiences of their own lives. Based on these elements, well-being has either been framed as a composite of different building blocks or a concept in itself.

The Commission on the Measurement of Economic Performance and Social Progress' recommendations on assessing functioning and capabilities *(61)* illustrate the composite approach: this typically draws on an objective epistemology, using objective measurement tools and indicators, such as income, education or mortality rates. This approach sees health as a component of the composite of well-being. A large body of literature and research *(61–63)* defines well-being as a function of life opportunities and achievements. It is multidimensional, reflecting people's functioning or the "flourishing of selected human normal functions" *(64)* – such as consumption and personal security – and their capabilities – the objective conditions in which choices are made and that shape people's abilities to transform resources into given ends, such as health.

For the conceptual approach, the ontological method is typically linked to a subjective epistemology, with knowledge about well-being gained through people reporting their own perceptions. This combination of ontology and epistemology is often called subjective well-being: what someone feels is what matters. Although there is significant debate on the content and usefulness of subjective elements of well-being, including what people feel and report (as opposed to objective elements only) clearly adds different information for policy discussions. Nevertheless, in policy implementation and evaluation, governments are more easily held accountable for objective conditions.

What people feel and experience can be described in different ways. A new OECD review *(65)* documented three separate areas, each contributing important information, that make up subjective well-being:

- eudemonic well-being – self perceptions of autonomy, competence, purpose of life, locus of control;
- positive and negative state – experience of joy, happiness, anxiety, sadness;
- life evaluation – a reflective assessment.

Other conceptual models have different underlying assumptions. Moreover, well-being is envisaged as both a state and a dynamic process: a definition and a route that could illustrate pathways. Frameworks sometimes mix these aspects.

Defining the components or elements of well-being is an important step towards conceptual and operational clarity. Mapping the processes and pathways towards a state of well-being identifies the potential entry points for action to improve average well-being and its distribution within a population.

Why is it important for health?

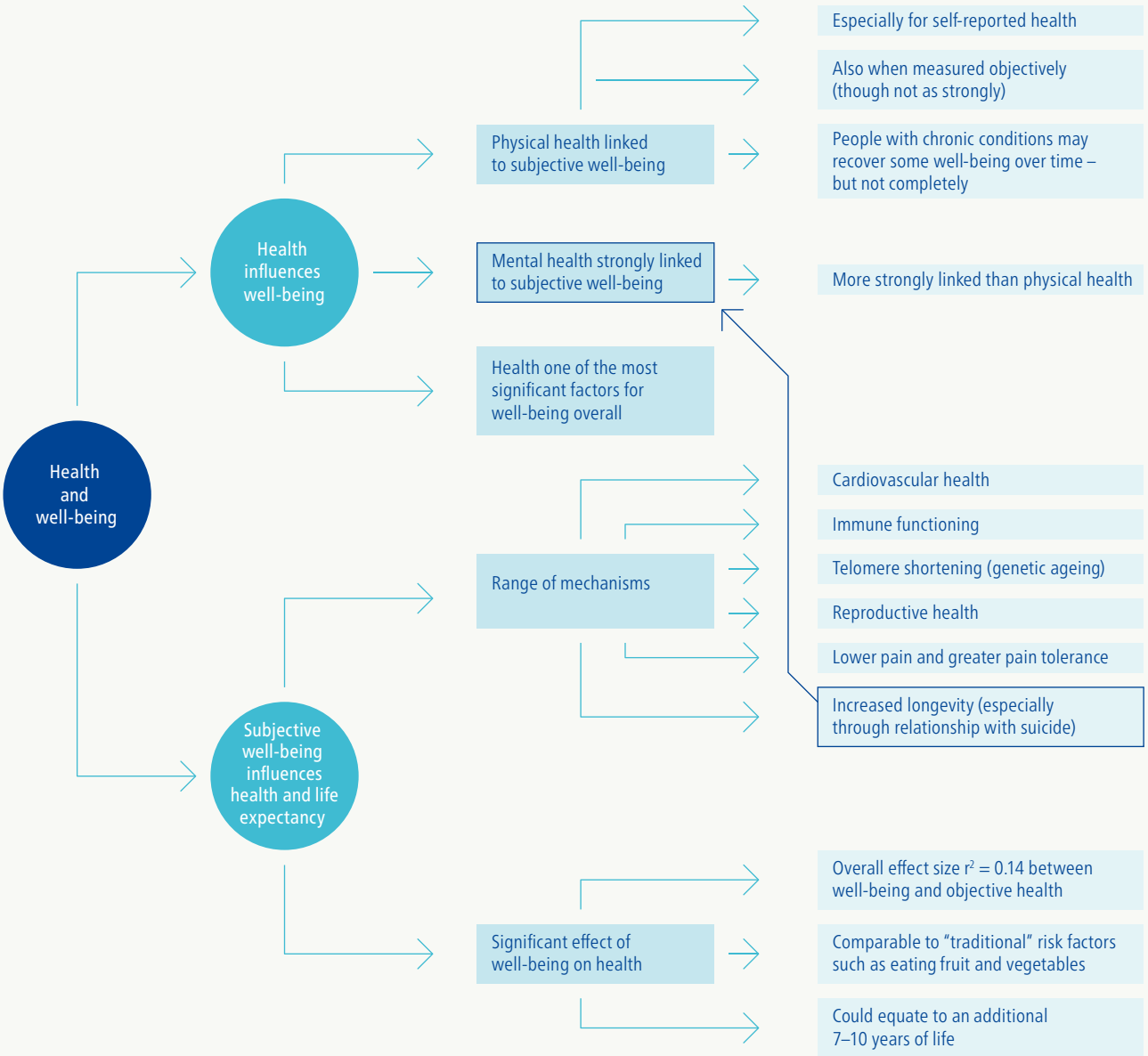
Policy-makers, public health practitioners and people in communities across Europe agree that well-being includes health as an essential part, if not a prerequisite. The WHO definition of health should not be taken to mean that health is the same as well-being, but that health – including its physical, mental and social aspects – matters for well-being.

An overview of the relationship between health and well-being is beyond the scope of this report but a mind map illustrates the connections between the concepts (Fig. 69).

This draws on recent overviews of the evidence on well-being, such as that carried out by the New Economics Foundation *(66)*, as well as the discussion of the expert group convened by the WHO Regional Office for Europe *(60)*. Both physical and mental health influence well-being; indeed, health is one of the strongest influences on well-being overall. The relationship between physical functioning and well-being

is not as strong, but this may be precisely because of the added value of measuring subjective well-being; it captures what people perceive (such as pain), which traditional biological measurement does not *(67)*. This is a two-way relationship, as well-being significantly influences future health through a range of mechanisms such as the functioning of the immune system and responses to stress *(68)*. Reviews of studies

Fig. 69.
Mind map of connections between health and well-being



Source: Measurement of and target-setting for well-being (59).

to date suggest that well-being has a substantial (though variable) effect on health that is comparable to that of other factors, such as a healthy diet, that have more often been the targets of public health interventions *(69)*.

Moreover, the literature documents two-way relationships between different areas of well-being: it is clear that health influences overall well-being, but well-being predicts future health or illness. Well-being and health are interactive concepts with some common determinants, such as the health system. Other determinants include the broader political, economic and social context, as well as other intermediary factors, such as the degree of social stratification or exposures that could either increase or reduce vulnerabilities. Fig. 70 shows another way to start to conceptualize these relationships, also connecting the role of the health system.

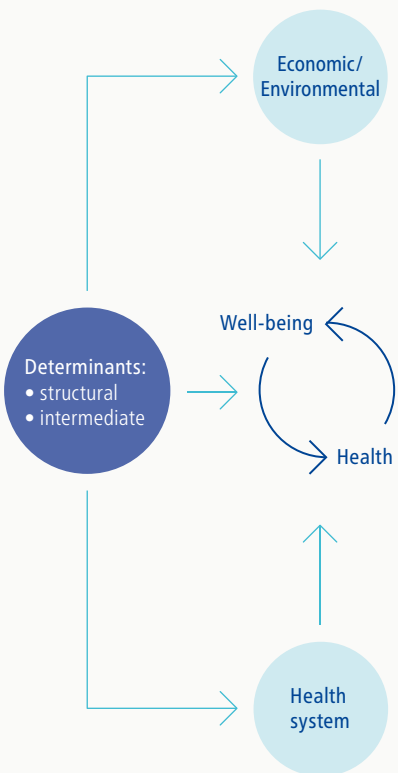
Discussions with representatives from European Member States and technical experts during the consultation on Health 2020 provided qualitative evidence that people across the European Region value health and want to minimize disease: they value social cohesion and inclusion as important broader determinants of health and well-being, giving all people a fair chance of health. People also value security and safety, which are related to health in the context of well-being. Common values across Europe increase the likelihood of having a regional target on health and well-being.

