

Guest editors Dr Mitchell Sarkies, Dr Joanna C Moullin, Teralynn Ludwick and Prof Suzanne Robinson are pleased to present a special issue for the *Journal of Health Organization and Management*, focussed on the theme *Implementation Science to Practice in Healthcare Organization and Management*. This conspectus of peer-reviewed research serves to broaden our understanding of implementation science from the standpoint of health organisation and management. By further reconciling both the theoretical and empirical knowledge derived from health organisation and management studies and that of implementation science, we hope to progress both areas of research and ultimately support the implementation of evidence-based innovations in healthcare.

Implementation science to practice in healthcare organisation and management

Implementation science has been defined as:

the scientific study of methods to promote the systematic uptake of research findings and other evidence-based practices into routine practice, and, hence, to improve the quality and effectiveness of health services. (Eccles and Mittman, 2006).

Implementation science has offered valuable tools for the improvement of healthcare delivery (Nielsen, 2015; Moullin *et al.*, 2020). However, as a relatively new field, implementation science has not yet fully capitalised on the theoretical and empirical contributions of health organisation and management studies (Haines and Birken, 2020; Birken *et al.*, 2017; Sarkies *et al.*, 2017). The impetus of this special issue is to showcase ways in which organisational and management theory can be integrated within implementation research and complement the evolving knowledge across both fields.

Implementation science and health organisation and management studies share similar challenges. Producing generalisable evidence for changing individual behaviour and organisational inertia is a complex and “wicked” problem, especially in contexts of infrastructure and resource constraints, and in conditions which investigators cannot fully control (Sarkies *et al.*, 2020; Woolf, 2008; Davidoff and Batalden, 2005). The studies included in this special issue highlight the value in increased crossover between these areas of research to generate knowledge about what works, why and under what circumstances when implementing innovations in healthcare.

This special issue of the *Journal of Health Organization and Management* brings together exemplar research at the frontier of implementation science in healthcare organisation and management. The included studies present novel perspectives on the importance of context and implementation success, clinical genomics in complex health systems, facilitation and co-creation in change leadership and responses to the coronavirus disease 2019 (COVID-19) pandemic, sustainability of specific clinical intervention programs, and the role of brokering in health services. We begin the special issue with a viewpoint article by Sarkies *et al.* (2021) examining how a selection of theoretical approaches has been applied to better understand the implementation of healthcare innovations. Normalization process theory (Morden *et al.*, 2015; May and Finch, 2009), institutional logics (Shaw *et al.*, 2017; Thornton *et al.*, 2015) and complexity theory (Best *et al.*, 2016; Bar-Yam, 2002) were selected as case studies to elucidate how relationships across different levels of organisations can influence implementation success within complex adaptive healthcare systems. The presented examples in this viewpoint article illustrate practical considerations for healthcare implementation endeavours.



Rogers *et al.* (2021) focuses on the importance of accounting for existing norms within organisations and adapting interventions during implementation to better fit local contexts. Reporting on over 30 h of observations and 25 interviews, the authors identify two key overarching themes: adapting to everyday realities and the implementation process causing actual changes in the local context. This reciprocal relationship is often overlooked in implementation research, where the focus is often on fitting within the context rather than the mutual evolution of context to facilitate implementation of organisational changes.

Best *et al.* (2021) presents the organisational perspectives on implementing clinical genomics in Australia, progressing beyond an analysis of barriers facing individual clinicians to uncover the organisational factors that must be considered to realise the potential of genomic medicine. They apply the Translation Science to Population Impact Framework (Spoth *et al.*, 2013) to guide their qualitative data collection and use the Theoretical Domains Framework (Michie *et al.*, 2005; Cane *et al.*, 2012) for analysis. These approaches uncovered that organisations initially focus on the value of clinical genomics and setting organisational goals before willingness to adopt becomes apparent. Once a decision to implement has been made, leadership and priority setting are essential preconditions for success. This study illustrates an organisation's journey from preadoption to implementation of clinical genomics.

