



# Breaking Down Silos:

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Paramedics' New Role in Supporting Palliative Care Patients at Home

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# Acknowledgements

## **Conflicts of Interest:**

The Investigators have no conflicts of interest to declare

## **Project and Research Partners:**

NS Emergency Health Services, Nova Scotia Department of Health and Wellness, Cancer Care Nova Scotia (now part of Nova Scotia Health Authority), Dalhousie University, Emergency Medical Care Inc., Health PEI and Island EMS.

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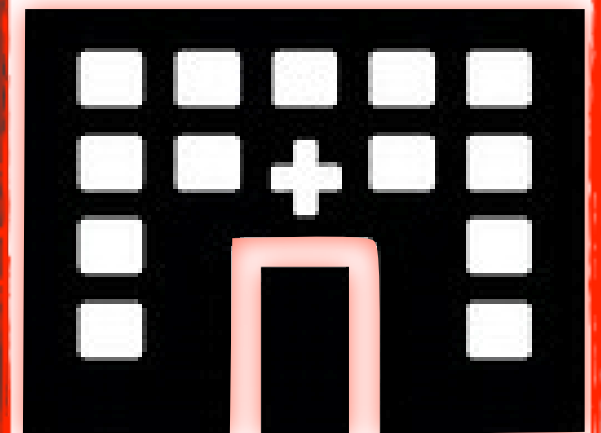




# Background

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- Many Canadians wish to spend their dying days at home (CHPCA, 2013). However, 70% of deaths occur in hospital (Statistics Canada, n/d)
- Application of a palliative approach in a preferred location of choice:
  - Reduces aggressive **interventions** (Rowland et al., 2010)
  - Reduces health care **costs** (Seow, et al., 2016)
  - Reduces **emergency department (ED) visits** and hospitalizations (Seow et al., 2016; Burge, et al., 2003; Lawson, et al., 2009)
  - Increases **quality of life** (Burge, et al., 2003)



# Background

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- Palliative crises/emergencies (Schrijvers, et al. 2010):
  - Occur for physical, emotional or existential reasons
  - Are common when there is a sudden increase in need (patient unexpectedly worsens) and/or the usual care team is unavailable
- Paramedics facilitate over half of ED visits for patients receiving palliative care (Burge, et al., 2003)



# The Gaps

- Traditionally, paramedic protocols are to stabilize patients and transport to ED
- Protocols allowing for “treat and release” for patients receiving palliative care did not previously exist
- Paramedics have no pre-existing knowledge of patient
- Goals of care are not always readily/clearly accessible

1. Carter AJE, Earle R, Gregoire M-C, MacConnell G, Frager G.  
“Breaking down silos: building better advance directives. CJEM

2012(14)S1

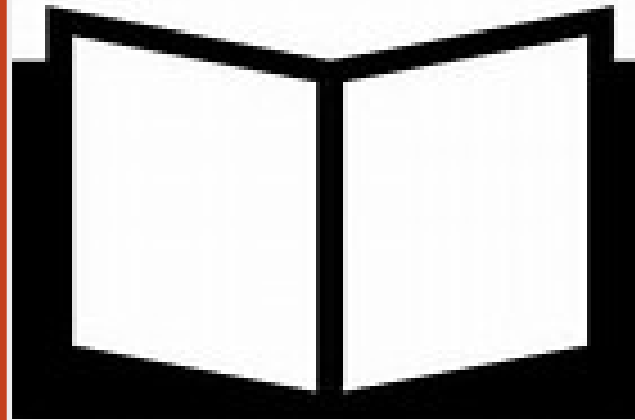


# The Program



## Palliative Clinical Practice Guideline (CPG)

- A CPG for paramedics responding to patients receiving palliative care focusing on symptom management (e.g., pain, breathlessness, nausea, agitation, psychosocial distress, fear, etc.)



## Education Intervention

- Collaboration with Pallium Canada to develop a new curriculum for palliative care that is specific for paramedics (“LEAP Mini for Paramedics”) – taken by all paramedics in NS and PEI in 2015