Of course, other domains of well-being are valued or matter. Nevertheless, full agreement on or a static understanding of what well-being means is needed to develop ways to improve well-being and eventually to measure and monitor it.

Box 17.
The meaning of well-being, its importance to health and its stability across populations – key messages

- One approach to well-being concerns the meeting of people's objective basic needs and the enabling of their capabilities; another approach considers people's subjective perceptions.
- Health can be conceptualized as part of well-being, as both a determinant and an outcome.
- Common values across Europe increase the likelihood of having a regional target on health and well-being

Fig. 70.
Health and well-being: an overview of determinants



Source: Measurement of and target-setting for well-being (59).

Why are governments and societies across Europe interested in health and well-being?

Improving or at least maintaining well-being is part of the social contract between governments and the people they represent. No particular sector or service is responsible for ensuring a good life; it is a multidimensional concept with multiple determinants. Improving

population well-being can be a platform on which to develop a common agenda, including a whole-of-government approach across sectors and stakeholders. Health ministers and ministries all know that well-being is part of the WHO definition of health. As noted, some of the determinants of well-being are also determinants of health.

In addition to governments, major actors interested in well-being include civil-society groups, patient groups, wellness and health promotion practitioners, and media organizations. Various groups – government and nongovernmental, public and private – try to influence the policy-making process and/or programmes in one or more sectors to improve well-being outcomes for people and society

Box 18.
Case study: enhancing well-being in Iceland – 6 steps linking assessment and interventions to improve well-being

1. Deciding to start measuring well-being
Over the last decade, Iceland has focused increased attention on the goal of enhancing well-being. As a result, interest has grown in assessing well-being status and exploring whether any interventions might be successful in increasing it for both individuals and society as a whole.

Inspired by studies looking at well-being from an epidemiological perspective (such as Huppert et al. *(70)*) and emphasizing the need for measuring positive mental health (Stewart-Brown *(71)*), public health authorities in Iceland became very interested in measuring well-being at the population level. They were keen to explore both well-being and the determinants of health, which research has revealed are not necessarily the same (Wilkinson & Marmot *(72)*, Huppert *(73)*).

2. Selecting methods and processes, including stakeholders, and gathering information
When the Public Health Institute of Iceland (which was incorporated into the Directorate of Health in 2011) decided to implement a national survey on health and well-being in 2007, a module on well-being therefore needed to be constructed. A group of experts was convened to decide what to include from measures already published:

- a single measure of happiness;
- the WHO-Five Well-being Index (WHO-5) *(74)*;
- Satisfaction With Life Scale (SWLS) created by Diener et al. *(75)*;
- a short version of the Perceived Stress Scale (PSS) created by Cohen et al. *(76)*;
- the short version of the Warwick-Edinburgh Mental Well-being Scale (WEMWBS) created by Stewart-Brown et al. *(77)*, which was translated specially for this purpose and has since been used as the main measure on well-being within public policy.

All these measures were included in the health and well-being study in 2007, which was repeated in 2009 and 2012. The second and third rounds added further scales, including the Meaning in Life Scale by Steger & Samman *(78)* and new well-being questions based on Huppert & So's conceptual framework for defining well-being *(79)*.

3. Ensuring the assessment responds to the current context
When its banking system collapsed in October 2008, Iceland's public health authorities decided to conduct a new study to assess the impact of the economic crisis on Icelanders' well-being. The protocol included the single measure of happiness, WEMWBS and PSS.

4. Presenting and communicating the results
An analysis of the impact of the economic crisis in Iceland, using data from studies on both health and well-being and economics and well-being, documented the findings (Gudmundsdottir *(80)*). An open seminar presented the results, including a panel discussion with the Minister of Welfare and the studies' project leader. The panel discussed the kind of society that would increase well-being in the population, and highlighted the following points.

- Good social relationships – the quality of relationships with family and friends, along with the amount of time spent with family – predict happiness.
- Difficulty making ends meet is the strongest predictor of unhappiness.
- The population subgroups that find it difficult to make ends meet are not the same as the unemployed or those in the lowest income group.

The results and the reaction from the Minister received extensive attention from the mass media (newspapers, radio and television).

5. Ensuring an impact on policy-makers and policy
The decision to measure well-being at the national level affected both health and whole-of-society policies. The well-being measures are used as an indicator in the Health 2020 policy for Iceland, as well as in a broader policy called Iceland 2020, led by the Prime Minister *(81)*: a government policy on the economy and community. In addition, the Minister of Welfare was very interested in the results and gave good examples of how they could be incorporated in further policy-making efforts.

6. Planning for the future
As demonstrated, indicators of well-being are already used to monitor policies in Iceland, where several actions aim to increase well-being. It is therefore necessary to continue monitoring the population's well-being and further develop measures of mental well-being to increase its comprehensiveness.

as a whole. Over the last decade, the goal of enhancing population well-being in Iceland catalysed an effort to measure progress at the national level and to inform policies across government sectors (Box 18). The remaining sections of this chapter lay out a range of issues and challenges to address, along with approaches to do so over the next several years.

How can we measure levels of well-being?

To improve and maintain people's well-being, we need to describe in more detail what well-being comprises, and understand how to measure it. Researchers, organizations, governments and other entities take a wide range of different approaches to describe both what areas or domains make up well-being and what should be measured for each. Some argue for objective measures, of air quality or level of hearing impairment, for example, whether measured by external scientific devices or by people responding to a questionnaire or an interview. Others include subjective measures: for example, people's satisfaction with a particular area of their lives, such as their jobs or the quality of the environment. Some measures are quantitative; others include qualitative evaluations.

Technical experts agree that multidimensional profiles of well-being are more likely to be used in policy-making, as they are easier to interpret. If an index is constructed of different elements or domains, each contributing part (level) and its value (weight) should be made transparent and be interpreted on its own, as well.

Different methodologies and tools are used to collect information to measure each area. One of the most common tools is a survey, typically asking people to respond to specific questions. A very large number of standardized instruments has been developed to provide additional information on well-being associated with a particular type of morbidity, health condition or disability. These are often used in clinical trials as part of the outcomes assessed in the evaluation of new or different treatments. Standardized instruments, such as telephone or postal surveys, are also widely used across Europe to collect population-based information.

To assist the process of developing a common concept and approach to measuring well-being at the population level across the European Region, the WHO Regional Office for Europe carried out a systematic literature review of validated tools to measure well-being. The search combined six key concepts: well-being, measurement tool, measurement properties, general population, observational studies, and peer-reviewed literature. It drew on databases covering biomedical, psychological and economics literature, resulting in some 3200 published articles for review, of which about 160 contained information on indicators and measures. Box 19 highlights the main findings.

In addition, the review showed that each instrument or tool uses different sets of domains, reflecting an implicit difference in how well-being is conceptualized and an explicit difference in how it is measured operationally.

Two short questionnaires widely used to monitor well-being within and across populations are Cantril's Ladder and the Personal Wellbeing Index (Table 5). Each provides measures of self-reported health, self-perceived health and well-being.

For subjective measures of well-being it is important to gauge whether the questions asked measure what they intend to measure. When there is no gold standard to use for comparison – such as people's assessment of their personal relationships or the quality

Box 19.
Key findings from WHO's literature review of tools to measure well-being

- There are many definitions of health in the context of well-being: this requires more conceptual clarity.
- Well-being is often treated as synonymous with quality of life and happiness.
- Among various descriptions of tools used, the distinction between subjective and objective measures is often incorrect, or not distinguished from the measurement technique (for example, whether data are self-reported or externally assessed/measured).
- The most common domains in all tools are economics, health, education, society/community and environment.
- Within the different domains there is no consistency in the types of question asked or areas assessed.
- A limited number of tools supports assessment at the population level: the vast majority focuses on specific clinical conditions.

