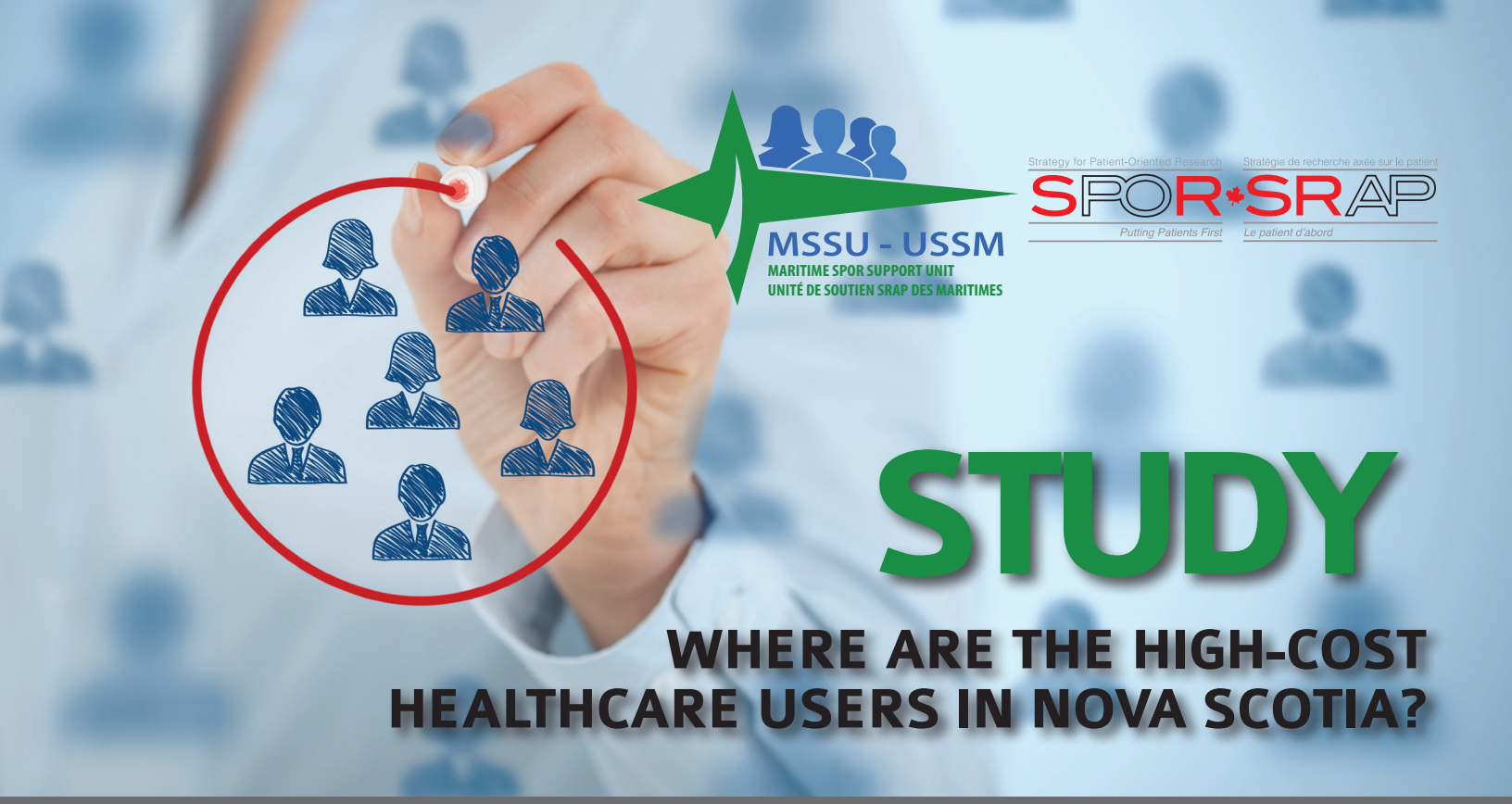


MSSU - USSM
MARITIME SPOR SUPPORT UNIT
UNITÉ DE SOUTIEN SRAP DES MARITIMES

Strategy for Patient-Oriented Research — Stratégie de recherche axée sur le patient
SPOR·SRAP
Putting Patients First — Le patient d'abord

STUDY

WHERE ARE THE HIGH-COST HEALTHCARE USERS IN NOVA SCOTIA?

A SUMMARY OF THE REPORT, *SMALL AREA VARIATION IN RATES OF HIGH-COST HEALTHCARE USE ACROSS NOVA SCOTIA*, PRODUCED BY THE MARITIME SPOR SUPPORT UNIT (MSSU) AND THE NOVA SCOTIA PRIMARY AND INTEGRATED HEALTH CARE INNOVATIONS (NS-PIHCI) NETWORK.

