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EDITORIAL



The health production model and the crucial role of health promotion

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The overarching goal of health systems is to improve the health of the population. Health is traditionally defined by the World Health Organization (WHO) as a state of complete physical, mental, and social well-being [1]. However, it can also be understood in a more functional sense, as seen in the concept of positive health, which focuses on aspects such as resilience, sense of purpose, meaningfulness, and self-management. Positive health is specifically defined as the ability to adapt and self-manage when faced with the social, physical, and emotional challenges of life [2]. Enhancing health should also be viewed from a longitudinal perspective, encompassing the prevention of premature mortality, the attainment of additional healthy life years, and ultimately, the achievement of healthy longevity [3].

This requires a genuine commitment to investing in health. Recent simulations by the Ageing Working Group (AWG) of the European Commission, which account for demographic changes, anticipated new technologies, and potential efficiency gains, indicate that in all future scenarios considered, healthcare expenditure will need to grow faster than the economy [4]. After all, investing in health is synonymous with investing in the economy, a notion reflected in the 'health for all' policy principle [5]. The importance of ensuring the sustainable financing of health systems was also emphasized in a recent declaration by European Ministers of Health, recognizing that such investments both protect society and drive economic growth [6].

1. The health production model

Wise investments in health require an understanding about how health can be produced. For that purpose, a health production model is proposed here, depicted in Figure 1 and outlined below.

Health, in the sense of both positive health and healthy longevity, can be produced at four levels:

- Keeping people healthy through health promotion and disease prevention [7].

- Early detection of health issues and indicated prevention to intervene before clinical symptoms manifest [8].
- Repairing health problems when they occur and/or preventing further complications [8].
- Supporting individuals with incurable conditions while optimizing their quality of life [9].

At all these levels, individuals should be empowered to take responsibility for their health (self-care), supported by their families, informal caregivers, and volunteers, alongside the professional assistance of the health and social workforce. Achieving this requires the empowerment of the population and enhanced health and digital health literacy [10]. This ensures that health decisions are informed by the expertise of health and social professionals, combined with individuals' values, knowledge, competence, and preferences [11]. Thereby the beneficial role of integrated community care projects is more and more documented. The OECD estimates that governance structures supporting care integration could reduce annual health expenditures by up to 4% as a proportion of total health expenditure [12]. A critical prerequisite for producing health is the availability of an integrated health record for every citizen, paired with a strong commitment among health and social professionals to share data effectively [13].

The model also highlights that people's living conditions play a significant role in determining their health. As such, caring for people's health should not focus solely on addressing health problems but should also prioritize tackling the root causes of poor health, including social and commercial determinants of health. Social determinants of health (SDoH) can be addressed downstream or upstream. Downstream interventions focus on addressing individual health-related social needs and referring them to appropriate social support [14]. This approach requires goal-oriented care for individual patients, integrated into care pathways. Upstream interventions address SDoH at a structural level, such as through investments in social housing [14]. Commercial determinants refer to the systems, practices, and pathways through which commercial actors influence

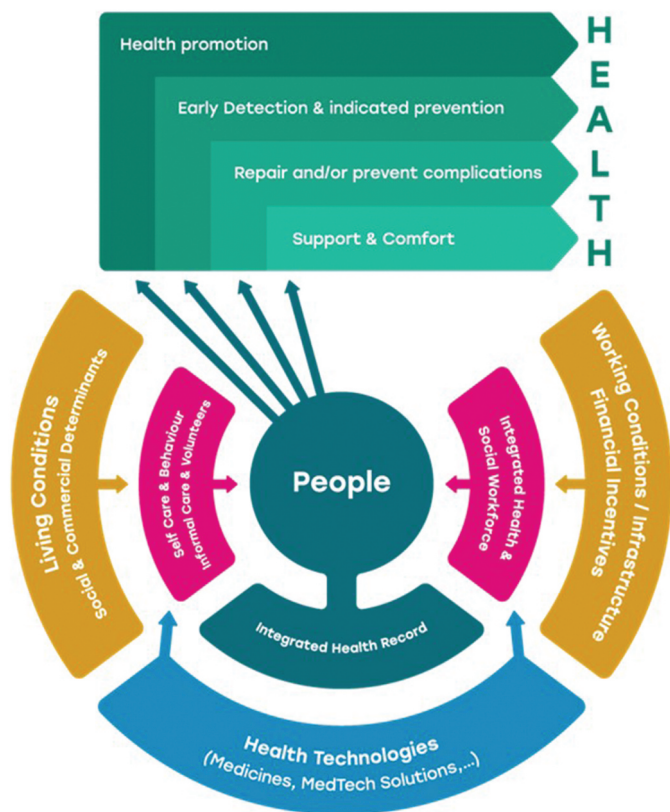


Figure 1. The health production model.

health by shaping preferences and choices for low-standard products [15]. To counteract this, public health actors must strengthen their discursive power, challenge misleading narratives with evidence, and build their influence through institutionalized health impact assessments, regulation, and control measures [15].

