# Incorporating value in investment decisions in health across Europe

Reflection paper written by Prof. Rifat Atun on behalf of the working group on "Creating Value in European Healthcare" (Prof. Rifat Atun, Dr. Christina Åkerman, Prof. Lieven Annemans & Mr. Hans Martens)

Health systems in Europe are experiencing adverse consequences of an ageing population. This has brought an epidemiological transition with growing burden of chronic illness and physical disability, with declining levels of cognitive wellbeing. These changes have led to a rapid rise in demand for health services and long-term care. As with other advanced economies, Europe is facing increasing health expenditures due to ageing and 'excess cost growth'.¹ This rise in demand is coupled with higher expectations of citizens for better health care, who expect greater involvement in decision-making, improved access to innovative health products and more responsive person-centred health services. But, health systems in Europe are not effectively responding to these challenges.

## European response to emerging challenges

In Europe, investments in health systems have largely focused on funding inputs: reinforcing out-dated patterns of episodic and fragmented care designed for managing acute problems and the challenges of the past. As with other advanced economies, there are few innovations in delivery of healthcare services to improve their efficiency, effectiveness, equity and responsiveness to achieve better and more consistent outcomes in health, financial protection and user experience. To date, health systems policies, regulations and education of citizens, health professionals, payers and policy makers have not emphasised outcomes. Paradoxically, this stagnation in 'innovation in delivery' is happening at a time where a renaissance in science has enabled 'delivery of innovations' in medical devices, medicines and health technologies enabling more precise diagnosis, monitoring and treatment.<sup>2</sup>

As a result, in most of the last four decades, the rise in real health expenditures in European countries has outstripped real growth in national incomes³, but without commensurate improvements in health outcomes with much inefficiency and waste emerging in European health systems⁴. improvements in efficiency levels to that achieved by best performing EU countries could help increase average healthy life expectancy in the EU by 6.1 years at birth and 2.9 at age 65, and realise average amenable mortality rates.⁵

Without visible improvements in efficiency, effectiveness, equity and responsiveness, the risks to sustainability of health systems in Europe are real. There is a critical need for transformative innovations in health systems with new financing and investment models to achieve value, ensure sustainability and protect universal health coverage enjoyed by European citizens.

This paper briefly explores the concept of value and value based heal-th care in relation to investment decisions in health systems in Europe. It discusses how value based approaches could guide economically sound investments to improve health system performance by reducing waste and achieving better outcomes.

### **Understanding Value**

Value has been variously defined and conceptualized through different perspectives. At its core, from a patient, health service provider or a payer perspective value is achieved by achieving better clinical outcomes for a given or reduced healthcare cost. Here, the cost typically relate to direct costs (both medical costs, and non-medical costs – such as those related to travel) of providing health care (or the payment by a payer). Clinical outcomes typically relate to reduced mortality, morbidity and disability, as well as other outcomes that matter to patients, such as better quality of life.<sup>6</sup>

A broader view of value beyond that of health services takes a societal perspective, where all benefits and costs, irrespective of who has incurred them are taken into account and quantified. From this perspective, costs include indirect costs incurred by patients due to loss of production (due to incapacity for work, occupational disability, or death), by their carers or families (e.g. those for looking after a person when ill or providing ongoing care), and hence the society as a whole. Improvements in health outcomes benefit patients and their carers by enabling them to be economically active and help to reduce losses in production for the employers and the economy. In Europe and globally, carers' opportunity costs could be as large as direct costs of healthcare. The Further value is created for the health professionals directly involved in patient care, who are able to discharge their professional duties more efficiently and effectively.

A yet broader perspective takes a larger macroeconomic view by estimating the value of statistical life – the value of lost production or earnings plus the value people (or the society) place on living longer and healthier lives and reduced mortality risk. The 'Full Income' approach, places an economic value on additional life-years gained beyond the gains in national income from productivity gains.<sup>9</sup> Further economic gains are achieved as people who now expect to live longer invest in their children and pensions to further drive economic growth by achieve an economic dividend.<sup>10</sup>

However, in Europe approaches currently used in health services have tended to provide a narrow perspective on incremental costs and outcomes and not fully incorporate all benefits nor indirect costs, which can be very substantial and hence can influence the value calculus.

