Provincial Stroke Rounds
March 1, 2023

Central South Regional StrokeNetwork

Optimizing transitions for older adults with stroke to support successful community reintegration and life after stroke

Dr. Maureen Markle-Reid
Eileen Britt
David Dayler

Evaluation

For the **Provincial Stroke Rounds Planning Committee**:

- To plan future programs
- For quality assurance and improvement

For **You**: Reflecting on what you've learned and how you plan to apply it can help you enact change as you return to your professional duties

For **Speakers**: The responses help understand participant learning needs, teaching outcomes and opportunities for improvement.

Online Evaluation

Please take 2 minutes to fill the evaluation form out.
Thank you!

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Mitigating Potential Bias

(Provincial Stroke Rounds Committee)

The Provincial Stroke Rounds Committee mitigated bias by ensuring there was no Industry involvement in planning or education content.

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Disclosures of Affiliations, Financial Support & Mitigating Bias

Speaker Names, Affiliations, and Research Support:

Dr. Maureen Markle-Reid

Professor Emerita, School of Nursing, McMaster University

Canadian Institutes of Health Research (CIHR) project grant: PJT 166026

Dr. Markle-Reid's CIHR Tier 2 Canada Research Chair in Person-Centred Interventions for Older Adults with Multimorbidity and their Caregivers

Eileen Britt

Central South Regional Stroke Team

David Dayler

None

Financial Support:

This session has not received financial or in-kind support

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Objectives

Participants will:

1. Learn about the **effectiveness** of the Transitional Care Stroke Intervention (TCSI) as a strategy for improving the quality and experience of hospital-to-home transitions for persons with stroke and their care partners.

2. Learn about the barriers and facilitators to **implementation** of the TCSI in two Central South sites.

3. Discuss how the results of the TCSI study can be used to **improve transitions and advance stroke recovery, self-management, and community reintegration** for persons with stroke and their care partners.

4. Discuss the implications of the results for **implementation and scale-up** of the TCSI in other provincial regions.

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Transitions - Definition

- Refers to the movement of people across various healthcare locations, settings and providers
- Includes working with persons with stroke, their families and caregivers to establish and implement a transition plan that includes goal setting and has the flexibility to respond to evolving needs

Canadian Stroke Best Practice Recommendations
Transitions and Community Participation Following Stroke
6th edition- 2019 Updated

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Successful Transition Management

- Requires transfer of accountability through interdisciplinary collaboration and handover between healthcare providers, persons with stroke, their families and caregivers.
- It encompasses the organization, coordination, education and communication required as people move through the stages and settings for stroke treatment, recovery reintegration, adaptation and end of life care.
- A transition plan includes discharge planning.

Canadian Stroke Best Practice Recommendations
Transitions and Community Participation Following Stroke
6th edition- 2019 Updated

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What is the problem?

- Improvements in hyperacute and acute stroke care have contributed to **population-wide decline in stroke mortality**[1-3]
- Despite these improvements, **the burden of stroke is increasing**, especially in the post-acute phases[3]
- Most (58-68%) older adults (≥ 55 yrs.) are discharged directly home after hospitalization, and up to 60% require rehabilitation in the community[4]
- **Navigating the transition between hospital and home is associated with substantial psychosocial and health-related challenges**
- Median number of transitions after discharge from acute care is 3, but some have up to 7 transitions in the first 90-days post-stroke[5]
- **Deficiencies in quality of transitions** and **significant evidence gaps regarding stroke care transitions**[4].

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Why is this important?

Poor quality transitions from hospital to home are associated with:

- avoidable hospital readmissions
- increased healthcare use and costs
- reduced quality of life, patient satisfaction and safety
- increased stress and burden on care partners[6,7].

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Factors associated with poor quality transitions

- Poor communication and collaboration
- Suboptimal use or delayed access to OP or CB services
- Lack of timely follow-up
- Lack of education during or after hospital stay
- Lack of individualized self-management plans or information about available community services
- Conflicting plans of care and instructions
- Lack of involvement of persons with stroke and their care partners in care decisions
- Wide variation in availability and type of CB services and lack of equitable access to care[8-12]

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Goal of transition management

- To facilitate and support seamless movement across the continuum of care and to achieve and maintain optimal treatment, outcomes, adaptation and quality of life for persons with stroke, their families and caregivers.

- This incorporates physical, cognitive, emotional, environmental, financial and social factors

Canadian Stroke Best Practice Recommendations
Transitions and Community Participation Following Stroke
6th edition- 2019 Updated

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What can be done?