Table 5.
Typical questions from Cantril's Ladder and the Personal Wellbeing Index

Question	Scale used	Source/User
How satisfied are you with your life as a whole?	Cantril's Ladder, eleven-point scale (worst possible = 0 to best possible = 10)	OECD, Gallup
Are you satisfied with: • your standard of living • your health • your achievements in life • your personal relationships • how safe you feel • feeling part of your community • your future security • your spirituality or religion?	Personal Wellbeing Index, eleven-point Likert Scale (completely dissatisfied = 0 to completely satisfied = 10)	International Wellbeing Group

of their social networks – validity can be estimated in several other ways. Analysis can focus on the extent to which life circumstances and other candidate variables plausibly explain responses for an individual or the distribution of responses for a population. The extent to which they are correlated with other subjective and objective measures of well-being (correlation validity) can also be assessed: this is a measure of reliability. Another method is to consider how and whether the measures predict subsequent outcomes and behaviour (predictive validity).

Methodological questions, as with any tools that use survey approaches, need to address whether the way data are collected, including the ordering and framing of questions, influences the response. It is also important to confirm whether the data collected can be compared over time for population health monitoring across or within countries. Another significant issue for monitoring is the role and potential influence of people's expectations of a certain level of well-being. People consider their position in relation to an idealized norm, for example, within a community or a country, and this can influence their self-assessment. The importance of expectations can affect the analysis and interpretation of the meaning and significance of different components of well-being and their distribution across different subpopulations.

Another important aspect is knowing how to interpret the data collected, either for individuals or populations, including in what scale the data are expressed and what differences of 5%, 10% or 20% mean. For measures of well-being that aim to capture the positive end of the distribution within a population, it is important to understand, for example, how health in the context of well-being differs from being sick or being normal. For the latter, is there an expected set point or norm for well-being?

In fact, the Australian Unity Wellbeing Index *(82)* surveys claim that the major strength of subjective well-being as an indicator is its reliability and stability, as shown by highly consistent results. Subjective well-being seems to behave like body temperature: it is normally constant. Strong challenges can make it fall or rise, but it normally returns to its set point. If it does not, this indicates overwhelming challenge and distress (Fig. 71). The Australian Unity Wellbeing Surveys identified some groups that are found below the normal range, such as people who are unemployed, live alone, have low incomes or provide informal care.

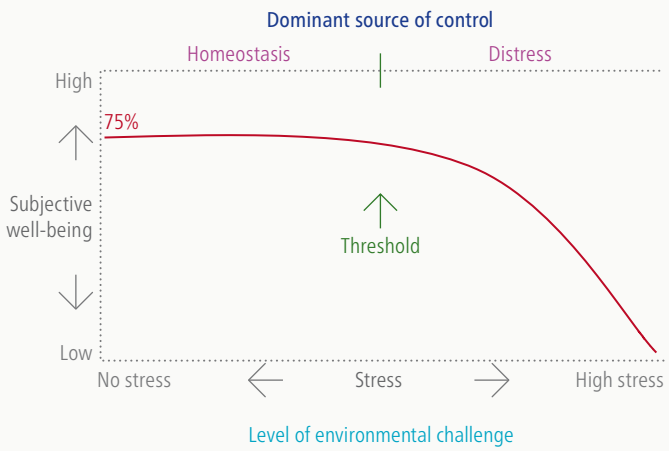
What can we build on?

To monitor and report on health and well-being across the European Region, previous efforts to measure well-being at the population level are more relevant in practice than those focusing on specific clinical subpopulations. This report briefly examines five examples, led by a national government, another international organization, a private firm, WHO at the international level and the United Nations. All feature health as an important component of well-being, or a factor directly affecting it; a few draw on the same data sets collected through international surveys, and some use different words – such as quality of life and happiness – to discuss what makes up a good life, or different ways to measure subjective well-being and self-reported objective well-being.

Work in the United Kingdom

A Member State with a long history of commitment to target setting and health measurement at the population and local levels is the United Kingdom. A programme to develop an accepted set of national statistics for understanding and monitoring national well-being, launched in 2010 and led by the Office for National Statistics (ONS), aims to put

Fig. 71.
The relationship between stress and subjective well-being



Source: Professor R. Cummins, Deakin University, Melbourne, Australia (unpublished).

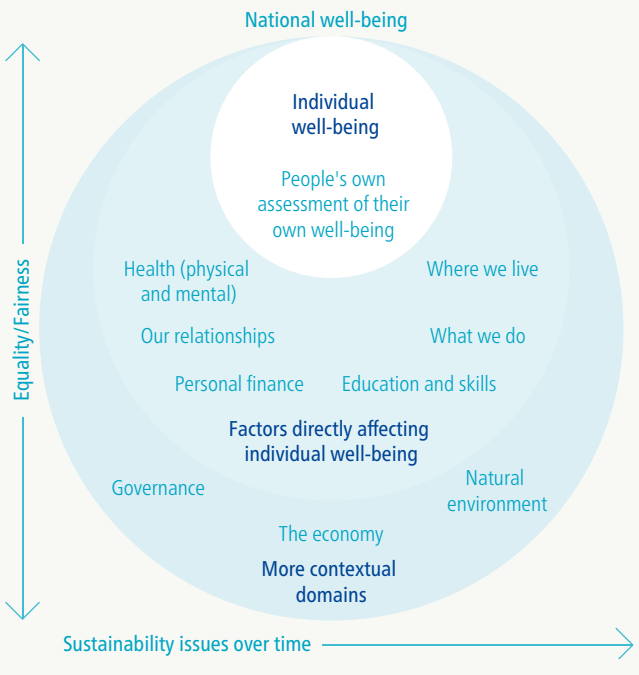
measures in place by around 2014. The initiative includes public debate (in which health is one of the major issues identified), a review of international work and further development of subjective well-being.

The programme initially proposed domains in 2011, and ONS published a second iteration of a framework for the domains and proposed headline indicators in July 2012 *(83)*. The current framework comprises 10 domains (Fig. 72).

Health is one of the proposed domains, including four headline indicators *(84)* as set out in Table 6. The ONS approach to measuring health within the context of well-being includes indicators of objective (including self-reported functioning or disability) and subjective (satisfaction measures – all self-reported) well-being.

ONS published background details on the domains in July 2012, along with the first set of experimental statistics on subjective well-being from its Annual Population Survey *(86)*. These studies explore the headline measures in more detail and put them in the context of other measures of health and well-being – for example, looking at self-reported health and subjective well-being in relation to life expectancy,

Fig. 72.
Proposed well-being framework



Source: United Kingdom Office for National Statistics licensed under the Open Government Licence v. 1. 0.

Table 6.
Proposed headline measures for the health domain

Objective	Subjective
Healthy life expectancy (at birth)	Satisfaction with your health (percentage somewhat, mostly or completely satisfied with their health)
People not reporting a long-term limiting illness or disability	
General Health Questionnaire (GHQ-12) assessment (percentage with some evidence indicating probable psychological disturbance or mental ill health *(85)*)	

Source: United Kingdom Office for National Statistics licensed under the Open Government Licence v. 1. 0.

mortality, disease and physical health, mental health and lifestyles – each of which affects health. This supports the overall interpretation, and several key findings emerged.

- People who feel that they are in good health are much more likely to report higher levels of subjective well-being; conversely, those who report poor health are much more likely to report lower subjective well-being.
- Nevertheless, everyone who reported that their health was good or very good did not report relatively high levels of life satisfaction. Neither did all those who reported bad or very bad health also report low satisfaction with life. Similar patterns emerge in relation to the other aspects of subjective well-being.
- The findings of the Annual Population Survey, combined with evidence from other sources, show that people's well-being depends on multiple aspects of their lives, not just their feelings about their health. This means that other areas also matter, such as housing, employment and such non-traditional areas of government policy as friendships, autonomy and volunteering.

The domains and measures will be further developed as the Measuring National Well-being Programme progresses, including to address subgroups, such as children.

Work by OECD

Work by OECD on measuring well-being represents a recent major effort by an international organization. The interest in new measures came out of the long-standing debate on how far traditional indicators, such as GDP per capita, actually measure well-being. Evidence from within the European Region and beyond suggests that one should look beyond markets, national averages and a focus on current economic well-being. OECD's work also builds on other important initiatives in the field, such as the report by the Commission on the Measurement of Economic Performance and Social Progress *(61)*, set up by the French Government in 2008; the European Commission's 2009 communication on measuring progress in a changing world *(87)* and subsequent work; the Group of 20 leaders' statements from 2009, 2010 and 2011 *(88)*; OECD ministerial council conclusions in 2010 *(89)* and national initiatives.