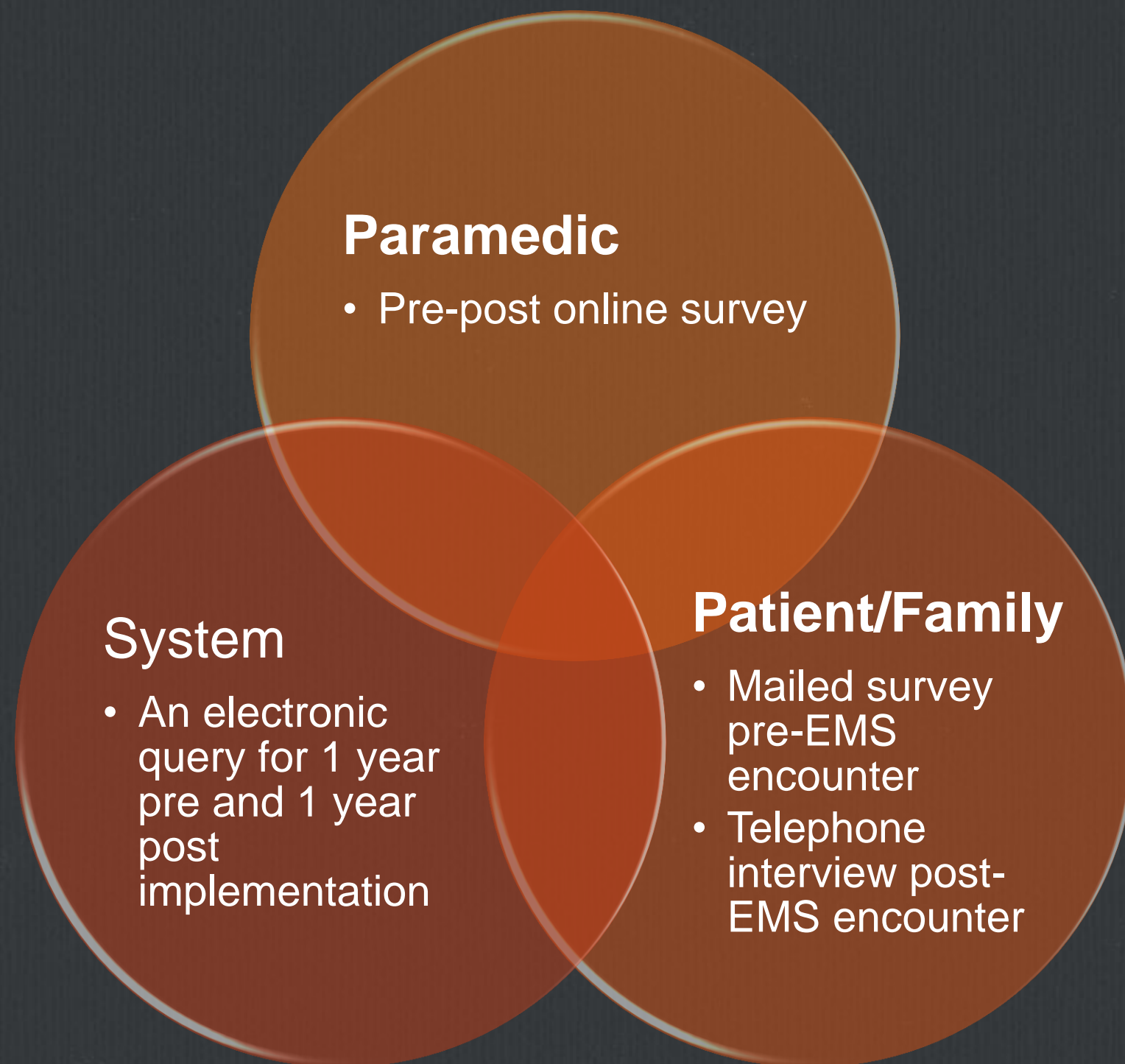
## EHS Special Patient Program (SPP)

- Database to make patient care wishes accessible to paramedics



Paramedics Providing Palliative Care at Home  
<https://www.youtube.com/watch?v=A9G348RI>  
GrQ

# Methods





# Results

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Paramedic Comfort &  
Confidence

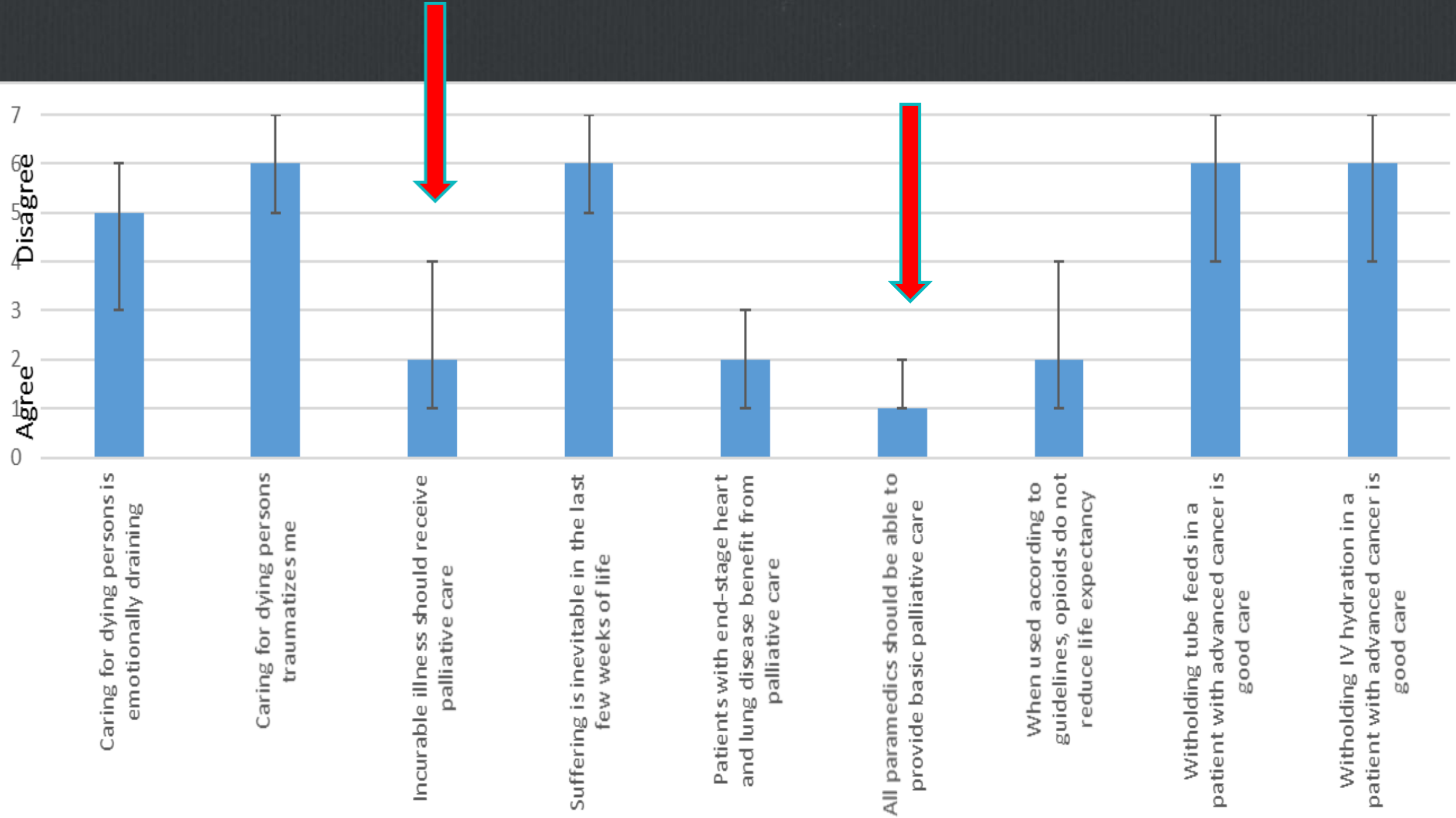
# Results:

