Why frequent users of paramedic services call 9-1-1: A knowledge-to-action approach



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# Outline

- Project Overview
- Purpose
- Methodology
- Preliminary Results
- Conclusions







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## Background

- Frequent caller contributes to ED overcrowding
- Specific medical conditions = higher rates of use.
  - multiple chronic conditions
  - mental illness
  - substance abuse
  - homeless
  - lack primary care
  - low incomes









# But WHY do they call?

- Complex needs, context specific, and cannot be simply reduced to a general set of individual characteristics
- Langer *et al*, 2013 (US)
  - Past experience with health care
  - Lack of alternative solutions
  - Lack of financial means
  - Dissatisfaction with 1° care provider
- Ahl, Nystrom & Jansson, 2005 (Sweden)
  - Different Decision-making methods
  - Consider patients' perspective







## **Example of Differing Perceptions**

*" I didn't have anyone else to call. I don't like to be alone.* They made me tea and calmed me down

*"I assumed they would tell me that I didn't need to go to the hospital. They kept coming when I called."* 

We believe that understanding the patient perspective can guide us to suggest interventions or improvements in policies which can reduce inappropriate use in the Hamilton region.





# Study Aim

- Identify and understand the reasons exploring the social, cultural and psychological elements which influence the patients' decision to call 911 in Hamilton
  - To identify knowledge gaps related to when patients should call 911 and the prevalence of these attitudes
  - To identify policy and program actions to improve service use (i.e. potential to decrease call volumes, divert to more appropriate providers)





# Design

- Mixed-methods design
- Interview and Survey Components

Identified individuals who had called > 5 times within a year

Key informant interviews (KIIs) held by phone or in-person (participant's choice) (n=10)

Transcribed the interviews and are conducting thematic analysis

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#### **Interview Questions**

- Could you please tell us about your experiences of when you dialed 911 for help?
- What made you call for the paramedics?
- How were you feeling when you called 911?
- How did you feel after calling 911 in comparison to how they were feeling before calling?
- Were you worried about anything other than your health at that time?
- Could you please describe the type or extent of care you received upon calling for a paramedic?







### **Interview Questions**

- What do you believe should be the functions of paramedic services and paramedics?
- What do you believe the role of Paramedic Services/Paramedic should be in relation to your health needs?
- Is there a particular healthcare professional or healthcare institution you visit when you are concerned or worried about your health?
- If we were going to find ways to decrease 911 calls:
  - What interventions would you like us to do?
  - Do you feel socially isolated in any way? Do you ever feel alone or lonely? Please describe.
  - What would you like to see in a program to decrease social isolation among older adults?





# **Preliminary Results**

- Demographics:
  - Significant proportion were elderly
- Emerging Themes:
  - Mobility and lack of social supports
  - Anxiety and social isolation



- Paramedic Role:
  - Public service to be used however the person sees fit
  - Reserved for absolute emergencies
- Frequency underreporting was observed





#### Conclusion

- Emerging themes to conduct a broader survey
- Assess the prevalence of key themes
- Share our findings
- Develop targeted programs and policies











#### **Project Team**

- Brent McLeod BA, MHM, MPH, AEMCA, ACP (PI)
- Ricardo Angeles MPH, MHPEd, PhD
- Dale Guenter MD, MPH
- *Michelle Howard* MSc, PhD
- Alix Stosic BSc, MBA
- Sabnam Mahmuda Health Sciences student
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# Thank You!!

# OPRC and the OAPC for your support!







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