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RESEARCH CONNECTIONS GRANT PUBLIC REPORT

Time for Action in Saskatchewan: Connecting people with neurological conditions to the long-term benefits of exercise



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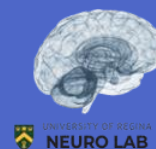


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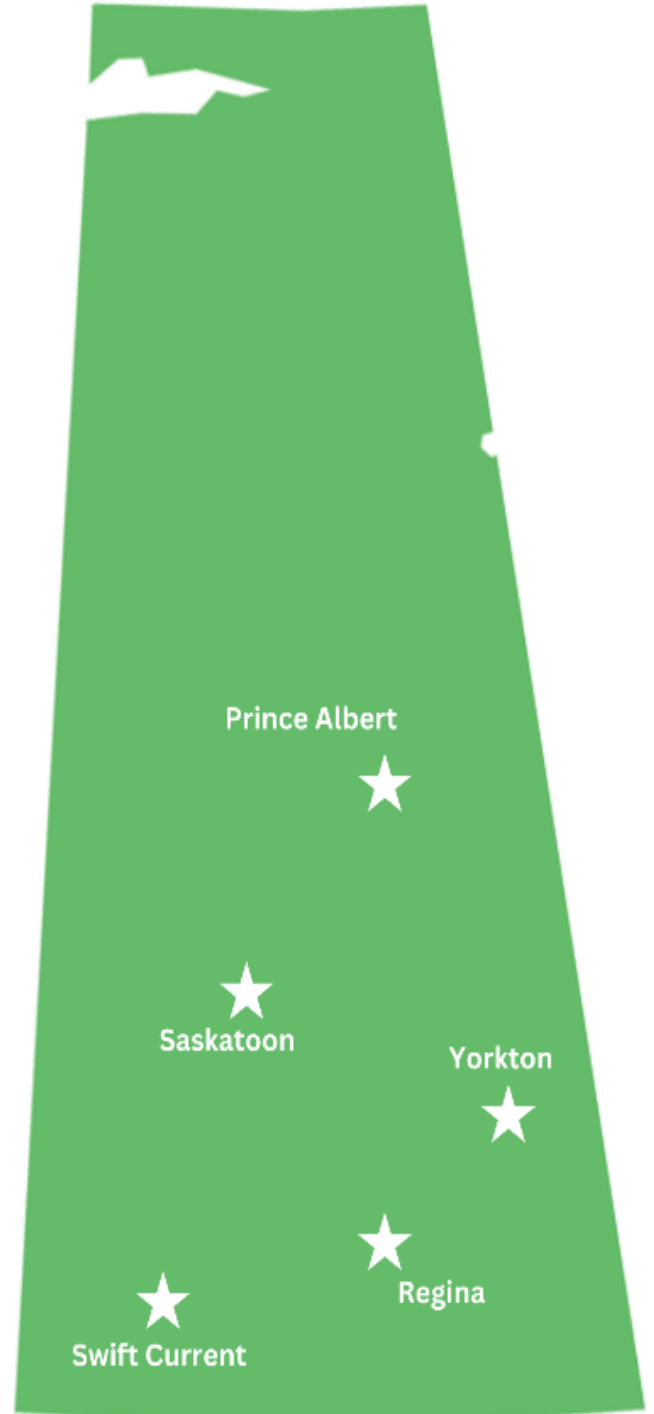
ACKNOWLEDGMENTS

01 PROJECT SUMMARY

There are well over 100,000 people in Saskatchewan living with chronic neurological conditions. Regular exercise can help to manage symptoms, support recovery, and improve quality of life for people experiencing such conditions. We hosted community roundtable meetings in Prince Albert, Regina, Saskatoon, Swift Current, and Yorkton, bringing together people living with chronic neurological conditions, exercise professionals, and healthcare providers in Saskatchewan. We talked about accessibility and quality of exercise services for people with neurological conditions in our province. We then formed an Expert Panel to develop recommendations to guide future work in this area. The Expert Panel made FIVE recommendations related to:

1. Practical training of students/professionals
2. Information-sharing and partnership
3. Accessible transportation
4. Accountability for services
5. Diverse perspectives

With these recommendations in hand, we hope that our communities can take initiative to increase delivery and use of exercise services for Saskatchewan residents living with chronic neurological conditions. It is: **Time for Action.**



02 PROJECT TEAM



Cameron Mang, PhD, CSEP-CEP

Cameron is a Neurophysiologist and Clinical Exercise Physiologist. He studies exercise and skill training effects on the central nervous system.