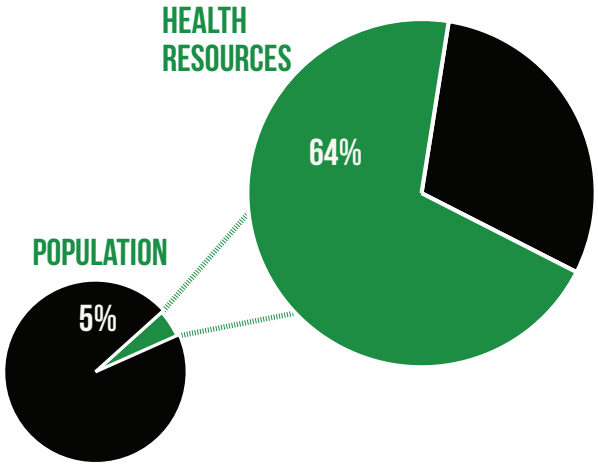
In Canada, healthcare costs are not split evenly among all citizens. In other words, a bigger amount of the health budget is spent on the very small groups of people who have the highest healthcare needs. Knowing more about these people—where they are and why their costs are so high—is an important first step in finding better ways to deliver healthcare for everyone.

One way of gathering this information is doing something called Small Area Rate Variation (SARV) research. This means taking two or more small areas, such as different neighbourhoods in a city or counties in a province, and comparing the rates of high-cost healthcare users in each of these areas. SARV allows us to measure rates of high-cost healthcare users in smaller areas in comparison with provincial averages. The Maritime SPOR SUPPORT Unit(MSSU) used SARV for adults in Nova Scotia to find out where the high-cost users are and what factors might explain their use of health services.

Here's what we found.

1. TWO-THIRDS OF HEALTHCARE COSTS ARE USED BY 5% OF THE POPULATION

Nova Scotia spends most of its healthcare dollars on a very small number of people. The top 5% of these people cost the province 64% of its health resources. The majority of these costs are related to hospital stays.

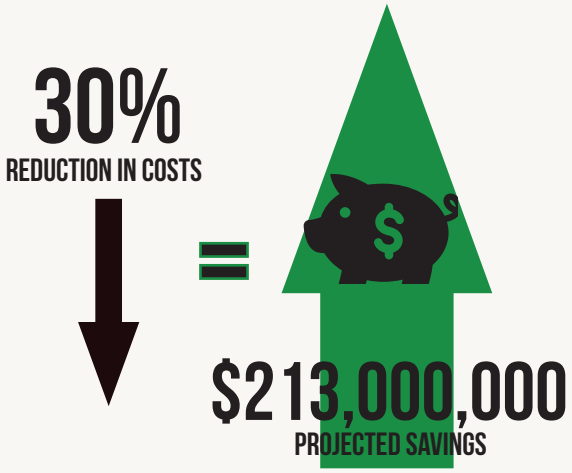


REPORT SUMMARY

2. REDUCING THE COST OF DELIVERING CARE TO THE HIGHEST USERS CAN SAVE A LOT OF MONEY

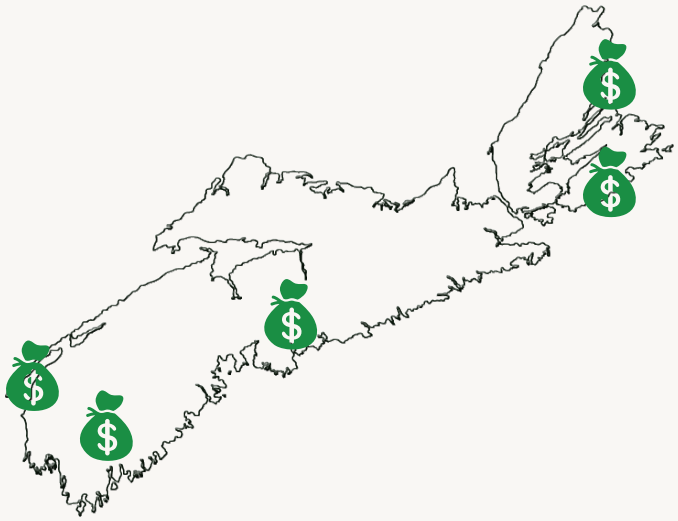
We estimated that the highest-cost users (the top 5%) in Nova Scotia account for $700 million in doctors and hospital stays each year.

If we found more efficient ways to treat these people, the health system could save anywhere from $36 million (5% reduction in cost) to $213 million (30% reduction in costs) each year.



