

Maritime SPOR SUPPORT Unit 2021-2022 Report to Community

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LEADERSHIP MESSAGES

2021-2022: A YEAR OF RENEWAL

OUR STRENGTH IS OUR PEOPLE

I want to take this opportunity to thank our incredibly resilient Patient Partners for their involvement with the Maritime SPOR SUPPORT Unit (MSSU) during another year of the COVID-19 pandemic. These past two years have undoubtedly affected your lives personally and professionally, yet your commitment and passion to improve healthcare in the Maritimes has been steadfast.

Our goal has always been to inspire and energize our research community in conducting patient-oriented research and I am happy to say we have done that.

Working together, we generated much-needed evidence to address health system challenges. When patients, researchers, and health care professionals combine their expertise and experience, that's when we are truly able to make a difference in patients' lives.

In 2021-22, we had a renewed focus on Capacity
Development with the formation of a new Advisory
Committee. This committee was tasked with combining

the MSSU Student Awards (NS/PEI) and NBHRF & CIHR-SPOR-MSSU Studentship/Fellowship program (NB) into one MSSU Trainee Support Program for 2022-2023.

Other MSSU advisory committees have also expanded to include Patient Partner participation. Now, all governance committees and advisory groups, such as the Learning Health Systems Advisory Group and Data Platforms Working Group include Patient Partners and the teams working on the cross-cutting themes of Equity, Diversity, Inclusion and Accessibility, Sex and Gender, and Indigenous Allyship and Engagement. This year, the Patient Partner Council also became fully operational.

It has been a transformative year at the MSSU. I am excited for the opportunities and partnerships that lie ahead and celebrating our successes together in patient-oriented research across the Maritimes.



Dr. David Anderson Nominated Principal Investigator, MSSU

RESILIENCE IN THE FACE OF CHANGE

As vaccines rolled out across our region and ignited hope for a post-pandemic future, the Maritime SPOR SUPPORT Unit (MSSU) looked forward to an official funding announcement, renewing our promise to support patient-oriented research in the provinces of Nova Scotia, New Brunswick and Prince Edward Island.

We made important strategic progress in the past year, beginning with the \$16.1 million contribution from the Government of Canada and our provincial governments. This investment made it possible to prioritize collaboration and alignment across the three provinces and five sites of the MSSU.

Our Phase II funding supports greater collaboration between the MSSU and the wider SPOR community, with a focus on Equity, Diversity, Inclusion and Accessibility (EDIA), Sex and Gender Diversity, and Indigenous Allyship

and Engagement to address inequities in health research and care, and to ensure the involvement of diverse perspectives in patient-oriented research across the Maritimes.

As we transitioned into Phase II, the MSSU introduced a new governance structure, which includes partnerships with the Wabanaki-Labrador Indigenous Health Research Network and the newly-formed PEI Strategy for Patient-Oriented Research (SPOR) Coordinating Committee.

Together with our partners we refocused our strategic priorities and initiated more interprovincial research projects, such as the Mental Health Impacts of COVID-19 across the Maritimes. This collaborative effort and other impact stories now live on our redesigned website launched this fiscal year and provides a fresh new appeal to the public and research ecosystem.

Throughout 2021 our research touched the lives of cancer patients, of children with complex care needs and projects delved into provincially important topics of health system policy, staffing shortages, and community and seniors' care.

Although the pandemic interrupted research, paused non-essential projects and cancelled in-person events, we forged ahead making new connections and becoming involved in important and time-sensitive research about COVID-19.

I am incredibly proud of how we adapted and remained committed to our vision to ensure better healthcare experiences for all Maritimers. Through the passion and dedication of our employees, Patient Partners and partner organizations, we were able to be there for our research community and stakeholders during another challenging year.



Marina Hamilton Director, MSSU



NEW BRUNSWICK

- Centre de formation médicale du Nouveau-Brunswick
- Dalhousie University Saint John
- Mount Allison University
- Horizon Health
- Université de Moncton
- University of New Brunswick Fredericton
- University of New Brunswick Saint John
- Vitalité Health Network

PRINCE EDWARD ISLAND

• University of Prince Edward Island

NOVA SCOTIA

- Acadia University
- Cape Breton University
- Dalhousie University
- IWK Health Centre
- Mount Saint Vincent University
- Nova Scotia Health Authority

WHAT WE DO

The Maritime SPOR SUPPORT Unit (MSSU) supports and conducts patient-oriented research in all three Maritime provinces. We are the only SPOR SUPPORT Unit that operates in more than one province—an arrangement that creates opportunities to learn and collaborate on innovative solutions to meet the health needs of people living in the Maritimes.

We work closely with government stakeholders, health authorities, the research community, health care providers, and patients and caregivers in New Brunswick, Nova Scotia, and Prince Edward Island. Our approach helps engage different perspectives, so that they can shape patient-oriented research and help move evidence into practice more quickly.

PART OF A NATIONAL MOVEMENT

The MSSU is one of 11 Support for People and Patient-Oriented Research and Trials (SUPPORT) units that form an integral part of the **Strategy for Patient-Oriented Research (SPOR)**, a Canadian Institutes of Health Research (CIHR) initiative that is match-funded by the provinces.







