THE HUNTER PRIZE - 2023 FINALIST



The Hunter Prize Policy Brief

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What is a high-impact, low-cost, politically feasible policy reform to reduce health-care wait times? "Collaborative and cooperative action is required to effect the necessary change recommended"

THE CHALLENGE & OPPORTUNITY

Leveraging community-based health care providers (HCP) to reduce ER visits

During the current stage of pandemic recovery, the health care system is overwhelmed and previous problems are exacerbated. There is staff burnout and attrition, delays in care, and an increase in poorer health in the Canadian population. Across these circumstances, access to care becomes more limited, particularly for vulnerable populations.

Better coordination of care in the community by combining health care professionals into teams to conduct home visits may address some of these concerns. Paramedics, nurses, international medical graduates (IMG) and midwives may be responsive by providing community-based care outside of the hospital. The integration of community based and hospital-based care has benefits for care providers to use clinical skills but also integrate social risk assessments to address health disparities in ways that are limited in hospital-based environments.

Community based health care providers that currently conduct home visits include doctors, paramedics, nurses (eg VON, home care, public health) and midwives. Health care providers such as Nurse Practitioners (NP) and Physician Assistants (PA), also skilled at working in interdisciplinary teams in hospital and community settings, may provide support within their scope of practice. Pharmacists have also found their scope of practice expanding and may contribute by offering treatments for patients in community settings. Internationally trained medical personnel may also contribute to these teams bringing their underutilized experience into their community.

At the same time, these care providers are seeking better work-life balance and/or unable to work in their current models. Responses to the <u>health human resources (HHR)</u> crisis have been limited. Finding ways to promote and improve health in the community will settle the pressure on the hospital to react and fulfill this need in-house. Deployment of these well-trained workers to assist with ERs may calm the current situation across affected regions of the country.

Federal transfer payments to each province is required to address wait times. Funding this model home visits are provided in private residences as well as community facilities (such as long-term care, shelters, schools etc) by forming and deploying teams of community-based health care providers that are well integrated into the hospital. Expanding community paramedicine (CP) programs into interdisciplinary teams that provide home visits, and link community and hospital settings, can address prolonged ER visits, improve outcomes and experiences for patients while providing continuity and culturally safe care.



One option is for people to have access to nurses, paramedics, emts [emergency medical technicians] or others to supplement in-person services.

People could receive virtual care from a doctor or nurse practitioner with on-site staff who could see them.

The idea is to triage patients — figure out who wants a family doctor, who has an urgent need and start creating an attachment program for the people who need a doctor most.

— Dr. Onil Bhattacharyya, Frigon Blau Chair in Family Medicine Research, Women's College Hospital, Ontario

CURRENT STATE

Pooling existing health care providers in geographic communities for redeployment to address non-urgent care needs can address some of the bottlenecks in ERs contributing to prolonged waiting times.

Teams can divert non- urgent patients and care for them in a timely manner in several ways. Some examples are provided, as well as a reasonable plan to adapt, redeploy or implement a team, using existing resources found within communities.

Implemented Policy Solutions

Recent funding has been allocated for recruitment and retention of healthcare workers:

- Learn and Stay;
- Community Paramedicine for LTC;
- Physician Assistant Career Start Program;
- Training Physician Assistants in Nova Scotia
- Expanded Models in midwifery;
- Grow Your Own Nurse Practitioner Program for LTC;
- Growing the Ontario Health Care Workforce
- Ontario Expanding Midwifery Services

"High Tech & High Touch" Environment

If patients require urgent or life-saving care, the emergency medical team is well trained to respond.

Immediate transfer of patients to a **Home Visit Team (HVT)** to provide primary care or non-urgent services in ERs or in the community may address some of the current bottlenecks found in ERs – both teams responding to do what they do best.

- PAs and NPs are increasingly found in ER teams across the country
- Many hospitals re-deployed nurses, doctors and midwives during COVID-19
- · Community Paramedicine (CP) is offered in many communities across Canada
- · Uptake of virtual care and AI solutions are increasing in health settings
- Transitional care teams currently offer high-risk patients intensive follow-up at home after hospital discharge (eg CCAC coordination after discharge).



THE EVIDENCE

Research on home visits by care providers demonstrates improved outcomes and experiences for patients and providers and reduces hospital re- admission rates for high and low risk populations.