Additionally, the working conditions of the health and social workforce significantly impact their performance and, consequently, the production of health [16]. This includes the infrastructure available to them and the financial incentives provided to deliver high-quality, integrated healthcare. Furthermore, all actors involved (patients, health and social workforce, caregivers, volunteers) can utilize health technologies, such as medicines and medical technologies (including diagnostics), to support health production across all four levels.

Health production cannot exist without measuring its impact. Hence, the (positive or negative) change of the health status of individuals/patients should be systematically and objectively measured. The currently available and future use of medical and other devices will allow continuous monitoring of body vital signs (heart rate, respiration – breathing rate –, body temperature, blood pressure) and biomarkers such as glucose. Collected data and information can be used to keep track of the user's health trends, guiding them to lead a (more) healthy lifestyle [17].

Health production should also go hand in hand with value based reimbursement whereby better value is also better rewarded [18].

2. Health promotion – the best buy

All of the above aspects of health production deserve policy attention. However, for the purpose of this paper, the need for health promotion is emphasized and developed in depth.

Keeping people healthy is indeed critical to addressing many of the current challenges faced by healthcare systems. A fundamental shift is required – from a focus on acute care to an emphasis on prevention. The Institute of Medicine (IOM) has identified three types of prevention [19]:

- Universal prevention targets an entire population (national, local community, school, neighborhood, etc.) with messages and programs aimed at promoting overall health.
- Selective prevention focuses on specific segments of the population that are considered at higher risk for certain health conditions. For example, a physical exercise program designed for individuals with sedentary jobs.
- Indicated prevention is aimed at preventing the onset of disease in individuals who show early warning signs. An example would be promoting healthy nutrition for people with elevated LDL cholesterol levels.

This classification is arguably more appropriate than the commonly used and on a biomedical model based distinction between primary, secondary, and tertiary prevention [20], as it more effectively describes the target population for each type of prevention.

Health promotion encompasses the first two types of prevention: universal prevention and selective prevention. The WHO has provided extensive evidence that health promotion is 'the best buy' in improving health [21]. Moreover, it creates opportunities for improving equity, on condition that hard to reach populations are addressed via inclusive projects and meaningful citizen participation at all levels, with a large focus on empowerment-oriented promotion, rather than only on risk reduction [22]. It is important to note that health promotion also includes mental health promotion. Additionally, even individuals who already suffer from one or more diseases can benefit from health promotion to prevent the onset of other conditions and to strengthen their overall health.

Rather than merely arguing for investing more money in health promotion, three actionable strategies are proposed here. First, various organizations and settings, such as health insurers, schools, leisure clubs, and municipalities, should be encouraged to actively participate in health promotion. The health-in-all-policies concept, aims to achieve health objectives across various life settings, including education, work, leisure, care and welfare, family, and local policy levels. It has been argued that digital and hybrid (partly digital and partly in-person) interventions can contribute to better and more inclusive health promotion, by overcoming geographical and physical barriers. However, evidence also shows a 'digital health divide,' whereby people with vulnerable socioeconomic status may not benefit equally due to issues like digital literacy and access to technology [23].

Second, within the healthcare system itself, health professionals – such as general practitioners, physiotherapists,

dieticians, psychologists, and pharmacists – should actively contribute to health promotion. A notable example of a potentially cost-effective measure is exercise by referral [24], where a general practitioner prescribes an exercise program to inactive individuals. Additionally, other local health professionals can play a valuable role in directing individuals toward various health promotion initiatives, ensuring broader participation and impact. Health promotion should, more broadly, become an integral part of the regular care activities provided by local health professionals. To encourage them to actively take on this role, additional incentives are required, such as an additional fee per subscribed patient in their practice, with the engagement to guide their patients to health promotion activities.

Finally, health professionals with specialized expertise in health promotion and behavioral change must be more actively involved. These professionals are trained in understanding human behavior, designing health promotion programs, and fostering healthy behaviors. At the local level, these health promoters can collaborate directly with policymakers in communities, schools, employers, leisure clubs, sickness funds, and the general population. They can implement strategies focused on education, awareness, coaching, taking concrete actions, and creating healthy environments for all. Furthermore, they can stimulate and support citizen-led initiatives, such as social activities that not only enhance overall health but also promote mental health by fostering social connectedness.

With these concrete proposals, the aim is to put health promotion on the agenda of health policy makers. Investing in health promotion, additional health promoters and incentives for current professionals will lead to positive health and well-being, better results in education and a better performing economy, hence contributing to health *for* all policies.

Declaration of Interest

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