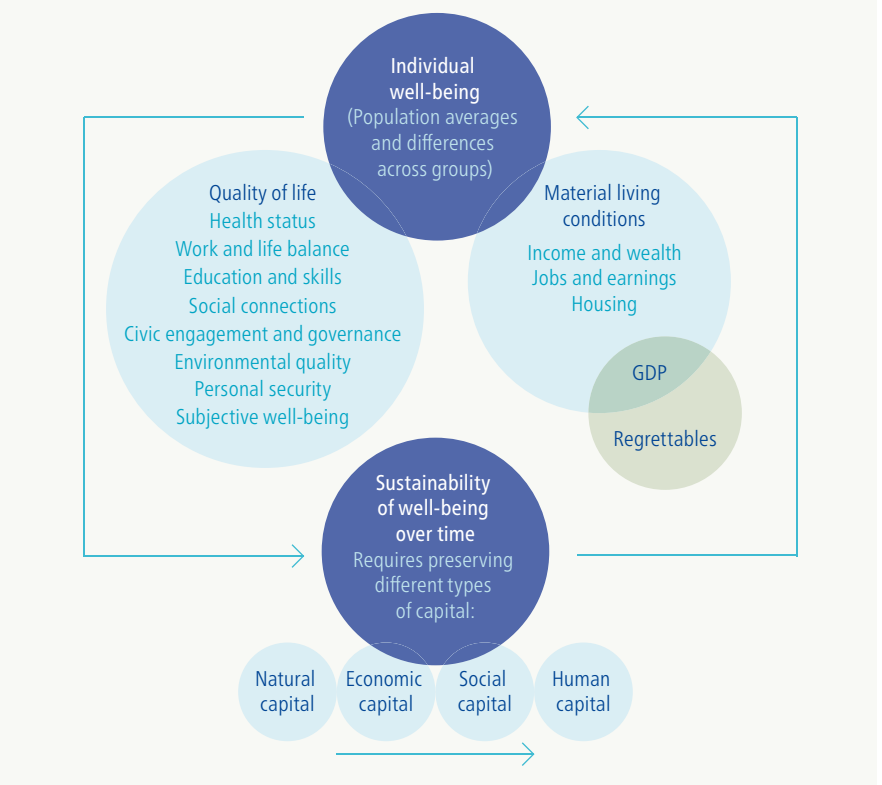
The resulting OECD Better Life Initiative, described in its 2011 report *How's life? (90)* and distributed through an interactive tool covering

OECD Member States (the Your Better Life Index), builds on almost 10 years of work. This framework (Fig. 73) has four distinctive features.

- It focuses on people (individuals and households): both their individual attributes and how people relate to others in the community where they live and work.
- It looks beyond the purely economic aspects of well-being (people's command over resources and commodities), conceiving well-being as a truly multidimensional concept.
- It considers the distribution of well-being in the population alongside average achievements of each country.
- It considers both current and future well-being, assessing the latter in terms of key resources (observable today) that have the potential to generate well-being over time.

Measurement of each domain is based on indicators, the criteria for which include unambiguous interpretation, amenability to policy changes and the possibility of disaggregation by population subgroups.

Fig. 73.
OECD framework for measuring well-being



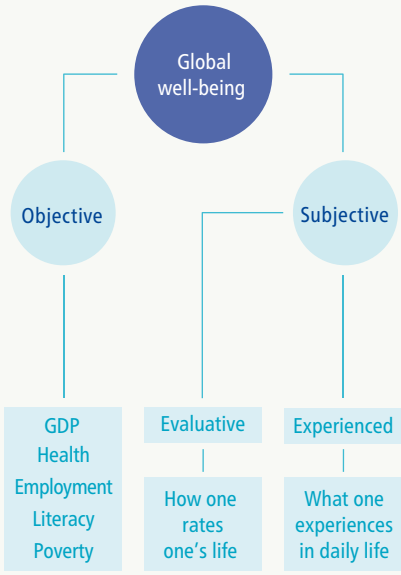
Source: Measuring well-being and progress (91).

The availability of high-quality data is also considered, normally from official statistics (with comparable definitions across countries). In addition, OECD integrated into its dashboard of well-being indicator data from non-official sources such as Gallup. These are placeholders for indicators based on comparable official surveys that should become available in the future.

Work by Gallup

Since 2006, Gallup, a private company, has been conducting an international poll, which provides practical experience with collecting international data on well-being over time. The Gallup World Poll *(92)*, primarily reflecting self-reported data, covers at least 130 countries in any given year, and asks about a wide range of topics, including health. Its well-being index combines objective and subjective measures, with self-reported health as one of five domains included as objective measures (Fig. 74).

Fig. 74.
Gallup model for measuring well-being through the World Poll



Source: Gallup World Poll *(92)*.

A recent OECD working paper *(93)* used Gallup World Poll data to explore the determinants of well-being and examine the drivers of measures of affect (positive and negative states), as well as the determinants of life satisfaction that are more prevalent in the existing literature. It reported that *(93)*:

> *Overall, items relating to health status, personal security, and freedom to choose what to do with one's life appear to have a larger impact on affect balance when compared to life satisfaction, while economic factors such as income and unemployment have a more limited impact. … Relatively small differences are found between men and women, but priorities change significantly over the life course.*

Moreover, since 2008 Gallup has conducted a daily survey in the United States of America covering six domains, including emotional and physical health, which provides data on micro trends. This tool has already collected information from over 1 million randomly selected respondents, and links emotional and physical health with micro information on basic access to health care, work environment and healthy behaviour. The project has expanded into Europe, to Germany and the United Kingdom, and will regularly provide information for public health programmes. The tool can be used to conduct assessments in communities and organizations and among health service providers.

Collecting and reporting on data from a large number of countries around the world present serious methodological challenges. Drawing on its experience with estimating population preferences, Gallup is setting strict standards to ensure proper sampling, analysis and comparability across countries: a particular challenge for a private company, as public authorities frequently do not provide access to all facilities used by official statistical agencies conducting surveys or polls. Nevertheless, Gallup has also provided tools for individuals to track their well-being and is developing ways to collect biomarkers of individual well-being, such as taking saliva samples and providing analysis of stress levels.

Work by WHO

An effort to measure well-being at the global level is nested within the WHO Study on Global AGEing and Adult Health (SAGE) *(94)*. SAGE is a worldwide survey of ageing and health, drawing on population-representative samples from six countries: China, Ghana, India, Mexico, the Russian Federation and South Africa. It has a total sample of around 45 000 people, with oversampling of people aged 50 years or more to provide more detailed information. The aim is to track changes in health and to have a clear, meaningful concept of well-being over time: a baseline cohort was set up in 2002–2004, and the first full wave was carried out in 2008–2010, with two further waves in 2013 and 2015. The survey looks at health conditions, functioning in daily life (self-reported health status and performance tests in a range of domains) and people's subjective well-being.