- ✓ **A standardized, effective, equitable, scalable** and **adaptable** transitional care model is needed to improve the experience and quality of transitions across the care continuum for persons with stroke and their care partners.

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Transitional Care Stroke Intervention Study

Nominated Principal Applicant: Maureen Markle-Reid RN, MScN, 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

Partners

- **Central South Regional Stroke Network**
- Regional Rehabilitation Centre, Hamilton Health Sciences
- Hotel Dieu Shaver Health and Rehabilitation Centre
- Canadian Partnership for Stroke Recovery
- Rehabilitative Care Alliance
- Heart and Stroke Foundation
- Canadian Frailty Network
- Care Partners
- CorHealth Ontario Health
- Healthcare Excellence Canada
- Ontario Ministry of Health
- March of Dimes Canada
- Niagara Health

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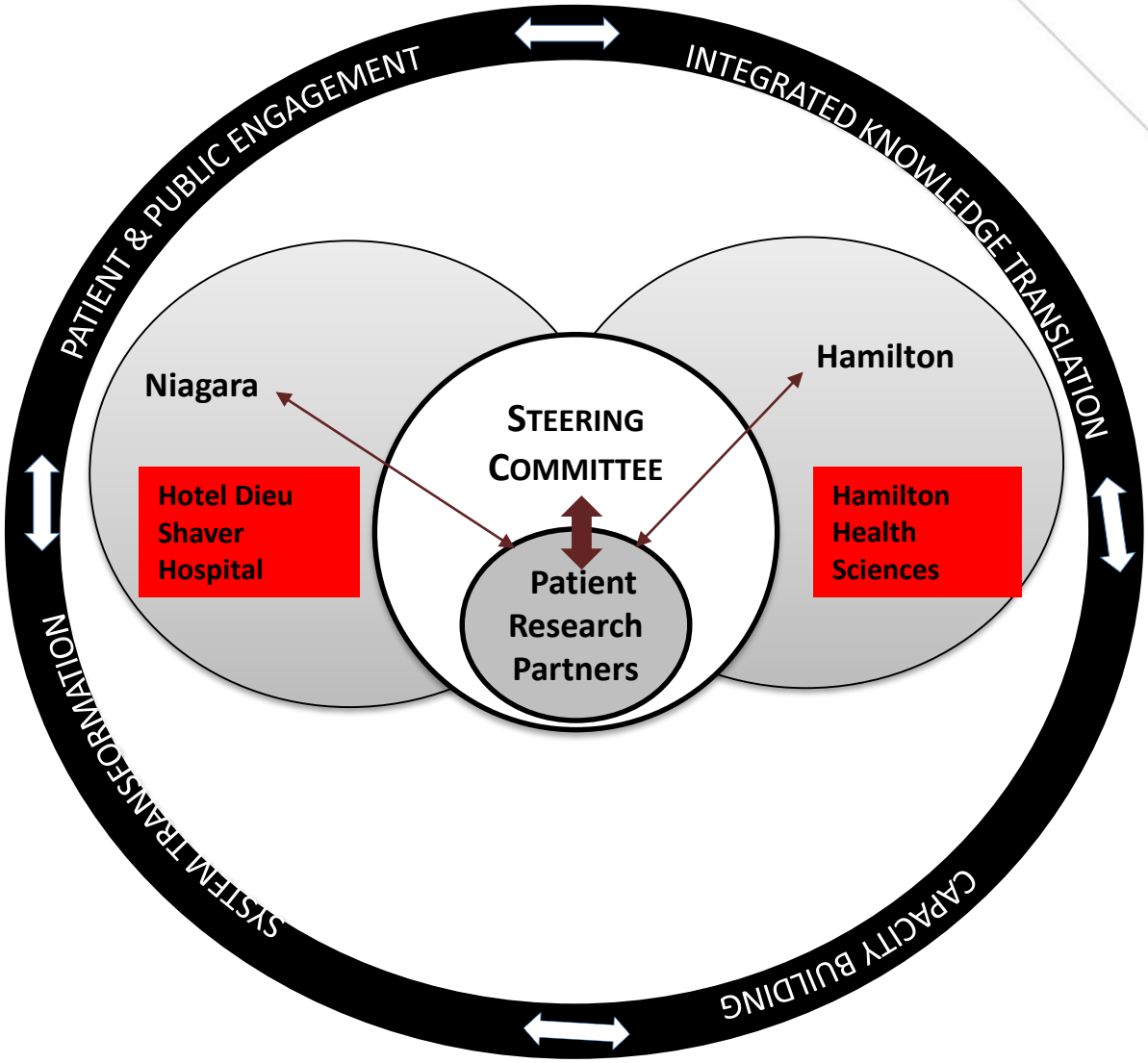
Governance Structure



