

# A Scalability Assessment of the **Transitional Care** Stroke Intervention in Community Stroke Rehabilitation

Provincial Stroke Rounds



Melissa Northwood, RN, PhD & Tracey Chambers, RN, MSc  
September 11, 2024





# Disclosures of Affiliations, Financial Support & Mitigating Bias

## Speaker Names, Affiliations, and Research Support:

**Dr. Melissa Northwood**

*Regional Geriatric Program Central (RGPC) (not for profit organization)*

**Tracey Chambers**

*None*

## Financial Support:

*This session has not received financial or in-kind support*



## Land Acknowledgement

McMaster University recognizes and acknowledges that it is located on the traditional territories of the Mississauga and Haudenosaunee nations, and within the lands protected by the Dish With One Spoon wampum agreement.



# Objectives of Today's Rounds

1. Learn about the Transitional Care Stroke Intervention (TCSI) in community stroke rehabilitation.
2. Understand factors that influence the scalability of the TCSI across three diverse community stroke rehabilitation programs in Ontario.





# Study Background



# Community Stroke Rehabilitation

Model of Care<sup>1</sup>  
July 20, 2022

# Navigation During Community Stroke Rehabilitation

## Guidance Document<sup>2</sup>

May 2024

# Study Purpose

## Scalability Assessment

To assess the scalability and determine the readiness for scale-up of the Transitional Care Stroke Intervention with three CSR programs in Ontario selected to reflect diversity in:

- geography (urban/rural locations, northern locations)
- hospital-based outpatient clinics/in-home settings
- presence/absence of system navigator role

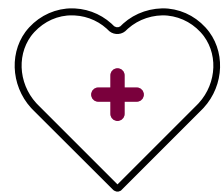


# Transitional Care Stroke Intervention (TCSI)

---

- Co-designed with a variety of stroke experts, including patient research partners, healthcare providers, and policy makers
- Evaluated to date:
  - pragmatic feasibility study (2014-2017)<sup>3</sup>
  - multi-site pragmatic randomized controlled trial (2020-2022)<sup>4</sup>
  - scalability assessment (2023-2024)
- Six-month, virtual, evidence-based, patient-oriented intervention designed to complement standard outpatient stroke rehabilitation services:
  - to improve the quality and experience of transitions
  - to address gaps in post-acute care for older adults with multimorbidity receiving community stroke rehabilitation services
  - core components of intervention were based on literature and were designed to support self-management.

# Transitional Care Stroke Intervention



**Care coordination** by dedicated Care Coordinator/System Navigator & development of patient-centred care plan



Early **post-discharge** phone call



Up to 6 virtual **home visits**



Monthly virtual **interprofessional team conferences**



**Secondary stroke prevention &** health promotion education



Self-management & **community re-integration** support



**System navigation** support aided by “My Stroke Recovery Journey” Website



# Transitional Care Stroke Intervention

## Activities During Virtual Home Visits

- Screening & assessment with standardized tools
- Use of evidence-based guidelines to prevent and manage stroke, other comorbidities
- Medication review & reconciliation
- Self-management support (problem-solving, decision-making, and goal-setting)
- Stroke management and prevention education
- System-navigation support
- Use of My Stroke Recovery Journey website
- Caregiver assessment and support
- Alerts (depressive symptoms, medication, dementia)





# Transitional Care Stroke Intervention

## System Navigation Support



- Identify & address risk factors for adverse events, e.g., avoidable hospital readmissions, safety issues
- Arrange community services & follow-up health-care appointments
- Facilitate communication between the patient, care partner, and health care team
- Support linkages & referrals to relevant health and social service providers
- Develop & evaluate an individualized patient-centred plan of care



# Transitional Care Stroke Intervention

## Results from Multi-site Pragmatic Randomized Controlled Trial

### Primary Outcome

- No significant differences in baseline to 6-month risk of hospital re-admission

### Secondary Outcomes

- Significant differences in physical functioning, stroke self-management, and patient experience

### Cost Analysis

- No significant differences in total costs from baseline to 6-month

### Implementation Facilitators

- Dedicated care coordinator/system navigator
- Use of standardized clinical assessment tools and alerts
- Shared electronic communication

# Scalability Assessment

## Intervention Scalability Assessment Tool

- Scalability is the ability of a health program demonstrated to be effective on a small scale and/or under controlled conditions to be expanded into routine practice to reach a greater proportion of the eligible population while still retaining effectiveness
- Scalability assessment is a systematic process to assess the suitability of a health program for population scale-up<sup>5</sup>