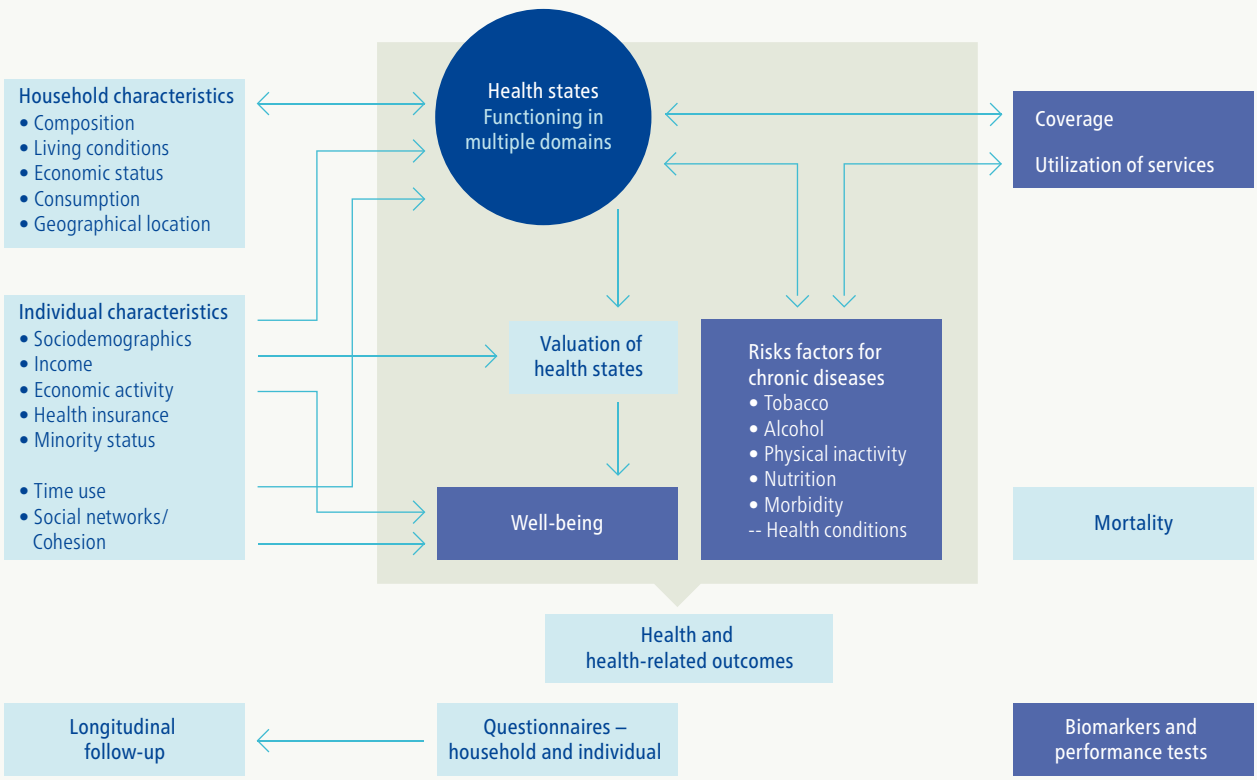
Within this framework, well-being is seen as made up of a combination of subjective appraisal (happiness, life satisfaction) and affective experience (Fig. 75). SAGE measures subjective well-being through a combination of life satisfaction (using WHOQoL-8 (WHO Quality of Life): eight questions about satisfaction with different domains of life and life overall) and experienced well-being through the Day Reconstruction Method *(see 59)*.

The data collected allow analysis of various factors affecting changes in well-being over the life-course. The results to date suggest that overall happiness and experienced well-being have very similar determinants: a strong relationship with health status, chronic disease and disability; and consistent relationships with age, income,

education, social networks and the broader environment. In the future this study may help to improve understanding of well-being and its measurement by identifying biomarkers of well-being, examining framing effects within different methodologies (such as how the way questions are asked can influence the response), making comparisons between populations and identifying relations with characteristics such as temperament. Better ways of interpreting the data will bring stronger validity, leading to greater use of longitudinal survey data in identifying and evaluating possible interventions, and making policy *(59)*.

In the European Region, Finland, Poland and Spain are collecting similar data.

Fig. 75.
Overall SAGE measurement framework



Source: WHO Study on Global AGEing and Adult Health (SAGE) *(94)*.

Work by the United Nations

A recent global report commissioned by the United Nations *(95)* starts with the premise that we need a very different model of humanity, one that does not put rising income or economic growth at the centre of what matters in life. The report is part of the response to a 2011 United Nations General Assembly resolution that invited Member States to "pursue the elaboration of additional measures that better capture the importance of the pursuit of happiness and well-being in development with a view to guiding their public policies" *(96)*. Similar to the origins of OECD work in this area, the aim is to learn from studies and existing data, even if not from official sources, that consistently show that higher average incomes do not necessarily improve average well-being within a country or across countries. This is not to discard the idea that higher household income (or higher GDP per capita) usually signifies an improvement in the life conditions of the poor. Instead, the report *(95)* argues that the information used to build an understanding of what makes lives better should include measures of subjective well-being.

The report is not billed as addressing subjective well-being, but as the first *World happiness report (95)*, reviewing and reporting on data collected by others, including the World Values Survey, the Gallup World Poll and several other national and international surveys, including the European Social Survey. It argues that the assessment of social progress needs a broader set of domains, which addresses both objective and subjective aspects of well-being. Moreover, information on multiple domains provides policy-makers with a greater understanding of the implications of their policies and decisions, beyond income or economic growth.

The report *(95)* concedes that, for many:

> *Happiness seems far too subjective, too vague, to serve as a touchstone for a nation's goals, much less its policy content. That indeed has been the traditional view. Yet the evidence is changing this view rapidly. A generation of studies by psychologists, economists, pollsters, sociologists, and others has shown that happiness, though indeed a subjective experience, can be objectively measured, assessed, correlated with observable brain functions, and related to the characteristics of an individual and the society.*

External factors proposed as important domains or key determinants of subjective well-being are income, work, community and governance, and values and religion. Among the more personal factors are mental and physical health, family experience and education. Differences in the level of well-being by sex and age are also noted.

The main message from the data across countries is that wealth is not the only thing that makes people happy, in terms of subjective well-being. In fact, political freedom, strong social networks and an absence of corruption are together more important than income in explaining differences in well-being between the highest- and lowest-ranking countries. Other things also matter: at the individual and household level, good mental and physical health, someone to count on, job security, stable families and community trust are crucial.

Reporting and presenting data

Well-being is multidimensional; this creates challenges for presenting data. Much can be learned from current efforts around the world, including those of OECD, when crafting an approach to communicate results across the European Region's 53 Member States. Typical approaches to presenting multidimensional concepts include using a dashboard or combining data into composite measures (reflecting composite indices); each has advantages and disadvantages.

With dashboards, patterns are straightforward to interpret and require no specific assumptions. Such images, however, can sometimes make it difficult to understand the main message (Table 7), and priorities can be hard to set. In addition, taking the dashboard approach may lead to not being as parsimonious as possible with indicators.

Composite measures may be easier to communicate (especially for the public and policy-makers), and they can help to support priority setting. Their creation depends on assumptions (that are arbitrary, to some extent), however, and may lack transparency; they can also be overly simplistic in representing complex phenomena (Fig. 76).

One solution is to use both approaches in a complementary way. Dashboards provide information on each component and are easier to interpret; composite indices can be used to show highlights and to assess interconnections between drivers of well-being, for example.

Box 20.
What we can build on – discussion points

- Efforts to measure well-being at the population level are more relevant in practice than those focusing on specific clinical subpopulations.
- Subjective well-being measures should be complemented by objective measures, even if self-reported.
- In practice there is a high degree of cooperation between international organizations in this area and complementarities between international and national initiatives.
- For policy-makers, the main issues are often external, environmental factors affecting well-being, since government policy might be able to influence these in a stable way in the long term.

