Healthy Seniors Pilot Project | Projet pilote sur les aînés en santé

G007

Care Coordination for Vulnerable Patients with Complex Needs

Summary

- The New Brunswick Health Council predicts a $100 million increase in the cost of care for complex needs patients - patients who have multiple chronic conditions, often seniors - within the next 7 years.
- The lack of care integration and coordination among health, social, and community service providers for complex needs patients places a strain on the primary care system and impacts the quality of care.
- Findings from the project team's assessment of Miramichi's extra-mural program (EMP) services supported the development of an integrated case management (CM) approach that coordinates health, social, and community services for eligible patients. This CM approach was carried out by community paramedicine services with the aim of reducing complex needs patients' rates of emergency room (ER) visits and hospitalizations, and improving their general health, wellbeing, and quality of life.
- 98 complex needs patients were enrolled into the CM program. These patients were 55+ years of age, diagnosed with 3+ chronic medical conditions, and had 3+ ER visits in the year leading up to the study.
    - 33 patients identified as First Nations – 23 female, 10 male
    - 65 patients were from the Miramichi EMP – 37 female, 28 male
- 204 healthcare workers supported the integrated CM program
    - 128 case managers – 70 women, 58 men
    - 76 community paramedics – 45 women, 31 men

HSPP Focus Area	Innovative Care Pathways
Project Start & End Date	September 1, 2019 - March 31, 2023
Organization/Agency	Medavie Health Services New Brunswick
Location	Northumberland County
Principal Investigator(s)	Antonia Arnaert and Pierre Godbout (McGill University)
Project Lead	Ginette Pellerin, Vice-President, Extra-Mural Program, Medavie

Indicator	Impact / Outcome / Result	Quote
Reduced rates of ER visits and hospitalizations	From patients' medical charts, 592 CM needs were organized into 69 categories. Common needs included mobility, mental health, end of life decisions, and medication management. Statistical tests showed that addressing patients' CM-related **medical** (e.g., medical tests, kidney functioning) and **non-medical needs** (e.g., legal, alternative housing, clothing shortage) led to a significant decrease ($p < .001$) in ER visits and hospital admissions in the 6 months after the program compared to the 12 months before.	*"I think that this program is gonna save a lot of time and resources for the government on health care. I also think it's going to keep a lot of New Brunswickers comfortable and happy in their own homes or their own environment. […] We're super happy that my mom's in this pilot project. And I think it's helping to keep her out of both the hospital and a long-term care home."* - CM Program Patient
Improved health and quality of life	Despite 100% **satisfaction** with CM services, patients' quality of life did not change from 12 months before to 6 months after program enrolment, with the exception of their increased confidence in support from their **social networks** (family, friends, or neighbours; $p = .025$). Interview data showed that CM **medication management education** prevented potentially harmful medication intake.	*"I couldn't afford my glasses because I didn't have a job because of the pandemic. She [case manager] asked me if I needed anything medical, and I said my glasses. So that's what they helped me with. I just got a call from the manufacturers saying that they got the payment from the Band so that I could get my glasses."* - CM Program Patient

Indicator	Impact / Outcome / Result	Quote
Increased coordination of care among health and social services and community organizations	Resolving patients' CM-related needs depended on EMP case managers' number of **home visits** and **remote interactions** (e.g., phone calls), as well as patients' number of **ER visits** and **hospital admissions** during/after the program ($p < .05$). In interviews, patients shared that their case managers responded to their individual needs **quickly**, **knowledgeably**, and **supportively**. Although case managers ($n = 3$) indicated in a survey that all complex needs patients should receive CM services, they also suggested some problems with program delivery. • Case managers were <u>dissatisfied</u> with the **implementation process,** the **training** received, and the **collaborative** processes with other healthcare workers. • The **paper-based** medical documentation system was <u>inefficient</u> and <u>ineffective</u>.	*"She [case manager] helped me get an appointment with a specialist that I've been trying for months to get in with. It's hard to get into; she [case manager] got me in within a week. That's something I was waiting for, like three, four months."* - CM Program Patient *"She [case manager] explains things that are available for me, and sets up appointments with physiotherapy. She was gonna look into having somebody to come home and help me with the household chores. She told me about different organizations that I would qualify for."* - CM Program Patient

Methods and Comparison

Mixed methods were used to analyze patients' medical charts and hospital records. Quantitative methods were used to assess changes in patients' quality of life and satisfaction with the CM program. The sample sizes were small, so these data should be interpreted with caution when used to make decisions. Qualitative interview methods were applied to understand the effectiveness of CM program delivery.

Conclusions and Lessons Learned

- Participants experienced significantly fewer ER visits and/or hospital admissions after CM program enrolment compared to before entering the program.
- Although clinicians were dissatisfied with the lack of processes and policies when implementing the program, they all agreed that CM is important to meet the needs of complex needs patients.
- The case manager role streamlined communication and service delivery, providing knowledge about external resources previously unknown in their bedside clinician role.
- Comprehensive electronic medical documentation is key for healthcare workers' effective communication and sharing of patients' medical information.

Recommendations

- Develop and distribute a CM model and training program to all EMP staff before a provincial scale-up.
- Case managers should be involved in the decision-making processes regarding CM program delivery.
- Community paramedics should attend EMP reviews of daily caseloads prior to the planned patient visits to facilitate priority assessment and accommodation of patient needs.
- Providing EMP patients with training to use the "Shared Care Plan" would improve continuity of care.
- The complementary community paramedicine, CM, and EMP services should be integrated.

Next Steps

The project team will be submitting a business case to the Department of Health to secure additional funding for community paramedicine services to continue as part of the CM program.

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