## Paramedic Comfort & Confidence

	Pre (N=235)	Post (N=267)
<b>Female</b>	73 (31.1%)	83 (31.1%)
<b>PCP</b>	105 (44.7%)	118 (44.2%)
<b>Years on the job (mean)</b>	13.01	12.5
<b>PEOL calls (median)</b>	6 (3,12)	4 (2,10)
<b>No prior palliative</b>	183	

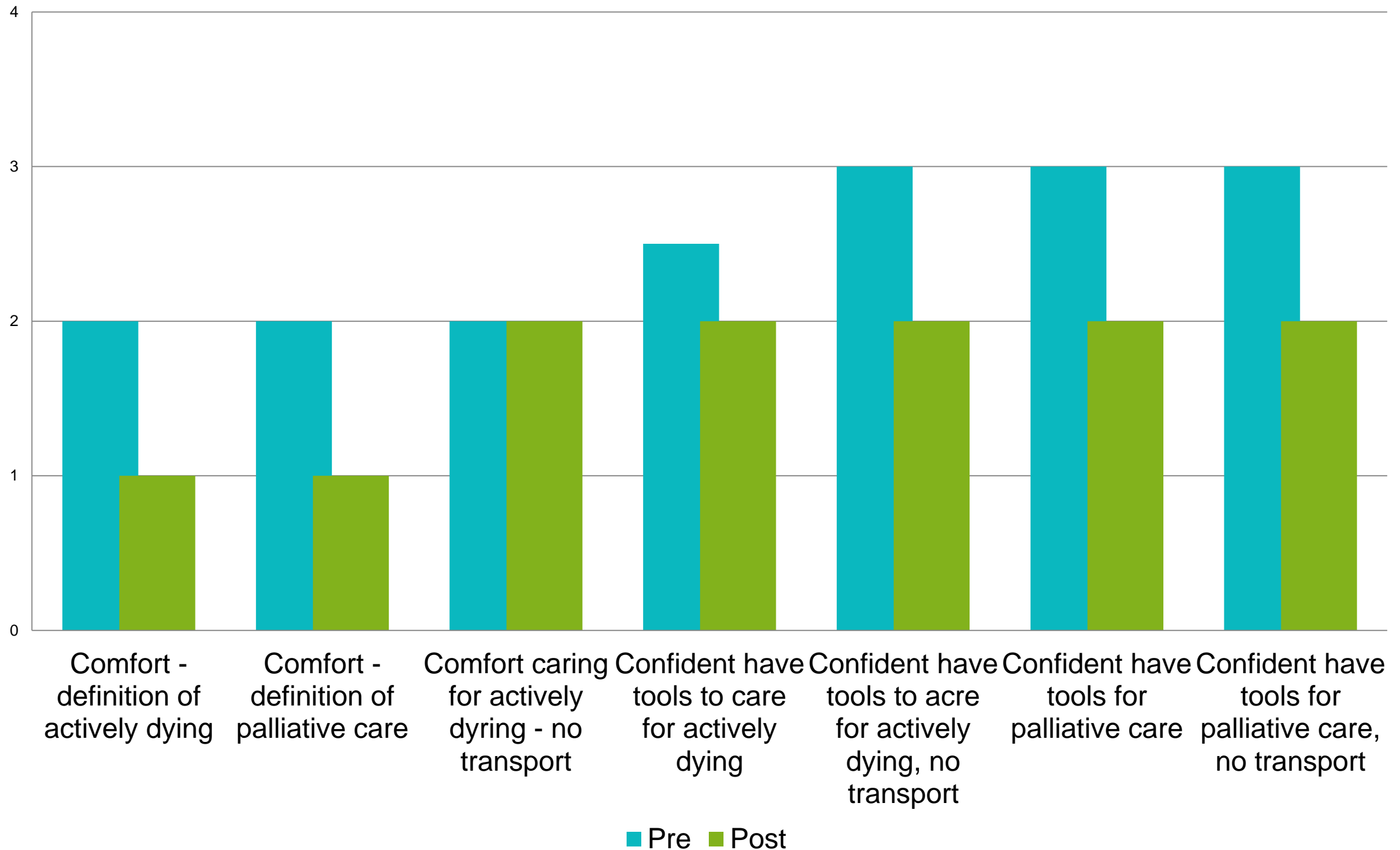


# Results: Attitudes



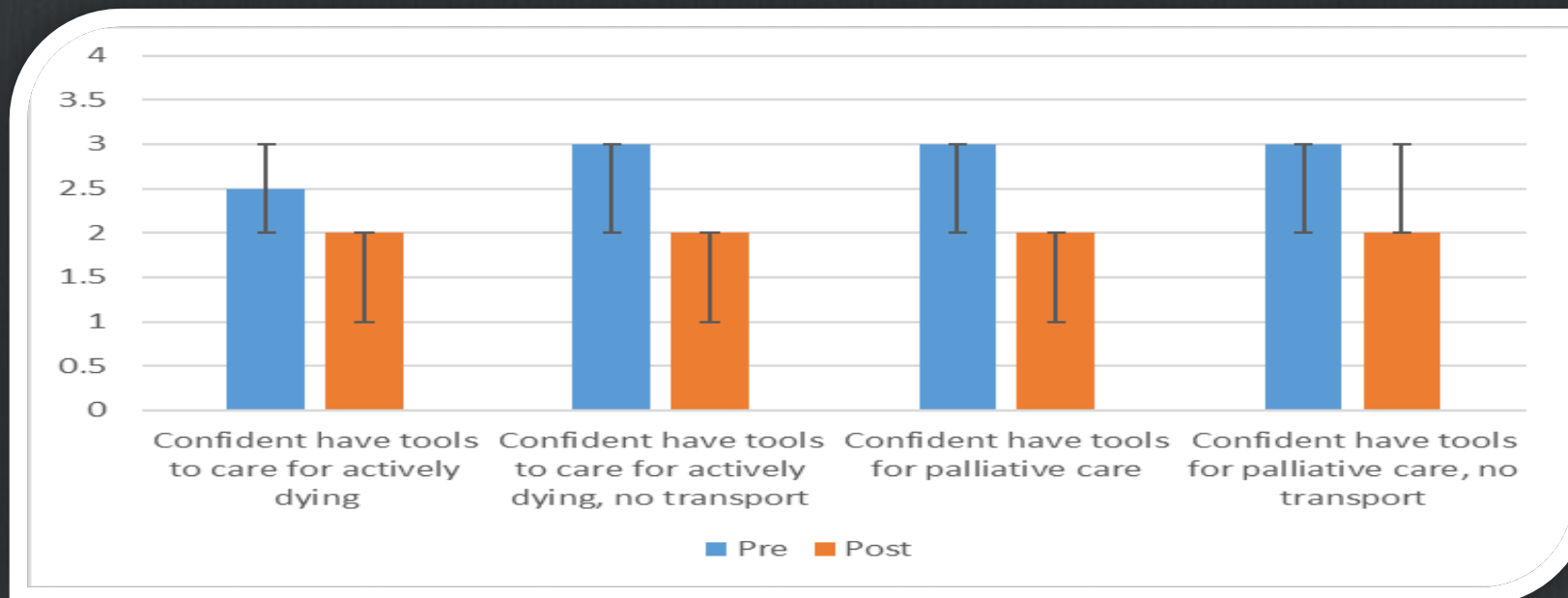
# Results: Paramedic Comfort & Confidence

Nova Scotia & PEI





# Results: Paramedic Confidence



Paramedic comfort and confidence with palliative and end of life care **improved significantly** post-program

## QUOTES FROM PARAMEDICS:

***"I think the program is absolutely fantastic. It really covers an important patient need, and relieves strain from an emergency system, especially when patients do not require, nor want, a trip to the ER department. I think the more that paramedics can do for this patient type the better."***

***"I believe palliative care training has helped elevate paramedic care in this particular sector to an excellent degree."***

# Results

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Patient/Family Satisfaction



# Results: Patient/Family Satisfaction

## □ Survey A: Pre-EMS Encounter

### Response Rate:

- 225 surveys distributed, 67 (30%) returned/completed

### Survey completed by:

- 13 (19%) by patient
- 49 (73%) by family/caregiver

### Education:

- 29 (43%) Did not complete high school
- 12 (18%) High school graduate/GED
- 11 (16%) Higher education

### Ethnicity:

- 36 (53%) identify as Caucasian

# Being Enrolled in the SPP (Survey A)

## Fulfilling care wishes

- Location of care/death wishes will be respected/fulfilled by paramedics

## Peace of mind

- Simply being enrolled increases family confidence to care for their loved one at home

## Feeling prepared for emergencies

- Comfort knowing the paramedics know about them, their situation, and care plan in advance of an emergency call

### QUOTES FROM PATIENTS/FAMILIES:

***“Great program - paramedics will be so much more knowledgeable when attending to a call to a registered patient. More awareness of patient's needs”.***

