



Delft University of Technology

Document Version

Final published version

Licence

CC BY

Citation (APA)

Vandekerckhove, P., Harris, B. H. L., Koizia, L. J., & Howard, S. (2025). Involving Health, Technology, and Financial Stakeholders in Co-Designing Digital Pathways for Value-Based Care. *JMIR Medical Informatics*, 13, Article e84885. <https://doi.org/10.2196/84885>

Important note

To cite this publication, please use the final published version (if applicable).
Please check the document version above.

Copyright

In case the licence states "Dutch Copyright Act (Article 25fa)", this publication was made available Green Open Access via the TU Delft Institutional Repository pursuant to Dutch Copyright Act (Article 25fa, the Taverne amendment). This provision does not affect copyright ownership.

Unless copyright is transferred by contract or statute, it remains with the copyright holder.

Sharing and reuse

Other than for strictly personal use, it is not permitted to download, forward or distribute the text or part of it, without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license such as Creative Commons.

Takedown policy

Please contact us and provide details if you believe this document breaches copyrights.
We will remove access to the work immediately and investigate your claim.

This work is downloaded from Delft University of Technology.

Letter to the Editor

Involving Health, Technology, and Financial Stakeholders in Co-Designing Digital Pathways for Value-Based Care

Pieter Vandekerckhove^{1,2}, PhD; Benjamin H L Harris^{3,4,5,6,7}, MD, MBA, PhD; Louis J Koizia⁵, MBBS, MD; Steven Howard⁸, MBA, PhD

¹Delft Centre for Entrepreneurship, Delft University of Technology, Delft, The Netherlands

²Erasmus School of Health Policy & Management, Erasmus University Rotterdam, Rotterdam, The Netherlands

³Department of Oncology, University of Oxford, Oxford, United Kingdom

⁴St. Catherine's College, University of Oxford, Oxford, United Kingdom

⁵Department of Bioengineering, Cutrall Perioperative and Ageing Group, Imperial College London, London, United Kingdom

⁶Division of Medicine, Institute for Liver and Digestive Health, University College London, London, United Kingdom

⁷Department of Psychosocial Rehabilitation, Faculty of Health Sciences, Medical University of Lodz, Lodz, Poland

⁸Department of Health Services Administration, School of Health Professions, University of Alabama at Birmingham, Birmingham, AL, United States

Corresponding Author:

Pieter Vandekerckhove, PhD

Delft Centre for Entrepreneurship

Delft University of Technology

Jaffalaan 5

Delft 2628 BX

The Netherlands

Phone: 31 15278980

Email: p.b.m.vandekerckhove@tudelft.nl

Related Articles:

Comment on: <https://medinform.jmir.org/2025/1/e57385>

Comment in: <https://medinform.jmir.org/2025/1/e86837>

JMIR Med Inform 2025;13:e84885; doi: [10.2196/84885](https://doi.org/10.2196/84885)

Keywords: digital health; value-based health care; VBHC; patient-reported outcome measures; PROM; digital transformation; health care innovation; patient-centric care; health technology; patient-reported outcome; PRO; outcome measure; telehealth; telemedicine; eHealth; personalized; customized; engagement; patient-centered care; standardization; implementation

Dear editor,

We read with great interest the recent viewpoint by Zhang et al [1] on leveraging digital technologies to integrate patient-reported experience measures and patient-reported outcome measures (PROMs) into value-based health care (VBHC). As researchers, practitioners, and educators committed to advancing VBHC, we share their enthusiasm and believe that digital tools have transformative potential.

However, this discussion is part of a longstanding struggle to operationalize VBHC in real-world practice. A fundamental shift is needed in how patient input is considered to both improve and innovate care delivery. Evidence suggests that survey-based approaches alone are insufficient; what is required is a more value-sensitive methodology that truly integrates the perspectives and needs of all stakeholders [2,3].

Such an approach demands horizontal and vertical engagement across the health system, embedding values through co-design processes. The example presented by Zhang et al illustrates this well: the collection of PROMs alone was not enough, but the oncology team's subsequent actions to adapt care pathways led to more personalized care. Importantly, contrary to common assumptions, this did not result in greater complexity or reduced efficiency, but instead in more patient-centered care and higher levels of engagement.

