



EDITORIAL COMMENT

Rediscovering quality improvement and value creation in healthcare using a value-based healthcare approach



Redescobrir a melhoria da qualidade e a criação de valor em saúde partindo da abordagem *value-based healthcare*

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«In any field, improving performance and accountability depends on having a shared goal that unites the interests and activities of all stakeholders».¹

The request to change from volume-driven to value-driven or value-based healthcare (VBHC) originated in the 1990s.^{2,3} This change implies a healthcare system that increasingly focuses on quality of care rather than volume of care (quantity).

Across the world, different healthcare systems have gradually embraced a VBHC agenda. They have been doing so for different reasons, using diverse schools of thought, and variations on the tools and tactics to define and achieve their strategic goals.⁴

The definition of value in health care can be simply stated as the outcomes that matter to patients divided by the cost to achieve these outcomes. This definition was introduced by Michael Porter and Elizabeth Teisberg in their seminal book *Redefining Health Care* – a work that launched the entire field of VBHC. In this value ratio, the numerator (outcomes) designates condition-specific results that matter most to patients, such as functional recovery and quality of life, while the denominator (cost) applies to the total spending for the full cycle of care.² Accordingly, if outcomes that mat-

ter to patients are not improved, the resulting value is low. This definition applies to the entire care pathways, from primary to secondary and tertiary care, including post-hospital care for patients with a single or multiple condition.^{2,5}

Value-based approaches to organizing care have been widely presented as critical to improving the health outcomes of patients worldwide while at the same time controlling healthcare costs. This approach emphasizes that the overarching principle in redesigning healthcare delivery systems must be value for patients.⁶ In this view, value should be defined as the outcomes that matter to patients and the costs to achieve those outcomes.

The goal of VBHC transformation is to enable the health care system to create more value for patients. Since value is only created when a person's health outcomes improve, descriptions of VBHC that focus on cost reduction are incomplete.⁷

Moreover, by focusing on the outcomes that matter most to patients, value aligns care with how patients experience their health. At the same time, VBHC connects clinicians to their purpose as healers, supports their professionalism, and can be a powerful mechanism to decrease clinician burnout.

Critics who characterize VBHC as underpinning a model of "industrial healthcare" distort the meaning of the term value, misinterpreting it as focused on cost. Instead, VBHC focused on better health outcomes aligns clinicians with

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their patients – this alignment is the essence of healthcare professionals and patient relation – empathy.⁷

Today it is widely accepted that philosophical value and cost containment are both important, however, improving health outcomes is essential to value creation.⁸

The current edition of this journal presents a very interesting paper in which the authors have developed methods to support healthcare managers in effective added value of improvement measures, following a VBHC framework. Focused on a cardiac catheterization laboratory, and based on a sociotechnical approach, the authors state an ambitious aim to produce clear efficiency, reduce duplication of tasks, cut costs, and improve patient care, while making decision-making more inclusive and reliable. As a global aim, they seek to inform and support the Center for Integrated Responsibility (Centro de Responsabilidade Integrada Cérebro-Cardiovascular do Alentejo - CRIA) management in the analysis and evaluation of improvement measures to enhance operational efficiency while studying the possibility of operating two cath rooms without doubling CRIA operational team costs.

Given the complexity of health care and the “people nature” of healthcare work and delivery, a sociotechnical approach is recommended to address different issues and integrate diverse perspectives through a participatory and inclusive process. At the same time, it is widely acknowledged that adopting a sociotechnical approach to system development in general, and specifically in social contexts such as the healthcare system, leads to systems that are more acceptable to end users and deliver better value to stakeholders.⁹

The three step methodological approach starts with an As-is process, which is a process management strategy that identifies and evaluates a business’s current process. This kind of analysis can be focused on an entire business organization or on one or more specific processes within a department or team. In this case, it was used to define and assess the current state of the cath lab clinical pathways and to clarify exactly how CRIA workflow processes work.

After exploring different improvements, the defined implementation measures were simulated to reproduce their operational impact on CRIA workflow with only one Cath room in operation. In the next step, the simulation model was then updated to depict a new layout of CRIA with two operational Cath rooms working at the same time.

The results obtained in this study showed the importance of involving different members of the healthcare team in the process, in order to promote discussion and exchange of perspectives among managers and frontline professionals about priorities for improving quality of care and patient experience. Although the results achieved were very interesting, there are some aspects that need to be added in future studies to make similar approaches more effective, comprehensive and rigorous.