Steering Committee

Representative Members

- ✓ Patient Research Partners
- ✓ Knowledge Users
- ✓ Policy Makers
- ✓ Co-investigators
- ✓ Trainees

Patient Research partners

Representative Members

- ✓ Patient & Public Research Partner representatives from each study site
- ✓ Research team patient partners

Intervention Team

Representative Members

- ✓ Physiotherapist
- ✓ Occupational Therapist
- ✓ Speech Language Pathologist
- ✓ Social Worker
- ✓ RN/RPN
- ✓ Managers

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Transitional Care Stroke Intervention

Transitional Care Stroke Intervention components include:

1) Development of a comprehensive discharge plan using the Patient Oriented Discharge Summary (PODS)

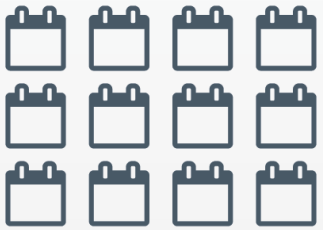
2) A post-discharge telephone call by the Care Coordinator

3) Up to six virtual visits by an interprofessional team

4) Care coordination and the development of a patient-centred care plan

5) System navigation support providing linkages to primary care providers and other health and community services supported by an online tool, "My Stroke Recovery Journey" website

6) Monthly interprofessional team case conferences



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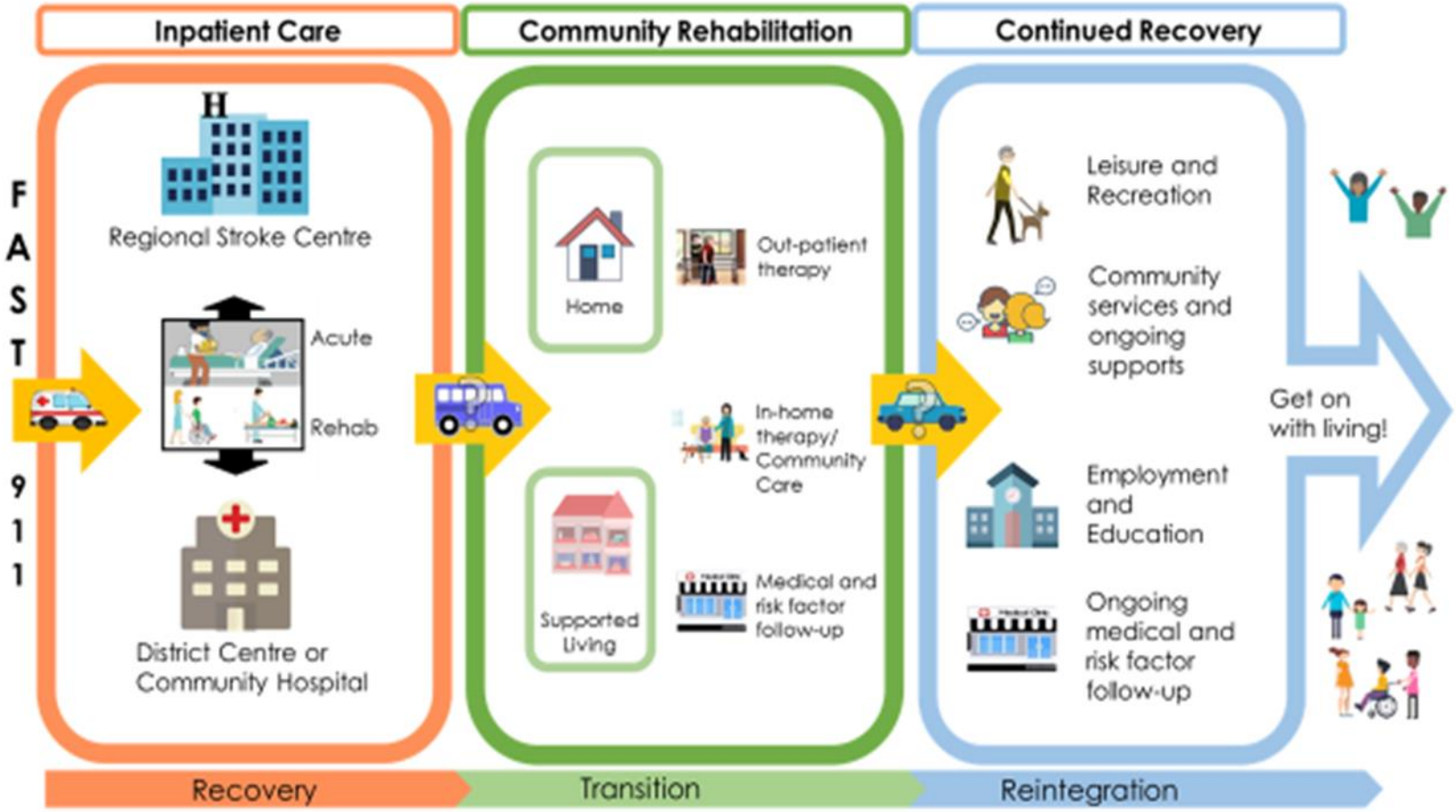
My Stroke Recovery Journey