***“Support for my mom to fulfill her wishes to remain in the home and receive care without having to be transported to hospital .”***



# Results: Post-EMS Encounter (Survey B)

- ❑ Most common reason for calling paramedics: Breathlessness; reported by 6 families, followed by pain and falls (2 each)
- ❑ All indicated that the paramedics helped their symptoms
- ❑ 14/18 respondents rated the care as “excellent”
- ❑ 7 respondents indicated they would have had to find a way to get to the hospital, and that family members would have been in hospital for the end of life period in the absence of the program

# Patient/Family Satisfaction (survey B)

## 24/7 Availability

- Comfort knowing that the program was available 24/7, in the event of an acute crises

## Professionalism and compassion of the responding paramedics

- Families described the paramedics as going “above and beyond” for their loved ones during the crises

## Symptom relief

- Ability of paramedics to alleviate symptoms enough that the patient/family were able to stay home

## Program continuation

- Families expressed a desire to see the program continue
- Without the program, their loved one would not be able to be cared for at home

## QUOTES FROM FAMILIES:

*“ It's a great program. There are times when making a trip to outpatient is very stressful and exhausting for my father, but we're not comfortable assessing him ourselves here at home.”*

*“It relieves stress on myself as the EMS team is trained to provide palliative care, in home and transport to hospital at just the right time, and that they help us make the right decision, for mother.”*

*“Very professional, very supportive and empathetic, gentle and respectful. I haven't had any incident where we felt they weren't providing the best possible service.”*