July 2021



2021

April 14 - Funding Approval Letter for Phase 2

Priority Setting workshop for Canadian Multiple Myeloma **Priority Setting Partnership**

Patient Partner Council (PPC) formed and began regular meetings

MSSU 2021-22 Student **Award Recipients** Announced

Patient-Oriented Training is redesigned and new tools added to provide a more interactive online experience for participants

Four Studentship Mentees begin working with MSSU Science Leads in the areas of Indigenous Allyship & Engagement, Equity, Diversity, Inclusion and Accessibility and Sex and Gender







February 2022

March 2022

Transitions in Care Project highlighted in SPOR National Newsletter; emphasized valuable role of Patient Partners

MSSU-led study "Different Boats in a Stormy Sea: The Mental Health Impacts of COVID-19 on Nova Scotians" report is released

MSSU partners with Alzheimer Society of NB, AGE and Horizon Health Network to implement and evaluate a new approach to supporting informal caregivers of people with dementia

Top ten priorities identified for multiple myeloma research in Canada and internationally

New website launched, featuring more stories about POR in the Maritimes

Multiple Myeloma Canada created the Aldo Del Col Research grant of \$100,000 to fund research related to the identified priorities

> Official announcement for Phase II funding 🗾

NB-IRDT partners with FutureGNB to launch Pathways to Profession: Experience GNB for NB high school students

Patient Partners added to Peer Review Committee for MSSU Student Awards

Our Expertise



PATIENT ENGAGEMENT

- Develop plans to engage Patient Partners
- Supporting recruitment of Patient Partners
- Training in patientoriented research



EVIDENCE SYNTHESIS

- Refining research questions
- Developing and conducting search strategies
- Rapid evidence products including Background Summaries, Knowledge Snapshots



KNOWLEDGE TRANSLATION

- End-of-grant and integrated knowledge translation plans (development/review)
- Provide support, resources, and tools for knowledge translation strategies
- Training and presentations to build knowledge translation capacity



RESEARCH METHODS

- Grant or protocol reviews
- Survey design or review of validated surveys
- Study design general guidance, including for pragmatic trials and randomized control trials (RCTs)



PRIVACY AND ETHICS

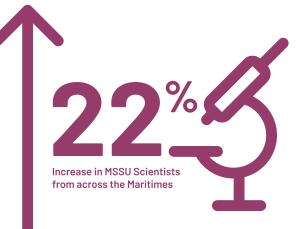
- Data privacy training
- Legislation review
- Ethics and privacy compliance advice/guidance



ADMINISTRATIVE DATA SERVICES

- Assessing administrative data needs
- Support completing data access requests
- Navigating administrative health data





PARTNER ORGANIZATIONS



POST-SECONDARY INSTITUTIONS

- Acadia University
- Cape Breton University
- Centre de formation médicale du Nouveau-Brunswick
- Dalhousie University
- Mount Allison University
- Mount Saint Vincent University
- New Brunswick Community College
- Nova Scotia Community College
- St. Francis Xavier University
- St. Mary's University
- Université de Moncton
- University of New Brunswick
- University of Prince Edward Island



GOVERNMENT

- New Brunswick Department of Health
- Nova Scotia Department of Health and Wellness
- PEI Department of Health and Wellness



RESEARCH ORGANIZATIONS

- New Brunswick Health Research Foundation
- Research Nova Scotia



HEALTH AUTHORITIES

- Health PEI
- Horizon Health Network
- IWK Health Centre
- · Nova Scotia Health
- Vitalité Health Network





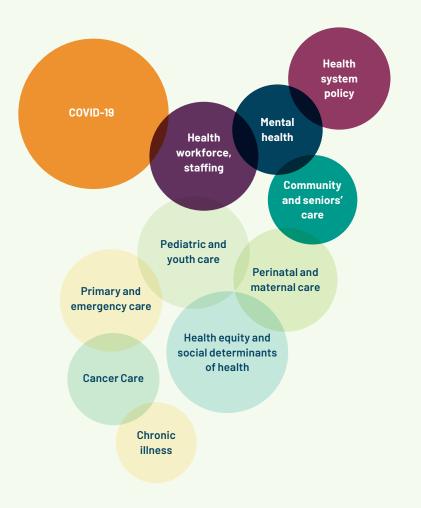


167% increase in requests from health system, care managers and professional organizations



Research Support Requests

Most popular topics supported by our research consultations (2021-22). The top 5 are identified by provincial and federal governments as a health priority.



WHAT IS A LEARNING HEALTH SYSTEM?

A Learning Health System (LHS) is characterized by continuous learning and growth. It brings together information from practice and research and feeds it back to teams in ways that are meaningful and useable to them. This in turn leads to practice change that improves care.

- Alliance for Healthier Communities

This cycle of continuous improvement has been increasingly recognized as a key enabler of better health care and was adopted by the MSSU with the formation of an advisory group to develop strategies to best support LHS across the Maritimes.

There is already a noticeable increase in the demand for support from policy makers; a positive sign that the local health system is moving towards an LHS model and using evidence to inform decision-making.

Learn more about The Science and **Practice of Learning Health Systems**



The COVID-19 pandemic exposed a need for health system transformation and in many ways provided an opportunity to showcase the supports MSSU provides.