Three articles (Shoobridge *et al.*, 2021; Schwarz *et al.*, 2021; Irgang *et al.*, 2021) shine a spotlight on the role of facilitation in implementation. These perspectives range from change leadership and co-creation, through to responding to the COVID-19 pandemic in Brazil. The integrated-Promoting Action on Research Implementation in Health Services (iPARIHS) framework (Harvey and Kitson, 2016) was used by Shoobridge *et al.* (2021) and is frequently applied in both implementation science and health organisation and management studies—the active ingredient of which is “*facilitation*”. Shoobridge *et al.* (2021) describe the first application of a networked facilitation model within an action learning set methodology, as part of a change management program. This model supported the organisational transition to a new hospital with some practical applications for how organisations are perceived during these transitions. Schwarz *et al.* (2021) report on the results of a participatory facilitation workshop for a change process in mental health services in Sweden. The results indicate the workshop may bring stakeholders on the same page but requires additional effort and resources to be turned into action. Irgang *et al.* (2021) turn their attention towards facilitation in a low- and middle-income country (LMIC) setting and build upon change response theory from a cognitive, affective and behavioural aspect. These studies suggest there is a shared interest in the subject of facilitation between implementation science researchers and those studying health organisation and management.

Christie *et al.* (2021) refine our examination of implementation science in health organisation and management at the micro-level by investigating clinical practice change. They identify a substantial evidence-to-practice gap in occupational therapy for recovery after traumatic brain injury and identify key individual, organisational and social factors to enable evidence implementation. Improved knowledge and opportunities to practice can be supported through positive social influences and organisational environments (e.g. culture and resources), which with reinforcement can lead to sustainable practice change and improved care for this patient cohort.

We finish the special issue with a research examining two case studies on the role of “*brokers*” in healthcare implementation by Williams *et al.* (2021). Brokerage roles were occupied by healthcare professionals, patients and caregivers who all support the transfer, translation and transformation of knowledge and information across functional and organisational boundaries. These case studies highlight the often underappreciated role of patients and caregivers as translators of knowledge and information within the healthcare

system, which could be leveraged to implement evidence-informed innovations within healthcare organisations.

The studies included in the special issue largely explore phenomena in health systems from high-income countries, with only one study from a middle-income country setting. While we attempted to attract submissions from LMICs, we received few studies. We hypothesise that this may reflect different foci and priority of health services delivery and research in LMICs, particularly of low-income countries, where a large proportion of health services are delivered outside of health facilities in community contexts by non-clinicians and through vertical programs managed by non-governmental organisations. In the context of moving towards universal health coverage in LMICs as part of the United Nations Sustainable Development Goals, there is increasing interest in strengthening interactions between community and facility-based care and harmonising non-government organisation (NGO) supported programs with national systems. This suggests that examining how research methods from health organisation and management can be combined with those from implementation science may yield important insights related to the interplay between health system governance, organisation, and management structures and effective health service delivery at the primary care level in LMICs.

The emergence and prominence of implementation science within the broader healthcare research and practice agenda carries the opportunity to bridge discipline-specific knowledge and apply it for the common purpose of improving healthcare delivery. Looking towards the horizon, the formalisation of implementation science and cross-learning between this area of research and studies of health organisation and management brings us closer to understanding the mechanisms influencing implementation and how or why implementation succeeds or fails. Greater utilisation of organisational theory and management science within implementation efforts will support investigations beyond individual and group behaviour change, towards a holistic understanding of change across multi-level organisations and health systems.

Mitchell N. Sarkies

Centre for Healthcare Resilience and Implementation Science, Australian Institute of Health Innovation, Faculty of Medicine, Health and Human Sciences, Macquarie University, North Ryde, Australia and Health Economics and Data Analytics Discipline, School of Population Health, Faculty of Health Sciences, Curtin University, Perth, Australia

Joanna Moullin

Curtin Medical School, Faculty of Health Sciences, Curtin University, Perth, Australia

Terallynn Ludwick

Nossal Institute for Global Health, Melbourne School of Population and Global Health, University of Melbourne, Melbourne, Australia, and

Suzanne Robinson

Health Economics and Data Analytics Discipline, School of Population Health, Faculty of Health Sciences, Curtin University, Perth, Australia

References

- Bar-Yam, Y. (2002), *Complexity Rising: from Human Beings to Human Civilization, a Complexity Profile, Encyclopedia of Life Support Systems*, United Nations, Oxford.
- Best, A., Berland, A., Herbert, C., Bitz, J., van Dijk, M.W., Krause, C., Cochrane, D., Noel, K., Marsden, J. and McKeown, S. (2016), "Using systems thinking to support clinical system transformation",

Journal of Health Organization and Management, Vol. 30 No. 3, pp. 302-323, doi: [10.1108/JHOM-12-2014-0206](https://doi.org/10.1108/JHOM-12-2014-0206).

