Understanding Spasticity in Long-Term Care:

Perspectives of Health Care Providers and Experiences of Residents

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WeRPN Symposium 2025

Background: Spasticity

Definition

- Velocity-dependent increase in muscle tone and exaggerated tendon reflexes

Presentation

- Stiffness, tightness, muscle contractions, and spasms

Complications

- Pressure ulcers, falls, infections, pain, mobility restriction and dependence, and psychological distress

Resident Impacts

- Mobility, feeding, dressing, toileting, sleep and personal hygiene

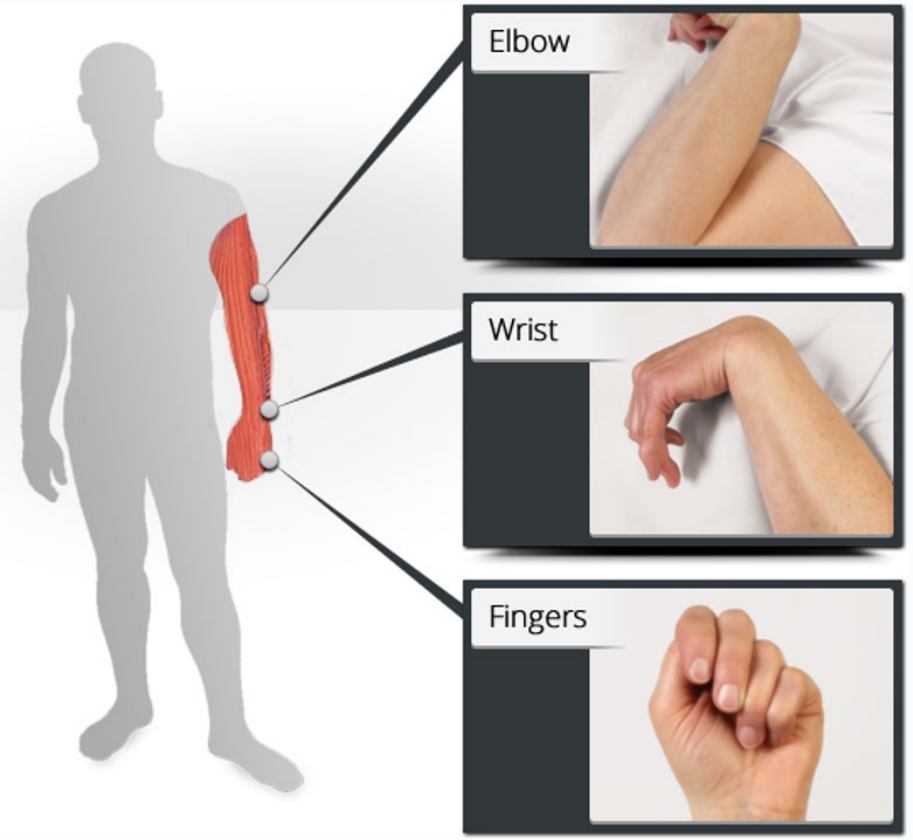
Provider Impacts

- Increased caregiver burden, workload, and costs

Management

- Routinely assessed and managed in acute and rehabilitation settings, **overlooked in LTC**

Spasticity



Why Does LTC Matter?

- **20% of LTC residents have a stroke history**
- Wide range documented for spasticity prevalence in LTC (20-70%) due to poor assessment and documentation
- **65% of LTC nurses are RPNs**

Literature Gaps

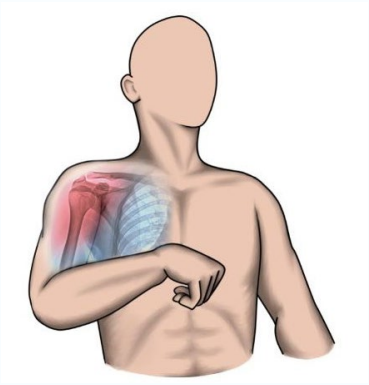
Research Studies

- N=12 studies have explored spasticity in LTC
- Diverse methodologies, little consistency in outcomes, few interventions
- Qualitative and quantitative; no reviews
- 1 study exploring provider perspectives
- **No Canadian studies

To explore RPNs' knowledge, experiences, and challenges in caring for LTC residents with post-stroke spasticity.