It is important to remember everyone's stroke recovery is different!

Name: _____

Date: _____



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ORIGINAL ARTICLE

Interprofessional Stroke Rehabilitation for Stroke Survivors Using Home Care

Maureen Markle-Reid, Camille Orridge, Robin Weir, Gina Browne, Amiram Gafni, Mary Lewis, Marian Walsh, Charissa Levy, Stacey Daub, Heather Brien, Jacqueline Roberts, Lehana Thabane

Journal of Comorbidity
Volume 9, January-December 2019
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https://doi.org/10.1177/2235042X19828241

SAGE journals

Study Protocol

Feasibility and preliminary effects of an integrated hospital-to-home transitional care intervention for older adults with stroke and multimorbidity: A study protocol

Maureen Markle-Reid[1,2,3,4], Ruta Valaitis[1,3,4], Amy Bartholomew[1,3], Kathryn Fisher[1,3], Rebecca Fleck[5], Jenny Ploeg[1,3,4,6], Jennifer Salerno[1,3], and Lehana Thabane[2,3]

Journal of Comorbidity
Volume 10, 2020
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https://doi.org/10.1177/2235042X19900451

SAGE journals

Article

An integrated hospital-to-home transitional care intervention for older adults with stroke and multimorbidity: A feasibility study

Maureen Markle-Reid[1,2,3,4], Ruta Valaitis[1,3,4], Amy Bartholomew[3], Kathryn Fisher[1,3], Rebecca Fleck[5], Jenny Ploeg[1,3,4,6], and Jennifer Salerno[3,4]

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Research Objectives

Primary Objective:

- To examine the ***effectiveness*** of the TCSI compared to usual care on health outcomes and costs among persons with stroke and multimorbidity

Secondary Objectives:

- To examine how to best ***implement*** the TCSI intervention across the study sites
- To examine ***patient, care partners, and provider/manager experiences*** with the TCSI intervention.

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Effectiveness Evaluation

What is the effectiveness of the TCSI compared to usual stroke care on health outcomes, patient experience and health and social service use costs among older adults with stroke and multimorbidity?