- Best, S., Long, J.C., Gaff, C., Braithwaite, J. and Taylor, N. (2021), "Organizational perspectives on implementing complex health interventions: clinical genomics in Australia", *Journal of Health Organization and Management*. doi: [10.1108/JHOM-12-2020-0495](https://doi.org/10.1108/JHOM-12-2020-0495).
- Birken, S.A., Bunger, A.C., Powell, B.J., Turner, K., Clary, A.S., Klamann, S.L., Yu, Y., Whitaker, D.J., Self, S.R., Rostad, W.L., Chatham, J.R.S., Kirk, M.A., Shea, C.M., Haines, E. and Weiner, B.J. (2017), "Organizational theory for dissemination and implementation research", *Implementation Science*, Vol. 12 No. 1, p. 62, doi: [10.1186/s13012-017-0592-x](https://doi.org/10.1186/s13012-017-0592-x).
- Cane, J., O'Connor, D. and Michie, S. (2012), "Validation of the theoretical domains framework for use in behaviour change and implementation research", *Implementation Science*, Vol. 7 No. 1, p. 37, doi: [10.1186/1748-5908-7-37](https://doi.org/10.1186/1748-5908-7-37).
- Christie, L., McCluskey, A. and Lovarini, M. (2021), "Implementation and sustainability of upper limb constraint-induced movement therapy programs for adults with neurological conditions: an international qualitative study", *Journal of Health Organization and Management*. doi: [10.1108/JHOM-07-2020-0297](https://doi.org/10.1108/JHOM-07-2020-0297).
- Davidoff, F. and Batalden, P. (2005), "Toward stronger evidence on quality improvement. Draft publication guidelines: the beginning of a consensus project", *Quality and Safety in Health Care*, Vol. 14 No. 5, pp. 319-325, doi: [10.1136/qshc.2005.014787](https://doi.org/10.1136/qshc.2005.014787).
- Eccles, M.P. and Mittman, B.S. (2006), "Welcome to implementation science", *Implementation Science*, Vol. 1 No. 1, p. 1, doi: [10.1186/1748-5908-1-1](https://doi.org/10.1186/1748-5908-1-1).
- Haines, E.R. and Birken, S.A. (2020), "Organizational perspectives in implementation science", in Nilsen, P. and Birken, S.A. (Eds), *Handbook on Implementation Science*, Edward Elgar Publishing, Cheltenham.
- Harvey, G. and Kitson, A. (2016), "PARIHS revisited: from heuristic to integrated framework for the successful implementation of knowledge into practice", *Implementation Science*, Vol. 11 No. 1, p. 33, doi: [10.1186/s13012-016-0398-2](https://doi.org/10.1186/s13012-016-0398-2).
- Irgang, L., Holmén, M., Gama, F. and Svedberg, P. (2021), "Facilitation activities for change response: a qualitative study on infection preventionists during a pandemic in Brazil", *Journal of Health Organization and Management*.
- May, C. and Finch, T. (2009), "Implementing, embedding, and integrating practices: an outline of Normalization Process Theory", *Sociology*, Vol. 43 No. 3, pp. 535-554, doi: [10.1177/0038038509103208](https://doi.org/10.1177/0038038509103208).
- Michie, S., Johnston, M., Abraham, C., Lawton, R., Parker, D. and Walker, A. (2005), "Making psychological theory useful for implementing evidence based practice: a consensus approach", *Quality and Safety of Health Care*, Vol. 14 No. 1, pp. 26-33, doi: [10.1136/qshc.2004.011155](https://doi.org/10.1136/qshc.2004.011155).
- Morden, A., Brooks, L., Jinks, C., Porcheret, M., Ong, B.N. and Dziedzic, K. (2015), "Research 'push', long term-change, and general practice", *Journal of Health Organization and Management*, Vol. 29 No. 7, pp. 798-821, doi: [10.1108/JHOM-07-2014-0119](https://doi.org/10.1108/JHOM-07-2014-0119).
- Moullin, J.C., Dickson, K.S., Stadnick, N.A., Albers, B., Nilsen, P., Broder-Fingert, S., Mukasa, B. and Aarons, G.A. (2020), "Ten recommendations for using implementation frameworks in research and practice", *Implementation Science Communications*, Vol. 1 No. 1, p. 42, doi: [10.1186/s43058-020-00023-7](https://doi.org/10.1186/s43058-020-00023-7).
- Nilsen, P. (2015), "Making sense of implementation theories, models and frameworks", *Implementation Science*, Vol. 10 No. 1, p. 53, doi: [10.1186/s13012-015-0242-0](https://doi.org/10.1186/s13012-015-0242-0).
- Rogers, L., De Brún, A., Birken, S.A., Davies, C. and McAuliffe, E. (2021), "Context counts: a qualitative study exploring the interplay between context and implementation success", *Journal of Health Organization and Management*. doi: [10.1108/jhom-07-2020-0296](https://doi.org/10.1108/jhom-07-2020-0296).
- Sarkies, M.N., Bowles, K.A., Skinner, E.H., Haas, R., Lane, H. and Haines, T.P. (2017), "The effectiveness of research implementation strategies for promoting evidence-informed policy and