One example is the participation of patients as experts in their own health. Their experiences should be included in any attempt to improve and add value to care. As health care providers are faced with significant challenges, there has been an increased emphasis on co-production of health.¹⁰ Batalden proposes that health is not a product generated by professionals in the healthcare system,

but a service co-produced with users, i.e., patients.¹¹ Co-production of health is defined as “the interdependent work of users and professionals who are creating, designing, producing, delivering, assessing, and evaluating the relationships and actions that contribute to the health of individuals and populations”. It carries with it a new focus on the logic of providing a service. There are many applications of the original idea of co-production.^{12,13} Elwyn et al. connect co-production to the voice of the patient, to practice improvement and organizational design of a learning health system.¹³ A learning healthcare system is anchored in patient needs and perspectives and promotes the inclusion of patients, families and other caregivers as vital members of a care team that is continuously learning.

Another way of involving patients in initiatives to improve care is asking them to provide their views on their health and healthcare experiences. This can be achieved by using questionnaires or tools called patient-reported outcome measures (PROMs) and patient-reported experience measures (PREMs).¹⁴

Patient-reported outcome measures and PREMs are an effective way of gathering patient feedback and can facilitate health effectiveness, patient-centered care and cost-effectiveness analysis in order to improve decision-making and enhance quality of care.¹⁴

Moving to a system of VBHC requires healthcare professionals and healthcare professionals in training to be taught to think differently about their role within the care team, to consider what in fact an effective care solution is, and the importance of measuring the health outcomes that matter most to patients. That learning should begin during the undergraduate training and continue through post-graduate training.

Moreover, the development and discussion of studies like Rocha et al.,¹⁵ published in the current issue of this Journal, highlight VBHC as one of the most important topics in health care transformation today. Furthermore, these studies can yield insights and evidence to policymakers and healthcare providers as they strive for a more patient-focused and value-based care culture.

Conflicts of interest

The author has no conflicts of interest to declare.

References

1. Porter M. What is value in health care? *N Engl J Med.* 2010;363:2477–81.
2. Porter M, Teisberg E. *Redefining health care: creating value-based competition on results.* Harvard Business School Press; 2006.
3. Ohldin A, Mims A. The search for value in health care: a review of the National Committee for quality assurance efforts. *J Natl Med Assoc.* 2002;94:344–50.
4. van Staaldin, Bekerom PV, Groeneveld S, et al. The implementation of value-based healthcare: a scoping review. *BMC Health Serv Res.* 2022;22:270.
5. McAlearney AS, Walker DM, Hefner JL. Moving organizational culture from volume to value: a qualitative analysis of private sector accountable care organization development. *Health Serv Res.* 2018;53:4767–88.

6. Burnhope E, Waring M, Guilder A, et al. A systematic approach towards implementing value-based health care in heart failure: understandings from retrospective analysis methods in South London. *Health Serv Manag Res.* 2020;35:37–47.
7. EIT Health. Implementing value-based health care in Europe: handbook for pioneers (Director: Gregory Katz); 2020.
8. Teisberg E, Wallace S, O'Hara S. Defining and implementing value-based health care: a strategic framework. *Acad Med.* 2020;95:682–5.
9. Baxter G, Sommerville I. Socio-technical system: from design methods to system engineering. *Interact Comput.* 2011;23:4–17.
10. Gremyr A, Gare BA, Thor J, et al. The role of co-production in learning health systems. *Int J Qual Health Care.* 2021;33(S2):26–32.
11. Batalden P. Getting more health from healthcare: quality improvement must acknowledge patient coproduction—an essay by Paul Batalden. *BMJ.* 2018;362:46–8. Epub ahead of print, 6 September 2018.
12. Osborne SP, Radnor Z, Strokosch K. Co-production and the co-creation of value in public services: a suitable case for treatment? *Public Adm Rev.* 2016;18:639–53.
13. Elwyn G, Nelson E, Hager A, et al. Coproduction: when users define quality. *BMJ Qual Saf.* 2019.
14. Withers K, Palmer R, Lewis S, et al. First steps in PROMs and PREMs collection in Wales as part of the prudent and value-based healthcare agenda. *Qual Life Res.* 2021;30:3157–70.
15. Rocha PL, Patrício LM, Oliveira MD, et al. Efficiency in the Cath Lab: pursuing value-based improvements following a sociotechnical approach. *Rev Port Cardio.* 2022;41.