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# Human functioning: realizing the value of health

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functioning, health, well-being, quality of life, health system, resilience, indicators

An Editorial on the Frontiers in Science Lead Article

The human functioning revolution: implications for health systems and sciences

## Key points

- Human functioning encapsulates what matters to people about their health in relation to their own actual lived experience. Along with other constructs, such as symptoms, self-reported health, patient experience, and health-related quality of life, it is a key construct that aligns with the broad paradigm shift toward patient-centered, outcome-based healthcare systems that aim to better address people's health needs and reduce waste in health systems.
- A focus on improving population-level functioning throughout the life-course could support wider efforts toward strengthening health system and socioeconomic resilience, which is essential to prepare for and adapt to the challenges of demographic aging and future systemic shocks confronting health systems, while providing a positive return on investment to society.
- Operationalizing functioning requires a new generation of indicators, multi-stakeholder and multi-sectoral collaboration, and broader public awareness and support.

## Introduction

What matters most to people about their health, and how do we ensure health systems are best oriented toward delivering this goal? Bickenbach et al. address these fundamentally important questions in their *Frontiers in Science* article on the “human functioning revolution” (1).

Bickenbach et al. argue that the concept of human functioning presented by the World Health Organization (WHO) bridges health and well-being and thereby accounts for the value of health, both for individuals and for societies. This is an important concept: by linking health to well-being, functioning offers a conceptual basis to unlock investment toward achieving the United Nations' Sustainable Development Goal 3 (SDGs) on health and well-being – progress toward which has been set back by the COVID-19 pandemic (2).

It is perhaps intuitive that health matters most to people in relation to what it allows them to do in their daily lives. People care about their health when it impacts their quality of life (QoL), their ambitions, their plans, and their happiness. Besides the alleviation of symptoms and follow-up to chronic disease prevention and management (3), it is the very reason why we seek out healthcare in the first place. This is likely to be recognized and agreed upon by healthcare professionals, health system managers, and policymakers, too. One might imagine, therefore, that health systems focus on delivering what people care about most, namely their functioning, well-being, and QoL, all of which are key to their ability to thrive and to live a fulfilling life. However, in practice, this is not the case, and achieving it would require a radical paradigm shift – the “revolution” proposed by Bickenbach et al. – whereby functioning is integrated across health systems as the third indicator of health, complementing morbidity and mortality, and used to advance health sciences (1, 4).

## Refocusing health systems

Health systems are generally designed to manage diseases, not to make populations healthy or to optimize their well-being. They measure and reward activity primarily according to the volume of care delivered, and gauge success mainly according to morbidity and mortality.

The Organisation for Economic Co-operation and Development (OECD) has for years promoted a shift toward systems that are centered around what people need, not about what healthcare providers can do, through its work to benchmark people-centered health systems (5), and its Patient-Reported Indicator Surveys (PaRIS) initiative (6). Furthermore, PaRIS is framed as a co-development process with patients at the center of its development (7).

Health systems must do more to maximize their effectiveness and efficiency, deliver seamless care across services and providers, and deliver improvements that matter to patients and their changing care needs. This requires shifting the focus from inputs and activities happening within the health system to serving people’s needs and preferences. It implies systems that are outcome-based (i.e., focused more on the outcomes achieved by care), and where all services are integrated, and centered around meeting the needs of users (i.e., patients, or people more broadly). Functioning and QoL encapsulate what matters to people about their health in relation to their own actual lived experience, in all its dimensions. Such a shift is not only in line with what people need and the evolution of patient expectations, but it is also a response to unacceptably high levels of waste that still exist in health systems – that is, care and spending that do not maximize health outcomes and a positive experience for more people, and that is ineffective at best or, in some cases, even harmful.

## Functioning supports resilience

Ever since the 2008 financial crisis, the OECD has examined how complex systems can be made more resilient to shocks by

preparing, adapting, and recovering from them (8). The COVID-19 pandemic prompted a renewed, urgent focus on strengthening the resilience of our health systems against future shocks (9–11). In addition to the preparedness against future pandemics, efforts to strengthen health systems’ resilience must also encompass the long-term threat to health systems from demographic change and climate change.