Research Questions

1. What do RPNs know about spasticity?
2. How does spasticity affect their workload?
3. What barriers exist to specialized care access?



Methods

Ethics	Western University Research Ethics Board
Study Design	Interpretive Description
Participants	Registered Practical Nurses (18+ years)
Setting	Long Term Care (N=375 bed)
Data Collection	Semi-structured interviews
Data Analysis	Thematic Analysis (Braun & Clark)


Mount Hope Centre for Long Term Care
St. Mary's Building
Marian Villa Building
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ST JOSEPH
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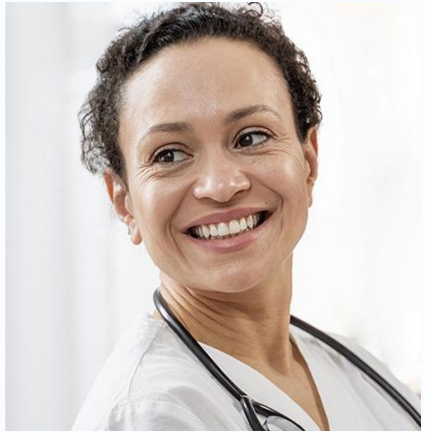
Participants



Registered Practical Nurses (N=26)

Mean Age: 43.4 years

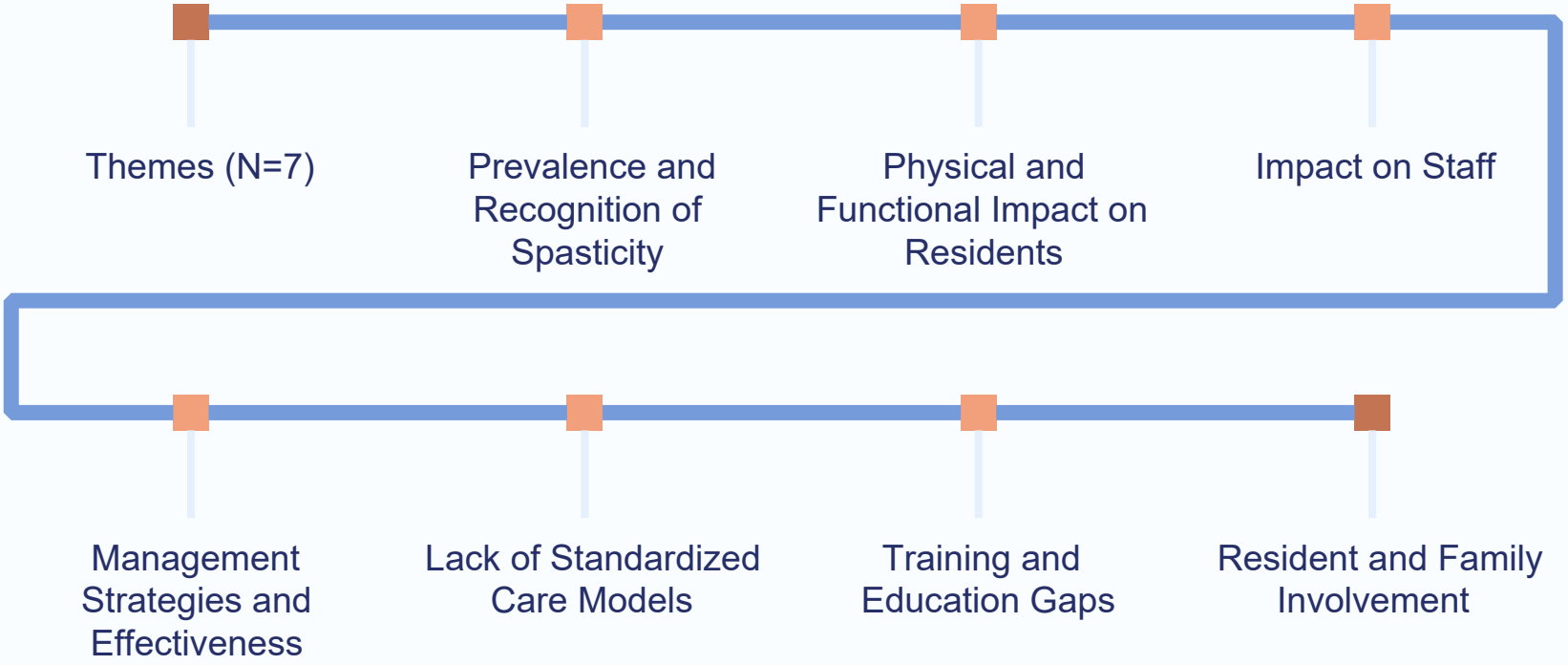
Sex: 24 females, 2 males

Years of Experience : 1-10 years (mean 2.1 years)

Responsibilities :

- Direct patient care (e.g., medication, treatments, monitoring, ADLs)
- Care planning and documentation (e.g., care plans, documentation, reporting)
- Supervision and teamwork
- Communication and family support (e.g., family liaison, patient education, concern resolution)

Key Findings



