

# Value based Healthcare as a solution for the future of publicly funded healthcare systems

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Resilience is an intimate characteristic of every healthcare system, organization intrinsically complex, since many components should be in place in order to ensure its proper functioning [1]. Healthcare systems must be able to adapt effectively to changing environments, and tackle significant challenges with limited resources. Adequate funding, innovative drugs and appropriate technologies should be guaranteed to citizens increasingly demanding. Moreover, policy-makers should appropriately govern health systems and inform their decisions accordingly to reliable and timely health information [2].

In the last decades the transition from the concept of paternalistic medicine to the modern paradigm of healthcare has been declined in clinical practice through the evidence based medicine (EBM) and in public health through the evidence-based prevention (EBP) and the evidence-based healthcare (EBH), respectively. Moreover, many changes are still taking place including demographics and burdens of disease, advances in biomedical research, health technologies and personalised medicine, and the availability of large, population-based data sets [3]. Whether they want it or not, policy-makers will have to shape and tailor the upcoming health systems according to these givens.

To address this complexity Michael Porter, in 2010, introduced the concept of value in healthcare describing it as “*health outcome achieved per dollar spent*” and expressing a ratio that brings to the foreground (i.e. the numerator) the primary objective of any healthcare organization, the health outcomes achieved, inextricably linked to the resources spent (i.e. the denominator). In

this way Porter refers to a model oriented to a continuous evaluation of performance, with particular regard to the structure and the organizations, defining transparently the process of continuous improvement of the providers who are committed to stand out within the health service [4].

During the same period, adapting the concept of value to the European context, Sir Muir Gray introduced the definition of triple value healthcare as a solution to face the challenges of sustainability and innovation without waiving universal coverage guarantee by the National Health Service [5]. In an editorial published on the Lancet, Gray proposed a paradigm shift connecting value-based medicine to the population medicine approach: “*even if an effective intervention is delivered at high quality without waste, it may still represent a low value activity if greater value could be achieved to treat another group of patients. [...] Clinicians, while still focused on the needs of the individual in front of them, [...], also are called upon to make decisions on the allocation of resources and there is a moral responsibility for doctors and healthcare professionals to maximise the value for all the people in the population they serve*” [6].

According to this perspective, publicly-funded health systems could foster equity whilst working efficiently maximizing the allocation of resources and applying techniques to describe and give the detailed costs of every activity or programme that is to be carried out with a given budget [7]. In the National Health Service programme budgeting proves financial information across disease areas, also known as programme categories and provides a framework for estimating the expenditure across these programmes

categories covering the whole care pathway [8].

Unfortunately, a lot in healthcare evoke to the characteristics of the Brownian motion forcing patients to move looking for solutions between different providers (e.g. hospitals, diagnostic centres, primary care centres, etc.) totally unconnected in terms of flow and, above all, devoid of common aim and common objectives [9]. The introduction of an innovative technology in a chaotic context does not necessarily creates value and, before applying concretely the concepts of value based medicine, a framework defining a range of population based systems of care focused on specific diseases or groups of people is needed. Groups could be defined either by clinical condition, such as cancer, mental health or respiratory disease, or by a characteristic, such as having multiple morbidity and frailty. These groupings can be called programmes (Figure 1).

Therefore, how to protect the universalistic model in the healthcare of the next future? How to drive changes in public health systems in transitions in order to ensure equity while operating efficiently? Firstly, governance for health is the driver for change in healthcare and the core energy that makes change happen. The new responsibility that is required by managers and formal leaders in healthcare is to lead a widespread leadership. Tackling disparities and achieving true health equity will only come through leadership – collective and individual – that embraces the powerful integration of science, practice, and policy to create lasting change [10].

Secondly, designing appropriate policies, establishing monitoring platforms, and evaluating achievements is critical for every healthcare system. Policies should be informed by reliable and timely health data, monitoring their implementation should be an integral part of each health plan since it allows addressing corrective actions,

and evaluating the achievements should inform the design of forthcoming strategies. In fact, while health economics research has generated evidence of differences between costs and health outcomes within and across countries, our understanding of major drivers of these differences is limited [11]. Data on costs and health outcomes are nowadays available from an increasing range of sources, underlining the need for better data integration, big data analytics and synthesis of evidence [12]. The challenge for everyone is to strengthen data generation for health economic evaluation, the methodological quality of the evaluations and their use in decision-making.

In conclusion, for publicly funded healthcare systems, performance measurement, value based decision making and health policy making data driven are extremely challenging exercises and they should be conducted across all the dimensions of healthcare, including the equity related aspects at the local, regional and national levels.

**Conflict of Interest**

The author declares that there is no conflict of interest.

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**FIGURE 1. Example of a program and relatives population-based systems of care.**

People with problems relating to the heart, and the circulation of blood in the central and peripheral vessels	Chest pain
	Coronary disease
	Heart Failure
	Rhythm disorders (including atrial fibrillation)
	Stroke
	Breathlessness
	Tiredness
	Leg Ulcer

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