The promise of digital tools will only be realized if challenges around digital access, health literacy, and inclusivity are addressed. Without careful attention, technology risks amplifying inequities rather than reducing them. Sustainable implementation also depends on overcoming barriers such as data interoperability, integration into clinical workflows, and building trust among clinicians and patients

in the use of patient-reported data. Embedding patient-reported experience measures and PROMs into routine care further requires equipping health professionals with the skills to interpret and act on these measures, highlighting the central role of education and training in driving meaningful change.

In addition, the business models and revenue streams that underpin value-based transformations remain underexplored. Value-based care is only viable through sustainable financial reforms, which require adaptive strategies. Provider organizations' legacy financial systems and processes are deeply rooted in fee-for-service payment, and it is difficult for them to transition to more advanced forms of alternative payment [4], supporting the need for incorporating strong financial incentives into VBHC and digital technology reforms. Previous studies have also demonstrated that diverse stakeholders are crucial for the design and implementation

of sustainable VBHC business models [5]. Psychological and behavioral mechanisms underlying financial incentives may stand as barriers to VBHC and digital technology adoption. We therefore echo Zhang et al's call for stakeholder involvement and argue that dynamic, participatory approaches to business model development are essential to achieving sustainable improvements in care quality and value.

In conclusion, digital technologies hold great promise in advancing VBHC, but realizing this potential requires more than technological adoption. It demands systemic reorientation toward value-sensitive design, stakeholder collaboration, equitable implementation, education and training of health professionals, and adaptive business modeling. We encourage future research that not only evaluates outcomes but also tests models for scaling and sustaining these approaches across diverse health systems.

Acknowledgments

We used the generative artificial intelligence tool ChatGPT by OpenAI to make minor copyedits to parts of the manuscript for conciseness and clarity, which were further reviewed and revised by the authors.

Conflicts of Interest

None declared.

References

1. Zhang L, Bullen C, Chen J. Digital health innovations to catalyze the transition to value-based health care. *JMIR Med Inform*. Jan 20, 2025;13:e57385. [doi: [10.2196/57385](https://doi.org/10.2196/57385)] [Medline: [39864959](https://pubmed.ncbi.nlm.nih.gov/39864959/)]
2. Vandekerckhove P, Harris BHL, Koizia LJ, Handa A, Brainard C, Howard S. Why we need a patient-centered innovation renaissance: a horizontal and vertical integration of knowledge to transform care pathways. *Patient Exp J*. 2025;12(2):9-13. [doi: [10.35680/2372-0247.2023](https://doi.org/10.35680/2372-0247.2023)]
3. Glover WJ, Hendricks-Sturup R. Ethics and equity-centred perspectives in engineering systems design. In: *Handbook of Engineering Systems Design*. Springer; 2023:1-24. [doi: [10.1007/978-3-030-46054-9_34-3](https://doi.org/10.1007/978-3-030-46054-9_34-3)]
4. APM framework report. HCPLAN. 2017. URL: <https://hcplan.org/apm-framework/>
5. Howard SW, Bradford N, Belue R, et al. Building alternative payment models in health care. *Front Health Serv*. 2024;4:1235913. [doi: [10.3389/frhs.2024.1235913](https://doi.org/10.3389/frhs.2024.1235913)] [Medline: [38948085](https://pubmed.ncbi.nlm.nih.gov/38948085/)]

Abbreviations

PROM: patient-reported outcome measure

VBHC: value-based health care

Edited by Amanda Iannaccio; This is a non-peer-reviewed article; submitted 26.Sep.2025; final revised version received 17.Nov.2025; accepted 21.Nov.2025; published 04.Dec.2025

Please cite as:

Vandekerckhove P, Harris BHL, Koizia LJ, Howard S

Involving Health, Technology, and Financial Stakeholders in Co-Designing Digital Pathways for Value-Based Care

*JMIR Med Inform*2025;13:e84885

URL: <https://medinform.jmir.org/2025/1/e84885>

doi: [10.2196/84885](https://doi.org/10.2196/84885)

© Pieter Vandekerckhove, Benjamin H L Harris, Louis J Koizia, Steven Howard. Originally published in JMIR Medical Informatics (<https://medinform.jmir.org>), 04.Dec.2025. This is an open-access article distributed under the terms of the Creative Commons Attribution License (<https://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work, first published in JMIR Medical Informatics, is properly cited. The complete bibliographic information, a link to the original publication on <https://medinform.jmir.org/>, as well as this copyright and license information must be included.