Now more than ever, our knowledge translation and implementation science consultation services are an invaluable resource to researchers. health system practitioners and quality improvement teams.

Although our research consultations supported many priority health topics, the largest number of requests were related to COVID-19 in 2021-22.



MSSU research backs presumptions about COVID effects on mental health for Nova Scotians

PATIENT PARTNERS HELP BRING "DATA TO LIFE"

There has never been a lack of media attention about the COVID-19 pandemic and its impact on the mental health of people in our region. Since 2020, we've heard countless stories of how families, individuals young and old, frontline workers and other groups were negatively affected by the pandemic and associated public health measures.

But are these stories the norm; were these negative impacts happening at a population level? Building on a similar analysis from **New Brunswick** last year, MSSU researchers sought to find the missing data in Nova Scotia.

"There were a lot of presumptions during the pandemic of what the mental health impacts were but there was little data to back any of that up," said project lead Dr. Amy Grant, senior health policy researcher for the MSSU.

The MSSU Halifax team collaborated with the Nova Scotia Department of Health and Wellness, Nova Scotia Health, and a group of Patient Partners, to study the impact of COVID-19 on the mental health of Nova Scotia residents. This priority project provides a first look at the self-reported impacts of COVID-19 on mental health of Nova Scotians and identifies key trends in the use of mental health services in Nova Scotia before and since the COVID-19 pandemic began.

Researchers found anxiety and depression increased during the COVID-19 pandemic, along with increased use in mental health services, however, experiences varied.





This research provided critical insight into these impacts for a diverse group of Nova Scotians. Having a group of Patient Partners on the team shaped our understanding of the survey data and opened our minds to how these impacts were felt across different groups of people. Being able to bring together the data with the patient perspective really made the data come to life.

Amy Grant, PhD, Senior Health Policy Researcher, MSSU "Each Patient Partner brought valuable and diverse insights that helped the project to be tailored to the true needs of the Maritime population," said Patient Partner Cassidy Bradley. "The results highlight the impact of intersectionality on mental health needs and how vulnerable populations must be targeted for equitable mental health supports."

When more recent data was released in fall/winter 2021, a Maritime-wide project was initiated. The Maritime project will leverage a larger sample size and will specifically focus on the unmet mental health needs in the Maritimes.

A follow up report in Nova Scotia and from the Maritimes project are expected to be released in 2022. The findings will be shared with policy makers to help inform decisions of care and resource allocations in the health systems across the Maritimes.

Read "Different Boats in Stormy Sea: The mental health impacts of COVID-19 on Nova Scotians."

Mental Health Impacts of COVID-19 on Nova Scotians: An update to the 2020 survey using data from June 2021

61 COVID-19 PROJECTS SUPPORTED

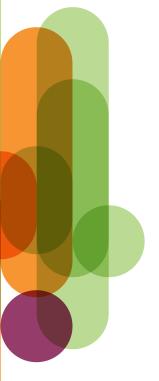
Our range of expertise has been vital in supporting the ongoing pandemic response and recovery. Through unique partnerships and collaborations, each of the five MSSU sites worked to meet the needs of health system stakeholders in making evidence-informed decisions related to COVID-19.

In New Brunswick, the Moncton site produced two rapid reviews to support the Vitalité Health Network in COVID-19 decision making. One was a jurisdictional scan of triage tools and triage protocols used to determine access to critical care during times of limited resources, such as pandemics. The second was about the effectiveness of portable air filtration systems in reducing the spread of COVID-19 in hospital rooms.

In Nova Scotia, we continued to support COVID-19 requests by updating rapid reviews for the Public Health Agency of Canada about SARS-CoV-2 variants of concern and providing monthly updates on 19 background summaries about potential COVID-19 treatments. This series of background summaries were created for the CO-VIC study and the Nova Scotia Therapeutics and Prophylactics Advisory Group.

Read COVID-19 Background Summaries









Dr. Anthony Reiman, MSSU Science Lead, Saint John

Is the COVID-19 vaccine safe for people with blood cancers?

MSSU Saint John joins national study to find out

MSSU Saint John is the local site of a national study looking at vaccine response and safety of the COVID-19 vaccine in people with blood cancers.

Dr. Anthony Reiman, science lead for MSSU Saint John, learned of the study through his network with other medical oncologists who treat hematological malignancies.

Joining researchers at the Ottawa Hospital, the team will collect blood samples from local participants for this Public Health Agency of Canada funded project, "A prospective multi-site observational study of SARS-CoV-2 vaccination immunogenicity in patients with hematologic malignancies."

As the only site in Atlantic Canada, the Saint John site plays an essential role in contributing to the national results that will inform doctors' counseling practices of patients and public health recommendations about vaccination and other protections, such as masking, for this population.

ABOUT THE STUDY

People with blood cancers have weakened immune systems due to their disease and the treatments they receive. They also have a significantly higher risk of death from COVID-19 compared to people without blood cancers.

However, people with blood cancers were not included in the large COVID-19 vaccine trials. Therefore, we don't know if they develop protection, and if so for how long. Although it's believed the vaccine is safe in patients with blood cancers as it is not a live vaccine, there is currently no safety data.