Alison Oates, PhD

Alison is Motor Control Scientist. She studies walking and balance control in aging adults and those experiencing neurological conditions.



Kathryn Sibley, PhD

Kathryn is the Canada Research Chair in Integrated Knowledge Translation in Rehabilitation Sciences. Her work aims to improve the health of Canadians by accelerating the translation of research evidence into healthcare practice.



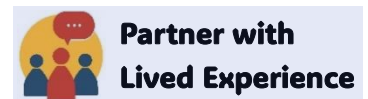
Sue Peters, PhD, MPT

Sue is a Neuroscientist and Physical Therapist. She studies how the brain functions to control mobility and how recovery of mobility can be optimized after injuries like stroke.



Karon Hantelman

Karon experienced an incomplete spinal cord injury in 2015. She is an avid exerciser and long-time participant of the Enrich Neurorehab Program offered at the University of Regina.

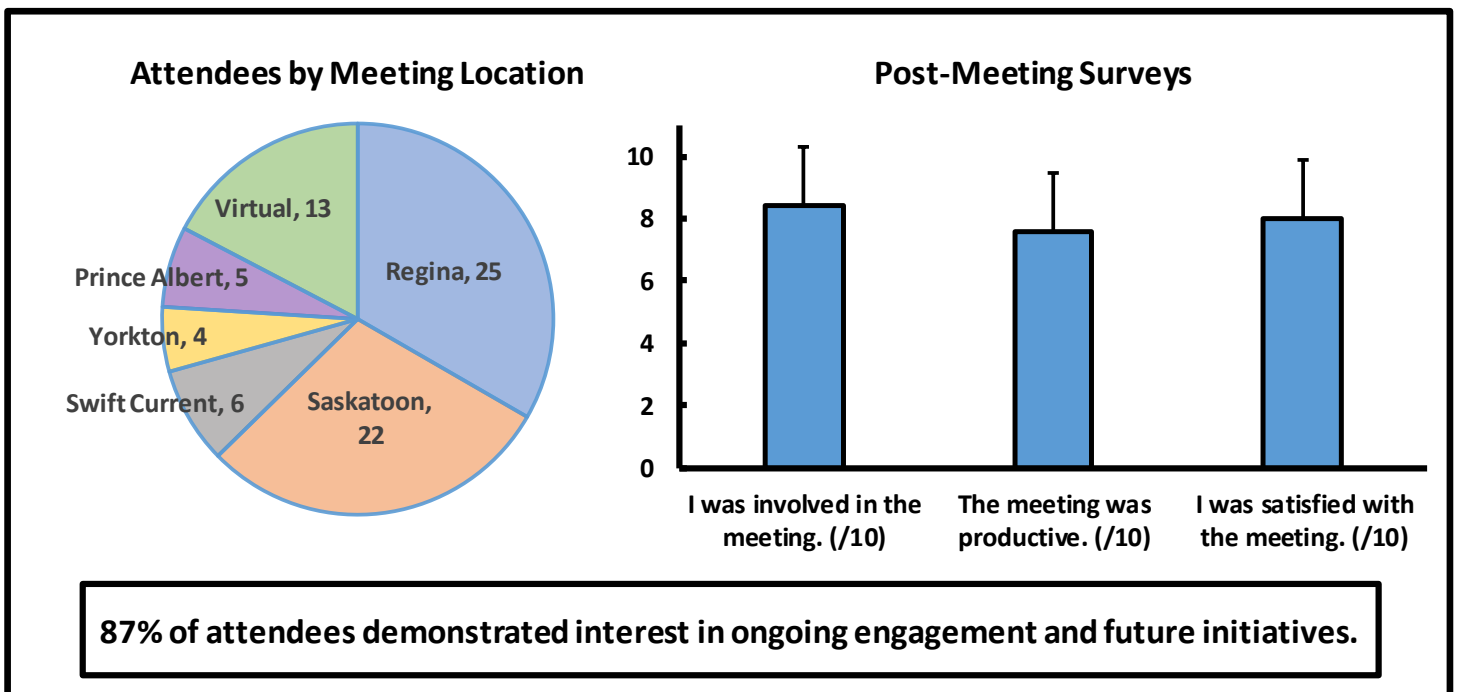


03 ROUNDTABLE MEETINGS

75 people across Saskatchewan participated in roundtable meetings to discuss exercise experiences and opportunities for people living with chronic neurological conditions.

Between June and December 2023, and across Regina, Saskatoon, Swift Current, Yorkton, and Prince Albert, we engaged with: **34** people with lived experience of neurological conditions, **12** exercise professionals, **10** physical therapists, **4** recreation therapists, **4** physicians, **2** occupational therapists, and **9** other professionals (e.g., program administrators, researchers).

