

# Community Paramedicine in Frontenac County : *Primary Care to Public Health*



Jason Kervin BClinPrac, ACP



## Conflicts:

- None

## Disclosures:

- CP@clinic program was developed by  
McMaster University, Hamilton, Ontario

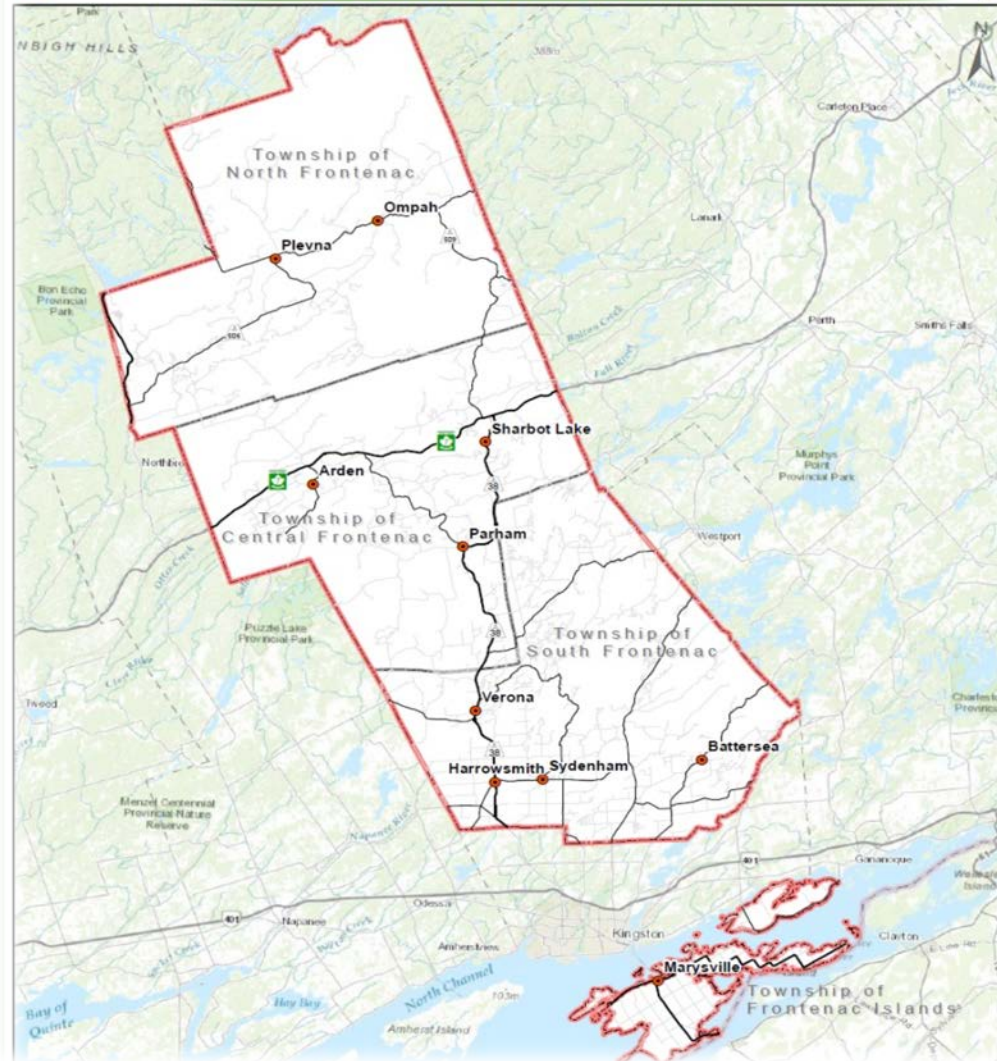
# Outline

- CP@clinic experience
- Overdose Prevention Site



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# Community Paramedic Programs







# Community Paramedicine Research Team



*Principal Investigator:* Dr. Gina Agarwal

*Research Team:* Dr. Ricardo Angeles, Francine Marzanek, Jenna Parascandalo, Melissa Pirrie, Andrea Ziesmann