Samples will be collected at a few different time points, including before the vaccine, immediately after the vaccine, and a few months after the vaccine, to determine how their immune systems respond to the vaccination. Participants will receive their own results, to have a personalized understanding of their immune system's response to the COVID-19 vaccine.



This project gave us the opportunity to revolutionize how we approach rapid evidence syntheses and jurisdictional scans, spurring us to complete easily digestible products within tight deadlines. Our team is proud of the high-quality work we produced and the relationships we developed with our Patient Partners and clients at the Public Health Agency of Canada.

Leah Boulos. Senior Evidence Synthesis Consultant

SPOR EVIDENCE ALLIANCE

COVID-19 revolutionizing rapid evidence synthesis

Halifax team helps decision-makers understand impact of public health restrictions on variants of concern

The COVID-19 pandemic served as a catalyst for the MSSU's growing relationship with the SPOR Evidence Alliance (EA).

It was through this connection that MSSU's KT Science Lead Dr. Janet Curran and Senior Evidence Synthesis Consultant Leah Boulos co-led living evidence syntheses on public health impacts of the

> SARS-CoV-2 variants of concern (VOC) for the Public Health Agency of Canada (PHAC).

> > The Halifax team, which included two Patient Partners, maintained a living rapid review and jurisdictional scan alternately

updated every three weeks. The rapid review summarized research evidence relating to the impact of the VOC on public health measures, while the jurisdictional scan compiled public health guidance relating to COVID-19 and the VOC from each Canadian province and territory as well as Belgium, Germany, and England. Results of the syntheses were presented in clear, concise reports and one-pagers in direct response to PHAC's information needs. Patient Partners on the team provided patient-identified key messages for each update, highlighting which points resonated most with them.

These reviews built on previous work for Alberta Health Services and PHAC in early 2021 brokered by COVID-19 Evidence Network to support Decisionmaking (COVID-END) and the Coronavirus Variants Rapid Response Network (CoVaRR-Net), which leverage the Alliance's connections and platforms.



Guiding clinical practice with evidence: Research leads to less invasive testing for HPV

Thanks to a strong foundation of existing evidence produced by the MSSU, two new Clinical Practice Guidelines (CPGs) are changing patient care across Canada.

Patients may soon be able to self-administer HPV tests instead of being subjected to an invasive Pap test in their doctor's office.

Dr. James Bentley's team, spearheaded in Halifax by Dr. Karla Willows, created two new evidence-based clinical practice guidelines (CPGs) for Canadian clinicians. The first supports the switch from currently standard Pap testing to HPV testing, and the second supports the referral of patients who test positive for HPV to appropriate follow-up tests and procedures, including colposcopy, to promote the best care while ensuring efficient use of health care resources.

MSSU Senior Evidence Synthesis Consultant Leah Boulos provided support in the early phases of the guideline development, including planning, systematic search design, and methodological support. The final reports and guidelines are currently being reviewed and will be released in the near future.

This project addresses two identified priorities in the **Action Plan for the Elimination of Cervical Cancer in Canada**, released by the Canadian Partnership Against Cancer in response to the World Health Organization's 2018 call to action to eliminate cervical cancer by 2030.

Creating partnerships in seniors' care

The Alzheimer Society of New Brunswick has partnered with Advanced Gerontological Education (AGE) Inc., Horizon Health Network, and the Maritime SPOR SUPPORT Unit (MSSU) to implement and evaluate Gentle Persuasive Approaches © (GPA) Community, a new educational program designed to support informal caregivers—family and friends—of persons living with dementia.

With funding from the Healthy Seniors Pilot Project, the team delivered the training to 38 informal caregivers and collected feedback on their satisfaction with training, caregiver burden, ability to manage responsive behaviours, and life satisfaction.

The results will be used to inform the improvement and expansion of the GPA Community program in New Brunswick.



A program like GPA Community gives care providers the hands-on tools they need to confidently provide care for the person with dementia. Implementing and evaluating this program will help us to determine its impact on care provider stress and burnout and, ultimately, its potential to allow the person with the disease to live at home for longer.

Chandra MacBean, Executive Director Alzheimer Society of New Brunswick

Building community resilience to climate change

PATIENT PARTNERS TO SELECT DATA INDICATORS FOR UPEI PROJECT

A MSSU supported research project at UPEI moved forward this year after receiving funding through the Government of PEI's Climate Change Challenge Fund.

Dr. Jürgen Krause, Centre for Health and Community Research, Faculty of Business, received \$100,000 from the fund for the project titled "Engaging Islanders in mapping climate-related social and health factors to build resilience to climate change on PEI."

PEI's climate change policies have largely focused on managing environmental challenges and protecting vulnerable aspects of infrastructure and industries. However, climate change adaptation plans also need to prioritize vulnerable

individuals and populations that are disproportionately impacted by climate change.

For example, if a particular community has a high number of seniors, or individuals with respiratory conditions, the adaptation strategies may differ from a community with a significant number of children with chronic disease.