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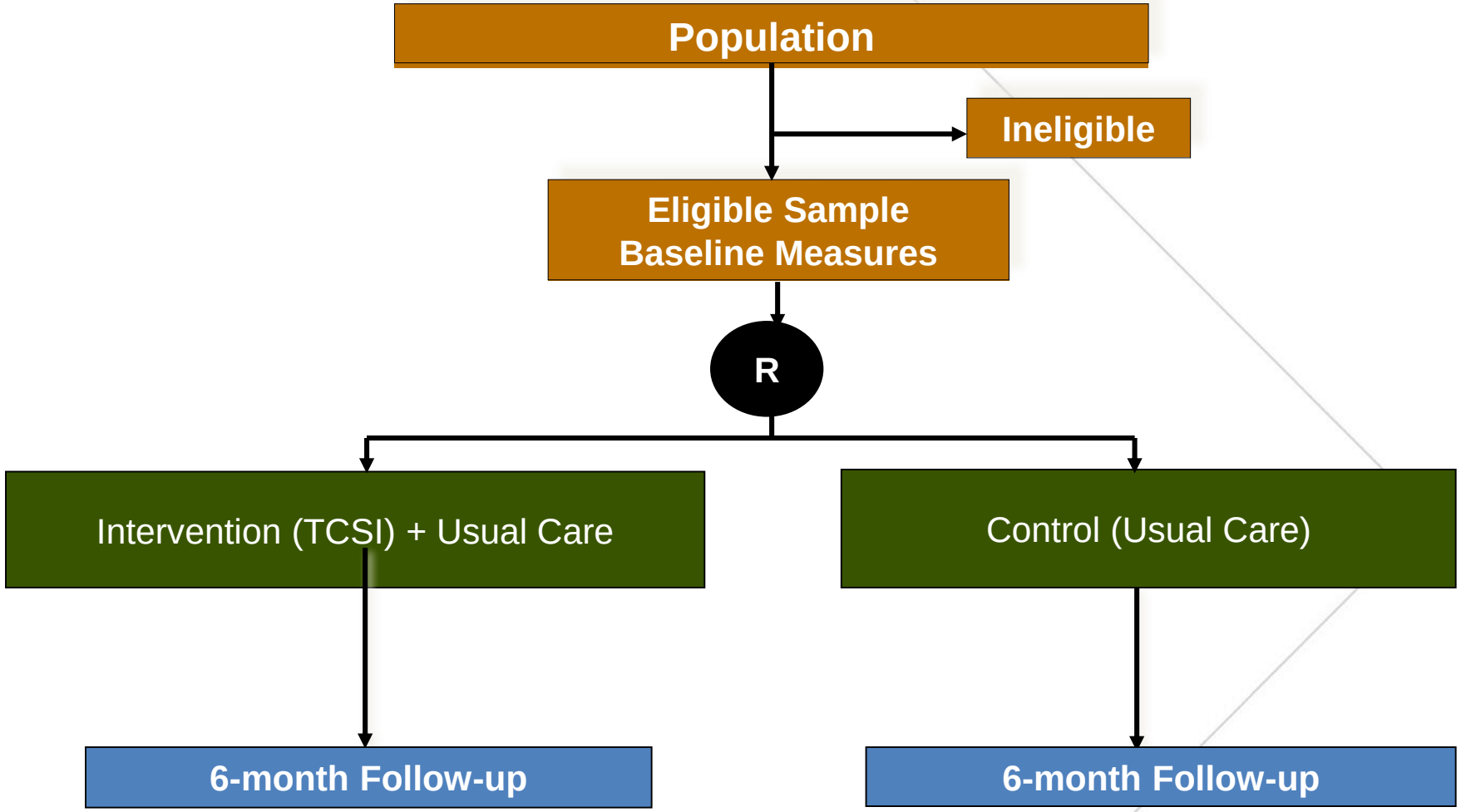
Pragmatic Randomized Controlled Trial



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Eligibility Criteria

- ≥ 55 years
- hospitalized for a stroke within the last year
- two or more co-morbid conditions
- discharged to the community (not hospital or LTC)
- referred to outpatient stroke rehab
- access to a phone or other device
- live within the geographic boundaries of the OP stroke rehab
- mentally competent to give informed consent or SDM
- Understand English or have a translator.

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Outcomes

Primary outcome:

- Risk of hospital readmission (all cause) after 6 months

Secondary outcomes:

- Number of hospital days and readmissions
- Survival rate to first hospital and ED visit readmission
- Number of ED visits
- Health and social service use costs, from societal perspective
- Physical and mental health functioning
- Stroke self-management
- Patient experience
- Depressive symptoms