RESEARCH ARTICLE

Open Access

## Development of a community health and wellness pilot in a subsidised seniors' apartment building in Hamilton, Ontario: Community Health Awareness Program delivered by Emergency Medical Services (CHAP-EMS)

Gina Agarwal<sup>1\*</sup>, Ricardo N Angeles<sup>1</sup>, Beatrice McDonough<sup>2</sup>, Brent McLeod<sup>3</sup>, Francine Marzanek<sup>1</sup>, Melissa Pirrie<sup>1</sup> and Lisa Dolovich<sup>1,4</sup>

2015

Agarwal et al. *BMC Emergency Medicine* (2017) 17:8  
DOI 10.1186/s12873-017-0119-4

BMC Emergency Medicine

RESEARCH ARTICLE

Open Access

## Effectiveness of a community paramedic-led health assessment and education initiative in a seniors' residence building: the Community Health Assessment Program through Emergency Medical Services (CHAP-EMS)



G. Agarwal<sup>1\*</sup> , R. Angeles<sup>1</sup>, M. Pirrie<sup>1</sup>, F. Marzanek<sup>1</sup>, B. McLeod<sup>2</sup>, J. Parascandalo<sup>1</sup> and L. Dolovich<sup>1</sup>

2017

# Evaluation of a community paramedicine health promotion and lifestyle risk assessment program for older adults who live in social housing: a cluster randomized trial

Gina Agarwal MBBS PhD, Ricardo Angeles PhD, Melissa Pirrie MA, Brent McLeod MPH, Francine Marzanek BSc, Jenna Parascandalo BA, Lehana Thabane MSc PhD

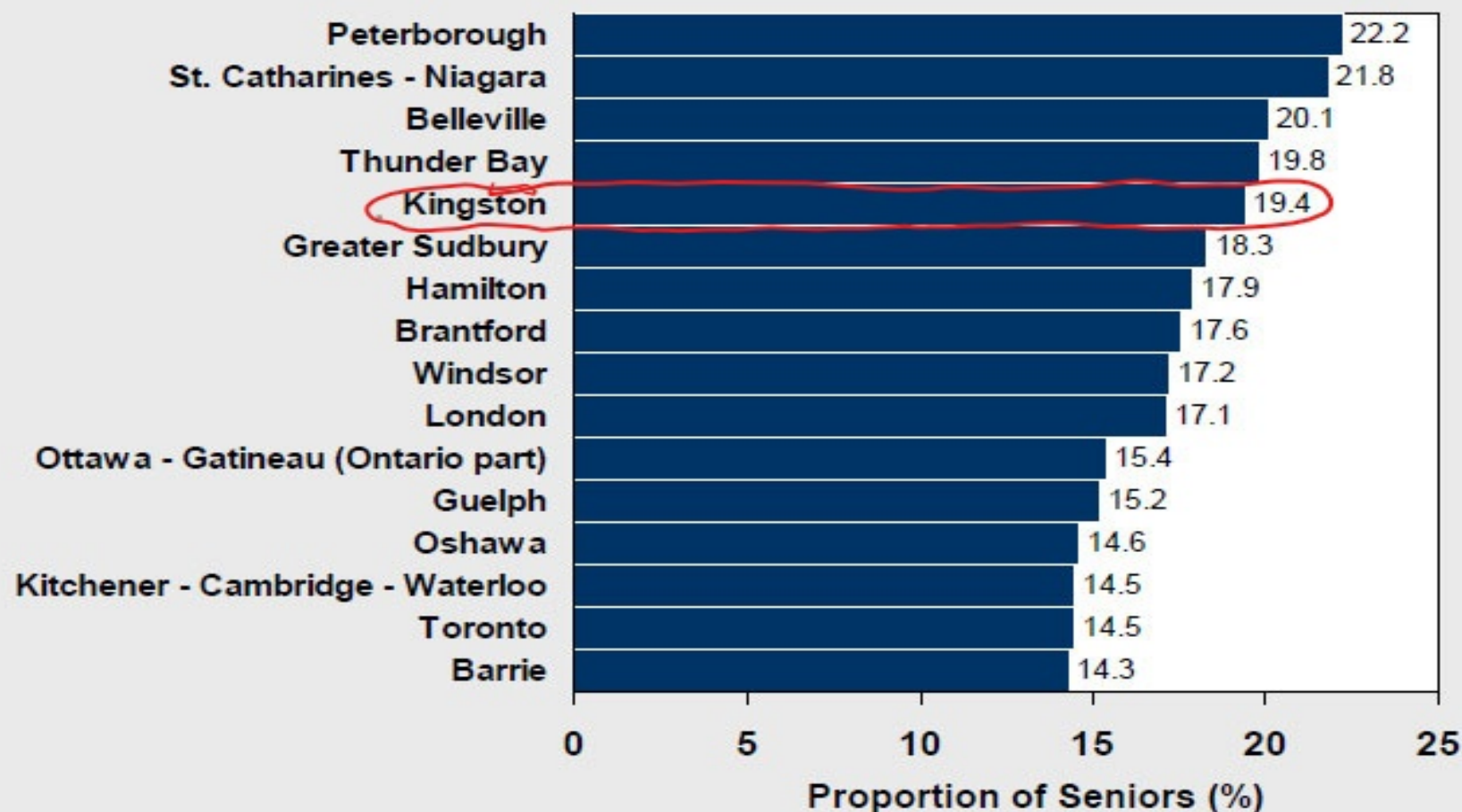
■ Cite as: *CMAJ* 2018 May 28;190:E638-47. doi: 10.1503/cmaj.170740