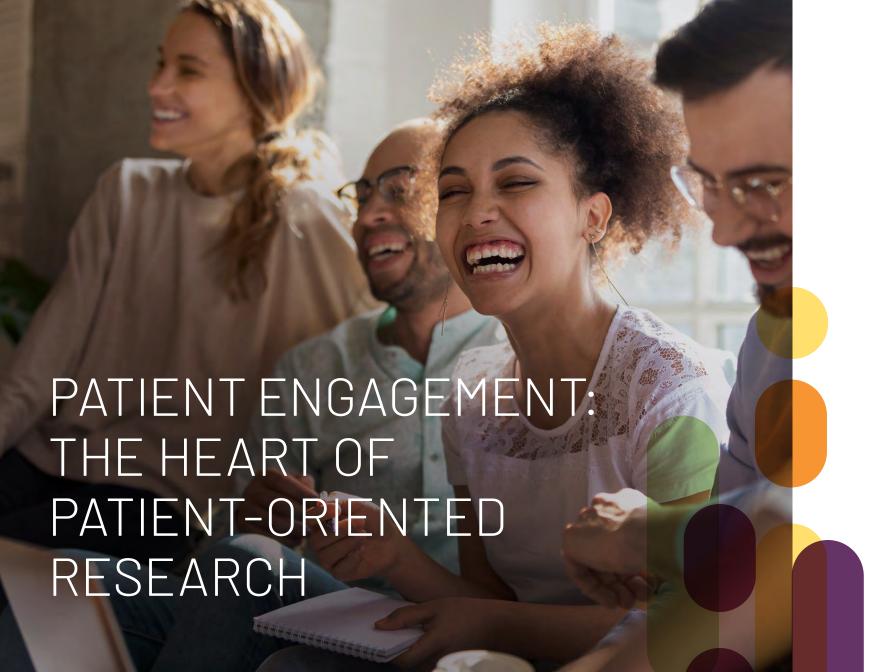
Several recent reports have emphasized the importance of considering the people of PEI when planning climate change actions, including the relationships between climate, health and social factors. However, no health or social indicator maps currently exist to inform mitigation and adaptation decisions. The MSSU is uniquely positioned to address these gaps through its data platforms and expertise in patient engagement and knowledge translation.

The expertise of a research advisory committee comprised of members of the public, decision-makers, and researchers will increase the mutual awareness about how data availability, lived experiences, community-level factors, and policy considerations work together to impact climate change impacts and responses.

"Developing effective climate adaptation actions requires genuine collaboration between researchers, decision-makers, and those who will be most impacted by climate change. To do this, we will engage with members of the public and decisionmakers throughout all stages of the research project," said Mary-Ann Standing, research manager at MSSU Centre for Health and Community Research, University of Prince Edward Island.

It is the first time they have engaged Patient Partners at this level in a research project by asking them what data are meaningful and important.









100% of governance committees

of governance committees and advisory groups with Patient Partners Patient and caregivers are at the heart of patientoriented research. By partnering in research, they are helping generate new knowledge and transform our health care systems. In the process, they are improving the health and well-being of their communities—and beyond. Throughout 2021-2022, Patient Engagement activities remained committed to supporting the new Patient Partner Council and engaging Patient Partners on all MSSU governance committees and newly formed advisory groups, such as Sex & Gender, Indigenous Allyship and Engagement.

READ MORE 7

My experience has been like I have a role, I feel respected when I speak up and people are supportive and positive.

Donna Rubenstein, Patient Partner

Patient Partner Council

Last year, the MSSU Patient Partner Council was in the early stages of forming. This year, the Patient Partner Council became fully operational. Since May 2021, the Patient Partner Council has held regular meetings with 12 Patient Partners.

Council members have been involved in numerous activities, including the impact measures for Patient Engagement for MSSU's Performance Measurement Framework. In early 2022, the Council facilitated the identification and prioritizing of the activities for 2022-2024 that will support the MSSU PE Workplan. The Patient Partner Council identified two priority initiatives: the development of a Peer Mentorship program, and a formalized orientation process for new MSSU Patient Partners.





Patient Partners help identify future myeloma research priorities

The Canadian Myeloma Priority Setting Partnership (PSP), the first of its kind in myeloma, has identified 10 priorities for future myeloma research.

Published in the British Journal of Haematology, these priorities will shape the direction of future myeloma research by identifying the unanswered research questions that are important to myeloma stakeholders.

"We can now turn to important funders, scientists and service providers and encourage them to recognize the views and needs of those affected, and invest in getting their questions answered," explained Dr. Tony Reiman, Medical Oncologist with Horizon Health Network and MSSU Science Lead (Saint John), who led the Myeloma PSP.

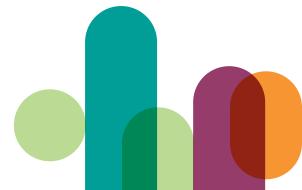
"It is only through research that we will continue to make advances in myeloma patient care, and it is only by asking myeloma patients, and those who care for them, that we will know what research topics are the most important," added Dr. Reiman. Following the James Lind Alliance method, the Myeloma PSP brought together myeloma patients, caregivers, and clinicians to collaboratively identify the Top 10 unanswered myeloma research questions—from a long list of more than 3,000 questions proposed during the early stages of the project.

See the Top 10 List



Watch Now: Patient Engagement in Canadian Myeloma Priority **Setting Partnership**







Patient Partners join Maritime-wide project on COVID-19 and mental health

EXPERIENCE DEEPENS PERSONAL AND PROFESSIONAL GROWTH

At its best, patient engagement is beneficial for researchers and patients—an opportunity for mutual growth.