Milat et al. *Health Research Policy and Systems* (2020) 18:1  
<https://doi.org/10.1186/s12961-019-0494-2>

Health Research Policy and Systems

RESEARCH Open Access

Intervention Scalability Assessment Tool: A decision support tool for health policy makers and implementers

Andrew Milat<sup>1,2,3\*†</sup>, Karen Lee<sup>2,3†</sup>, Kathleen Conte<sup>2</sup>, Anne Grunseit<sup>2,3</sup>, Luke Wolfenden<sup>2,4</sup>, Femke van Nassau<sup>5</sup>, Neil Orr<sup>6</sup>, Padmaja Sreeram<sup>7</sup> and Adrian Bauman<sup>2,3</sup>





# Scalability Assessment

## Intervention Scalability Assessment Tool

---

*Asks participants to consider:*

### **Part A**

- Problem
- Intervention
- Political context
- Evidence of effectiveness
- Intervention costs and benefits
- transitions in stroke care
- proposed program to address the problem (i.e., TCSI)
- current strategic/political/environmental context
- level of evidence available to support scale up of program
- known costs and quantifiable benefits

# Scalability Assessment

## Intervention Scalability Assessment Tool

---

*Asks participants to consider:*

### **Part B**

- Fidelity & adaptation
- Reach & acceptability
- Delivery setting & workforce
- Implementation infrastructure
- Sustainability
- proposed changes to program required
- reach and acceptability to the target population
- the delivery setting and current workforce
- potential requirements for scale up
- how could the program be sustained over time

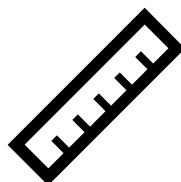


# Scalability Assessment

## Data Collection and Analysis <sup>6</sup>



Working Group  
meetings



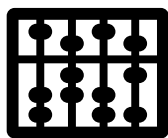
Working  
Group rating  
exercise



Document  
review and  
analysis



Key informant  
interviews



Quantitative  
analysis of  
ratings



Qualitative analysis of  
meeting minutes and  
interviews

# Results

- Benefits to implementing the TCSI
- Implementation facilitators
- Implementation challenges





# Benefits to Implementing the TCSI

- Evidence-based model
- Improved system navigation
- Enhanced post-stroke self-management skills
- Successful community re-integration

## Support the person with stroke at critical transitions

- Support with system navigation
- Continuity of care during transitions
- Reduce the risk of “*things falling through the cracks*”



# Implementation Facilitators

## System-Level

- TCSI aligns well with Ontario Health initiatives such as the provincial model of care for CSR; core functions of navigation
- Could leverage other initiatives
  - CSR indicators and minimum data set for provincial approach to CSR data collection & reporting;
  - Ontario Health Teams' work on integrated care pathways for chronic conditions;
  - reorganization of home care
- Ontario Regional Stroke Networks

## CSR Program-Level

- TCSI is consistent with local priorities and existing practice
- Some core components already part of usual care
- Adaptations to the local context and population
- Access to Regional Stroke Navigator or Acute Care Stroke Navigator roles
- Existing relationships with community supports and service providers
- Electronic health care records

# Implementation Challenges

## System-Level

- System integration, i.e., poor communication and coordination due to siloed services and health care sectors
- Lack of access to standard CSR in parts of the province; waitlists
- Lack of health human resources; shortage of primary care providers