Table 7.
Dashboard of OECD Better Life Index: multiple domains and countries

	Material living conditions							Quality of life				
	Income and wealth		Jobs and earnings			Housing		Health status		Work and life		
	IW I	IW II	JE I	JE II	JE III	HG I	HG II	HS I	HS II	WL I	WL II	WL III
	Household net adjusted disposable income per person	Household financial net wealth per person	Employment rate	Long-term unemployment rate	Average annual earnings per employee	Number of rooms per person	Dwelling without basic facilities	Life expectancy at birth	Self-reported health status	Employees working very long hours	Time devoted to leisure and personal care	Employment rate of women with children of compulsory school age
	2009	2009	2010	2010	2009	2009	2009	2009	2009	2009	2000	2008
AUS	●	▲	▲	●	●	●	...	●	●	◆	▲	▲
AUT	●	▲	▲	●	▲	▲	▲	▲	▲	▲	▲	▲
BEL	▲	●	▲	▲	▲	●	▲	▲	▲	▲	●	▲
CAN	●	▲	▲	●	▲	●	...	▲	●	▲	◆	●
CHL	◆	...	▲	...	...	▲	◆	▲	◆	▲	...	...
CZH	▲	▲	▲	▲	◆	▲	▲	◆	▲	▲	...	▲
DEN	▲	▲	●	▲	▲	●	●	▲	▲	●	●	●
EST	◆	◆	▲	◆	...	▲	◆	◆	◆	●	◆	▲
FIN	▲	▲	▲	▲	▲	●	▲	▲	▲	▲	▲	●
FRA	●	▲	▲	▲	▲	▲	▲	▲	▲	▲	●	▲
DEU	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
GRE	▲	▲	▲	◆	▲	▲	▲	▲	▲	▲	...	◆
HUN	◆	◆	◆	◆	◆	◆	◆	◆	◆	●	...	▲
ICE	◆	◆	●	▲	...	▲	▲	●	●	...	...	●
IRE	▲	▲	▲	◆	●	●	▲	▲	●	▲	...	◆
ISR	...	●	◆	▲	...	◆	...	●	▲	◆	...	...
ITA	▲	▲	◆	▲	▲	▲	▲	●	▲	▲	▲	◆
JPN	▲	▲	▲	▲	▲	▲	▲	●	◆	...	◆	▲
KOR	▲	▲	▲	●	▲	▲	◆	▲	◆	...	▲	...
LUX	●	●	▲	▲	●	●	▲	▲	▲	▲	...	◆
MEX	◆	◆	▲	●	...	...	◆	◆	...	◆	...	...
NET	▲	▲	●	▲	●	●	●	▲	▲	●	...	▲
NZL	▲	...	●	●	...	●	...	▲	●	◆	...	▲
NOR	●	◆	●	●	▲	●	▲	▲	▲	●	●	...
POL	◆	◆	◆	▲	◆	◆	▲	◆	▲	▲	◆	▲
POR	▲	▲	▲	◆	◆	▲	▲	▲	◆	▲	▲	▲
SVK	◆	◆	◆	◆	◆	◆	▲	◆	◆	▲	...	▲
SVN	▲	▲	▲	▲	...	◆	▲	▲	▲	▲	▲	▲
SPA	▲	▲	◆	◆	▲	●	●	●	▲	▲	▲	◆
SWE	▲	▲	●	▲	▲	▲	●	▲	▲	●	▲	●
SWI	▲	●	●	▲	●	▲	▲	●	●	▲	...	●
TUR	...	...	◆	▲	...	▲	◆	◆	▲	◆	...	◆
UNK	▲	●	▲	▲	▲	▲	▲	▲	▲	◆	▲	▲
USA	●	●	▲	▲	●	...	●	▲	●	◆	▲	▲

Note. Circles denote OECD countries in the top two deciles; diamonds, those in the bottom two deciles; and triangles, those in the six intermediate deciles. In addition, the indicator "Dwelling without basic facilities" considers only data referring to dwellings without indoor flushing toilet.
Source: OECD calculations based on the indicators shown in *How's life? Measuring well-being (90).*

Quality of life (Cont.)									
Education and skills		Social connections	Civic engagement and governance		Environmental quality	Personal security		Subjective well-being	
ES I	ES II	SC I	CG I	CG II	EQ I	PS I	PS II	SW I	SW II
Educational attainment	Students' cognitive skills	Social network support	Voter turn-out	Consultation on rule-making	Air quality	Intentional homicides	Self-reported victimization	Life satisfaction	Affect balance
2009	2009	2010	2007	2008	2008	2008	2010	2010	2010
▲	●	●	●	●	▲	▲	▲	●	▲
▲	◆	▲	▲	▲	▲	●	▲	▲	▲
▲	▲	▲	●	◆	▲	▲	◆	▲	▲
●	●	●	◆	●	▲	▲	●	●	▲
▲	◆	◆	●	◆	◆	◆	◆	▲	▲
●	▲	▲	▲	▲	▲	▲	▲	▲	▲
▲	▲	●	●	▲	▲	▲	▲	●	●
●	▲	◆	◆	◆	●	◆	◆	◆	◆
▲	●	▲	▲	▲	▲	◆	▲	▲	▲
▲	▲	▲	▲	◆	●	▲	▲	▲	▲
▲	▲	▲	▲	◆	▲	●	▲	▲	▲
◆	▲	◆	▲	▲	◆	▲	▲	◆	◆
▲	▲	▲	▲	▲	▲	▲	▲	◆	◆
◆	▲	●	▲	▲	▲	●	▲	▲	●
▲	▲	●	▲	▲	●	▲	▲	▲	▲
▲	◆	▲	▲	◆	▲	◆	●	▲	◆
◆	▲	◆	▲	◆	▲	▲	▲	▲	◆
▲	●	▲	▲	▲	▲	●	●	▲	●
...	●	◆	▲	●	◆	▲	▲	▲	▲
▲	◆	▲	●	▲	●	▲	▲	▲	▲
◆	◆	▲	◆	▲	◆	◆	◆	▲	▲
▲	●	▲	▲	▲	◆	▲	▲	●	●
▲	●	●	▲	●	●	▲	▲	▲	▲
▲	▲	▲	▲	▲	▲	●	▲	●	●
●	▲	▲	◆	●	◆	▲	●	◆	▲
◆	▲	◆	▲	▲	▲	▲	◆	◆	◆
●	◆	▲	◆	▲	▲	▲	▲	▲	▲
▲	▲	▲	▲	●	▲	●	▲	▲	▲
◆	▲	▲	▲	▲	▲	▲	▲	▲	▲
▲	▲	●	▲	●	●	▲	●	●	●
●	▲	▲	◆	▲	▲	●	▲	●	▲
◆	◆	◆	●	▲	◆	◆	◆	◆	◆
▲	▲	▲	◆	●	●	▲	●	▲	●
●	▲	▲	●	▲	▲	◆	●	▲	▲

What are the challenges in measuring health and well-being?

Despite general agreement on what makes a good life and the availability of multiple tools and approaches, researchers agree that the field of measuring well-being lacks clear definitions and rigorous assessment methods. There are several plausible reasons for this, including a narrow conceptualization of health and well-being, limited data sources and unclear application of information on well-being in the context of monitoring or improving health. In addition, the measures of health included in well-being indices often continue to measure mortality or illness ("ill-being"), not the positive end of what constitutes health and well-being.

Fig. 76.
OECD Better Life Index, composite: single index for each country

Source: How's life? Measuring well-being (90).

Box 21.
Challenges for measuring health and well-being – key messages

- There is no single definition of well-being across place or time, yet all agree that health is a key component.
- Multiple measurement approaches exist, with no criteria on how to select a tool.
- Presentation of multidimensional data is not always consistent or transparent.
- Interpretations can be limited because of differences in how domains are weighted or combined, and the difficulty of combining data on different scales.

Another challenge may be the inability to choose from a range of potential measures of well-being; there are many and almost all ask different questions or include different existing data, such as from economic, social or health surveys or statistics. Yet another is that most efforts to measure the level of health in the context of well-being have been primarily based on subjective measures that might be perceived as difficult to compare over time, across countries or across socioeconomic groups. Without clear guidelines, another challenge is the interpretation of collected data: some approaches combine domains that are measured at the individual level and the community or national level. Such indices are difficult to interpret if some of the parts improve while others stagnate or worsen.

A roadmap for advancing measurement of health and well-being

Reflecting the recommendations of the expert group convened by the WHO Regional Office for Europe and the new Health 2020 policy *(1,59,60)*, the WHO Regional Office for Europe is committed to providing operational clarity on how health is measured in the context of well-being. Recommendations and agreed criteria include the following steps.

A definition of well-being that is conceptually sound should be developed. As far as possible, the operational approach should draw on models that have been used at the population level, such as the OECD Better Life Index. The choice of domains used to measure well-being should aim for maximum coherence with other approaches at the international level.

For the health component of well-being, the range of domains and subsequent indicators tested should be linked to the International Classification of Functioning, Disability and Health (ICF) *(97)*, WHO's framework for measuring health and disability at both the individual and population levels. ICF is structured around the following broad components:

- body functions and structure;
- activities (related to tasks and actions by an individual) and participation (involvement in a life situation);
- additional information on severity and environmental factors.

It complements WHO's International Classification of Diseases, which contains information on diagnosis and health condition, but not functional status. Moreover, at minimum, health in the context of well-being must include social, mental and physical health.

Indicators selected to measure each aspect of the health domain need to be linked to an agreed target for monitoring progress towards the Health 2020 goal: to improve population health in the context of well-being. Approaches to measurement should be as objective as possible, although without discarding validated self-reported measures or lessons from assessments of health systems' performance. This includes identifying measurement indicators where data already exist, or recommending potential new measures that need to be developed and tested. In either case, measurement of these indicators should reach acceptable levels of reliability and validity.

