



UNIVERSITY OF
PLYMOUTH



Plymouth Business School

Faculty of Arts, Humanities and Business

2024-09-06

Co-creation of Value for Patient Centred Outcomes: Bridging Health and Management Research

Wai Mun Lim *Plymouth Business School*

Christopher Agyapong Siaw *Plymouth Business School*

Mona Nasser *Faculty of Health*

Let us know how access to this document benefits you

General rights

All content in PEARL is protected by copyright law. Author manuscripts are made available in accordance with publisher policies. Please cite only the published version using the details provided on the item record or document. In the absence of an open licence (e.g. Creative Commons), permissions for further reuse of content should be sought from the publisher or author.

Take down policy

If you believe that this document breaches copyright please [contact the library](#) providing details, and we will remove access to the work immediately and investigate your claim.

Follow this and additional works at: <https://pearl.plymouth.ac.uk/pbs-research>

Recommended Citation

Lim, W., Siaw, C., & Nasser, M. (2024) 'Co-creation of Value for Patient Centred Outcomes: Bridging Health and Management Research', Retrieved from <https://pearl.plymouth.ac.uk/pbs-research/315>

This Conference Proceeding is brought to you for free and open access by the Faculty of Arts, Humanities and Business at PEARL. It has been accepted for inclusion in Plymouth Business School by an authorized administrator of PEARL. For more information, please contact openresearch@plymouth.ac.uk.

Co-creation of Value for Patient Centred Outcomes: Bridging Health and Management Research

Abstract

The synergy between healthcare and management research has garnered attention for its potential to revolutionise patient-centred care. This paper addresses a critical gap in understanding how perceived value in healthcare and management research can be harnessed to optimise patient care and organisational efficiency. Through an exploration of recent studies and literature, the paper explores the conceptual foundations and practical implications of value co-creation, highlighting its capacity to cultivate patient-centred care models. Additionally, it discusses the benefits and challenges of interdisciplinary research initiatives, emphasising the importance of shared vision, effective communication, and equitable partnerships in realising successful value co-creation for patient-centred outcomes.

Introduction

In recent years, the healthcare and management research intersection has garnered increasing attention as scholars recognise the potential synergies between these domains in enhancing patient-centred outcomes (Ng, 2022; Bloom, Bloom, Sadun, Lemos and Van Reenen, 2017). However, despite growing interest, a discernible gap persists in the contextual relevance of perceived value in healthcare and management research can be leveraged to optimise patient care and organisational efficiency. This developmental paper addresses this gap by discussing the benefits and challenges inherent in cross-disciplinary research initiatives at the nexus of healthcare and management research.

Central to the inquiry is an exploration of recent scholarly contributions elucidating the relationship between healthcare and management research paradigms. Through a systematic examination of past literature, this paper demonstrates the conceptual underpinnings and practical implications of value and co-creation, emphasising its potential to engender patient-centred care models and bolster organisational performance within healthcare settings.

The overarching aim of this developmental paper is, therefore, twofold: firstly, to underscore the inherent value of cross-disciplinary research between healthcare and management domains in elucidating novel insights and fostering innovation within the realm of patient care; and secondly, to outline the challenges that may impede the seamless integration of disparate disciplinary perspectives. Through these inquiries, the paper endeavours to further this investigation with healthcare practitioners, healthcare and management researchers and policymakers. It seeks to understand the distinctions and similarities in the contextual understanding of perceived value within healthcare and management research contexts to facilitate the successful implementation of value co-creation for patient-centred outcomes.

Value co-creation

Value co-creation is the creation of value through collaborative efforts between stakeholders, such as businesses, customers, and employees. It involves the active

involvement of these stakeholders in the design, delivery, and improvement of products or services. In management terms, value co-creation focuses on integrating multiple actors' resources, knowledge, and capabilities to create value for all parties involved. This concept has been applied to various service contexts, including business transformation (Saxena, Mishra and Mukerji, 2024), digital services (Tuunanen, Lumivalo, Vartiainen, Zhang and Myers, 2023), tourist destinations (Melis, McCabe, Atzeni and Del Chiappa, 2023), and customer value co-creation in service organisations (Xu, Tang and Guo, 2023). Value co-creation has been explored not only in these contexts but also in its impact on market performance, service design, customer experiences, and public service delivery. The aim is often to enhance customer satisfaction, improve service outcomes, and achieve competitive advantage through collaborative value-creation processes.