1. Prevalence & Recognition of Spasticity

- Common among LTC neurological residents (post-stroke or wheelchair-bound)
- Symptoms recognized by nurses (stiffness, spasms, contractures) but the term *spasticity* rarely used
- Indicates terminology gap
- Prevalence estimates varied:

  Low estimate ~ 5-10%

  High estimate ~ 30-40%
- Recognition based on observation → not formal assessment
- Highlights need for clearer education

2. Physical/Functional Impact on Residents

Spasticity Affects Nearly All Activities of Daily Living (ADLS)

- Dressing, toileting, transferring, repositioning, feeding, recreation

Causes Chronic Pain, Stiffness, Spasms and Involuntary Movements

- Lead to frustration and reduced quality of life

Results In Loss of Independence and Psychological Distress Among Cognitively Aware But Physically Limited Residents

- Feelings of embarrassment, sadness, and reduced self-worth
- Not only physical but also psychological

3. Impact on Staff

Increases Physical and Emotional Workload

- Repositioning and washing tight limbs
- Leads to emotional stress and risk of burnout

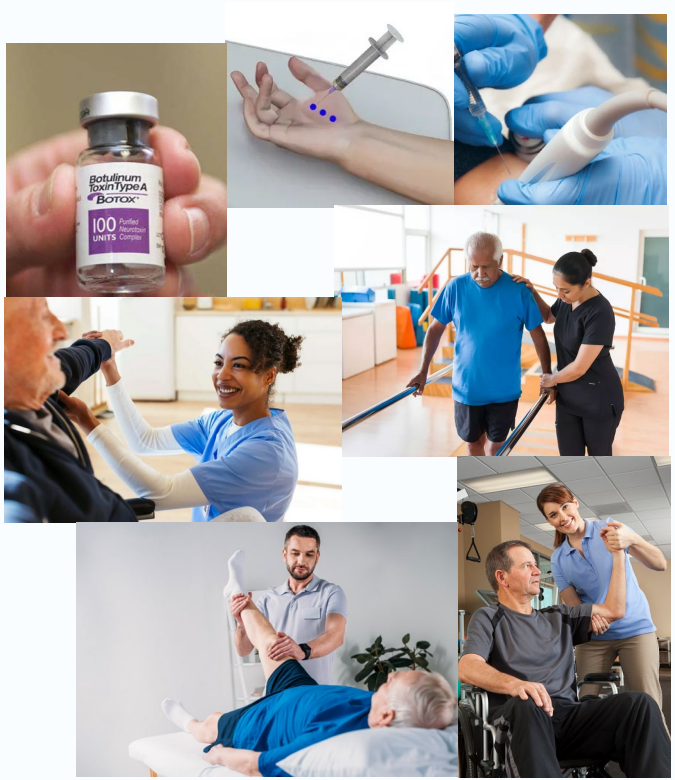
Requires Additional Time, Staffing, Resources and Equipment