# Results

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Emergency health system

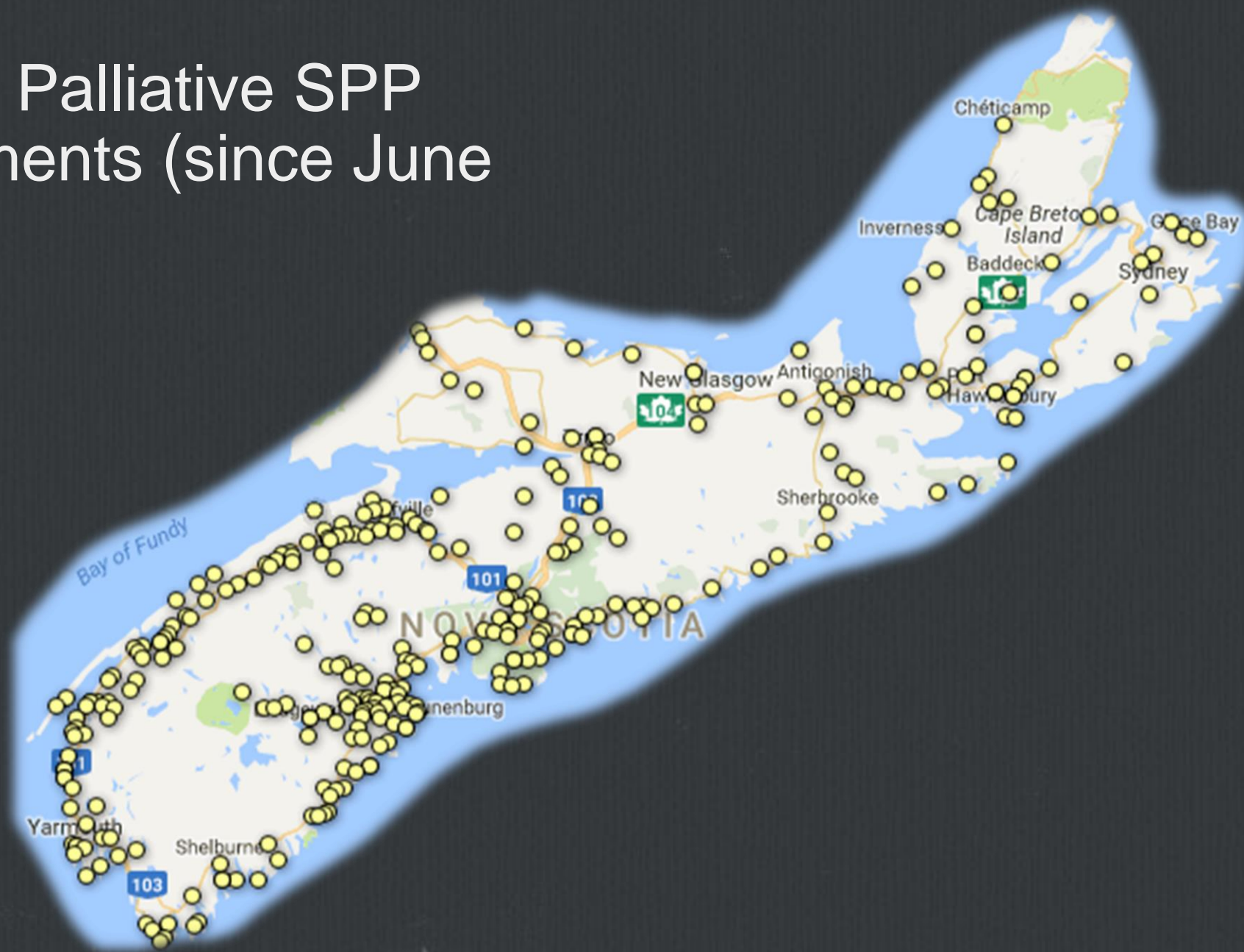


# Population Served

	All Cancer Patients		Special Patient Program only	
	Pre-Project	Post-Project	Pre-Project	Post-Project
Age	76.5(12.2)	74.7 (11.8)	72.8 (10.1)	73.2 (11.0)
Female Sex	387 (58.3%)	685 (43.0%)	133 (67.9%)	468 (39.5%)
Number of Calls	664	1594	196	1184
Documented AND/DNR	475 (71.6%)	491 (30.8%)	10 (5.1%)	83 (7.0%)
Registered in SPP	198 (29.9%)	1187 (74.5%)	196 (100%)	1184 (100%)
Calls with advanced life support on scene	464 (70.0%)	1121 (70.4%)	112 (57.1%)	802 (67.7%)

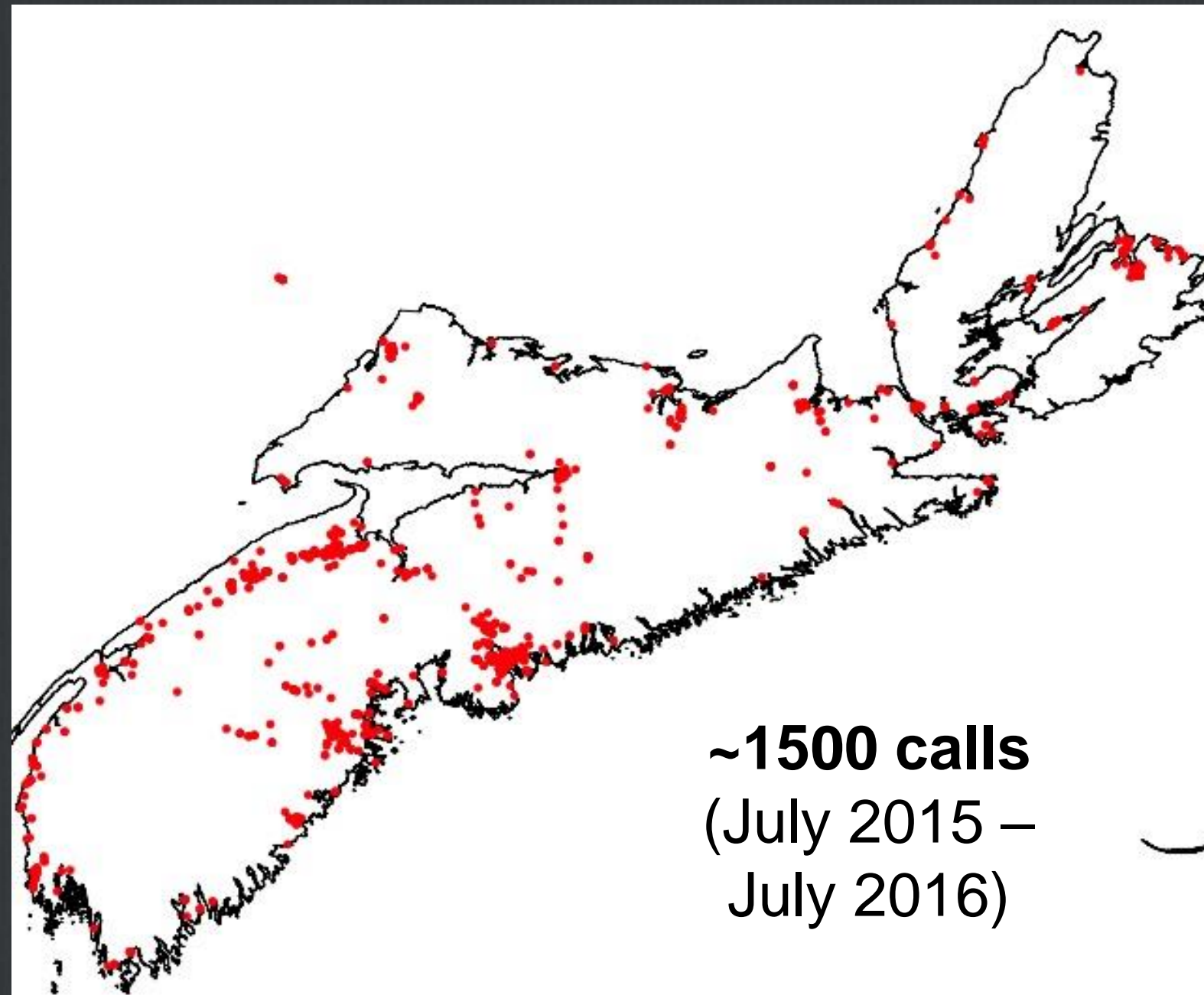
# SPP Enrolment

- 1500+ Palliative SPP Enrolments (since June 2015)