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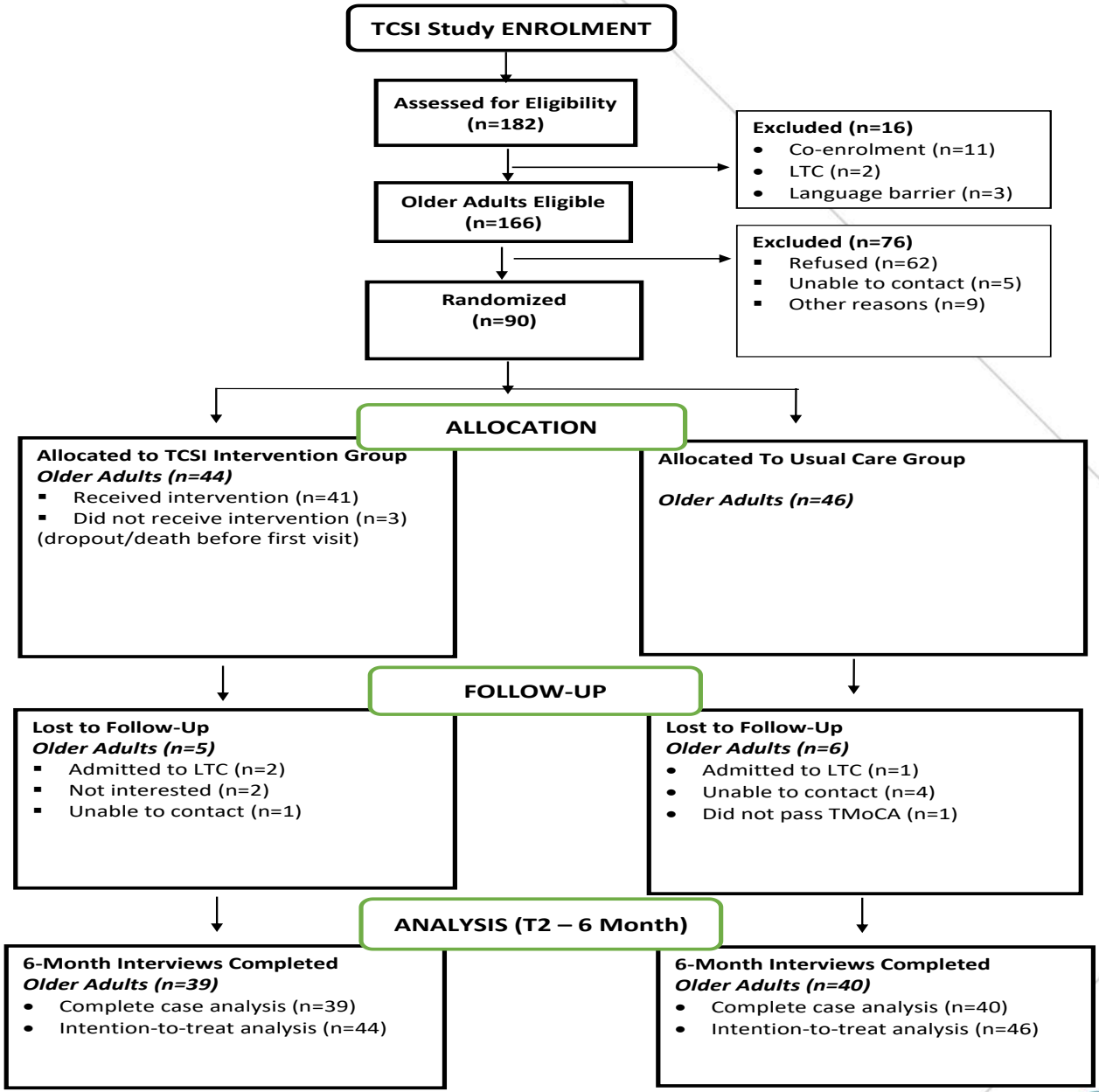

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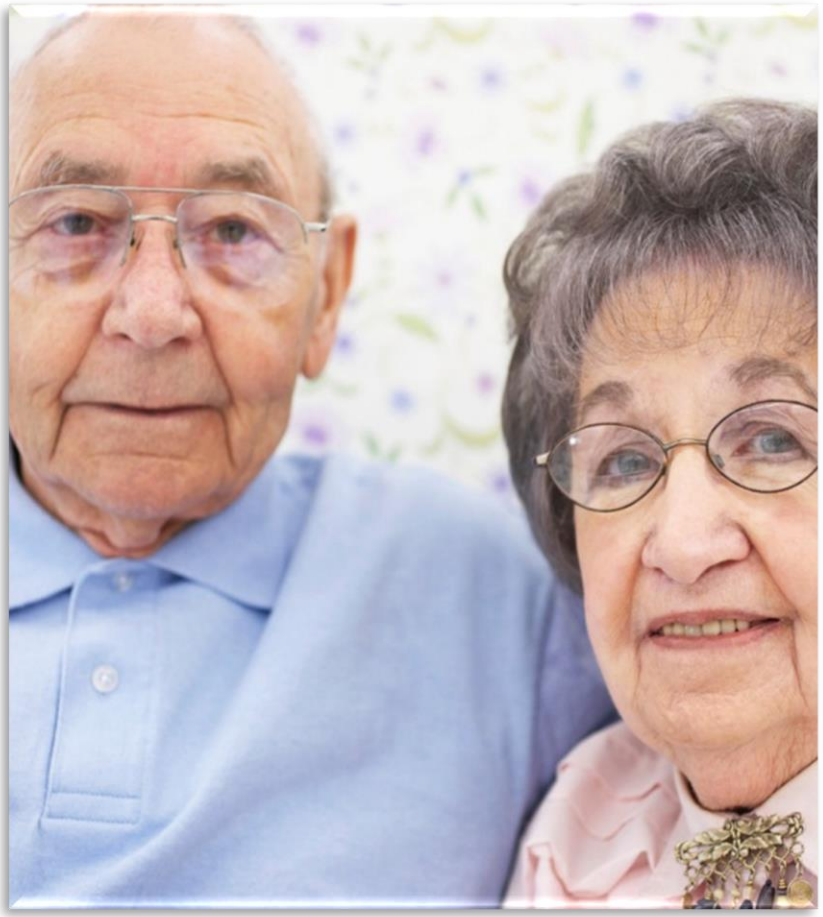
Baseline Characteristics (n=90)