The measurement approach should allow for the comparison and interpretation of health in the context of well-being within and across countries. Thus, values (data) for each indicator of health should be made available, and different potential approaches to combining the indicators and to reporting and interpreting a single index for the health domain should be tested and evaluated.

How policy-makers, health professionals and other interested stakeholders across the WHO European Region can use this information should be documented and communicated. Communication should also include tools that allow presentation and interaction in a web-based medium.

Where are we now?

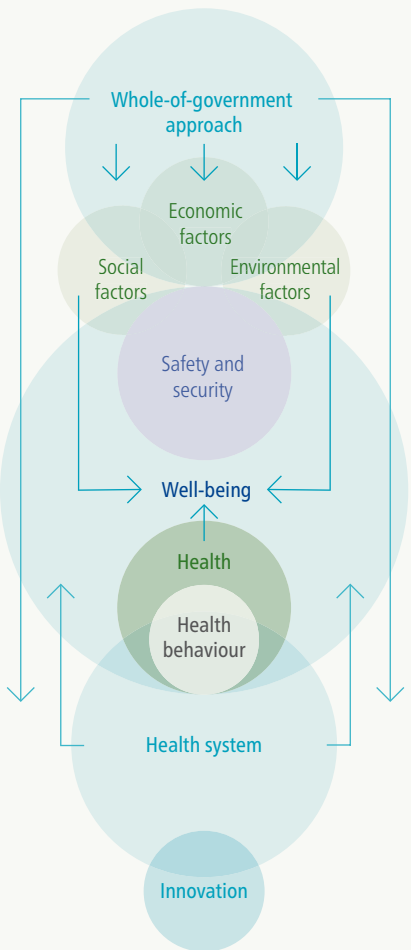
Based on the expert technical consultations in 2012 *(59,60)*, the WHO Regional Office for Europe proposes an initial high-level definition of well-being that could serve as an umbrella for other international population-based efforts:

> *Well-being exists in two dimensions: subjective and objective. It comprises an individual's experience of their life and a comparison of life circumstances with social norms and values.*

The term "social norms and values" is meant to capture the minimum threshold or level of different objective elements of well-being, recognizing such thresholds may change over time. Additional explanatory detail for the recommended definition includes the following.

- Well-being and health are interactive, with some common determinants, such as health and social systems. Health influences overall well-being, yet well-being also predicts future health.
- Across countries people usually agree on the big picture (the minimum ingredients of well-being), even if identification of the important areas or components remains a normative exercise.
- Subjective experiences can include a person's overall sense of well-being and psychological functioning, as well as affective states. Examples of objective well-being and life circumstances include health, education, jobs, social relationships, environment (built and natural), security, civic engagement and governance, housing and leisure.

Fig. 77.
Overall framework for health and well-being



Source: Measurement of and target-setting for well-being (59).

This definition recognizes that multiple domains or areas cover different aspects of well-being, with health an important domain of and contributor to well-being. Fig. 77 illustrates these domains and contributors, and indicates the approaches or entry points for improvement. As discussed, refining the mapping of the processes and pathways towards the state of well-being will help to clarify the potential entry points for action to improve average well-being and its distribution within a population.

Moreover, both subjective and objective elements could be incorporated as complementary parts of each domain of well-being. It is important, however, to clarify which framework will be used and for what purpose. For example, a descriptive framework would help to identify how to describe and measure well-being. An action-oriented framework would help policy-makers or practitioners understand the entry points for action and change, based on attribution studies and evidence on what works in practice.

Establishing how to refine the frameworks and move towards a specific definition of well-being in this context requires a more detailed review of the existing concepts. Although well-being clearly covers a range of domains, including health among many others, the expert group recommended that the Regional Office focus on its central mandate

of health and concentrate advances in measurement on the areas of health and the health-related aspects of well-being *(59,60)*.

Testing hypothesized relationships with different illness and disease groups, different socioeconomic and demographic groups, and other external criteria in advance will strengthen the interpretation and usefulness of multidimensional profiles of health and well-being. For this specific area, given the lack of existing data (depending on the choices made about the definition and indicators of well-being to be used), one option would be to have at least one process target for Health 2020, on governments' collecting data on well-being. This could be accompanied by a roadmap towards an outcome target, depending on the process target. This in turn could take account of inequities and variations within the Region by framing the outcome target in terms of reducing the gaps identified for specific groups at the national level. Other options include setting a target of increasing total well-being (however measured) within the Region; focusing on a few specific aspects (linked to health), or focusing on reducing inequalities in a particular dimension of overall well-being (such as reducing the social gradient related to income or education).

How can this information be used to improve health and well-being?

Government policy-making is a process formed and developed over time. This can include setting high-level policy objectives, discussing the role of government in achieving them and identifying where and how governments can best use resources, including managing trade-offs and competing priorities. Policy-making often involves a wide range of actors, from government ministers and key decision-makers, other politicians and parliamentarians, special interest groups, patient and community groups, civil servants, public service professionals, researchers and other experts, to members of the public.

The past few years have witnessed national and international initiatives promoting policy use of well-being indicators that reach beyond measuring economic performance and can supplement standard metrics of mortality, disability or disease within the health sector. These initiatives vary in scope, methods, targets and key audiences. Some are briefly presented in this chapter. Some initiatives

share the goal of involving citizens in the definition of measures of well-being and progress. Across many countries, activities to link well-being and health are increasing, including target setting to improve interventions addressing health in the context of well-being (Box 22). While the direct relevance of these initiatives and their objectives to policy varies, they all aim at informing policy-making: for example, the OECD Better Life Index was launched to promote benchmarking and mutual learning *(90)*.

Health 2020 aims to establish policy targets, which implies putting in place actions to improve the situation. For use within the Health 2020 framework, both the information content and the entry points of well-being measures need to be considered carefully. For example, in the case of health outcomes, some of the relevant drivers may pertain to the characteristics of individuals (patients), others to the programmes of service delivery and implementation (such as the health system), and still others to the environment where people live (including environmental and working conditions, immigration, income and other inequalities). Health systems clearly contribute to health and well-being: lessons from assessments of health systems' performance and related approaches to quantifying and attributing their overall contributions are crucial to ensuring the policy relevance of such efforts (Box 23).

Although beyond the scope of this discussion, some of these factors may not be directly amenable to policy interventions, while other measures of societal progress (such as measures of social connections or subjective well-being) may be too general to identify a causal link to government interventions in specific fields.

Further, there are potential limitations to using well-being indicators. Many indicators used by organizations or Member States are better suited to monitoring well-being than evaluating the impact of specific policy measures. It is nevertheless important to take account of how the outcomes measured respond to policy interventions and how other organizations, such as OECD, have fine-tuned the choice of indicators from a policy perspective.

The WHO Regional Office for Europe can support the use of health and well-being measures in policy in the following ways. It can:

- provide evidence on the mechanisms and tools that the health sector can use to enhance well-being in all sectors; this role could

Box 22.
Case study: occupational health and well-being in the former Yugoslav Republic of Macedonia

The country's Institute of Occupational Medicine, a WHO collaborating centre, promotes WHO principles in the field of occupational health, including well-being, at the national and international levels. The Institute took part in preparing the country's national strategy and action plan for safety and health at work for 2011–2015, coordinated by the Ministry of Health. This joint action resulted in the establishment of a national public health network of occupational health services, intended to improve health and well-being among vulnerable groups of workers.

Since 2007 the Institute has implemented the new basic occupational health services approach, within the framework of preventive programmes to assess health status and work ability, to support agricultural workers and unemployed people. Some of the activities that evaluate interventions from the perspective of impact on workers' well-being include research on workplace stress and burnout (supported by the EU's Seventh Framework Programme), and on occupational risks of infectious disease among health workers.

In addition, the Institute participated in the development of the national strategy and action plan to adapt health care to climate change (2011–2015), a heat–health action plan and an action plan on the prevention of adverse population health effects due to cold weather. The Institute also initiated the establishment of the South-eastern European Network on Workers' Health, which also includes Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Montenegro, Romania, Serbia, and Turkey. The Network's purpose is to strengthen subregional cooperation in occupational health, contributing to the implementation of the WHO Global Plan of Action on Workers' Health *(98)*.

be expanded to support policy-makers in improving well-being within the health sector, in other sectors, across government and in partnership with nongovernmental actors;
- disseminate policy-relevant information prepared in collaboration with European institutions or Member States (Box 24);
- investigate how well-being indicators should be interpreted and used in connection with standard measures of mortality, morbidity and health system performance: well-being indicators are meant to complement, rather than replace, such measures.