Conversations focused on: 1) Sharing evidence of the benefits of long-term exercise for people living with chronic neurological conditions; 2) Describing the gap between this evidence and current practice; and, 3) Exploring the perceived, actual, and optimal services that can be provided to better support people living with neurological conditions in engaging in exercise.



04 EXPERT PANEL MEMBERS

Barb Butler, Regina, Person with Lived Experience of a Neurological Condition

Barb Butler is a child of Canada having lived in Manitoba, Ontario, Alberta, and finally Saskatchewan. Educated as a teacher with hopes of one day becoming a principal, her career came to an accidental halt following a semi truck crash that left her in a coma and diagnosed with a traumatic brain injury. After some time in rehabilitation, Barb found a new path to walk and found the Saskatchewan Brain Injury Association which eventually led to a position as Chair of Brain Injury Canada. Still involved in brain injury closer to home, she facilitates the brain injury support group in Regina.

Sarah Donkers, Saskatoon, Physical Therapist and Neurorehabilitation Researcher

Sarah Donkers is a physical therapist and researcher specialized in neurorehabilitation. She is currently an Associate Professor in the College of Medicine, University of Saskatchewan. Her work focuses on improving the access to and quality of neurorehabilitation across the continuum of care. She is particularly interested in interventions promoting functional neurorecovery and maximizing participation in meaningful life tasks.

Katie McLeod, Regina, Clinical Exercise Physiologist

Katie McLeod works as an Exercise Physiologist with First Steps Wellness Centre, a non-profit community clinic located in Regina that specializes in activity-based therapy for individuals with neurological injuries or conditions. She aims to improve function, independence, and quality of life through intensive neurorehabilitation.

Blair Healey, Saskatoon, Clinical Exercise Physiologist

Blair Healey graduated from the University of Saskatchewan, where he received a BSc and MSc Kinesiology in 2006 and 2010, respectively. As a Clinical Exercise Physiologist, Area Manager for cbiHEALTH, and Board member of the Kinesiology Association of Saskatchewan Board, Blair enjoys working directly with clients, leading teams of health care professionals, and helping to evolve the field of Kinesiology in our province.

Charlene Heuer, Swift Current, Physical Therapist

Charlene Heuer earned a Kinesiology degree from the University of Regina and a Masters in Physical Therapy from the University of Saskatchewan. She works as a Physical Therapist for the Saskatchewan Health Authority in Swift Current. She works in home care, long-term care, and a temporary care bed unit. She has a large population of neurological clients on her caseload and has considered starting a community exercise group for some time.

Arien Ferré, Melfort, Occupational Therapist

Arien Ferré has been an Occupational Therapist since 2004. Arien is based in Melfort and has worked around the northeast throughout the former Kelsey Trail Health Region. Throughout her career she has worked with clients of all ages and abilities. She loves helping people live their best lives!

Mark Kennedy, Saskatoon, Transition Specialist and Person with Lived Experience of a Neurological Condition

Mark Kennedy sustained a spinal cord injury at the T12 level in 2016 and uses a wheelchair for mobility. Before his injury, he was a construction electrician, providing him with a strong understanding of construction and the accessibility needs of people with disabilities. In his role at URO Medical, he works with newly injured people and helps them with any and all questions they have about transitioning home.

Sumita Hintz, Yorkton, Physical Therapist

Sumita is a University of Saskatchewan physical therapy graduate with 10 years of physiotherapy practice. She primarily works in a private practice setting as a clinic owner, but she spent time in acute care early in her career. She is passionate about creating more ready access to physiotherapy services in rural Saskatchewan and has a particular interest in the neurological population.

Shaylene Leibl-Smith, Saskatoon, Recreation Therapist

Shaylene is a degreed Recreation Therapist who supports individuals and their families to achieve a purposeful and fulfilling quality of life across the lifespan. She works with patients and their families during their inpatient admission to rehabilitation, and to support transition to their communities. She is a firm believer that increasing opportunity for community-based, barrier-free, recreation (i.e., exercise), and leisure services for those with a disability provides unlimited wellness benefits to the individual, their caregiving systems, and our larger community. Likewise, increasing the variability of how we deliver active recreation opportunities will encourage lifelong involvement, decrease feelings of stagnation, and provide opportunity for people with disabilities throughout their lives.