- 60% were male
- Average of 70 years of age
- 78% had experienced their first-ever stroke
- Average of 6 weeks post-stroke
- Average of 7 chronic conditions in addition to stroke
- Taking average of 7 prescription medications daily
- 27% had 3 or more risk factors for stroke
- 25% had depressive symptoms
- 40% lived alone
- 46% had annual income < $60K CAN

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Primary Outcome: Hospitalizations

- No statistically-significant group differences in proportion hospitalized or risk of hospitalization:
  - ❑ Proportion hospitalized: 12.5% in control, 7.7% in intervention (p=0.48)
  - ❑ Risk of hospitalization (RR, 95% CI): 0.62 (0.16, 2.41) (p=0.48)

- No statistically-significant group differences in length-of-stay (LOS):
  - ❑ Intervention: 3 hospitalizations with LOS ranging 1-7 days
  - ❑ Control: 5 hospitalizations with LOS ranging 1-5 days (p=0.43)

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Secondary Outcome: ED Visits

- No statistically-significant group differences in proportion with ED visit or risk of ED Visit:
  - ❑ Proportion with ED Visit: 12.5% in control, 2.6% in intervention (p=0.10)
  - ❑ Risk of hospitalization (RR, 95% CI): 0.21 (0.03 to 1.68) (p=0.14)

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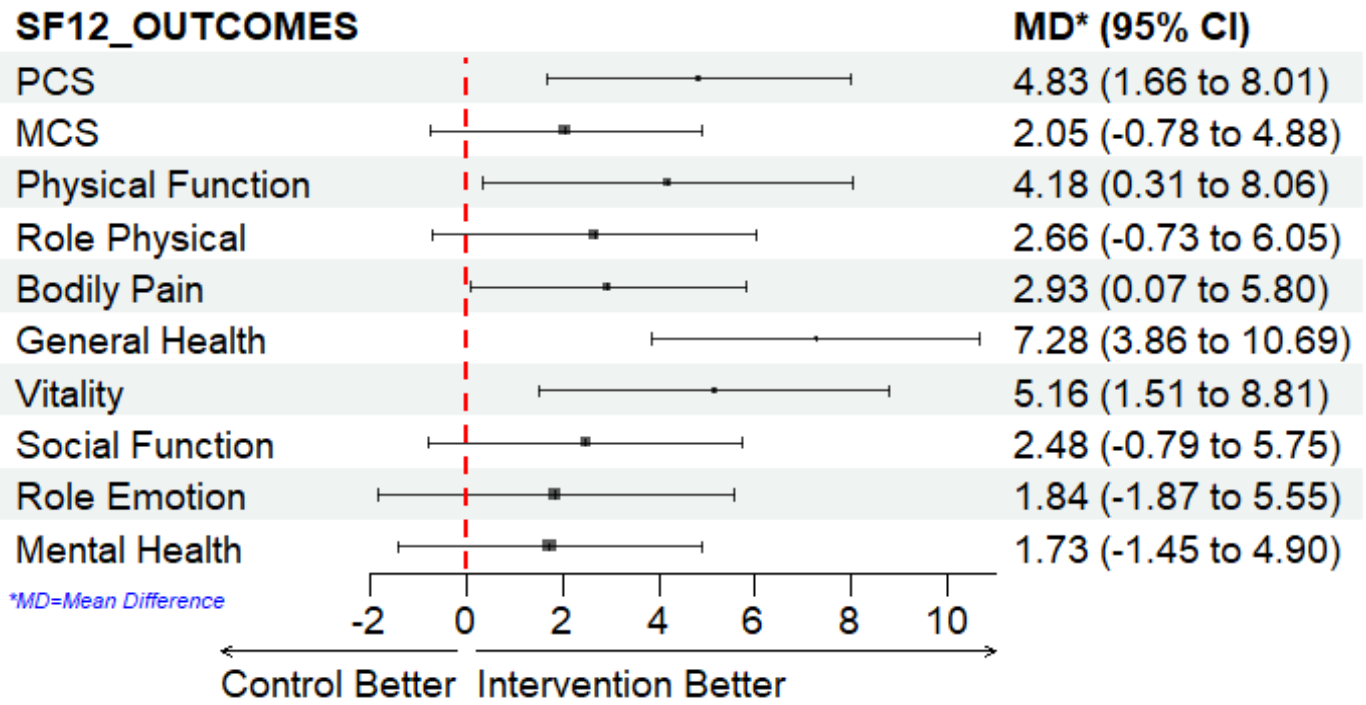
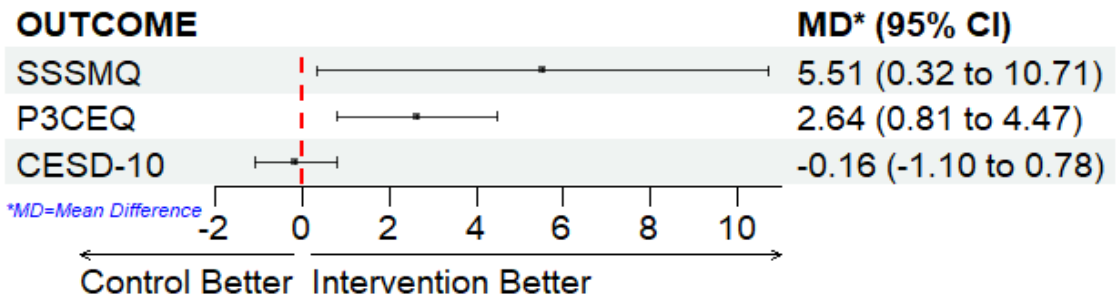
Secondary Outcome
Health-Related Quality of Life (SF-12 Survey)