## CSR Program-Level

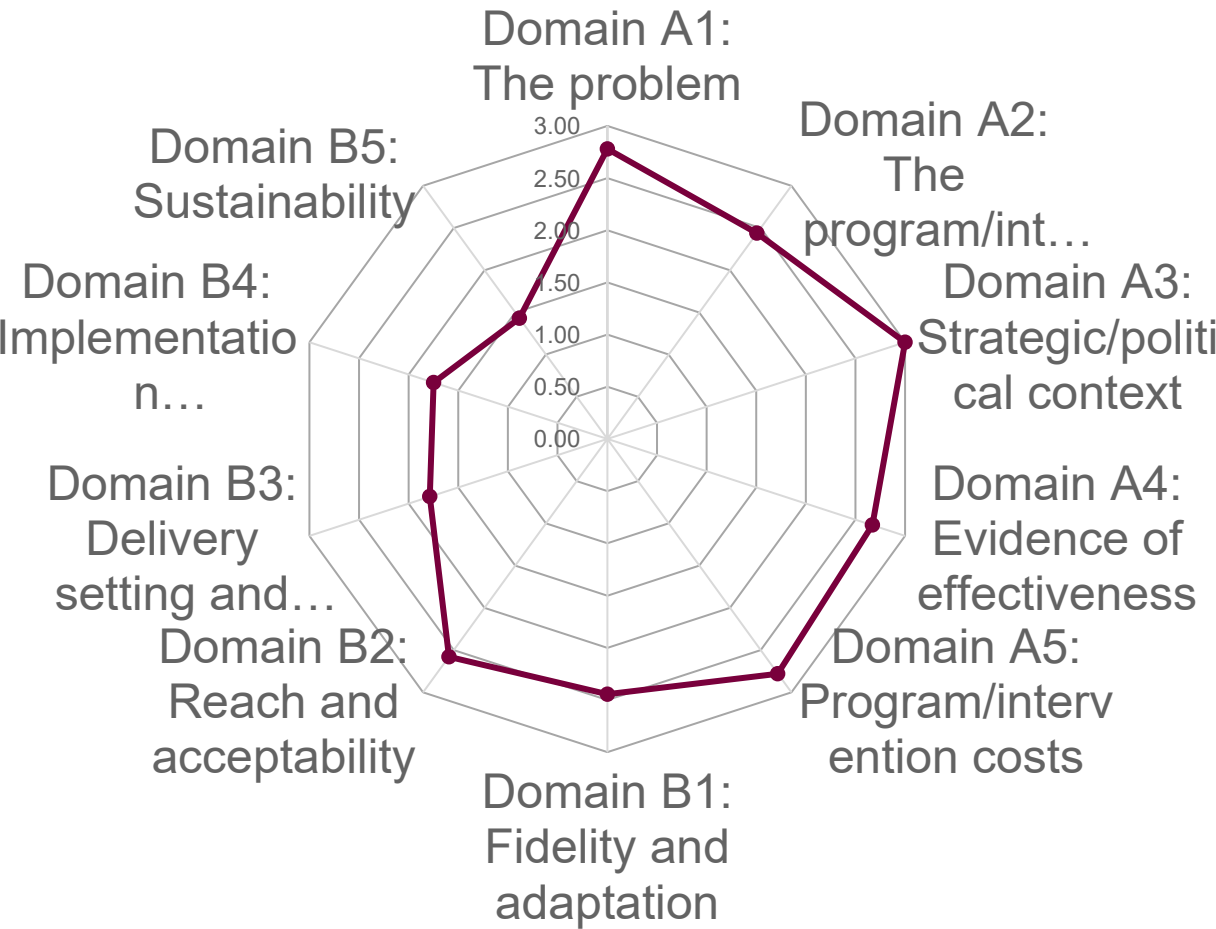
- Additional and ongoing funding
- Education, training and support
- Common digital platform
- Program quality monitoring

*“What we’ve been learning from some of the different sites is that any kind of outcome evaluations that they’re doing, it’s an extra manual step for them to collect any kind of metrics to monitor the program and most folks have been saying they’d love to have some sort of infrastructure that automated that and made it easier to see.”*