- Two-person assists and mechanical lifts often needed
- Adds to workload when staffing levels are stretched

Demands Greater Care Coordination, Communication and Interdisciplinary Collaboration

- Liaising with physicians and families takes extra time
- Highlights the need to support caregivers as well as residents

4. Management & Effectiveness



Multimodal Treatment Approaches

- Combination of oral medications (e.g., Baclofen, Gabapentin)
- Botulinum Toxin Type A injections
- Physiotherapy (passive ROM, stretching, walking, splints)
- Surgical interventions (e.g., tendon release in severe cases)

Variable Effectiveness Across Interventions

- Properly administered Botulinum Toxin and consistent physiotherapy→ **Most effective when follow-up is maintained**
- Oral medications are used less often due to side effects (e.g. sedation) and contraindications

Access and Implementation Challenges

- Therapy and splinting are often inconsistent across residents
- Criteria for physiotherapy referral remain unclear

5. Lack of Standardized Care Models

No Clear Model of Care Identified

- No formal or standardized spasticity care model exists within most facilities
- Care tends to vary depending on the unit, provider, and available equipment

Care is Ad Hoc and Provider-Dependent

- Decisions rely on individual provider experience, judgment, and available resources
- Collaboration is often informal among personal support workers, nurses, physicians, and physiotherapists

6. Training & Education Gaps

Minimal Formal Training

- Limited education on spasticity recognition or management

Learning On-The-Job

- Most knowledge gained through clinical experience or peer learning
- Few structured learning opportunities

Desire for Further Education

- Strong interest in handson workshops, case studies, in-services and other educational resources
- Motivated and ready to enhance spasticity management skills

7. Resident & Family Involvement

Involvement Is Variable

- Efforts to include residents and families in care decisions
- Limited by cognitive impairment, staff roles, and time constraints

Treatment Alignment With Goals of Care

- Aligning treatments with resident or family preferences
- Balancing functional gains with burdens of intervention
- Focus on comfort versus maximizing mobility