Eric Schalm, Saskatoon/Prince Albert, Clinical Exercise Physiologist

Eric grew up in rural Saskatchewan and finished his degree in Kinesiology at the University of Saskatchewan in 2014 with a minor in French. Eric has been working in the exercise world for 10 years, and became a CSEP-Clinical Exercise Physiologist in March of 2016. He has worked in various private multidisciplinary clinics throughout Saskatchewan and BC. Since 2021, he has been working for the Saskatchewan Health Authority at Victoria Hospital in Prince Albert.

Martin Shenher, Prince Albert, Person with Lived Experience of a Neurological Condition

Martin was diagnosed with relapsing-remitting multiple sclerosis (MS) at age 22. He was on modifying therapies Copaxone for 18 years and Teraflunomide for two years. At 52, he was 145 lbs and not in good physical shape, in part due to sedentary work at Saskpolytech for the previous 33 years. When he started Karate/Kickboxing at a Dojo close to his house, there were no exercise options at the time for people living with MS in Prince Albert. At 56, his neurologist took him off his disease modifying therapies and at 58 he obtained a Black Belt in Karate. He also has a Blue Belt in Kickboxing. Martin enjoys sharing his exercise story and successes with people who do not understand the benefits of exercise for people living with chronic disease.



Photo from Connections Community Roundtable Meeting in Swift Current, SK.

RECOMMENDATIONS

1ST RECOMMENDATION

We recommend an increase in hands-on, practical learning opportunities related to chronic neurological conditions at the trainee level (e.g., post-secondary courses) and at the professional level (e.g., continuing education) within the exercise, rehabilitation, and health science fields.

CONSIDERATIONS

Considerations supporting this recommendation include:

- People with chronic neurological conditions, and exercise and healthcare professionals alike express that there is a lack of preparation and knowledge for management of neurological conditions within community programs
- Increased hands-on, practical learning opportunities in this area will lead to increased service offerings and improved exercise experiences
- Opportunities for cooperative, multi-disciplinary health education experiences could support future interprofessional collaborations

ACTION

This recommendation could be acted on at the:

- Individual level
 - Professionals' openness and advertisement for supervision of volunteers and/or practicum students
 - Consider completing this online [Advanced Learning Module](#) focused on 'Disability and Exercise' for those in the health and fitness industry
- Institutional level
 - Clinic/organization development of volunteer/practicum programs
 - Professional associations' delivery of continuing education modules
 - Post-secondary institutions' delivery of experiential learning opportunities

2ND RECOMMENDATION

We recommend that all community exercise and physical activity-based recreation services relevant to people living with chronic neurological conditions be shared on a common, regularly updated web-based platform.

CONSIDERATIONS

Considerations supporting this recommendation include:

- There is a lack of awareness among people with chronic neurological conditions and healthcare providers about available exercise services
- An information-sharing resource could promote links and partnerships between organizations, services, and professionals
- Greater information sharing will:
 - Support healthcare providers in coordinating flow of services during community transitions
 - Facilitate health-recreation and community partnerships to increase exercise service delivery
 - Increase awareness of ‘pockets of excellence’ from which other services could grow

ACTION

This recommendation could be acted on at the:

- Individual level
 - Professionals’ sharing of available programs and updating of information or directing individuals to the resource
 - Consider adding your service to the [SaskNeuro](#) website, a service directory that is available and ready to use
- Institutional level
 - Organizations dedicating time and resources to develop and manage the platform

3RD RECOMMENDATION

We recommend improved accessible transportation to support people with chronic neurological conditions to participate in exercise and physical activity-based recreation programs.

CONSIDERATIONS

Considerations supporting this recommendation include:

- Rural and remote residents have few to no transportation options to access services outside of their home communities
- Accessible public transit in cities and towns does not meet demand
 - Paratransit is reserved only for specific types of appointments and exercise or recreation is often not recognized as important
 - Late and/or uncertain pick-up/drop-off times are limiting
- Improving transportation options will increase capacity of people with chronic neurological conditions to access available services

ACTION

This recommendation could be acted on at the:

- Individual level
 - Writing advocacy letters to government to increase funds
- Institutional level
 - Community organizations plan for transportation services within program offerings
 - Government or community organization development/expansion of transportation program (e.g., 'Wheels on Wheels') or strategic collaboration with private businesses
 - Government investment in more rural shuttles and/or increased paratransit services

4TH RECOMMENDATION

We recommend a greater emphasis on the pressing need for exercise and physical activity-based recreation options across the continuum of care following the onset of a neurological condition. Delivering such services must be recognized as a critical responsibility that is shared by and purposefully addressed through publicly-funded and community-based organizations.