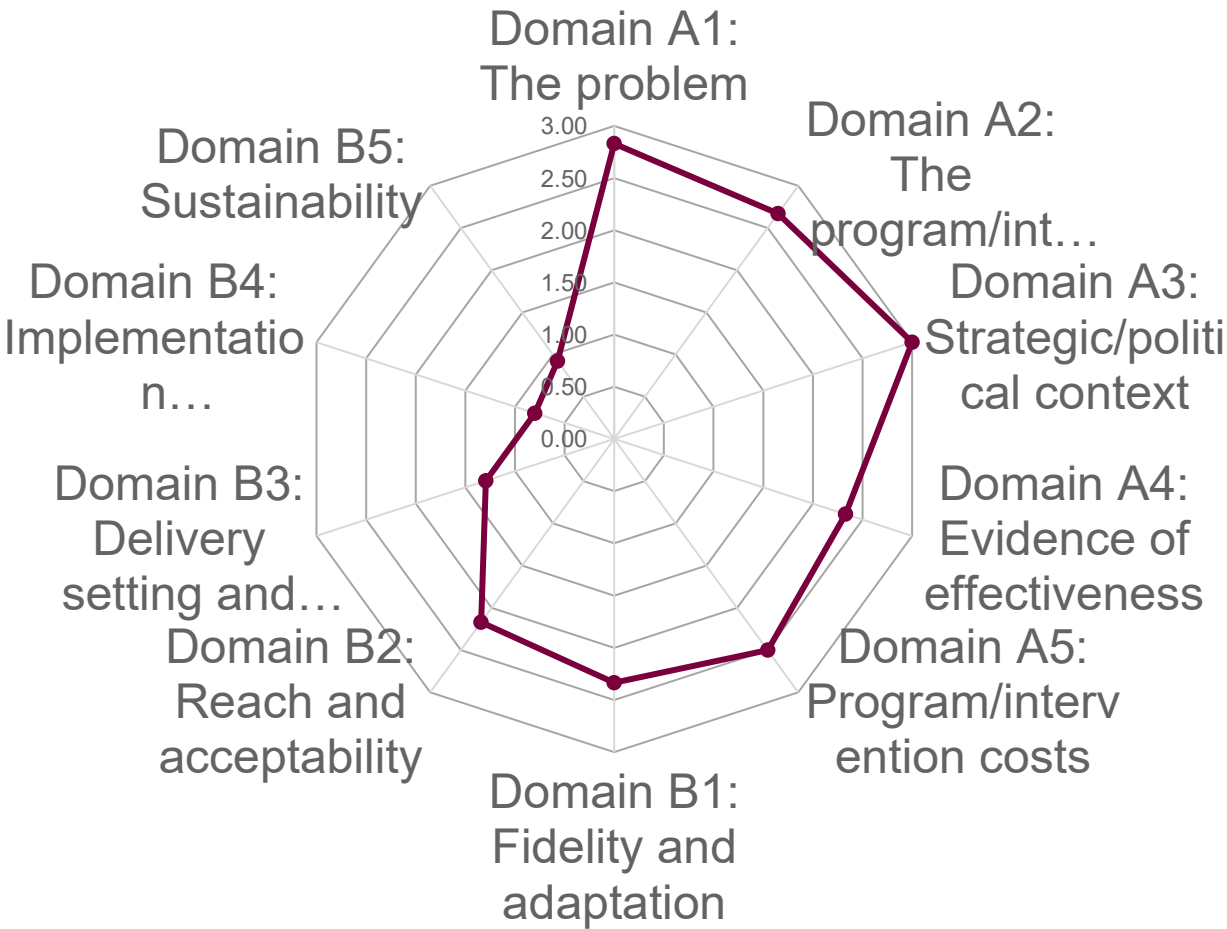


# Site-Specific Scalability Assessments

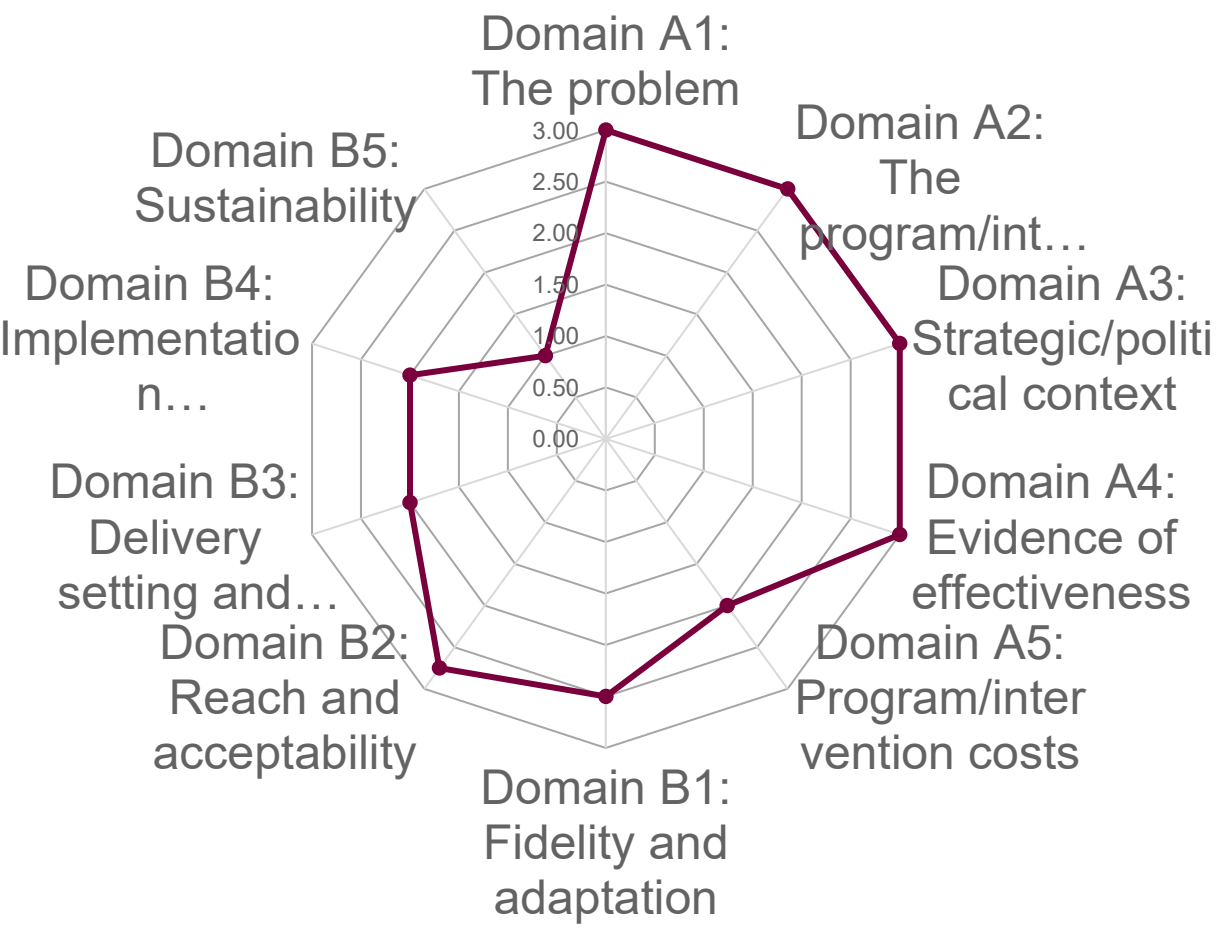
## Readiness Ratings



Site 1: Home-based



Site 2: Rural/remote hospital outpatient

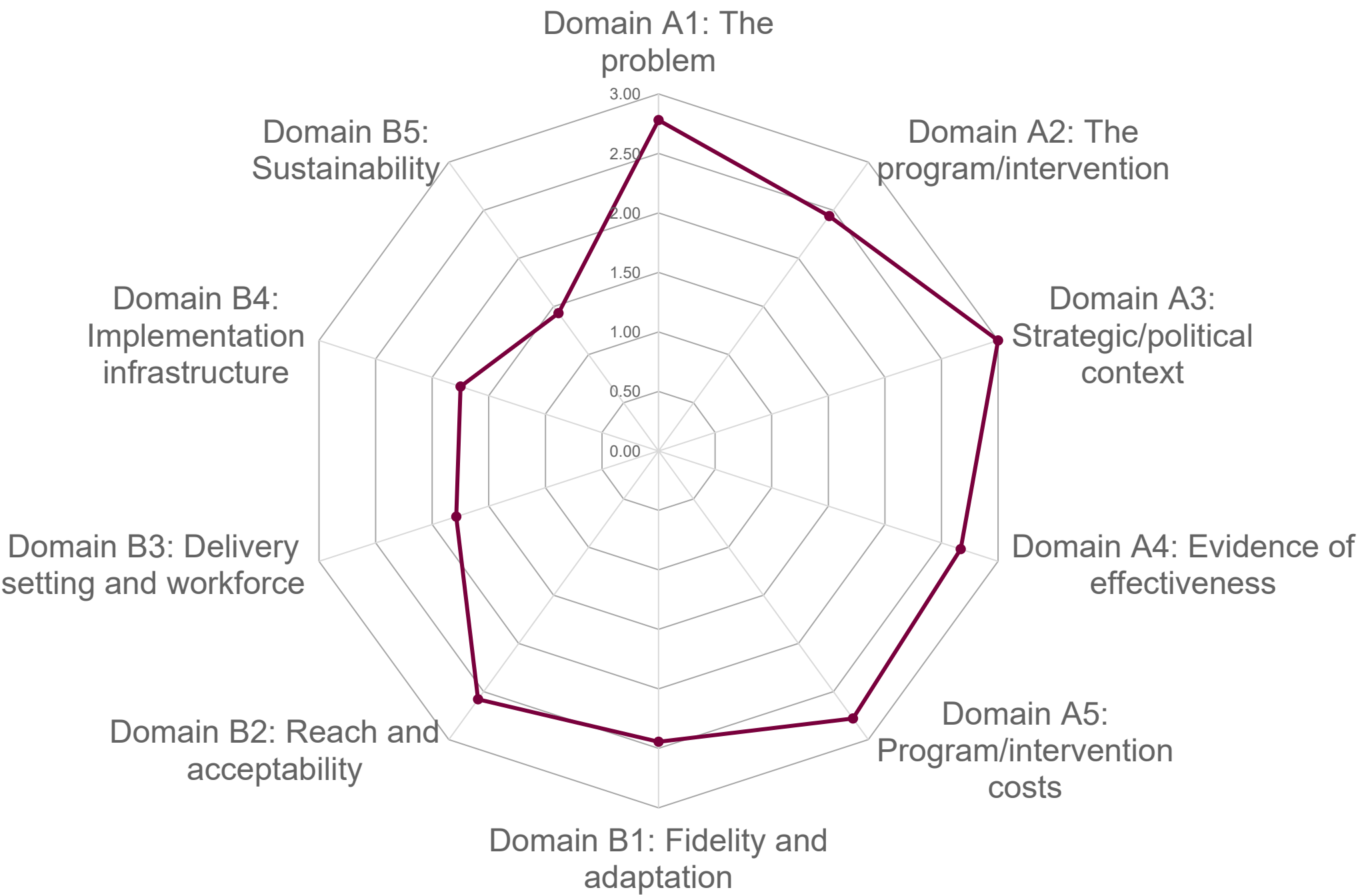


Site 3: Hospital outpatient with navigator role