3. RATES VARY DRASTICALLY ACROSS NOVA SCOTIA

High-cost users are clustered in small areas across the province. Certain rural areas (Cape Breton, Northern and South Western areas of mainland Nova Scotia) had the highest rates of high-cost users. Other urban areas (Halifax) had lower than average rates of high-cost users.



4. HIGH-COST USE CAN BE EXPLAINED BY DEMOGRAPHIC FACTORS AND DISEASE PATTERNS... SOMETIMES

In healthcare, some areas have more high-cost users for different reasons. Some areas might have more people who are older or more people who are sick. Other areas may have people who are sick with several chronic health conditions (e.g. diabetes, asthma, or heart disease) at once. Even when we removed the influence of things we would expect to drive healthcare costs (like age, gender and disease patterns), some areas were still higher than average. In these areas, something else must be happening to drive high-cost healthcare use.

5. AREAS WITH HIGH-COSTS FOR "OTHER REASONS" COULD BE PRIORITY AREAS FOR HEALTHCARE PLANNERS

In addition to comparing areas and their health costs in relation to the provincial average, we also examined why these areas' costs were high or low. Specifically, we questioned whether an area's health costs could be explained by their *demographics* (e.g. a high percentage of elderly residents), *disease patterns*, or *other factors*.

Understanding the reasons for healthcare costs is important. With this information, we can target health programs and services to areas where they can make the biggest difference on patient outcomes. For example, in areas with high costs due to disease, the priority should be disease prevention. In areas that have high rates for other reasons, the focus should be better disease management.

Areas that have lower healthcare costs than the provincial average due to disease or other reasons should also be studied. We may be able to learn important lessons from these areas.

6. PATIENTS CAN SHED LIGHT ON WHAT THESE "OTHER CONTRIBUTING FACTORS" MIGHT BE

We asked patients and their care providers for insight on why healthcare costs may be higher in their areas. Poor disease management was a big factor. They also suggested that having regular access to a primary care provider was a problem.

We know that hospital costs are a key cost driver. Lack of family support, low income, poor literacy, and lack of transportation can lead to hospital stays. Patients and families suggest that there aren't proper supports for people when they get out of hospital. Others note that some people are in the hospital when they should be getting care somewhere else, like a facility or in their home. We describe that as a lack of access to alternate level of care (ALC) arrangements.

"AREAS THAT STILL SHOW HIGH RATES OF HIGH-COST HEALTHCARE USE AFTER THE INFLUENCE OF DEMOGRAPHIC AND DISEASE PATTERNS ARE REMOVED ARE INTERESTING TO US. THESE ARE THE POCKETS OF NOVA SCOTIA THAT WE NEED TO KNOW MORE ABOUT, AND POTENTIALLY WHERE BETTER DISEASE MANAGEMENT AND IMPROVED OUTCOMES CAN MEET WITH GREAT SUCCESS."

DR. GEORGE KEPHART, PRINCIPAL INVESTIGATOR

SARV NEXT STEPS

This study is really just the first step. We now know where high-cost users are in the province and what some of the contributing factors driving costs may be. Further analyses and on-the-ground insights from patients, their families and healthcare providers, will help us gain a better understanding of the needs of high-cost patients, and how well those needs can be met. We can learn from areas that have both low and high rates of high-cost use. From this, we can focus on improving targeted healthcare programs and services to address the needs of the high-cost patients. We then need to evaluate these programs and services. Ultimately, we hope to improve patient outcomes by improving the way in which targeted healthcare services are delivered to smaller segments of the population who need and use these services the most.

Follow us on Twitter ***@maritimespor*** and continue the conversation about ***#SARV***.

PROJECT INFO

SMALL AREA VARIATION IN RATES OF HIGH-COST HEALTHCARE USE ACROSS NOVA SCOTIA

The SARV project was led by Dr. George Kephart, Department of Community Health and Epidemiology, Dalhousie University.

The Maritime SPOR SUPPORT Unit (MSSU) is funded by the Canadian Institutes of Health Research (CIHR), the governments of New Brunswick, Nova Scotia and Prince Edward Island, and the New Brunswick and Nova Scotia Health Research Foundations. It is one of several SUPPORT Units across Canada, administered by SPOR, the Strategy for Patient-Oriented Research, and focused on bringing health research findings to life by helping to integrate them into patient care.

For more information, contact info@mssu.ca or visit www.mssu.ca.

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

New Nouveau Brunswick CANADA

NOVA SCOTIA

Prince Edward Island CANADA

NOVA SCOTIA Health Research FOUNDATION

NS-PIHCI *Network*
IMPROVING HEALTH OUTCOMES THROUGH PRIMARY AND INTEGRATED HEALTH

New Brunswick Health Research Foundation

Fondation de la recherche en santé du Nouveau-Brunswick