Value co-creation in the healthcare context

Health practitioners and researchers understand the value of healthcare as a multidimensional concept that involves considering a combination of health and economic outcomes. They recognise that value may be defined differently by various stakeholders and that there is a need for sufficient information on these outcomes to make well-informed decisions (Rundell et al., 2015). Value is viewed as a balance between cost and benefit, focusing on quality-adjusted life years and long-term system consequences (Issel, 2015). In contrast, value-based healthcare involves creating value for the patient by measuring medical outcomes and costs that revolve around patient-centred care (Anderssen et al., 2015). While the value of medical research is analysed through the political economy of medical markets and the ethical significance of transnational clinical experimentation (Kelly and Geissler, 2011), the patient's perspective of value is determined by the providers' skills, knowledge, respectful communication, empathy, attention, and the physical environment (Liu et al., 2006).

Drawing on recent studies, Faghihnasiri, Alves, and Soares (2023) examined the theoretical interaction between value co-creation stakeholder theory (ST). It examined decision-making (SDM) in healthcare, emphasising the importance of co-created relationships between patients and stakeholders for decision-making and patient quality of life. Building on this interaction, Laurisz et al. (2023) conducted a structured literature review to identify the outcomes and determinants of co-creation in healthcare, providing a comprehensive framework for understanding the multidimensional and systemic perspective of co-creation in healthcare settings (Laurisz, Cwiklicki, Zabinski, Canestrino, and Maglioca, 2023). Highlighting the need for meaningful patient and medical worker involvement in the creation process, Russo-Spena et al. (2022) explored the scope and depth of co-creation in health services using modern technological solutions around Health 4.0. Similarly, Fusco, Marsilio, and Guglielmetti (2023) investigated the adoption of blockchain technology in healthcare and its impact on value co-creation, in particular relation to data and resource sharing, patient participation, and professional collaboration. While exploring the application of value co-creation, the importance of diverse perspectives highlighted the need for adaptation to ensure cultural sensitivity and inclusivity as

stakeholder groups include community members, healthcare practitioners, policymakers, and marketing experts (Cavacece et al., 2022).

Studies have shown that patients play an active role as actors in the co-creation process, contributing to better results in terms of product quality and alignment with customer expectations and needs (Laurisz et al., 2023). Co-creation, characterised by collaboration between patients and artists, can support patients in integrating life events, such as living with cancer, into their life stories (Weeseman et al., 2022). The co-creation process has been found to facilitate the integration of experiences of patients, allowing them to transcend the boundaries of their previous life narrative and change their perspective (Holen and Strand, 2022). Furthermore, patients often act as actors, activists, and experts in producing biomedical knowledge, initiating or transforming research agendas and leading knowledge production (Ding et al., 2022). As knowledge is moved to online healthcare platforms, patients have been found to engage in value co-creation through citizenship behaviour and participation behaviour, influenced by information quality, peer communication, and system quality (Aghdam et al., 2020).

Linking value co-creation research in healthcare and management

Integrating management theories into co-creating value research within healthcare reflects a recognition of the diverse stakeholders involved, necessitating a multidisciplinary approach that draws on insights from various research fields. It has been established that co-creation involves multiple stakeholders, including patients, healthcare professionals, and other actors in the healthcare ecosystem, and this requires a multidisciplinary approach that integrates knowledge from different research fields (Amorim and Ventura, 2023). This interdisciplinary approach is further supported by studies that have examined the outcomes and determinants of co-creation in healthcare, providing insights into the benefits and challenges of implementing co-creation strategies in healthcare settings (Fusco et al., 2023). Moreover, applying the concept of co-creation in the context of Health 4.0 shifted the focus to using modern technological solutions to improve the efficiency and effectiveness of healthcare services (Laurisz, 2023). The integration of technology is particularly relevant as the adoption of new technologies, such as blockchain, has been explored to facilitate value co-creation in digital healthcare ecosystems (Saxena, Mishra, and Mukerji, 2023).