# Three Issues

- Seniors account for 1/3 of all Paramedic calls (\$1044/call)
- High co-morbidities which require increased health resource use
- Seniors living in subsidised housing are particularly vulnerable  
(2014/15 data from Hamilton, Guelph, York and Sudbury)



## Proportion of Seniors in Ontario CMAs, 2016



Sources: Census of Canada, 2016.

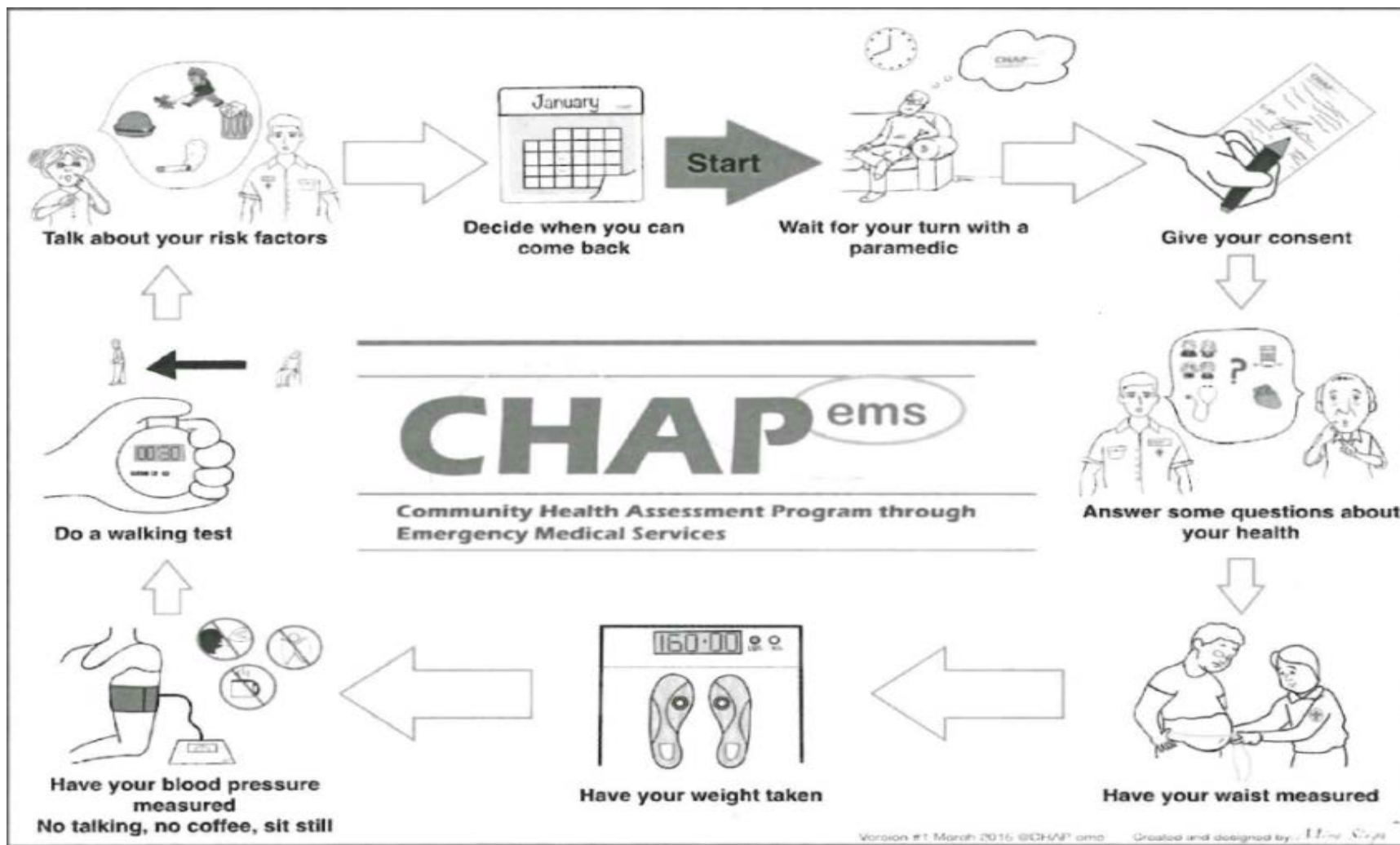


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# What is CP@clinic?



# CP@clinic Session Structure



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Hastings : Database (Access 2007) - Microsoft Access

File Home Create External Data Database Tools

1-Personal Information

Time to next CANRISK: 6 months

CP@clinic

Repeat CANRISK

Instructions: Fill-up the pages consecutively, click the buttons on the right side to go to the next pages. Avoid leaving blanks. For the first visit, complete pages 1, 2, 3, and 4, then discuss the participants' risk factors and the resources they can access (pages 5 and 6). For follow-up visit, complete pages 7 and 8, then discuss what they are doing regarding their risk factors (pages 5 and 6).

ID ##### Date of first visit 24/07/2018 Date of Birth (DD-MM-YYYY) Gender Age

Last Name First Name Middle Initial Signed Consent

Postal Code Building Name Marital Status

Ethnicity of Mother

Ethnicity of Father

☐ Have a Family Doctor Consent to send information to Family Doctor

If participant doesn't have a family doctor, call Health Care Connect (1-800-445-1822)

Find Physician from list Add to physician list Edit List Refresh List

Family Doctor's Name No Family Doctor Name

Clinic's Name

Clinic's Phone Number

Clinic's Fax Number

Participant ALERT/REMINDERS

Date of Alert	Notes	Actions Done
*		

Record: 1 of 1 No Filter Search

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Navigation Pane

2-CVD Risk Profile

3-CANRISK/Falls

3-EQ5D

3-Social Determinants of Health

4-Medication History

5-Patient Risk Summary

6-Risk Factor Discussion

7-Follow-up visit Q's

8-Blood Pressure Entry (WatchBP device)

8-Blood Pressure Entry (Other device)

