

# Paramedic – Evidence Based Medicine (P-EBP) Program

## Paramedic CAT (Critically Appraised Topic) Worksheet

**Title:** *Alleviating Emergency Department Strain: The Use of Extended Care Paramedics (ECPs) in the Pre-Hospital Setting*

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### **Clinical Scenario:**

*You are dispatched to a local nursing home for an 85-year-old female. You are greeted by nursing staff when you arrive and are told that the patient in question has been gradually deteriorating after a battle with pneumonia. After assessing the patient, you determine the patient is palliative, and with a valid DNR there is no real need for transport. As an ECP, you can initiate palliative care orders on scene while communicating with the patient's doctor and nursing staff without having to move the patient from her home.*

### **PICO (Population – Intervention – Comparison – Outcome) Question:**

*In geriatric patients, does the paramedic's ability to initiate palliative care orders on scene alleviate strain on emergency departments.*

### **Search Strategy:**

*(Community Paramedicine OR community paramedic OR extended care paramedic\*) AND (Advanced Illness Management OR acute care) AND (pre-hospital care OR out-of-hospital care)*

### **Search Outcome:**

*Due to the newness of this type of program within this province, I was unable to obtain any studies. The studies used for this paper were supplied by an outside source.*



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## Relevant Papers:

AUTHOR, DATE	POPULATION: SAMPLE CHARACTERISTICS	DESIGN (LOE)	OUTCOMES	RESULTS	STRENGTHS/ WEAKNESSES
Jensen J. 2013	Twenty-one participants in four focus groups: paramedics and dispatchers, ECPs, ECP oversight physicians, and decision-makers.	Prospective study with a controlled group of participants  (LOE 2)	A decrease in transports to the emergency department from LTC facilities  Initiation of end-of-life care by the paramedic without transport to hospital	37 codes initially identified were reduced to 11, then organized within four themes. The four major themes that emerged from thematic analysis are (1) program implementation; (2) ECP process of care; (3) communications; and, (4) EOL care.	Could have included a comparison group not within LTC  Concise data collection and analysis
Abrashkin K. 2016	1,602 individuals enrolled in the Advanced Illness Management (AIM) program with high rates of dementia, decubitus ulcers, diabetes mellitus, congestive heart failure, and chronic obstructive pulmonary disease.	A retrospective study with a controlled group of participants  (LOE 2)	In 78% of CP responses, individuals were evaluated, treated, and remained at home. Average CP response time (call initiation to paramedic in home) was 21 minutes, and average time on scene was 70 minutes.	Of enrolled individuals, 773 (48.3%) had at least one emergency response during the study period; 404 (52.3%) used CP at least once, and 369 (47.7%) used only traditional EMS.	Participants had specific debilitations  Definitively alleviates strain on emergency departments  Occupies paramedic on scene for an extensive amount of time



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## Comments:

- patients were treated for a variety of medical complaints, not specific to palliative care
- paramedics in question received specialized advanced training on-top of their advanced care training
- results were based off one extended care paramedic being able to provide care between specific hours (0900-2100) seven days a week
- supporting studies are specific to Nova Scotia where this program had been newly implemented

## Consider:

In reference to the original question, the studies used focused solely on patients in a controlled Long-Term Care setting and were not specifically treated for end-of-life palliative care. Therefore, based on the available information, though there definitively proves to be a need and this is slowly being implemented in this province, I cannot definitively support the benefits of this program.

## Clinical Bottom Line:

Although the data collected shows great potential for a community paramedicine program of this sort, this is a newer concept within this province specifically. There is not currently enough information to show how much of an impact a program of this sort of program has had on our health care system.

## References:

Jan L. Jensen, ACP, MAHSR, Andrew H. Travers, MD, MSc, FRCPC, Emily G. Marshall, PhD, Ed Cain, MD, FRCPC, Stephen Leadlay, ACP, MEd (c), Alix J. E. Carter, MD, MPH, FRCPC (2013). INSIGHTS INTO THE IMPLEMENTATION AND OPERATION OF A NOVEL PARAMEDIC LONG-TERM CARE PROGRAM

Karen A. Abrashkin, MD, Jonathan Washko, MBA, Jenny Zhang, BA, Asantewaa Poku, MPH, Hyun Kim, ScD, and Kristofer L. Smith, MD, MPP (2016) Providing Acute Care at Home: Community Paramedics Enhance an Advanced Illness Management Program—Preliminary Data