# Site-Specific Results

## Site 1: Home-based CSR program

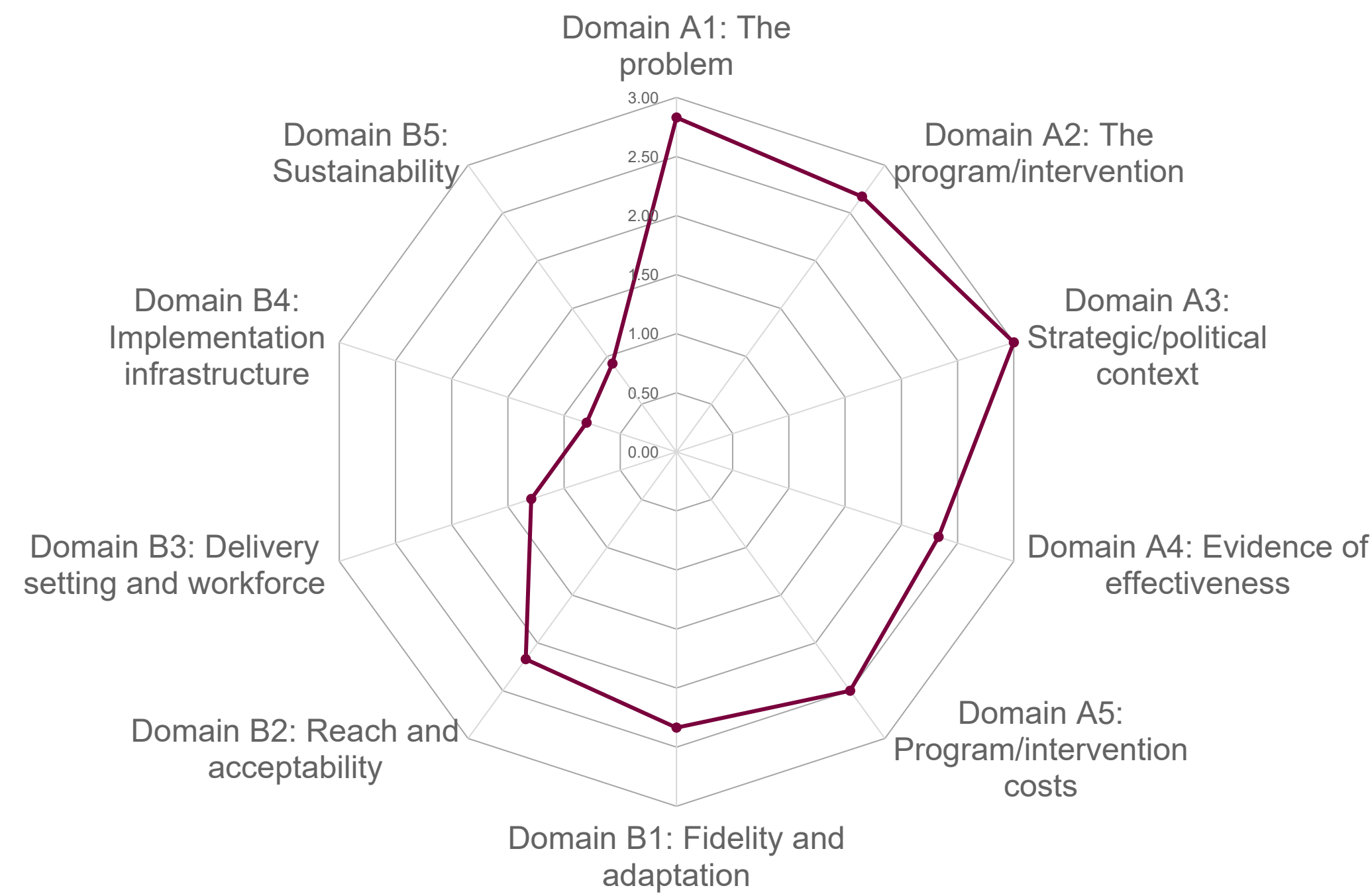
- Agreement that a dedicated care coordinator/system navigator would enhance care delivery
- Adaptations would be required for local context:
  - Use of stroke care binder instead of website to support care planning and system navigation
  - Leverage other programs to conduct early post-discharge call (i.e., acute care unit); and provide community support post-discharge from CSR (i.e., community peer education and support group)