This equally beneficial relationship has been especially fruitful for Cassidy Bradley, a Dalhousie University graduate. Her experience as an MSSU Patient Partner has been a catalyst for improving her own research skills as a master's student in epidemiology and in medical school.

"This experience has brought such a unique depth to my educational experiences. It has been personally meaningful, fulfilling, educational, empowering, eye-opening, and enjoyable. I have met many wonderful colleagues and peers and I have been able to reflect on and learn a lot about my personal experiences as a patient."

Cassidy recently joined three other Patient Partners on a research team for an interprovincial project studying the mental health impacts of the COVID-19 pandemic after being involved in a

similar project in Nova Scotia. Motivated by her struggles with mental illness throughout the pandemic, Cassidy was determined to help others through patient engagement efforts.

"It was very clear to me that the pandemic had immense and widespread negative impacts on the mental health of so many people, and it was important to me to be involved in work that could begin to mitigate these effects."

The research focused on characterizing unmet mental health needs of Maritimers and the work was split into three stages: developing the protocol, analyzing the data, and writing a report. Lead researcher and MSSU staff, Dr. Sandra Magalhaes, said Patient Partners were engaged from the very beginning and were invited to be part of each stage.

"Involving patient partners in our research from the start was instrumental in helping to shape our understanding of experiences with mental health concern in the Maritimes and the focus of our research project."

During the first meetings, researchers heard from Patient Partners about their own experiences with mental health and mental health care during and prior to the pandemic. Patient Partners shared both negative and positive stories that helped the researchers reflect on the data they had available, and to focus research efforts on themes that emerged from experience of Patient Partners.

"Throughout the entirety of the project, I felt included, heard, and valued. The team was very collaborative and open to continual learning, which I appreciated very much," said Cassidy.

Her experiences have given her a new understanding of and appreciation for patient engagement that she will carry with her as she pursues her own medical career.

Read more Patient
Partner interviews.

Patient Partners help rebuild program to support trainees

Donna Rubenstein is passionate about educating young researchers on the importance of patient engagement.

An MSSU Patient Partner for two years, Donna was excited to join a team of patients and researchers to redesign the MSSU support program for budding researchers in 2021.

"It was a wonderful opportunity for me because it gave us a chance for renewal; an opening to make widespread changes to really strengthen the Patient Engagement components," said Rubenstein.

Each year the MSSU provides funding for research trainees pursuing patient-oriented health research in the Maritimes. Originally known as the MSSU Student Awards (NS/PEI) and NBHRF & CIHR-SPOR MSSU Student Fellowship Program (NB), the program was overhauled to become a single Maritime trainee support program.

Working together with other members of the Capacity Development Advisory Committee (CDAC), Donna was instrumental in several new

additions to the application process. Some of these changes included a requirement for a Patient Partner to be on the research team, and that a Patient Engagement Plan be an essential part of the trainee's application. Donna and other Patient Partners were also part of the selection process for the 2022-23 recipients.

"It is so critical to bring patient engagement in early because if they start doing it now then it's the way they will always do it," said Donna. "Instead of being an after-thought, Patient Partners will become core to the design."

Donna's interest in Patient-Oriented research stems from her own personal experiences with the healthcare system. She felt there were opportunities for improvement, and she wanted to be part of the solution.

"I realized the deeper and longer lasting changes would come through research not necessarily in the delivery of health," said Donna.

Having already seen the value of diverse voices in research, Donna is enthusiastic about the future of POR and the innovation and creativity Patient Partners will bring to health research in the Maritimes.









The MSSU capacity development team is a source of knowledge for researchers, trainees, patients and policy-makers. Through a variety of online workshops and trainings, we empower research teams to engage patient partners and conduct meaningful patient-oriented research in the Maritimes.

This year we saw exponential growth in training participation among students, climbing from 169 to 1,236 in 2021-22 with the success of the Pathways to Professions program at NB-IRDT. Virtual learning opportunities also increased to 71 from 24 in 2021. In the fall of 2021, virtual training for patient-oriented research was refreshed to create a more interactive experience for participants.

New Science Lead for Capacity Development

This year, the MSSU was pleased to welcome Dr. Daniel Dutton as our new Science Lead for Capacity Development. Dr. Dutton is an Assistant Professor, Dept. of Community Health and Epidemiology, Faculty of Medicine, Dalhousie University and Adjunct Professor, Sociology, University of New Brunswick.

In this role, Dr. Dutton provides leadership for a growing portfolio of educational and capacity building activities including the Trainee Support Program, patient-oriented research trainings, and future MSSU Annual Meetings and bi-annual Maritime Health Research Summits.



I am looking forward to creating new opportunities for trainees and researchers to grow.

There are many institutions represented in the MSSU and I want to leverage their strengths so the network itself serves as a valuable resource to members.

Dr. Daniel Dutton Science Lead, Capacity Development



Student mentees bring invaluable perspectives and expertise to MSSU

There were four Studentship Mentees awarded funding for the 2021-2023 years. These students are co-funded by three Maritime Universities, with MSSU Science Leads in the areas of Indigenous Allyship & Engagement (IAE), Equity, Diversity, Inclusion and Accessibility (EDIA), and Sex & Gender (SG) mentoring the trainees. The mentees are members of the MSSU Scientific Leadership Committee and have contributed to the 2020-2022 priorities and are actively collaborating with MSSU Patient Partners to identify activities for the remainder of Phase II.