For business researchers, co-creation and value creation often extends beyond healthcare and various industries. Co-creation is a collaborative process between businesses and their customers or stakeholders in creating value by developing products, services, or experiences that meet their needs and preferences. This broader understanding is reflected in management frameworks and models of co-created value in healthcare, which have been studied in various papers. Faghihnasiri, Alves and Soares (2023) explored the theoretical interaction between stakeholder theory and shared decision-making in analysing the relationships between patients and stakeholders in decision-making for patients' quality of life. While one study focused on the role of artificial intelligence (AI) in value co-creation in healthcare, highlighting its potential to stimulate a patient-centred, adaptive

healthcare system (Latif, Wang, and Shahzad, 2024), another conducted a systematic literature review to identify outcomes and determinants of co-creation in healthcare, providing a comprehensive framework for understanding the process (Russo-Spena et al., 2022). Additionally, another study explored the value co-creation mechanism in online health communities (OHCs), emphasising the importance of social support and ethical interactions among members (Fusco et al., 2023). These studies contribute to understanding management frameworks and models for co-created value in healthcare, highlighting the importance of stakeholder relationships, AI, and ethical considerations.

By applying concepts from service design and evaluative research, such as Customer Journey Maps and Logic Models, researchers can identify and remedy service delivery gaps to reduce barriers to care (Joseph, Costello, Monkman, and Quintana, 2023). Additionally, integrating the fields of medicine and management through curricular programs can bridge the gap between understanding living systems at a microscopic level and managing the health of populations at a macro level (Saintfort, Jacko, Cohen, Rosman, and Viewweg, 2022). This trans-disciplinary approach dissolves disciplinary boundaries and enables decision-makers to work towards a broader understanding of value in healthcare, considering stakeholders' perceptions and enhancing value beyond financial economics-based accounting (Maguire and Murphy, 2023). Consequently, interdisciplinary collaborations between healthcare and business management can lead to better patient care, reduced costs, expedited delivery of patient information, and increased perceived patient quality of care (Warren and Warren, 2023).

Benefits and challenges of applying management concepts in healthcare

Applying business management concepts in the healthcare context offers several benefits. It allows for identifying and rectifying service delivery gaps in healthcare, reducing barriers to care and improving patient satisfaction (Joseph et al., 2023). This approach also provides a Systems Thinking approach to solving operational issues in healthcare, leading to improved treatment outcomes and reduced healthcare costs (Lisboa, 2022). Additionally, integrating business principles and economics into medical education better prepares students for future medical practices and the evolving healthcare system (Saintfort et al., 2022). There is also an emphasis in the importance of understanding individuals within their environment and managing the health of populations, particularly those with underlying conditions (Ding, Tomeny and Bates, 2021). By bridging the gap between medicine and business, understanding perceived value in healthcare and business management studies could significantly improve global health outcomes.

However, aligning perceived value within healthcare and business management to enhance patient-centred outcomes presents various challenges. Addressing these challenges involves navigating differences in communication styles and disciplinary assumptions (Donovan, 2020) and managing variations in the scale and scope of partner contributions, which can present significant obstacles (Ding, Tomeny and Bates, 2021). Exacerbating these challenges, research grants often favour one study context over the other. Another hurdle is the failure to holistically integrate diverse

perspectives and expertise (Sixsmith et al., 2021). Reluctance to share project control has also been found to impede collaboration (Nordgreen et al., 2021). Fostering cross-disciplinary research necessitates the establishment of a shared vision with explicit goals, maintaining regular communication, and fostering equitable partnerships (Petersen, Birkelund, and Schiottz-Christensen, 2020).

Conclusion

Aligning the understanding of value co-creation in healthcare and management research enhances patient-centred outcomes by promoting a comprehensive framework for healthcare co-creation based on a multidimensional and systemic perspective (Amorim and Ventura, 2023). Recent studies have examined this integration of knowledge allowing for a better understanding of the outcomes and determinants of co-creation in healthcare settings, including antecedents, management activities, and the institutional context (Megaro, 2023). Taking into consideration the perspectives of different stakeholders in healthcare, including patients, healthcare professionals, and other actors, the co-creation process can be shaped to facilitate collaborative behaviours and generate new institutions and resource integration practices (Laurisz, 2023). This collaborative approach goes beyond clinics and doctor-patient relationships, extending to all environments and interactions that add value to the patient's treatment, including relationships with friends, family, other patients, social media, public policies, and pleasurable activities (ibid; Amorim and Ventura, 2022). By involving patients as co-creators in the value-creation process, healthcare can become more patient-centred, adaptive, and resilient, improving patient outcomes and patient experiences.