- Midwives offer high quality services in and out of hospitals across the <u>country</u>. Clients in midwifery care (BC), which includes home visits, community based and hospital based care fared better than clients of the same risk (low or high risk) cared for by physicians (Stoll et al., 2023, McRae et al., 2018).
- Penalties for hospitals when patients are readmitted motivates some organizations to
 offer follow-up at home with multidisciplinary teams, preventing re-admission for
 high-risk patients (Hilgeman & Lamb, 2023).
- Nurse Practitioner home visits (in United States) demonstrated reduced ER visits and hospital readmissions in many cases reported (Osakwe et al, 2020; Sun et al, 2022).
- ICES data of physician home visits (Ontario) before COVID were a mixture of palliative care or home care, and healthy patients (Lapoint-Shaw et al, 2022). Billing for home visits has shifted this proportion since then as virtual care/telehealth services have increased. For example, e-visits with a Telemedicine nurse on site.
- Primary care concerns for childbearing patients and newborns often present to the ER (Varner et al, 2020; Matenchuk et al, 2022). Interdisciplinary programs divert patients from ERs and provide timely, patient-centred care but this is inconsistently found across hospitals (eg <u>Early Pregnancy Programs</u>, <u>Post partum care clinics</u>).
- Community paramedicine (CP) has demonstrated some improvement in both health services utilization and patient outcomes, but these models are varied and inconsistently found across Canadian jurisdictions (Thurman et al, 2021). In addition, CP often targets older adults and/or palliation, and isn't often offered to ER patients.
- Home visits for asthma and COPD patients (United States) by an interdisciplinary team (NP, RT, Social Worker) reduced ER visits, reduced hospital admission and improved adherence to medication (Ghimire et al., 2021)
- A team comprised of paramedics and advanced practice nurses (United States) demonstrated fewer hospital readmissions (Misra-Hebert et al, 2021).



HOME VISIT MODELS

Expand and scale existing community paramedicine (CP) programs into collaborative multidisciplinary teams that provide home visits for ER patients in the short term. Teams could also coordinate with attachment programs to make long term impact.

1. CP & Attachment

Renfrew County District Health Unit (RCDHU), a large rural area near Ottawa, <u>collaborated</u> with paramedics to provide care to residents in their homes and then liaise with ER physicians to plan appropriate follow up. RCDHU has no walk-in clinics and the local hospital ER functions as the 'after hours urgent care'. Care gaps have also been addressed with attachment programs.

2. CP & Palliation

Palliative care patients in <u>Nova Scotia</u> can access care at home after province-wide training for paramedics.

3. CP & ER

CP in <u>Saskatchewan</u> offers communities support with services including bloodwork, antibiotics, ECG, and assistance in ERs or LTC.

4. Home Care Nurses

Public health, CCAC and VON nurses are skilled at home care including palliative or home bound patients. Teams may have medical directives or use telemedicine to ensure continuity of care and culturally safe care in the community. Teams can meet patient needs if staff are integrated into interdisciplinary systems and can access consultations when needed.

5. Walk-in Clinic at the Hospital

Centenary Hospital (ON) has an after hours <u>walk-in clinic</u> on site to bypass the ER operating with personnel and physical space.

6. Moms and newborns in the ER

At North York General Hospital (ON), midwives offer care specifically for maternal-newborn issues in the ER.

7. Indigenous Midwifery

"Indigenous midwives play a key role in building healthy and safe Indigenous communities, in rural and urban areas. Increasing the number and capacity of Indigenous midwives fulfills the Truth and Reconciliation Commission's Calls to Action to recognize the value of Indigenous healing practices, and to increase the number of Indigenous professionals working in the health care field" (NCIM)

8. CP & Health Human Resources

Staffing shortages suggest that many highly skilled healthcare providers are inactive, or not working in clinical environments but data on this is limited if licensure is not renewed or internationally trained graduates are not accepted into Canadian workplaces. EMS offer backup to help out at <a href="https://hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.ncb/hospitals.nc



9. Nurse Navigators

Humber River Hospital (ON) started <u>Remote Monitoring Program for clients in Long Term Care</u> settings to reduce ER transfers,and also hired Nurse Navigators to support care coordination. Nurse Navigators are also central in mental health services via <u>SCOPE</u> teams.

10. Midwifery Care

Midwives across the country provide pregnancy and postpartum care to parents and newborns by offering home visits and liaise with hospitals when a higher level of care is required.

HOME VISIT MODELS

New Brunswick's <u>Extra Mural Program (EMP)</u> often known as the "hospital without walls," provides home health services to New Brunswickers of all ages in their homes and communities.

MP helps New Brunswickers stay in their homes when they may otherwise have required hospitalization, and helps them get home faster when they do require hospital-based care.