# Site-Specific Results

## Site 2: Rural/remote hospital-based outpatient CSR program

- Recommended regional care coordinator role outside of CSR team could provide navigation support
- Adaptations would be required for local context:
  - Computer-facilitated virtual care would not be ideal for all persons with stroke and care partners
  - Group-based education and goal-setting
  - Leverage other programs to provide support post-discharge from CSR (i.e., community self-management program)

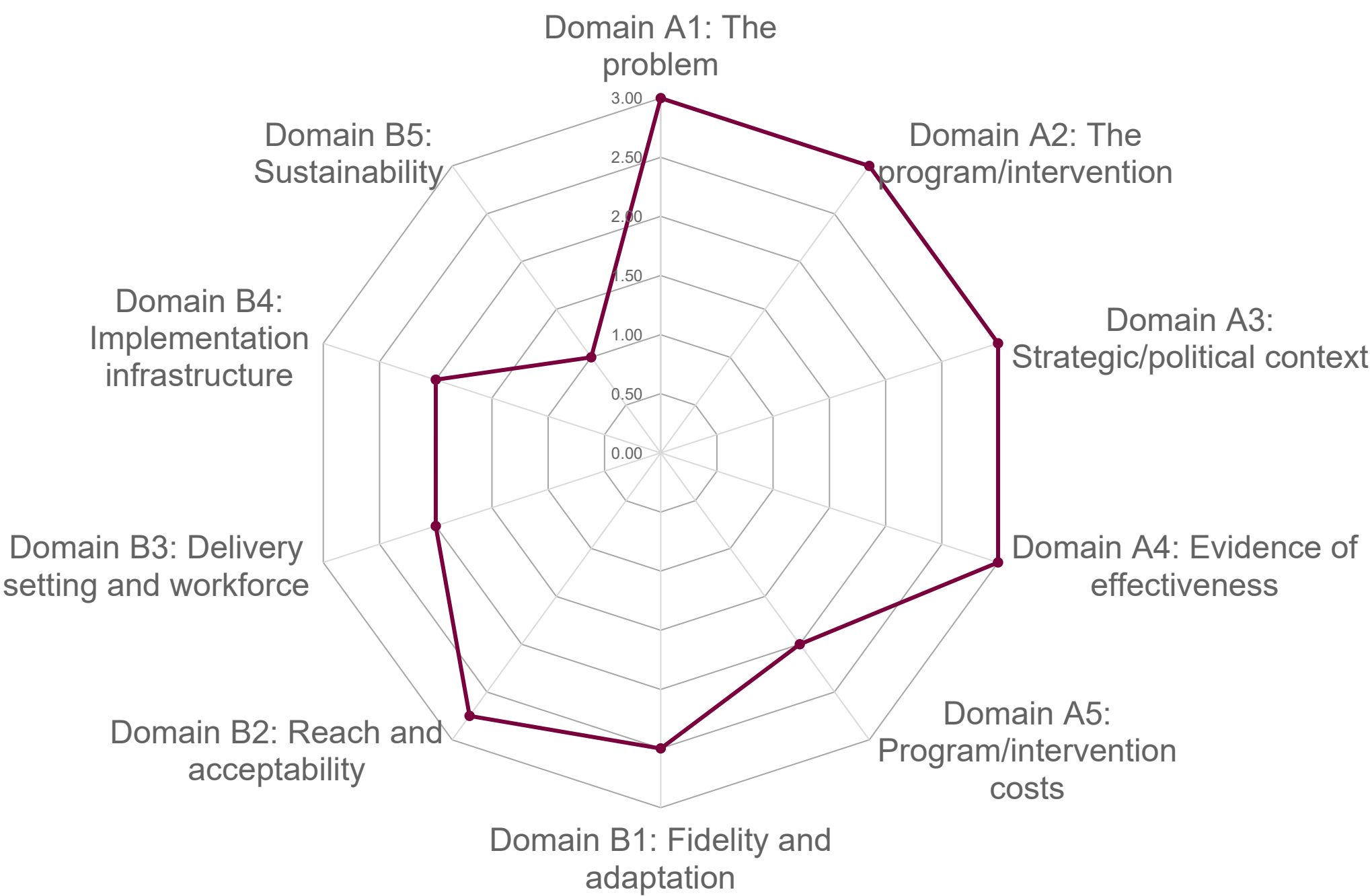




# Site-Specific Results

## Site 3: Hospital-based outpatient CSR program with navigator role

- Recommended dedicated care coordinator outside of the CSR team in addition to the navigator role on the team to facilitate connections to the community and improve community re-integration
- Adaptations would be required for local context:
  - Group-based education and peer support
  - Leverage existing databases of community programs for stroke instead of adapting the My Stroke Recovery Journey website



# Conclusions

- Participants shared benefits to implementing the TCSI
- The scalability assessment identified facilitators and barriers to the scalability of the TCSI
- Scalability assessment can be a useful tool to assess readiness for implementation





# Conclusions

- Evidence-based programs require adaptations to the local context and population
- Co-design of program adaptations should be done locally with patient partners, health and community care providers and leaders, and decision-makers
- CSR Community has a wealth of knowledge and innovations to achieve integrated care





# Next Steps

## Future Partnerships

- Conducting scalability assessments with other programs
- Developing virtual care as a facilitator of transitional care
- Understanding the effectiveness of different models of navigation in CSR
- Developing and evaluating a data collection and reporting strategy for CSR
- Collating and evaluating an implementation toolkit for the TCSI





# References

1. Ontario Health. (2022). Community Stroke Rehabilitation: Model of Care. <https://www.corhealthontario.ca/Community-Stroke-Rehab-Model-of-Care-092022.pdf>