Although co-creation and co-design principles have garnered recognition within health services research, health systems have encountered challenges in effectively integrating these principles across various levels. Moreover, discussions of values and co-creation as separate concepts appear to have created tensions between management and stakeholders in public health and health services research. This schism is exacerbated by the perception that the value propositions of business and patients are incongruent. These tensions are often viewed as disparate and conflicting rather than opportunities for constructive engagement.

The paper, therefore, posits that the alignment of these issues across the two disciplinary spheres is closer than commonly perceived. Additionally, significant literature within the business domain offers insights into how systems can potentially address some challenges in health services. These challenges emanate from a failure to conceptualise co-creation values at the systemic level and a lack of understanding regarding integrating these values into systemic responses.

Synthesising management concepts for patient-centred outcomes will offer a holistic understanding of healthcare delivery by integrating insights from innovative business models, marketing strategies, and management practices. With expertise in areas like process improvement, supply chain management, and technology adoption, business researchers contribute to enhancing efficiency and innovation within healthcare organisations. This, in turn, translates to improved patient outcomes through streamlined operations and optimised resource utilisation.

References

- Amorim, J., & Ventura, A. C. (2023). Co-created decision-making: From co-production to value co-creation in health care. *The Journal of Medicine Access*, 7, 27550834231177503.
- Andersson, A. E., Bååthe, F., Wikström, E., & Nilsson, K. (2015). Understanding value-based healthcare—an interview study with project team members at a Swedish university hospital. *Journal of Hospital Administration*, 4(4), 64-72.
- Bloom, N., Lemos, R., Sadun, R., & Van Reenen, J. (2020). Healthy business? Managerial education and management in health care. *Review of Economics and Statistics*, 102(3), 506-517.
- Cavacece, Y., Ebraico, S., Spena, T.R., Mele, C., Leone, D., Schiavone, F. & Bastone, A. (2022), October. Blockchain technology and Artificial Intelligence for value co-creation in healthcare. In 2022 IEEE International Conference on Metrology for Extended Reality, Artificial Intelligence and Neural Engineering (MetroXRINE) (pp. 522-527). IEEE.
- Ding, X., You, X., Zhang, X. & Yu, Y. (2022). Can Patients Co-Create Value in an Online Healthcare Platform? An Examination of Value Co-Creation. *Int. J. Environ. Res. Public Health*, 19, 12823. <https://doi.org/10.3390/ijerph191912823>
- Ding, Y., Tomeny, E., Bates, I., & IMPALA Consortium. (2021). Actions for fostering cross-disciplinary global health research A qualitative research. medRxiv, 2021-09.
- Donovan, S. (2020). The landscape of challenges for cross-disciplinary activity. In *The Toolbox Dialogue Initiative* (pp. 48-57). CRC Press.
- Faghihnasiri, K., Alves, H. M. B., & Soares, A. M. (2022). Value Co-Creation Activities Role in Patient Well-Being in Online Healthcare Communities: OHCs as The Fourth Sector of Health care. In *International Congress on Public and Nonprofit Marketing* (July, pp. 149-175). Cham: Springer International Publishing.
- Fusco, F., Marsilio, M. & Guglielmetti, C. (2023). Co-creation in healthcare: framing the outcomes and their determinants. *Journal of Service Management*, 34(6), pp.1-26.
- Holen, M., & Strand, D. L. (2022). Patientinvolvering og patientaktivisme i medicinsk forskning: Om autoritet, kredibilitet og forudsætninger for samskabelse. *Akademisk kvarter*, 24, 57-70.
- Issel, L. M. (2015). Value and the role of health care management research. *Health Care Management Review*, 40(4), 273.
- Joseph, A. L., Costello, J., Monkman, H., & Quintana, Y. (2023). Applying Logic to the Healthcare Journey. In *Context Sensitive Health Informatics and the Pandemic Boost* (pp. 74-75). IOS Press.
- Kelly, A. H., & Geissler, P. W. (2011). Introduction: The value of transnational medical research. *Journal of Cultural Economy*, 4(1), 3-10.