- Alternative to hospital admissions Facilitate early discharge from hospitals
- Provide an alternative to, or postponement of, long-term care facilities.

Funded by the Government of New Brunswick with over 900 professionals around the province are managed by Medavie Health Services New Brunswick (EMS).

Reporting and evaluation of progress towards goals to the public.

Areas of Care:

- · Transitional care to return home
- Ongoing care for patients with chronic conditions Palliative care at home
- · Home oxygen program and therapy at home Rehab services such as OT, PT, SLP
- Long term care services

Ongoing collaboration with communities via Patient and Family Advisors



HOME VISIT MODELS

<u>Expanded Midwifery Care Models (EMCM)</u> are client and quality focused, support collaboration, and support increased access to reproductive care in areas of Ontario where there is a demonstrated need.

18 EMCM are funded by the Government of Ontario in the province, and extend the reach of midwifery services to address gaps and meet community members.

Hospitalist Midwives

 Provide services in a hospital: intrapartum care, triage, discharge planning and interdisciplinary collaboration for follow-up and home care services

Post-partum care in the hospital

- · Those who do not have a family doctor, or
- · To facilitate transition to community care

Full Spectrum Midwives

- Prenatal care
- Post partum care and home visits
- Newborn care
- · Birth in the community or in a hospital

Midwives in primary care teams

Prenatal care and post partum care in an interdisciplinary team



HOME VISIT MODELS

An <u>Indigenous midwife</u> is the keeper of ceremonies, a leader and mentor, and someone who passes on important values about health to the next generation.

Indigenous Midwives:

- provide care in community and hospital settings
- · are knowledgeable about all aspects of women's sexual and reproductive health
- · provide education that helps keep the family and the community healthy
- · promote breastfeeding, nutrition, and parenting skills

We are not just about catching babies. We are nutrition. We are breastfeeding. We are safety in remote areas. We are insurance for our young families.

— Carol Couchie, Indigenous Midwife

Why Indigenous midwifery matters:

- · Indigenous midwives have specific core competencies
- · Responsive to needs that are unique to Indigenous peoples
- Bring birth back to communities
- Enable a reduction in the number of costly medical evacuations for birth in remote areas
- Maintain and restore the traditional ways

Taken from: National Council of Indigenous Midwives



PATIENT EXPERIENCE

1. THE PROBLEM

- Patient doesn't feel well
- Decide to go to the ER
- Transfer from community setting

2. THE GAP

- Patient waits many hours
- Pays for parking
- ER teams provide care that could be provided by other services

3. THE NEED

Meet patient needs with personalized care

- Before arriving to the ER from the community
- While in ER/Instead of ER personnel
- After leaving ER & returning to community setting

4. POSSIBLE SOLUTIONS

- Rapid deployment of CP teams to support ERs
- Form CP teams to target patient population that aren't appropriate for the ER
- Response depends on the community, patient population and capacity of the ER

5. LAUNCH AND EVALUATION

- Reduce ER waiting
- Reduce Re-admission
- Better coordination of hospital and community based care
- Employee satisfaction and retention
- Response aligns patient needs right now in the ER with or without attachment to primary care



CASE STUDIES - Real life examples

Meet the Patient: Rania

Rania arrives to the ER in the middle of the night seeking reproductive care services. Rania doesn't have a family doctor.

After assessment, Rania requires next steps which are arranged, and will return tomorrow (e.g. diagnostic testing, procedures).

Teaching and resources are provided and Rania is offered access to the HVT with questions and follow-up for test results.

Meet the Patient: Majuri

Majuri is at the end of her life and chooses to spend her final days at home. However, her family worry about her pain and take her to the ER frequently for assessment.

The HVT arrives to assess Majuri at home and after liaising with the NP/physician, administers medications at home.

The HVT consults the palliative care team and provides an update. The palliative care team provides instructions and the HVT return for follow-up the next day at home.

Majuri's family also has the number for the HVT to call with any additional concerns.

Meet the Patient: RI

RJ has not been able to see their family doctor, and needs a prescription refilled for a chronic illness

The nearby walk-in clinic has closed for the day, and the pharmacy will not provide a refill in the interim.

The HVT coordinates with the NP/attending physician and hospital pharmacy to fill the prescription for RJ for another week.

The HVT follows up the following day to make sure that RJ received the medication and has no further concerns. The HVT liaises with the primary care provider with the plan, and a scheduled appointment later this week.



Meet the Patient: Maria

Maria has struggled with her mental health for many years with periods of low mood.