Complementing societal and macroeconomic perspectives, there are other measures that could be incorporated into value considerations to guide investments in health. These include, for example, responsiveness to citizens' needs, equity, improved wellbeing and security – especially in Europe where solidarity and Universal Health Care (UHC) are critical for any value considerations, and are correctly considered as a human right. <sup>11</sup>

The current approaches to estimating value of investments in health take a very narrow view and also suffer from lack of consistent measures in several important outcomes that need to be considered when taking a broader societal or macroeconomic perspective to estimate costs and benefits over a suitable time horizon. There is, hence, an imperative for new approaches and advances in the instruments currently used to recognize and reward value creation in European health systems.

<sup>1)</sup> Clements B, Coady D, Gupta S, eds, The Economics of Public Health Care Reform in Advanced and Emerging Economies. International Monetary Fund. 2012; Washington D.C., USA.

<sup>2)</sup> Atun R. It is time to transform healthcare delivery. Financial Times. November 29, 2016.

<sup>3)</sup> Medeiros J, Schwierz C. Estimating the drivers and projecting long-term public health expenditure in the European Union: Baumol's 'cost disease' revisited. European Economy, Economic Papers No. 507. European Commission 2013 4) OECD (2017), Tackling Wasteful Spending on Health, OECD Publishing, Paris.

<sup>5)</sup> Medeiros J, Schwierz C. Efficiency estimates of health care systems in the EU. Economic Papers 549. Directorate-General for Economic and Financial Affairs. European Commission: Brussels; June 2015.

<sup>6)</sup> Porter ME. A strategy for health care reform – toward a value-based system. NEJM; 361:109-112

<sup>7)</sup> Langer A, Meleis A, Knaul FM, Atun R, Aran M, Arreola-Ornelas H, et al. Women and Health: the key for sustainable development. Lancet 2015; 386: 1165-1210 .

<sup>8)</sup> Martens H. Economic Value as a guide to invest in Health and Care Concept Framework. MedTech Europe. Brussels 201x

<sup>9)</sup> Jamison D, Summers LH, Alleyne G, et al. Global health 2035: a world converging within a generation. Lancet 2013; 382: 1898-1955.

<sup>10)</sup> Bloom D, Canning D. The health and wealth of nations. Science 2000; 287: 12-7-1209.

<sup>11)</sup> Opinion on defining "value-based healthcare. Expert panel on effective ways of investing in health. Draft 13.05.2019. European Commission. DG Health and Food Safety. Brussels <a href="https://ec.europa.eu/health/expert">https://ec.europa.eu/health/expert</a> panel/sites/expertpanel/files/024 valuebasedhealthcare en.pdf

#### Values drive what is valued

How decision-makers in different countries perceive value varies and is shaped by societal 'values'. For example, societies with a 'utilitarian values' may prioritise investments that predominantly enhance efficiency and effectiveness; those with 'liberal' values' may prioritise responsiveness and individual choice, while those with 'communitarian values' may prioritise investments that emphasise solidarity and equity. In practice a mix of such values is mostly observed and as such these values influence value considerations, albeit informally. Hence, when setting priorities, allocating resources and investing in health there is a need for consistent approaches that incorporate multiple criteria into value considerations. In Europe, this means core measures of cost effectiveness and patient-centred outcomes need to be bolstered by broader economic measures and societal principles (such as solidarity and UHC) to ensure all stakeholder views are taken into account in an inclusive and balanced manner.

#### Transitioning to value based decision-making models

Transitioning to value based decision-making to ensure sustainable health systems requires better and consistent measurement of costs and outcomes across the care continuum, application of broader societal or macroeconomic perspectives in value measurements, and consistent application of value principles in priority setting, resource allocation and procurement decisions. Yet, in European health systems funding decisions perpetuate input-driven models – where more inputs are not producing commensurate improvements in outcomes and creating greater value. Models for procurement of innovations are still designed around volume and price – suitable for commodities but largely irrelevant for solution-based innovations needed for creating value. Moreover models for paying health professionals and organizations are insufficiently focused on achieving value and better outcomes.

Clearly there is a misalignment with the value focus that Europe needs and the policy environment that continues to reinforce historic input-based budgeting, investment approaches and payment models, which are no longer fit for purpose.