2. Ontario Health. (2024). Navigation During Community Stroke Rehabilitation: Guidance Document. <https://www.corhealthontario.ca/resources-for-healthcare-planners-&-providers/rehabilitation/community-stroke-rehabilitation>
3. Markle-Reid, M. et al. (2020). An integrated hospital-to-home transitional care intervention for older adults with stroke and multimorbidity: A feasibility study. *Journal of Comorbidity*, 10, 1-21. <https://doi.org/10.1177/2235042X19900451>
4. Markle-Reid, M. et al. (2023). The stroke transitional care intervention for older adults with stroke and multimorbidity: A multisite pragmatic randomized controlled trial. *BMC Geriatrics*, 23(1), 687. <https://doi.org/10.1186/s12877-023-04403-1>
5. Milat, A. et al. (2020). Intervention scalability assessment tool: A decision support tool for health policy makers and implementers. *Health Research Policy and Systems*, 18(1). <https://doi.org/https://doi.org/10.1186/s12961-019-0494-2>
6. Milat, A. et al. (2019). Intervention Scalability Assessment Tool. [https://preventioncentre.org.au/wp-content/uploads/2019/11/The-ISAT-Oct-2019\\_FINAL.pdf](https://preventioncentre.org.au/wp-content/uploads/2019/11/The-ISAT-Oct-2019_FINAL.pdf)

# Acknowledgements

## Research Team and Funders

### Multisite Pragmatic Randomized Controlled Trial (previous study):

- Principal Investigator: Maureen Markle-Reid RN PhD
- Co-Investigators: Mark Bayley MD, Marla Beauchamp PT PhD, Jill Cameron PhD, David Dayler (Patient Partner), Rebecca Fleck OT MSc, Amiram Gafni PhD, Rebecca Ganann RN PhD, Ken Hajas (Patient Partner), Anne Hayes (Ontario Health), Barbara Koetsier (Patient Partner), Robert Mahony (Patient Partner), Michelle Nelson PhD, Jim Prescott (Patient Partner), Lehana Thabane PhD, Carly Whitmore RN, PhD



### Current Study:

Melissa Northwood RN PhD, Rebecca Ganann RN PhD, Tracey Chambers RN MSc, Sharvika Bharatselvam BHSc, Maxine Juneau RN MSc Student

Ontario Health  
(CorHealth)





# Thank you to the participating CSR Programs!

**Melissa Northwood**

- Assistant Professor
- [northwm@mcmaster.ca](mailto:northwm@mcmaster.ca)