A research agenda covering the statistical and methodological issues touched on in this chapter is warranted. It could also include ways to develop and test how best to communicate well-being measures that:

Box 23.
Health systems' contribution to well-being

Health systems, health, wealth and societal well-being: assessing the case for investing in health systems (99), a publication by the European Observatory on Health Systems and Policies, describes health systems' contributions to societal well-being in three main ways, based around a conceptual framework (see figure below).

- Health systems produce health, which is a major component of well-being.
- Health systems promote wealth by being a significant component of the economy, which is an indirect yet key contributor to well-being.
- Health systems directly affect societal well-being as people draw satisfaction from the existence of health services and their ability to access them.

The constellation formed by these three factors in enhancing societal well-being and the nature of the interrelationships between health systems, health and wealth necessarily differ between contexts and jurisdictions or countries. Well-being is something of a general principle in this work *(99)*, and health systems' contribution is not explicitly measured. Rather, it outlines that better health outcomes and healthier populations, via well-functioning health systems, can contribute to greater societal well-being.

Health is central to wealth and societal well-being (and health systems are a catalyst)
Health constitutes a major component of well-being.
- Health is valued in and of itself, and citizens in the European Region place a high value on good health.
- Health increases economic productivity and national income, which can promote societal well-being (healthier people are more productive).

Health has an impact on wealth and vice versa.

- Health may contribute to budgetary gains from health expenditure savings (better health reduces demands on health care now and in the future).
- Wealth affects health directly through material conditions, and indirectly though social participation and people's control over their lives.

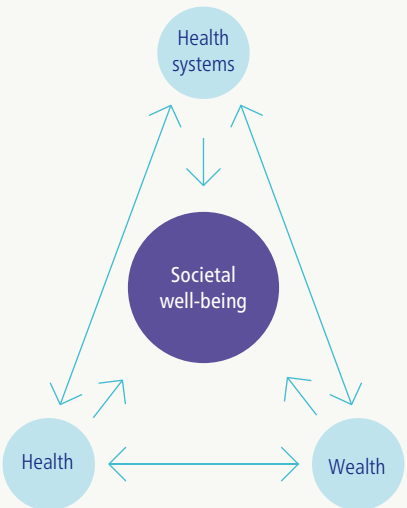
Health also reflects the progress of societies, and measures of social development must include it.

Investment in health systems brings real benefits
Societies can choose how and how much to invest in health systems, despite competing demands for resources. Appropriate investment in health systems is an effective way of improving health and wealth, thereby contributing to societal well-being.

- Health systems support healthier, more economically active societies.
- Health services save lives.
- Well-targeted public health interventions make a difference.
- Health systems help to create societal well-being, not least by promoting equity and responsiveness.

The Observatory has a dedicated programme on health system performance assessment, whose objectives are to "improve approaches to measurement and analysis, and to demonstrate how comparative metrics can help in the design and evaluation of initiatives intended to strengthen health systems" *(100)*. *Health systems, health, wealth and societal well-being (99)* documents progress in this area, with a second volume planned for 2013.

Health systems, health, wealth and societal well-being



- include health as an important domain;
- connect this work to health system performance assessment;
- provide a broader picture of what matters for a good life;
- consider how changes in one domain can influence changes in another or multiple domains.

Moving forward

Improving health and well-being is a recognized and essential component of Health 2020. A wide range of continuing activities measuring well-being at the international level in Europe, as well as many national initiatives (Box 25), provide a strong basis from which the WHO Regional Office for Europe can advance this work, particularly measuring health in the context of well-being.

Nevertheless, national efforts (within the health ministry, other ministries or national statistical agencies) or research studies to conceptualize, collect or use information on health and well-being are lacking in a large number of countries in the Region. Any effort to improve well-being at the regional level should consider options to support a broad range of countries, with different data and measurement starting points, connecting research centres with policy-makers in health and other sectors.

This chapter outlines an approach to further develop the measurement of progress towards health in the context of well-being – what we value. Addressing the challenges identified across the European Region and achieving solutions by 2020 will require the identification of collaborators, resources and processes that can support joined-up work: marking progress. Some areas for this agenda are discussed in the last chapter of this report, including mechanisms to refine concepts and agree on norms, validity and limitations; methodological issues; measurement approaches and challenges; and interpretation of health and well-being at the level of the European Region.

Box 24.
Usefulness of well-being measures to policy-makers

OECD analysis *(90,101)* indicates that policy-makers use well-being measures:

- to stimulate public discourse and help policy-makers to focus on policies that matter to people's lives – making more legitimate and socially acceptable policies that are more likely to succeed;
- to identify priorities for action needed to achieve the overall goal of improving people's lives; and
- to offer a broad set of criteria against which specific policy interventions can be evaluated.

Priorities emerge from defining what matters to well-being; identifying relative strengths and weaknesses in life conditions in a particular country, inequalities in well-being within countries and particularly vulnerable groups of people who may benefit from policy interventions; and assessing the interrelations between the different dimensions of well-being and their policy determinants, with a view to better managing trade-offs between them.

Box 25.
Case study: child well-being in Italy – a wealth of research studies

Italian indicators of child well-being are available, with those of 20 other countries, in a report by the United Nations Children's Fund (UNICEF) on a project on child well-being in rich countries (see table).

In addition, several national studies evaluate factors included in the broad definition of well-being, although none had previously focused on collecting specific indicators on child well-being. The Italian National Institute of Statistics (ISTAT) started a survey in 2008 to evaluate functioning, disability, health and well-being in students with disabilities in primary and lower secondary schools. Financed by the Ministry of Labour and Social Policy, in collaboration with the Ministry of Education, Universities and Research, its goal is to examine the resources and tools adopted by single school centres to facilitate the integration and inclusion of students with disabilities, and thus to improve their functioning and well-being. The survey provides indicators, based on the ICF framework *(97)*, on types of health problem and the scholastic environment: accessibility of buildings, presence of learning support teachers, presence of other specific professional figures and use of learning technologies.

Two rounds have been completed (2008–2009 and 2009–2010), and the first-round results are available in English *(103)*. For the second round, more than 89% of schools (over 23 000) completed the questionnaire. Analysis of the third round from 2012 is under way.

A new publication provides another overview of Italian child poverty and well-being *(104)*, and there are several ongoing research studies on child well-being in Italian universities and research centres, linking mental, physical and social functioning. The Foundation of the Carlo Besta Neurological Institute has also implemented pilot studies on disability, well-being and health-related quality of life in children with neurological disorders, such as Tourette's syndrome and dystonia.

Summary table.
Child well-being in rich countries

		Dimension 1	Dimension 2	Dimension 3	Dimension 4	Dimension 5	Dimension 6
Dimensions of child well-being	Average ranking position (for all 6 dimensions)	Material well-being	Health and safety	Educational well-being	Family and peer relationships	Behaviours and risks	Subjective well-being
Netherlands	4.2	10	2	6	3	3	1
Sweden	5.0	1	1	5	15	1	7
Denmark	7.2	4	4	8	9	6	12
Finland	7.5	3	3	4	17	7	11
Spain	8.0	12	6	15	8	5	2
Switzerland	8.3	5	9	14	4	12	6
Norway	8.7	2	8	11	10	13	8
Italy	10.0	14	5	20	1	10	10
Ireland	10.2	19	19	7	7	4	5
Belgium	10.7	7	16	1	5	19	16
Germany	11.2	13	11	10	13	11	9
Canada	11.8	6	13	2	18	17	15
Greece	11.8	15	18	16	11	8	3
Poland	12.3	21	15	3	14	2	19
Czech Republic	12.5	11	10	9	19	9	17
France	13.0	9	7	18	12	14	18
Portugal	13.7	16	14	21	2	15	14
Austria	13.8	8	20	19	16	16	4
Hungary	14.5	20	17	13	6	18	13
United States	18.0	17	21	12	20	20	–
United Kingdom	18.2	18	12	17	21	21	20

Note. OECD countries with insufficient data to be included in the overview: Australia, Iceland, Japan, Luxembourg, Mexico, New Zealand, the Republic of Korea, Slovakia and Turkey.
Source: Child poverty in perspective (102).