## Embedding value in policy and investment decisions

Strategic changes are needed in the prevailing logic, policy environment and institutional capabilities to transition to value focus in policy and investment decisions.

The prevailing logic that more inputs (in redundant health system models) will lead to more outcomes needs to be replaced by one where the focus is on creating greater value in health systems by reducing waste and inefficiencies and improve outcomes. The new logic should emphasise inclusive multi-stakeholder education and engagement: bringing together policy makers, funders, industry, health professionals, citizens, patients, carers and other beneficiaries to stimulate technology-enabled innovations to maintain good health, prevent disease and transform care delivery models. These models should address the problems jointly identified by key stakeholders and improve efficiency, effectiveness, equity and responsiveness of health systems in order to generate greater value for the patients, society and the economy as a whole.

This shift in logic from inputs to value creation must be accompanied by changes in the policy environment in order to create an ecosystem that fosters inclusive innovation, risk sharing between payers and providers of services and solutions, and learning. Policies should recognise the broader societal and economic value innovations and investments generate, beyond the narrow considerations that currently predominate.

Policies in relation to decisions for procurement of innovations should establish a framework for procuring solutions that generate value with judicious risk sharing and reward mechanisms for stretch targets in improved outcomes and efficiency.

# Building system capabilities for value based health care

A new policy environment has to be underpinned by system-wide improvements in institutional capabilities to translate policies to action. In particular, Europe-wide institutional capabilities are needed for creating interoperable digital data systems for defining, measuring and analysing costs and outcomes with consistency and comparability. Digital data systems should have the right configuration and specifications to harness the potential of 'big-data' and enable development of tools for risk-stratification and integrated care pathways for providing high-quality and consistent personalised care. Interoperable digital data systems are critical for developing value based health care solutions and likefor-like comparisons. They also create an enabling environment for the application of machine learning and Artificial Intelligence in the value creation process in health systems<sup>13</sup> and for enhancing health promotion, disease prevention and health protection<sup>14</sup>.

As with information and digital data systems, institutional capabilities need to be augmented in procurement and care provision to develop value-based purchasing and payment models that enable risk sharing and suitably reward achievement of the value created.

A transition from paying for standardised inputs to value based solutions will necessarily lead to development of innovations that are highly context specific and evolve as the need and capabilities change. There is an imperative, therefore, to develop institutional capabilities for capturing and sharing lessons for cross-learning and continued innovation.

In Europe, transition to new investment models that foster creation of value is well overdue. Existing investment models that have reinforced health systems that are no longer fit-for-purpose pose a major risk to sustainability and universal health coverage enjoyed by the citizens. Value based approaches offer much promise to transform health systems by harnessing delivery in innovations with innovations in delivery to meet current and future challenges in a sustainable way. This is an opportunity Europe must grasp and lead the way in greater value creation in health systems.

# About the working group "Creating Value in European Healthcare":

The working group is composed of Rifat Atun (Professor of global health systems at Harvard University), Dr. Christina Åkerman (former President of the International Consortium for Health Outcomes Measurement, ICHOM), Lieven Annemans (Professor of Health Economics at Ghent University and former President of the International Society for Pharmacoeconomics and Outcomes Research, ISPOR) & Mr. Hans Martens (Chair of the Coalition for Health, Ethics and Society, CHES, and former CEO of the European Policy Centre, EPC).

## Acknowledgement:

This reflection paper was commissioned by MedTech Europe and reflects the working group members' own views. The reflection paper aims at contributing to consensus building on defining "value" for European health systems, fostering value-driven thinking to guide healthcare investment decisions across Europe.

The working group welcomes your considerations and participation to enhance dialog on the paradigm shift towards value creation in European health systems. Please contact the authors themselves or CreatingValue@medtecheurope.org

<sup>12)</sup> Seidman G, Atun R. Aligning values and outcomes in priority-setting for health. J Glob Health. 2016 Dec;6(2):020308

<sup>13)</sup> Panch T, Szolovits P, Atun R. Artificial intelligence, machine learning and health systems. J Glob Health. 2018 Dec:8(2):020303.

<sup>14)</sup> Panch T, Pearson-Stuttard J, Greaves F, Atun R. Artificial intelligence: opportunities and risks for public health. Lancet Digital Health 2019; 1; e13 S2589-7500(19)30002-0