Secondary Outcomes (Self Management*, Care Experience** Depressive Symptoms***)



*SSSMQ = Southampton Stroke Self Management Questionnaire

**P3CEQ = Patient-Centred Coordinated Care Experience Questionnaire

***CESD-10 = Centre for Epidemiological Studies – Depression 10-Item Scale

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Secondary Outcome
Costs of Use of Health and Social Services

Results – costs of total services used:

- No statistically-significant difference between groups

Results – costs of each service type used:

- Statistically-significant differences seen for 2 services:
  - **Home care**: lower costs in intervention group ($p=0.01$)
  - **Stroke care**: higher costs in intervention group ($p < 0.0001$)
- No statistically-significant differences for other services

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Implementation Evaluation

What are the barriers and facilitators to the implementation of the TCSI?

Methods and Data Sources

- Qualitative descriptive design
- 4 focus groups (2 per site) with a total of 12 healthcare providers: 6 and 14-months following initiation of the intervention
- 6 surveys (3 per site) with a total of 4 Managers: 6 and 14-months following initiation of the intervention
- 24 monthly outreach meetings (12 per site) with the intervention teams
- 10 bi-weekly/monthly joint Care Coordinator meetings
- Other study-related documentation e.g., manager meetings

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Implementation Facilitators

- ✓ Use of standardized clinical assessment tools facilitated discussions among the IP team and with patients and caregivers
- ✓ Use of screening and alerts facilitated communication and information sharing between IP team and primary care
- ✓ Virtual care delivery
- ✓ Dedicated care coordinator/system navigator
- ✓ Use of Sharepoint by IP team to communicate and share information

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Implementation Barriers

- Virtual care delivery
- Human resources
- Information sharing and communication
- Access to community programs and services

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Research Impacts

- Introduction of Care Coordinator/Navigator position at study sites
- Addition of Registered Nurse and Social Worker to the outpatient stroke rehabilitation team
- Use of alerts to share information and communicate with primary care
- Post-discharge follow-up call to patients waiting for admission to outpatient services
- Use of Sharepoint for information sharing and communication
- Transfer of My Stroke Recovery Journey website to Central South Regional Stroke Network
- Transferrable learnings regarding delivery of virtual community stroke care
- Alignment between this work and the Provincial CSR initiative.

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Next steps

- Assessment of the readiness for scale-up of the TCSI in diverse settings in Ontario

- Evaluation of the implementation and effectiveness of the TCSI in other diverse settings

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Discussion/Questions

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Other Resources

My Stroke Recovery Journey Website:

https://mystrokerecoveryjourney.ca/

Videos:

- https://youtu.be/Qx-XQ4pS6eg
- https://youtu.be/GN4mwL5Xbi8

Infographics:

- https://achru.mcmaster.ca/app/uploads/2022/12/Infographic1-Overview.pdf

- https://achru.mcmaster.ca/app/uploads/2022/12/Infographic-2-Quantitative.pdf

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