Maria's family has not been able to convince Maria to eat for the past four days. Maria's family is very concerned and calls EMS.

The HVT offers to assess at home, provides supportive care and makes a care plan with the NP/attending physician for Maria until a hospital bed/psychiatrist is available.

Meet the Patients: Sam & Kat

Sam & Kat sometimes stay at a shelter in the core of a large city. Staff at the shelter are concerned that they may have been exposed to a communicable disease and have been keeping an eye out for them in the last couple days so they can be informed.

The HVT comes to see them at the shelter to assess, offer testing and subsequent treatment. The staff will call the HVT when Sam & Kat return to the shelter so they can access follow-up.



IMPLEMENTATION: OVERVIEW

Offering staff meaningful work:

Hospitals can invite current employees and/or external hires to form a Home Visitor Team (HVT).

Use Current Resources

EMS Base Physician and/or ER team have current systems in place that can be enhanced with team operating off-site, at residences (or in community based settings such as shelters) as well as coordinating care and offering follow-up.

Embedded

The HVT formulates a set of scheduled hours, protocols and standards for operating. Integration into the hospital culture and a strong presence with the ER team is critical to be supportive of each other.

Training

Strong relationships and trust are developed with cohort training especially critical in an interdisciplinary, multi-site team. Current CP training can be adapted to quickly onboard HVT.

Home Visit Team may focus on specific groups of non-urgent ER patient populations

- Primary Care Concerns
- · Older adults
- Reproductive Care Services
- Mental Health Services
- · Vulnerable Populations
- Palliative Care Services



IMPLEMENTATION: FORMING A TEAM

Legally, internationally trained medical personnel, nurses, paramedics and midwives may provide care with instructions from a doctor.

Assembling a Team

- Eligible for paramedics (all levels), nurses (all levels, RPN, RN, NP), midwives and internationally trained personnel.
- PAs/Manager is assigned by the hospital in the ER for the HVT. The PA liaises with HVT, ER Clinical Lead/Attending Physician, and Base Hospital
- Nurse Practitioner (NP)/Lead is assigned by the hospital for supervising patient flow and care plans for the HVT. NP and PAs lead evaluation of HVT implementation and impact on ER and the community.
- RT, Pharmacist, Unit Clerk, and Social Worker is assigned by the hospital for HVT consultations and/or transfers. Stipends for staff or Base Physicians at the necessary FTE for their area may be needed.

Funding

Hospitals covers costs for salary, benefits, mileage, phones or pagers, training, liability insurance, and supplies.

Handover

Team members attend daily AM Huddle/Handover and PM Huddle/Handover (can be remote or in person/hybrid).

Case reviews will refine program protocols and improve processes.

Shifts

Shifts can be days only, nights only, fireman schedule, etc determined by the team members.



Training

Training and buddying for all team members

- In the hospital ER
- · In Community with paramedics, public health nurses, and/or VON/CACC team
- Online modules from CP programs

Protocols & Directives

Protocols and directives that already exist may be used or adapted (eg paramedic protocols to consult Base Physician):

- For specific low risk clinical conditions (eg "see and treat").
- · For specific high-risk populations or settings.
- For specific diagnostic services (eg fast track for imaging, blood work at home). Consider diagnostics at home (eg AI tools, POCUS, or phlebotomy)
- For pharmacy dispensing medicine off site (eg pre-mixed <u>IV antibiotics</u> <u>for use at home</u>).
- Protocols for documentation in shared medical records and communication with other teams
- Developed and shared with collaborators



IMPLEMENTATION: BUDGET ITEMS

HVT Salary +Benefits	\$50/hour x 10 FTE paid to the team as employees of the hospital			
	Current staff maintain seniority without leaving organization			
	Provincial contracts may also work			
Support Staff Stipends	FTE Hours for hospital staff to supportt he HVT			
	 Clerk, Nurse Practitioner, Respiratory Therapist, Physician Assistant, Social Work, Pharmacist, additional Base Physicians 			
Supplemental Funds	CP equivalent training for staff/hires, mileage, phones/pagers, liability insurance			
Stipends for collaborators or partners	EMS, Community Settings, Buddying or shadowing preceptors			
NP/Physician consult	Usual Billing			

IMPLEMENTATION: TIMELINE

Winter Winter 2023/2024 2024/2025 Training & Buddying Evaluation and reporting • 2-4 months Ongoing Now **Spring** 2024 (September) Planning and Implementation recruitment of well functioning • 1-3 months teams and ongoing quality improvement



RISK MANAGEMENT

Considerations to mitigate risk

Employee Model

HVT hires are hospital employees but provide care in the community and/or hospital.