# EHS Palliative Care Calls

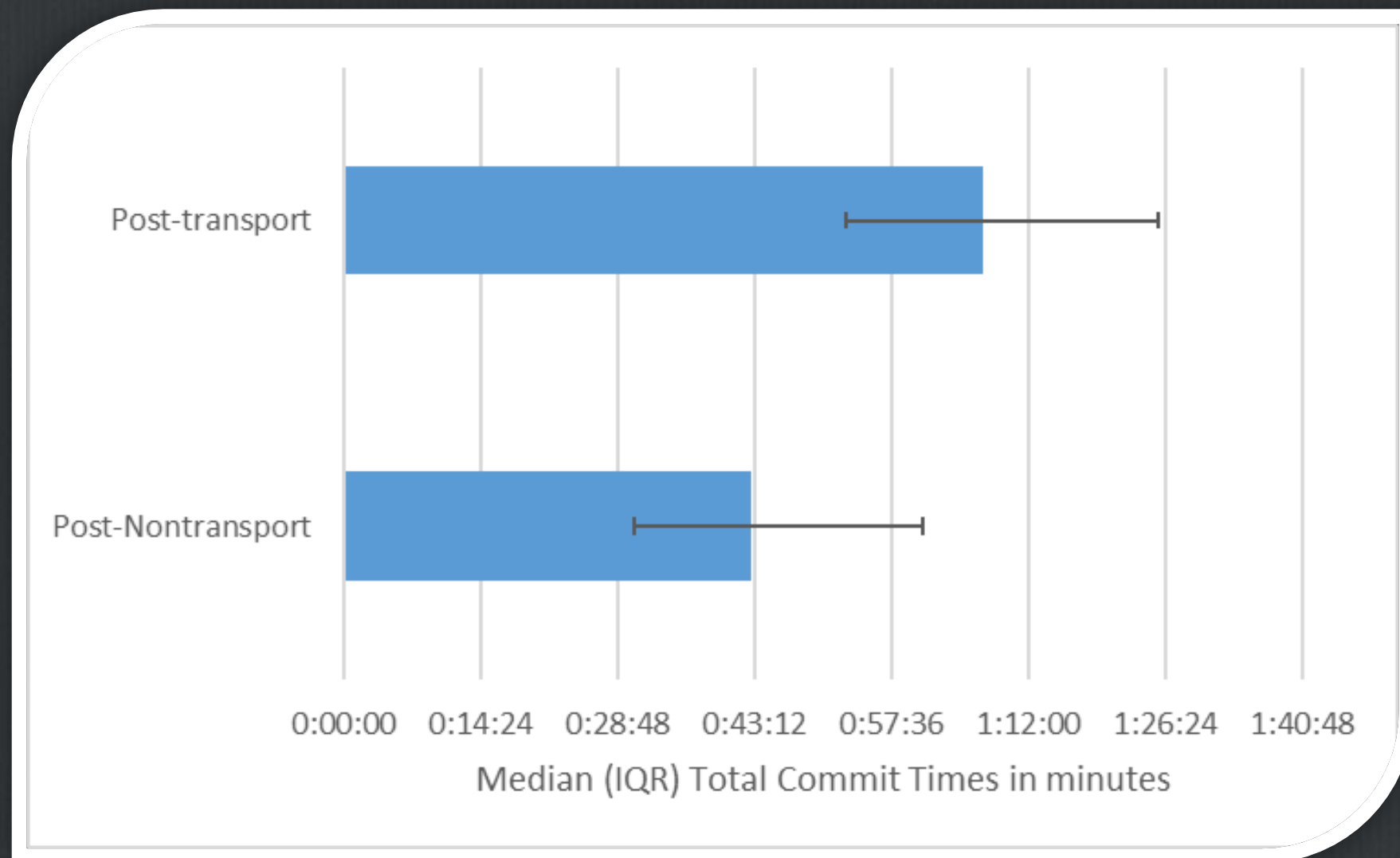


Unique locations  
for palliative calls  
(post-project)

- Higher density of calls in Halifax, which houses the bulk of the population
- A broad distribution of calls in rural areas