Key Takeaways

Prevalence

- Spasticity is prevalent but under-recognized as a distinct condition in LTC

Impact

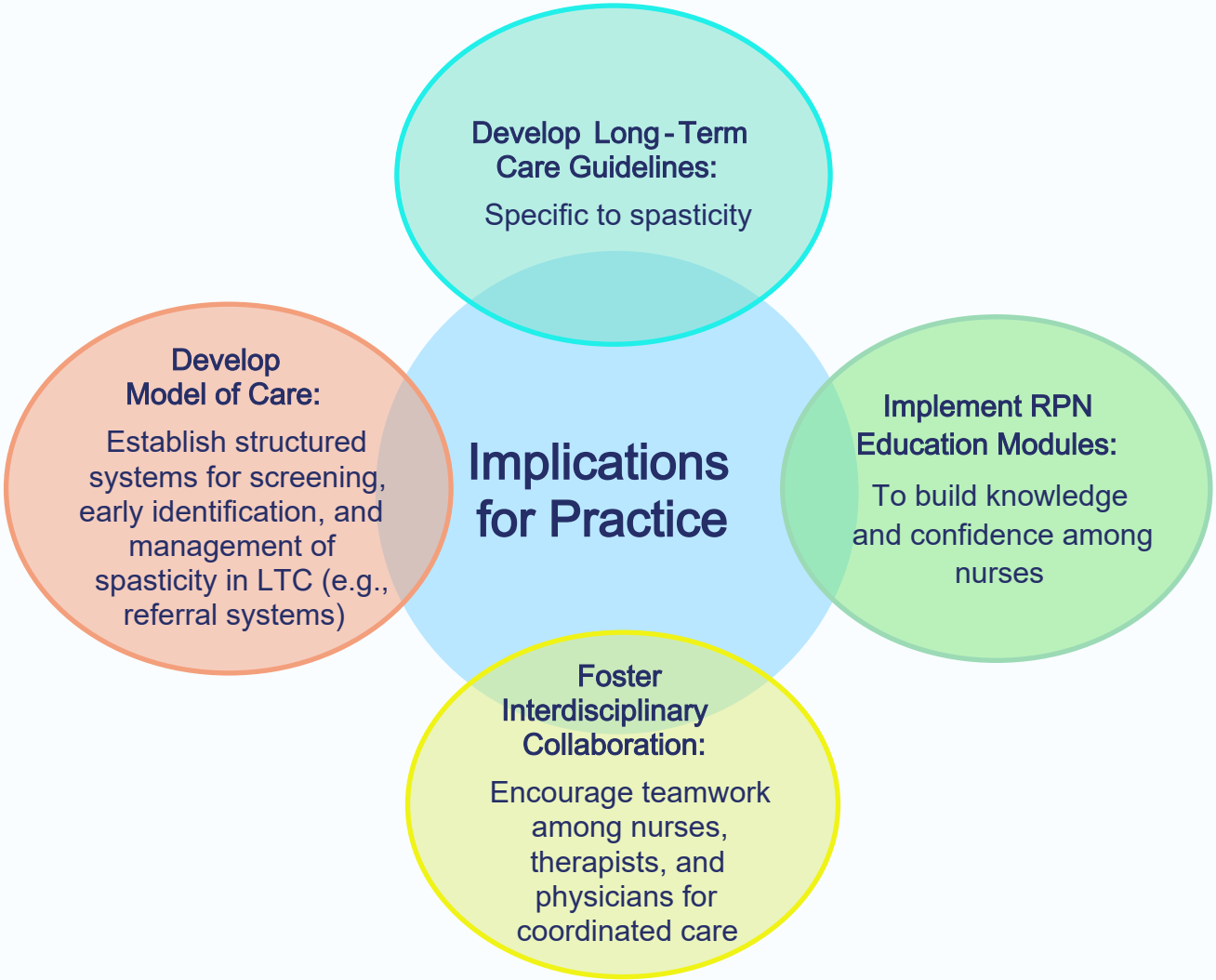
- Spasticity has substantial impact on resident quality of life and caregiver workload

Identification

- Identification requires interdisciplinary awareness, knowledge, and collaboration but lacks formalization

Management

- There is a critical need for staff training and structured clinical pathways (i.e., mode of care)


Develop Long-Term Care Guidelines:
Specific to spasticity
Develop Model of Care:
Establish structured systems for screening, early identification, and management of spasticity in LTC (e.g., referral systems)
Implications for Practice
Implement RPN Education Modules:
To build knowledge and confidence among nurses
Foster Interdisciplinary Collaboration:
Encourage teamwork among nurses, therapists, and physicians for coordinated care

Knowledge Mobilization and Next Steps

- **Poster Presentation**
  American Congress of Rehab Medicine (Chicago, USA, Oct 2025)
- **Oral Presentation**
  WeRPN Research Symposium (Brampton, Canada, Nov 2025)
- **Workshop**
  International Society of Physical Medicine and Rehab (Vancouver, Canada, May 2026)
- **Publications** in progress now
- **Next Grant** CIHR Planning and Dissemination Grant
  (pilot testing of SST in LTC homes across Ontario)

CIHR IRSC
Canadian Institutes of Health Research
Instituts de recherche en santé du Canada

Acknowledgments

Registered Practical Nurses
Association of Ontario

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Thank You!

Let’s Stay in Touch!
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