management decisions in healthcare: a systematic review”, *Implementation Science*, Vol. 12 No. 1, p. 132, doi: [10.1186/s13012-017-0662-0](https://doi.org/10.1186/s13012-017-0662-0).

Guest editorial

Sarkies, M.N., Francis-Auton, E., Long, J.C., Partington, A., Pomare, C., Nguyen, H.M., Wu, W., Westbrook, J., Day, R.O. and Levesque, J.-F. (2020), “Implementing large-system, value-based healthcare initiatives: a realist study protocol for seven natural experiments”, *BMJ Open*, Vol. 10 No. 12, p. e044049, doi: [10.1136/bmjopen-2020-044049](https://doi.org/10.1136/bmjopen-2020-044049).

Sarkies, M., Robinson, S., Ludwick, T., Braithwaite, J., Nilsen, P., Aarons, G., Weiner, B.J. and Moullin, J. (2021), “Understanding implementation science from the standpoint of health organisation and management: an interdisciplinary exploration of selected theories, models and frameworks”, *Journal of Health Organization and Management*. doi: [10.1108/JHOM-02-2021-0056](https://doi.org/10.1108/JHOM-02-2021-0056).

Schwarz, U.V.T., Andersson, K. and Loeb, C. (2021), “Quick and dirty or rapid and informative? Exploring a participatory method to facilitate implementation research and organizational change”, *Journal of Health Organization and Management*.

Shaw, J.A., Kontos, P., Martin, W. and Victor, C. (2017), “The institutional logic of integrated care: an ethnography of patient transitions”, *Journal of Health Organization and Management*, Vol. 31 No. 1, pp. 82-95, doi: [10.1108/JHOM-06-2016-0123](https://doi.org/10.1108/JHOM-06-2016-0123).

Shoobridge, J., Schultz, T., Harvey, G. and Kirby, N. (2021), “Facilitating Action Learning Sets within a change leadership program supporting transition of a health system to a new hospital”, *Journal of Health Organization and Management*.

Spoth, R., Rohrbach, L.A., Greenberg, M., Leaf, P., Brown, C.H., Fagan, A., Catalano, R.F., Pentz, M.A., Sloboda, Z., Hawkins, J.D.M. and Contributing, A. (2013), “Society for prevention research type 2 translational task Force Addressing core challenges for the next generation of type 2 translation research and systems: the translation science to population Impact (TSci Impact) framework”, *Prevention Science*, Vol. 14 No. 4, pp. 319-351, doi: [10.1007/s11121-012-0362-6](https://doi.org/10.1007/s11121-012-0362-6).

Thornton, P.H., Ocasio, W. and Lounsbury, M. (2015), “The institutional Logics perspective”, in Scott, R.A. and Kosslyn, S.M. (Eds), *Emerging Trends in the Social and Behavioral Sciences*, John Wiley & Sons, New York, pp. 1-22.

Williams, S., Radnor, Z., Aitken, J., Esain, A. and Matthias, O. (2021), “Translating and transforming knowledge - the role of brokering in healthcare networks”, *Journal of Health Organisation and Management*. doi: [10.1108/JHOM-02-2021-0063](https://doi.org/10.1108/JHOM-02-2021-0063).

Wolf, S.H. (2008), “The meaning of translational research and why it matters”, *Journal of the American Medical Association*, Vol. 299 No. 2, pp. 211-213. doi: [10.1001/jama.2007.26](https://doi.org/10.1001/jama.2007.26).

781