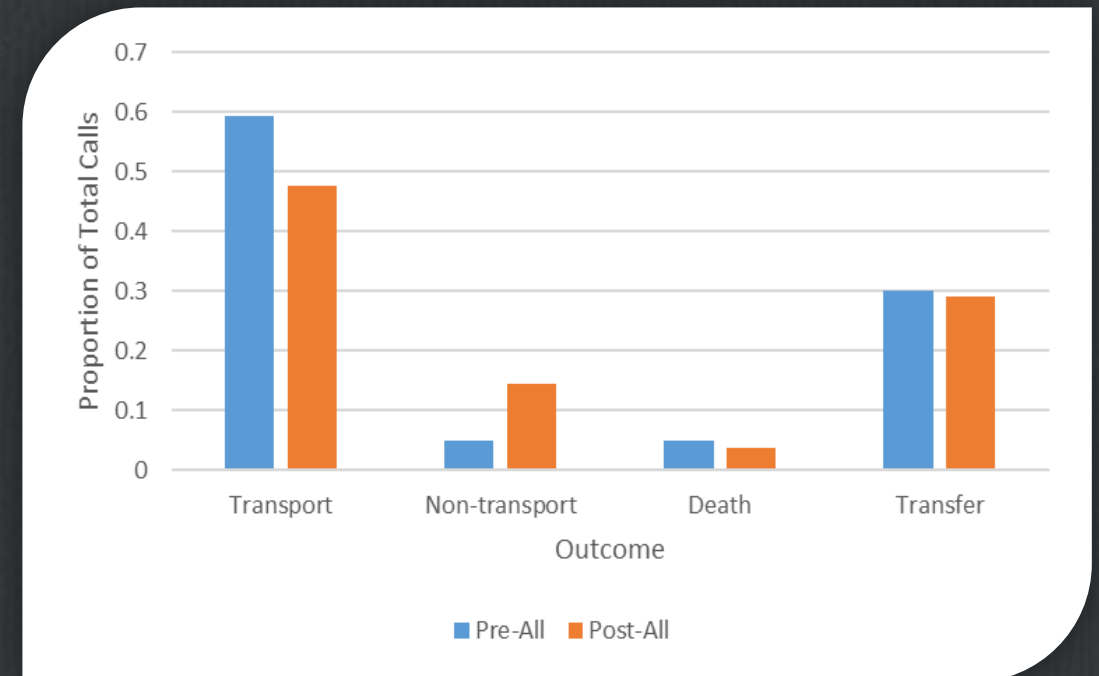
# System: Time on Task



- Maximum time on task: 6:29 for transport, vs 3:15 non-transport

# Call Outcome

- Transports decreased from 59.2% of all calls (including transfers) to 47.6%



- Being in the SPP is associated with even lower proportion transported

# System Findings

- The total time committed to a call (including transport and offload in the ED) is not longer when the patient remains at home
- Transports dropped (treat and release rate 52.4%)
- Being in the SPP is associated with even lower proportion transported
  - Registration in the SPP has a “protective” effect in avoiding transport to ED

## QUOTES FROM PARAMEDICS:

*“I think the program is absolutely fantastic. It really covers an important patient need, and relieves strain from an emergency system, especially when patients do not require, nor want, a trip to the ER department. I think the more that paramedics can do for this patient type the better.”*

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# Limitations

Pre-post paramedic  
comfort/confidence

- Technical issues in pre survey

Patient/family  
satisfaction

- Small sample size
- Timing of survey

System

- Case finding

# Future work

- Case definition query
- Analysis of cancer and non-cancer (RIM)
- Economic analysis (CFHI)
- Paramedic focus groups regarding fit with professional identity (NSHA)
- Health administrative data re hospital free days in last 6 months/30 days/week of life, comparing BC to NS (CIHR)
- Ability to share goals of care from EHS to ED and decrease interventions in ED (TRIC)

# Resources Available

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## Videos

1) Public information video  
(previous slide)

2) How to Complete the SPP  
Enrollment Form  
(target: health care providers)

## Brochures

1) Information for patients  
receiving palliative care (adult  
and pediatric versions available)

2) Information for health care  
providers

3) Information for patients and  
families (non-palliative)

All are available at:

<https://novascotia.ca/dhw/ehs/palliative-care.asp>



# Conclusions

- ❑ Paramedics are more confident with providing palliative support and believe it is their role
- ❑ Patients/families find comfort in the 24/7 access
- ❑ Patients/families are more confident staying at home
- ❑ System can sustain volume and time commitment of the calls
- ❑ Rural populations are being served
- ❑ Enhanced patients'/families' palliative and end of life experience



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# Questions?

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# Frequently Asked Questions



## ***Does a patient have to be in the SPP to receive paramedic palliative support?***

- All patients with comfort goals of care are eligible to receive care under the palliative CPG regardless of diagnosis. When patients are enrolled in the SPP their care wishes are made available to paramedics enabling them to receive more specific palliative supports (e.g., expanded formulary) if this is part of their SPP care plan.



## ***Can 'lights and sirens' be turned off for palliative calls?***

- EHS Medical Communications/Dispatch will assess the situation to determine the urgency of the call. If the patient is in the SPP and call can be responded to without lights and sirens – efforts will be made to do so (checkbox on enrollment form).



## ***Can patients/families self-refer to the SPP?***

- Patients cannot self-enroll in the SPP. We encourage patients receiving palliative care to talk to their health care provider to be enrolled (e.g., Palliative Care Team, Continuing Care Coordinator or Family Physician).

# Frequently Asked Questions



## ***Can paramedics use medications present in the home of patients receiving palliative care?***

- Under the direction of the Online Medical Oversight Physician, paramedics may assist the family/patients with medications in the home that are clearly indicated for self-administration (within the paramedic scope of practice).



## ***Of the new medications added for palliative care, which can PCPs vs ACPs administer?***

- Haldol and Hydromorphone are restricted to ACPs only. Metoclopramide is for all scopes of practice.



## ***Can Paramedics give palliative patients medications that they have not previously been taking?***

Under the guidance of the EHS Online Medical Oversight Physician, paramedics can administer medications that are within their scope of practice regardless of whether a patient has been on it previously.



# Frequently Asked Questions



*Which will Paramedics follow – the information in the SPP or the Advance Directive (AD)?*

- If an AD is present it must be followed, unless the decision maker of an incapacitated person says something different than the Directive. If this happens, Paramedics should listen to the decision maker then call the EHS Online Medical Oversight Physician for guidance. However, Paramedics cannot do things outside their scope of practice and do not carry all medications that may be listed on the AD. All efforts will be made to respect the Advance Directive, and the SPP is designed to facilitate a plan which Paramedics and families can agree upon.



*Does the ambulance transport fee apply if the patient stays home?*

- No, if the patient remains home no fee will be applied (transport to hospital will result in normal ambulance fees)