

Learning health systems in primary care: Identifying barriers and enablers to implementation and evaluation

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Background

- Learning health systems (LHSs) have been gaining traction over the past decade.
- Primary care, including general practice, is a common first point of contact with the healthcare system and is thus an opportune setting to develop a LHS.
- While many existing LHSs have been described in the literature, few have a focus on primary care¹⁻².
- Previously, we identified the elements of the LHS that were realised within a university-based general practice². Here, we build on that study and identify key barriers and enablers to successful implementation and evaluation of an LHS in this primary care setting.

Methods

- Study co-designed with administrative and clinical staff at the MQ Health General Practice, and researchers at the Australian Institute of Health Innovation.
- MQ Health General Practice operates across two sites and is a department of MQ Health, a university-owned not-for-profit health enterprise.
- Interviews (n=32) conducted with practice staff, including clinical and administrative staff.
- Interviews transcribed and thematically analysed using a framework approach to identify barriers and enablers to implementation of an LHS.
- Data coding according to the Theoretical Domains Framework (TDF), and then the adapted IoM LHS framework (Table 1) to describe barriers and enablers to practice alignment with specific elements of the LHS.

LHS Domains	Definition
Science and Informatics	Real-time access to knowledge & digital capture of the care experience
Patient – Clinician Partnerships	Engaged, empowered patients and families that are full partners in a patient-centred system.
Incentives	Incentives aligned for value, that actively encourage ongoing evaluation and improvement of care & full transparency, where all aspects of care are recorded and available to stakeholders.
Continuous Learning Culture	Leadership-instilled culture of learning & supportive system competencies that encourage staff skill development.
Structure and Governance	Policies, governance, and regulations aligned to facilitate research, collaboration, and learning.

Results

A total of 32 out of 35 (91%) practice staff were interviewed, comprising general practitioners, practice nurses, administrative staff, and a psychologist. Participants reported that the practice alignment with LHS principles was influenced by many behavioural determinants, some applicable to healthcare in general, but many specific to the general practice environment.

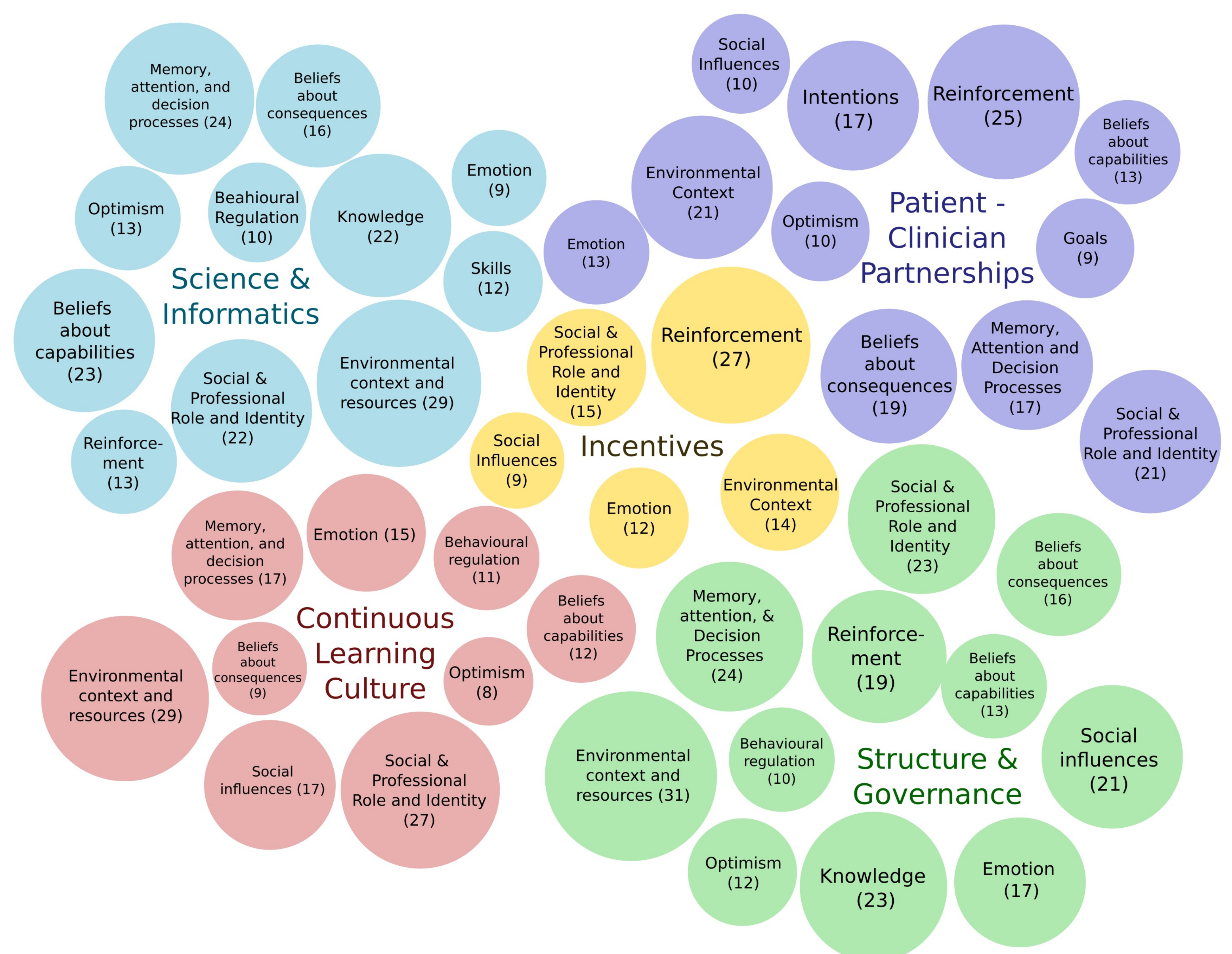


Fig 1.: Results from the framework analysis. Note. Each domain of the LHS is represented by a different colour. Each coloured circle represents a TDF determinant. The sizes of the circles represent the number of participants that reported a quote in the respective TDF determinant. Only TDF determinants with more than seven quotes were included, which represented ~25% of participants.

Conclusion

Although the idea of an LHS has been gaining traction in recent years, challenges remain for its implementation and evaluation. This study presents key barriers and enablers to initiating and sustaining LHS concepts in primary care, that can be applied to future, successful primary care LHSs.

References

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