- Latif, M. S., Wang, J. J., & Shahzad, M. (2024). Do ethics drive value co-creation behavior in online health communities?. *Information Technology & People*, 37(1), 1-28.
- Laurisz, N., Ćwiklicki, M., Żabiński, M., Canestrino, R., & Magliocca, P. (2023). The Stakeholders' Involvement in Healthcare 4.0 Services Provision: The Perspective of Co-Creation. *International Journal of Environmental Research and Public Health*, 20(3), 2416.
- Lisboa, I. (2021). A cross-disciplinary approach to the business strategy research. *Corporate & Business Strategy Review*, 2(2), 4-6.
- Liu, S. S., Amendah, E., Chang, E. C., & Pei, L. K. (2006). Satisfaction and value: a meta-analysis in the healthcare context. *Health Marketing Quarterly*, 23(4), 49-73.
- Maguire, W., & Murphy, L. (2023). Enhancing value in healthcare: towards a trans-disciplinary approach. *Accounting, Auditing & Accountability Journal*, 36(2), 494-519.
- Melis, G., McCabe, S., Atzeni, M., & Del Chiappa, G. (2023). Collaboration and learning processes in value co-creation: A destination perspective. *Journal of Travel Research*, 62(3), 699-716.
- Ng, S. M. (2022). A qualitative study on relationships and perceptions between managers and clinicians and its effect on value-based healthcare within the national health service in the UK. *Health Services Management Research*, 35(4), 251-258.
- Nordgreen, T., Rabbi, F., Torresen, J., Skar, Y. S., Guribye, F., Inal, Y., ... & Lamo, Y. (2021). Challenges and possible solutions in cross-disciplinary and cross-sectorial research teams within the domain of e-mental health. *Journal of Enabling Technologies*, 15(4), 241-251.
- Petersen, L., Birkelund, R., & Schiøttz-Christensen, B. (2020). Challenges to cross-sectoral care experienced by professionals working with patients living with low back pain: a qualitative interview study. *BMC Health Services Research*, 20(1), 1-10.
- Rezaei Aghdam, A., Watson, J., Cliff, C., & Miah, S. J. (2020). Improving the theoretical understanding toward patient-driven health care innovation through online value co-creation: systematic review. *Journal of medical Internet research*, 22(4).
- Rundell, S. D., Goode, A. P., Friedly, J. L., Jarvik, J. G., Sullivan, S. D., & Bresnahan, B. W. (2015). Role of health services research in producing high-value rehabilitation care. *Physical therapy*, 95(12), 1703-1711.
- Russo-Spena, T., Mele, C., Cavacece, Y., Ebraico, S., Dantas, C., Roseiro, P., & van Staaldin, W. (2022). Enabling Value Co-Creation in Healthcare through Blockchain Technology. *International Journal of Environmental Research and Public Health*, 20(1), 67.
- Sainfort, F., Jacko, J. A., Cohen, K., Rosman, A., & Vieweg, J. (2022). Disciplinary Intersection of Medicine and Business: A Novel Population Health Management Premedical Pathway for Medicine and Other Health Care Professions. *Population Health Management*, 25(5), 616-624.

Saxena, S., A., Mishra, S.C. & Mukerji, B. (2024). A multi-method bibliometric review of value co-creation research, *Management Research Review*, Vol. 47 No. 2, pp. 183-203. <https://doi.org/10.1108/MRR-09-2022-0646>

Sixsmith, J., Fang, M. L., Grigorovich, A., Wada, M., & Kontos, P. (2021). Working Together as a Transdisciplinary Team. *Knowledge, Innovation, and Impact: A Guide for the Engaged Health Researcher*, 69-76.

Tuunanen, T., Lumivalo, J., Vartiainen, T., Zhang, Y., & Myers, M. D. (2023). Micro-Level Mechanisms to Support Value Co-Creation for Design of Digital Services. *Journal of Service Research*, 10946705231173116.

Warren, J. L. & Warren, J. S. (2023). The Case for Understanding Interdisciplinary Relationships in Health Care. *The Ochsner Journal*, 23(2), 94.

Weeseman, Y., Scherer-Rath, M., Christophe, N., Do"rr, H., Bood, Z.M., Sprangers, M.A.G., et al. (2022) Co-creative art processes with patients: A theoretical framework and qualitative study among artists. *PLoS ONE* 17(4): e0266401. <https://doi.org/10.1371/journal.pone.0266401>

Xu, H., Tang, C., & Guo, L. (2023). Exploring service employees' involvement in value co-creation: dimensions, antecedents and consequences. *Journal of Services Marketing*, 37(5), 650-670.