CONSIDERATIONS

Considerations supporting this recommendation include:

- Current Saskatchewan Health Authority staffing cannot deliver and maintain exercise services in a sustainable way for this population
- Private practices (e.g., physical therapy clinics) cannot meet demand and are not required to offer such services
- Municipal services lack equipment, space, and trained staff for delivery of such services
- Community organizations struggle for funding and support to sustain services
- Coordination of relevant groups and parties could help to ensure that this critical need is equitably met across communities

ACTION

This recommendation could be acted on at the:

- Individual level
 - Raising awareness and advocating for program delivery in our communities
- Institutional level
 - Dedicating resources to program delivery within our communities
 - Creation of steering committees to coordinate services and ensure that they are available across communities

5TH RECOMMENDATION

We recommend that future work in this area consider diverse perspectives relative to Saskatchewan's rural, remote, Indigenous, and New Canadian populations. It is important to engage and learn from all demographic groups represented in our province and co-develop services that would address the needs of the diverse communities we live in. Efforts should be made to create a safe, respectful, and supportive environment to nurture diverse and inclusive programming options.

CONSIDERATIONS

Considerations supporting this recommendation include:

- Saskatchewan has a diverse population with unique needs
- Co-development of services supports the generation of new ideas and builds trust among community members
- Inclusion requires well-planned, intentional efforts that actively invite membership and participation of diverse people

ACTION

This recommendation could be acted on at the:

- Individual level
 - Professionals taking steps towards inclusive practice and relationship-building with diverse groups
- Institutional level
 - Creating equity, diversity, and inclusion goals and developing collaborations with intersecting organizations

CONCLUSION

Here in Saskatchewan, we have a strong, dedicated, and engaged community who understand the benefits of regular exercise for people living with chronic neurological conditions. Through this work, we further connected and expanded this community, linking people with lived experience of neurological conditions, exercise professionals, multi-disciplinary health care providers, community leaders, and researchers across the province. Our Expert Panel then generated recommendations for action related to: practical training of students and professionals, information-sharing and partnership, accessible transportation, accountability for services, and diverse perspectives.



Photos from First Steps Wellness Centre, Regina, SK.

Looking forward, we hope that this work will inspire our community to continue working to **improve access to, and quality of, exercise services for people living with chronic neurological conditions in Saskatchewan.**

EXERCISE OPPORTUNITIES

We became aware of many programs that provide exercise opportunities for people living with chronic neurological conditions, including:

- Regina
 - University of Regina [Enrich Neurorehab](#) and [Boxing4Health](#) Programs
 - [First Steps Wellness Centre](#)
 - [City of Regina Leisure Companion Program](#)
 - [The Nest](#) Regina
 - City of Regina [Fieldhouse](#)
 - [Stapleford Health and Rehabilitation Centre](#)
- Saskatoon
 - Next Program ([Saskatoon Fieldhouse](#))
 - [Physical Activity for Active Living Program](#) (PAAL)
 - MS Strengthening Program ([YWCA Saskatoon](#))
 - Alzheimer's [Minds in Motion](#) Program
 - [Parkinson's Society](#) Programs
- Swift Current
 - [Forever in Motion](#)
 - [City of Swift Current](#) Chair Yoga (Public Library)
 - [City of Swift Current](#) Walking for Wellness (The Stockade)
 - Adaptive Sports Teams ([Sledge Hockey](#), Wheelchair Basketball)
- Yorkton
 - [City of Yorkton](#) Facilities
 - [Indoor Walking Program](#) (Gallagher Centre)
 - [Aquacise Program](#) (Gallagher Centre)
 - [Prairie View Physiotherapy](#)
- Prince Albert
 - [Kuro Tora Dojo Martial Arts](#)
 - [FitLife Exercise and Education Program](#) (Albert Jenkins Fieldhouse)
- Virtual
 - [NeuroSask: Active and Connected](#)
 - [NorCal Spinal Cord Injury Virtual Adaptive Fitness Classes](#)
 - [MS Gym](#)

ACKNOWLEDGMENTS

This project was funded by a Saskatchewan Health Research Foundation (SHRF) Research Connections Grant, with matched funds provided through an anonymous donor and in-kind support from First Steps Wellness Centre, Regina. Andrew Schmidt of First Steps Wellness Centre provided roundtable meeting facilitator support and was a champion of this project.

In addition to the Project Team Members, Community Roundtable Attendees, and Expert Panel Members, several UR Neuro Lab Student Research Assistants also contributed to the project, including: Nathan Bye, B.Kin.; Heather Foy, B.Kin., and Jaiden Baardseth, B.Kin. Likewise, the project would not have been possible without administrative support provided by Sherrise Richards.

Finally, participants of the Enrich Neurorehab Program at the University of Regina are the inspiration and driving force behind this work.



We learn with each other.