Take the aging of our populations. This represents a pressing threat to population health and the sustainability of health systems globally. Aging increases the risk of many human diseases, in conjunction with reduced functional capacity. Across OECD countries, the share of the population aged 80 years and older is set to more than double to 9.8% by 2050, up from 4.6% today (12). In most G20 countries, the number of people over 65 years for each working-age person will at least double by 2060, while the fraction of the global population aged over 80 years will triple (13). The projected rise in the proportion of the population requiring complex care for multiple morbidities, compounded by a decline in employment rates and worsening intergenerational inequality, will put unprecedented pressure on health and social welfare systems (13). In addition to improving overall population health, extending the years lived in good health will be critical to help relieve this increasing pressure and thereby support the long-term resilience of these systems. A greater focus on optimizing people’s *functioning* throughout the life-course – including into later life – could help achieve this. Indeed, the COVID-19 pandemic clearly demonstrated both the dramatic socioeconomic impact of functioning impairment as well as the crucial importance of investing in population health – particularly for frail populations and other vulnerable groups – to make people more resilient to health risks and crises (9).

At the societal level, functioning contributes to the virtuous circle of the “economy of well-being” (14). Healthy children do better at school, contributing to creating human capital. Improved population health and functioning increase the probability that young people are in employment, education, or training. Healthy adults have better employment outcomes, are more likely to be employed, be productive at work, and achieve higher lifetime earnings (15). This means that investing in health systems that improve population-level functioning provides good returns on investment for society, in addition to facilitating the greater socioeconomic resilience we need to “bounce forward” and better deal with systemic shocks such as COVID-19 (16).

A focus on functioning also helps to address disparities in healthcare access and outcomes by helping to identify those individuals who are likely to benefit the most from health and care services. Further focusing resources on addressing limitations on people’s functional capacities, particularly on reducing the gaps between different societal groups, improves the chances of inclusion of more disadvantaged and vulnerable people. Therefore, actions that improve functioning could offer a means to unlock greater equity by ensuring that healthcare and social welfare systems are more responsive to people’s diverse actual lived experiences of health.

Finally, a focus on functioning aligns with a broader socioeconomic agenda relating to how societal success is

measured. The OECD has long advocated for complementing gross domestic product (GDP) measures with other indicators that focus on people and facilitate better understanding of societal well-being, its distribution, and its sustainability across social, economic, and environmental dimensions (17, 18). An emphasis on people-centered measures that consider how people assess their own lives, functioning, and well-being is important and complements measures that reflect objective conditions.

## Operationalizing human functioning

Bickenbach et al. explore how we should operationalize the functioning concept in practice within health systems and identify many challenges that will need to be addressed (1). This is an ambitious and daunting venture, spanning actions across health systems.

The challenge of how to measure functioning is critical to address, and this is an area where the OECD is particularly active. Patient-reported outcomes and experience data must be collected, analyzed, and shared to ensure health systems deliver what people want. Under the OECD's PaRIS initiative, countries work together on developing, standardizing, and implementing a new generation of indicators that measure the outcomes and experiences of healthcare that matter most to people. Implementing an international survey of this kind requires significant methodological preparations, including the development of a robust survey instrument, addressing requirements linked to sampling and data protection, monitoring of implementation, and the translation of results to support policy change processes (19). The expertise of patients is essential to ensure that the indicators reflect what matters most to them, and the PaRIS survey has been developed in close collaboration with a network of patient organizations.

Some of the very opportunities and strengths of the focus on functioning inherently create challenges. For example, the diversity and complexity of lived experiences of health can complicate comparable and practical measurement, and it is difficult to adequately capture the unique needs of individuals in policy responses. Moreover, to truly make a difference, the implementation of measurement and policy responses must happen across different sectors, such as the health and social sectors. This requires joining forces and clarifying outcomes, objectives, targets, and indicators across different government areas.

## Conclusion

The “*human functioning revolution*” that Bickenbach et al. argue for aligns with the need to make health systems and

sciences more directed toward improving the health of individuals and populations in ways that people value the most and which best benefit well-being.

This in turn supports ongoing efforts to improve the resilience of our societies in the face of the rising health implications of demographic aging, as well as future health shocks and crises.

Although the concept of functioning might be intuitive, it is perhaps not widely recognized beyond audiences with a specialized interest. Donald Rumsfeld famously referred to the existence of “known knowns” (things we know we know), “known unknowns” (things we know we do not know), and “unknown unknowns” (things we do not know we do not know) (20). The importance of human functioning to human and societal well-being could be said to be an “unknown known”: we can all intuitively recognize it, but it is not realized in practice. Broader public awareness and support would help mobilize action to operationalize it. Translating this shared intuitive understanding into a long-term, multisectoral, multistakeholder program toward global implementation across health systems should be our goal.

## Author contributions

The author confirms being the sole contributor of this work and has approved it for publication.

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## Conflict of interest

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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