MEET THE STUDENTS

Dr. Jackie Huberman

Sex and Gender Mentorship Awardee, MSSU, Postdoctoral Fellow, Couples and Sexual Health Laboratory, Dalhousie University

Prince Owusu

Equity, Diversity and Inclusion Mentorship Awardee, MSSU, PhD candidate, Social Work, Carleton University

Neil Forbes

Indigenous Allyship Mentorship Awardee, MSSU, PhD, University of New Brunswick, Network Coordinator, Wabanaki-Labrador Indigenous Health Research Network, Dalhousie University

Justin P Dubé

Sex and Gender Mentorship Awardee, MSSU, PhD Candidate Dalhousie University, Clinical Psychology. I served as a mentee on the MSSU's Sex and Gender-Based Science team during the 2021/2022 academic year. One of my major contributions this past year was helping to develop a strategic plan to increase skills and capacity within the health research community with respect to sex and gender-based analysis. I feel very fortunate for the training I have received. Working under the supervision of Dr. Natalie Rosen (and alongside fellow mentee Dr. Jackie Huberman), I learned the value of strategic, creative, and flexible thinking as well as intellectual humility. I am confident that this training experience will benefit my future career as a clinician-scientist.

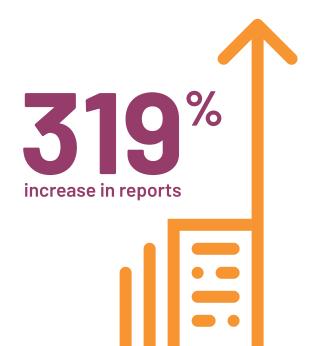
Justin P Dubé, PhD Candidate
Dalhousie University, Clinical Psychology. Currently predoctoral
clinical psychology intern at the Medical University of South Carolina
& Ralph H Johnson Veterans Affairs Medical Center.



CONNECT Project

A Knowledge Transfer Project, led by MSSU staff and three University students in Nova Scotia, was undertaken during the 2021-2022 year. "CONNECT Project: Spreading patient-oriented research about the challenges and barriers faced by adults with autism via an interactive video game platform" was a credit course for the students in the Masters of Applied Health Services Research program. Students were required to reach out to a government or non-profit government organization (NGO), healthcare service, research lab, or another part of the health system, and offered to collaborate with an organization to produce a KT tool or a strategy to meet an informational need. In completing this work, The KT students developed and disseminated the KT tool for MSSU.

507 **Knowledge Translation** products and engagements



Webinars amplify Knowledge Translation

Now in its second year, the Keeping up with Knowledge Translation (KT) webinar series remained popular with a 25% increase in registrants. We continued to host the series online with three new sessions focused on patient engagement including in evidence synthesis projects. A highlight this year was patient involvement with Louise Tardif, a Patient Partner on the CONNECT Project, copresenting with Dr. Caroline Jose, Adjunct Professor in the Department of Family Medicine at the Université de Sherbrooke and former MSSU Health and Patient Engagement Researcher. Patient Partners, Lorelei Dalrymple and Robin Sully, who are integral members of the Myeloma Priority Setting Partnership research team, copresented with Dr. Anthony Otley, IWK Health and IMAGINE SPOR—together, they shared the importance of engaging people with lived experience in identifying research priorities.

Watch the videos



Pathways to Professions Program

The NB-IRDT Pathways to Professions (P2P) program continued to grow and evolve this year with an additional \$84,000 in funding. This investment made it possible to welcome 20 student employees, compared to six in 2020, to participate in the 13-week experiential learning program for undergraduate and graduate students at the University of New Brunswick (UNB).

During March Break 2022, NB-IRDT partnered with FutureGNB to launch a one-week policy bootcamp for New Brunswick high school students. The Pathways to Professions: Experience GNB partnered students with mentors to come up with real-world solutions for relevant issues facing NB students. They took part in workshops intended to grow their workplace readiness skills, participated in networking opportunities with community leaders, and collaborated with other students on a team-based project to be presented directly to their Government of New Brunswick stakeholders.



The MSSU plays an important role in helping establish and expand provincial data platforms that provide researchers and policymakers with secure access to administrative health data—providing an evidence base for important health care decisions.



HIGHLIGHTS

NEW BRUNSWICK

New Brunswick Institute for Research. Data and Training (NB-IRDT) added 25 new datasets to its platform and 50+ updates to existing data. New health datasets include COVID-19 case data and new Chronic Disease Surveillance System data. Expansions to postsecondary/ early childhood education data were also added. NB-IRDT introduced patient partners to their Data and Research Committee, which reviews data access, to embed patient involvement into every stage of the research process.

NOVA SCOTIA

Several multi-jurisdictional project requests from Health Data Research Network (HDRN) Data Access Support Hub (DASH) were approved and data access work was started. Requests for project feasibility from DASH also continue to increase. A data-sharing agreement with Atlantic PATH also known as Atlantic Partnership for Tomorrow's Health Study, is under review and once approved, the PATH data will be transferred to Health Data Nova Scotia (HDNS). Similarly, a data-sharing agreement is being developed to bring in Canadian Longitudinal Study on Aging data.