- An employee model provides stability, accountability, predictable schedules and infrastructure.
- CP models can be stream specific to ensure continuity (eg palliative care) or task specific services to meet community needs (eg ER support, Lift assists)
 - 1. For rapid deployment: Skills and scope of practice are carried out under order of the Base Physician.
 - 2. For sustainable community connection, autonomous care providers may work under the scope of the Base Physician and bypass scope of practice regulations AND/OR
 - Shift chain of command by working independently by scope of practice
 - Use directives and protocols to identify when to liaise, transfer or consult
- CP often requires referral from a provider. Non-urgent patients that present to ER may be offered the option to be seen by the HVT and self-refer (eg Health811)
- Patients are triaged as patients of the ER to maintain clear transfer of accountability for the patients, the organization, and the staff.

Interdisciplinary & Collaborative Team Culture

Team members may be paramedics, midwives, nurses, and IMG. The goal is to re-direct human resources to enhance hospital-community coordination for the ER. Sites with high levels of hallway medicine may consider teams specific to high volume populations

- Salary plus benefits, \$50/hour for 15 team members. For example, the roster could be 5 on days / 5 on nights / 5 off, 1 floater/manager
- · Consider offering casual/part time staff to pick-up shifts when ER is busier
- Budget for hospital to train teams and to offer staff consults to support the HVT
- NP/Physicians in the hospital ER take a consulting role.
- Standard agreements/<u>contracts</u> for the province can ease implementation but changes the flow of funding from hospitals to EMS service.



Flexible and Adaptable Team Members

- Identify Champions for HVT in the ER, Nursing, and Senior Leadership at the Hospital and the community sites such as EMS, CACC (or equivalent), Hospice or LTC setting
- Ongoing monitoring and evaluation of the team, services provided and satisfaction of all stakeholders

Team members:

- 1. Adapt to community needs
- 2. Are willing to learn, take initiative and use critical thinking
- 3. Value patient-centred care: demonstrate humility by actively listening to the patient
- 4. Acknowledge that **nothing is mandatory**: All options are offered for the patient well-being
- 5. Are committed to working across differences with colleagues as well as patients/families

Remote/Rural Communities

Challenges for remote/rural areas, especially for fly-out communities, with staff retention and care access will likely persist

- Building supports using telemedicine network (eg attachment program)
- Consider <u>doula program</u> to provide support, continuity and advocacy for clients that require higher level of care if flying out or decline recommended care
- Drop-in at convenient locations may work better in some isolated communities

Capacity

Based on the **busiest day** for a paramedic, midwife or public health/VON nurse, 5-10 patients may be seen at home and followed up with by phone. 5 team members x 5 ER patients seen in the community = **25 non-urgent ER patients diverted**

- · Community care is rewarding for providers offering a change of pace for hospital staff
- · Continuity of care has positive impacts on patients, family, and provider experiences
- In current circumstances where burnout is high, HVT offers a viable option for care providers to make lateral career moves while engaging in meaningful work
- One limitation is difficulty in setting capacity and team size for all regions.
- Not everyone has a fixed address or feels safer at home during a health event. Care at home may not be appropriate or accepted by everyone.



LOOKING FORWARD

Regulations

- · Identifying ways to collaborate with professional colleges and unions
- · Standardize process for each provinces to deploy teams rapidly for urgent need

Identify types of CP support needed in the community

Where can CP Services augment ER patient needs for your site?

Just in Time Support

- · Scheduled, programmed or on demand
- IV Antibiotics
- Pain support
- · Phlebotomy or diagnostics
- · ED Supports

Ongoing Support

- · Scheduled / programmed
- Medication assist
- Schedules mobility support
- · Phlebotomy or diagnostics
- ED Supports



Community Paramedicine Programming

CP Programming is available in the following communities:

Service Available	Humboldt	Lanigan	Saskatoon	Strasbourg	Wadena	Wakaw	Watrous	Wynyard
Phlebotomy			Х		Х	Х		Х
Antibiotics	X	Х	X		Х	X		Х
ECG			Х		Х	х	Х	X
Assessments			Х		х	х	х	х
Lift Assist					х	х	Х	х
ED Assist	х				х	х	х	х
LTC Assist			X	X	х	X	х	х

CP Deployment in Saskatchewan

Health Economics

 Assessment of cost savings by analyzing reduction in ER use, re-admission,primary care attachment, patient experience and adverse outcomes



RESOURCES

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