PRINCE EDWARD ISLAND

The MSSU team in PEI is making leaps towards operation of the Secure Island Data Repository (SIDR). A dry-run exercise was conducted on the system and all required upgrades completed. All legal agreements required under the Health Information Act were drafted and finalized by the University of Prince Edward Island (UPEI) and are signed by the Department of Health and Wellness and Health PEI. Operating procedures, including application guidelines and SIDR staff job descriptions are now ready for launch.

MSSU supported 17 Real World Clinical Trials

The close working relationship between the MSSU and the SPOR Innovative Clinical Trials (iCT) has resulted in the Unit supporting several studies, including the Multiple Myeloma Molecular Monitoring (M4) Cohort Study.

Medical oncologist Dr. Anthony Reiman, MSSU Saint John Science Lead, is the principal investigator for this national study coordinated by a mentee under Dr. Reiman's iCT Mentorship Chair.

The MSSU Saint John team collaborates with the iCT mentee to add local data to the Canadian Myeloma Research Database. MSSU staff assist with local Research Ethics Board (REB) applications, participant recruitment, and data collection. Myeloma researchers nationwide can access the database and use it to provide real-world evidence for myeloma treatments. The database has produced five peer-reviewed publications and 13 published abstracts.

New data linkages driving cancer and mental health research

Several notable data linkages were made this year, opening new avenues of investigation and generating crucial data to inform health policy and decisions.

- Clinical data from the IWK Pediatric Oncology Research Database was linked to physician billing, hospitalization, and ambulatory care data at HDNS. The purpose was to study the symptom diagnostic interval and show how SDI may change over time for children diagnosed with central nervous system tumours.
- Nova Scotia Cancer Registry and Oncology Patient Information System data from NSH was linked to physician billing, patient registry, hospitalization, and provider registry data from HDNS to estimate the burden of frailty in cancer survivors and identify patterns of follow-up care for cancer survivors.
- "Mental Health and Substance Abuse Disorders on the Risk of Suicide: a Population-Based Study". This priority project links data from the following sources for the first time: Canadian Chronic Disease Surveillance System (Department of Health), immigration data (IRCC), and social assistance data (Department of Social Development).

Detailed data fills gap to inform future treatment options

After a 2020 report indicated New Brunswick had the highest average number of CT scans in all of Canada, researchers began investigating the volumes and types of imaging in the province.

The study, Choosing Wisely: Imaging for lower back pain, linked lumbar spine imaging data with population demographics data at New Brunswick Institute for Research, Data and Training.

The detailed results will be used to help reduce unnecessary imaging tests for patients with lower back pain – a recommendation of Choosing Wisely Canada. This global campaign advises imaging for lower back pain should only be performed if red flags are present.

Researchers discovered spine imaging rates in NB had decreased between 2012 and 2019 by about 20 per cent. Their investigation also revealed imaging for red flag conditions accounted for about 20 per cent of all imaging.

Read the report 7



Diversity and inclusion will remain a priority within our organization, our workforce and our corporate and brand communications in the years ahead.

Our Sex and Gender team moved forward with preparing a list of quality resources and training for MSSU staff to gain foundational knowledge of sex and gender considerations, while our Equity, Diversity, Inclusion and Accessibility group builds important partnerships to learn and share knowledge about EDIA best practices.

Jenny Perley joined the MSSU this year as an Indigenous Allyship and Engagement Patient Partner to share her knowledge and worldview with us. She will provide cultural teachings for the MSSU and present at the bi-annual Maritime Health Research Summit in June 2022, which will focus on our cross-cutting themes.

The theme of the Summit is "Wise Practices in Health Equity". This virtual event will be open to participants across Canada.

We look forward with optimism as we forge new partnerships and explore new and innovative ways to improve health and care together across the Maritimes.

2021-2022 ACTUAL (\$CDN)	
Carryforward from 2020/21	\$ 1,427,134
NEW REVENUE	
CIHR	\$ 1,465,526
Provincial Partners	\$ 1,682,251
TOTAL REVENUE	\$ 4,574,911
EXPENSES	
Salaries	\$ 3,020,765
Studentships	\$ 286,495
Operations	\$ 238,757
TOTAL EXPENSES	\$ 3,546,017

FINANCIAL SUMMARY 2021/2022

MSSU is funded by CIHR with a 1:1 match with Provincial funding partners. In the fiscal year 2021-2022, MSSU had a total operating budget of \$4.57 million which is comprised of \$1.46 million new CIHR funds and \$1.68 million of new Provincial Partner funding along with the CIHR and Provincial Partner carry forward of \$1.42 million from 2020-2021. Expenses for 2021-2022 totaled \$3.5 million, including salaries, operations and studentships.

The Maritime funding partners include the New Brunswick Department of Health, the Nova Scotia Department of Health and Wellness, the Prince Edward Island Department of Health and Wellness, the University of Prince Edward Island and the New Brunswick Health Research Foundation (NBHRF).

CIHR and partner surpluses are carried forward as revenue to the next fiscal year.







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