9-Save and Close Participant Record

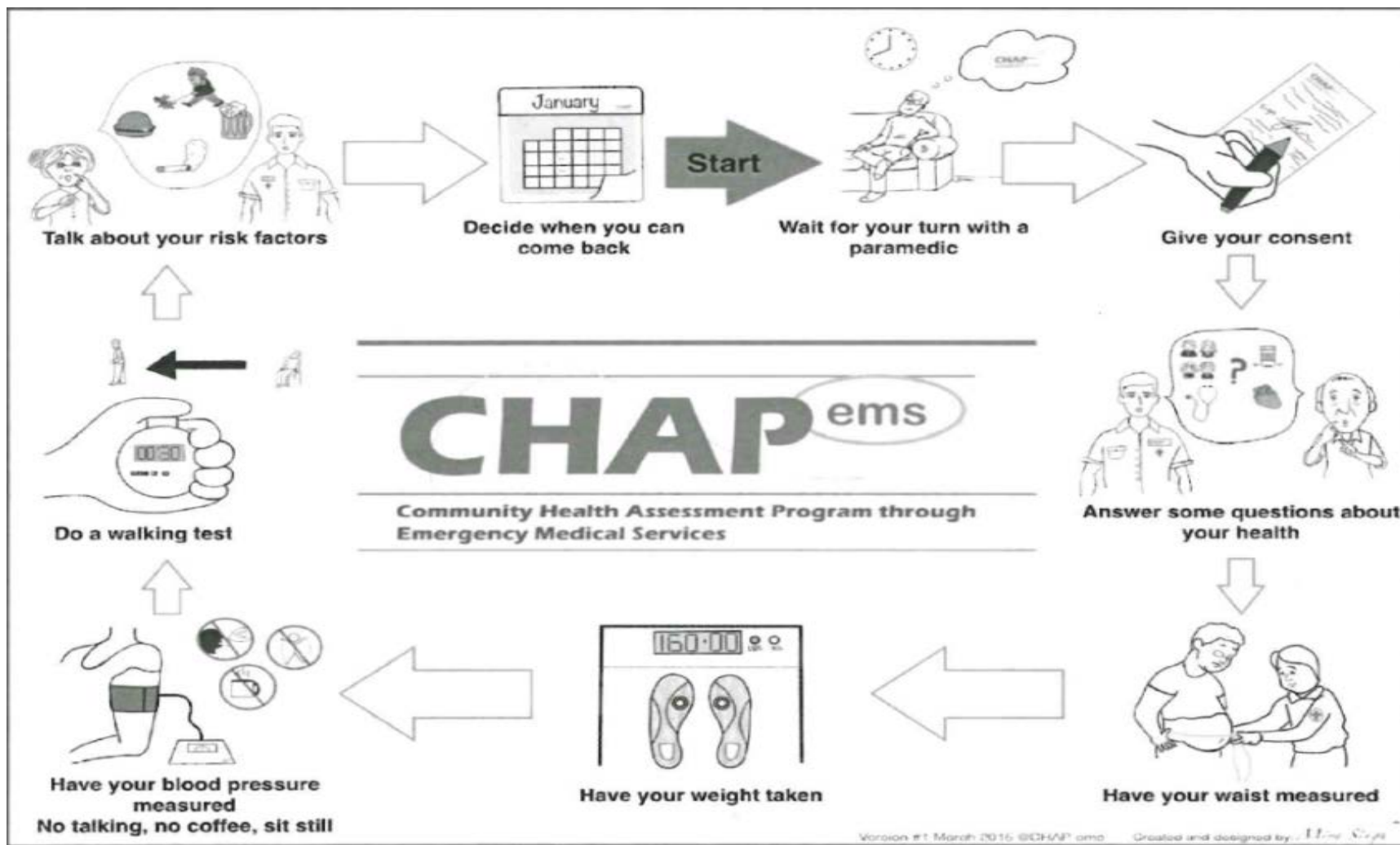
Form View



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# CP@clinic Session Structure



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Hastings : Database (Access 2007) - Microsoft Access

File Home Create External Data Database Tools

5-Patient Risk Summary Form

ID (New)

Today's date 24/07/2018

Your CANRISK Score is:

<--4-Medication History 6-Risk Factor Discussion-->

Your risk of developing diabetes is:

<--1-Personal Information Print Page

Here are the risk factors you have that you may want to change:

☒ Smoking ☒ Weight

☒ Alcohol intake ☒ Waist Circumference

☒ Low fruits and vegetables intake ☒ Stress

☒ High salt intake ☒ Not taking blood pressure medication regularly

☒ High fatty food or fast food intake ☒ Diabetes

☒ Low physical activity

Systolic BP Action Done

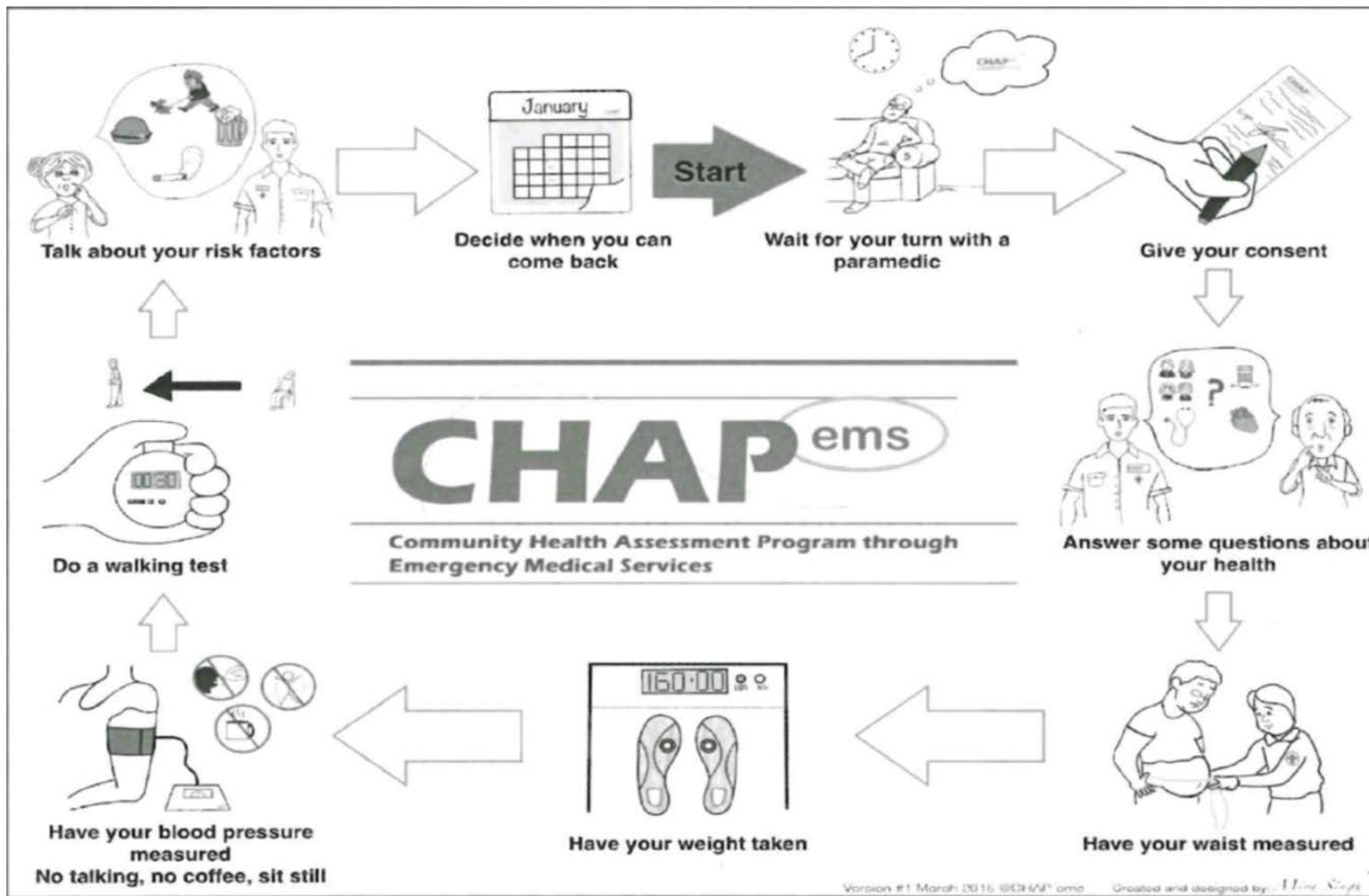
Diastolic BP

Record: 1 of 1 No Filter Search

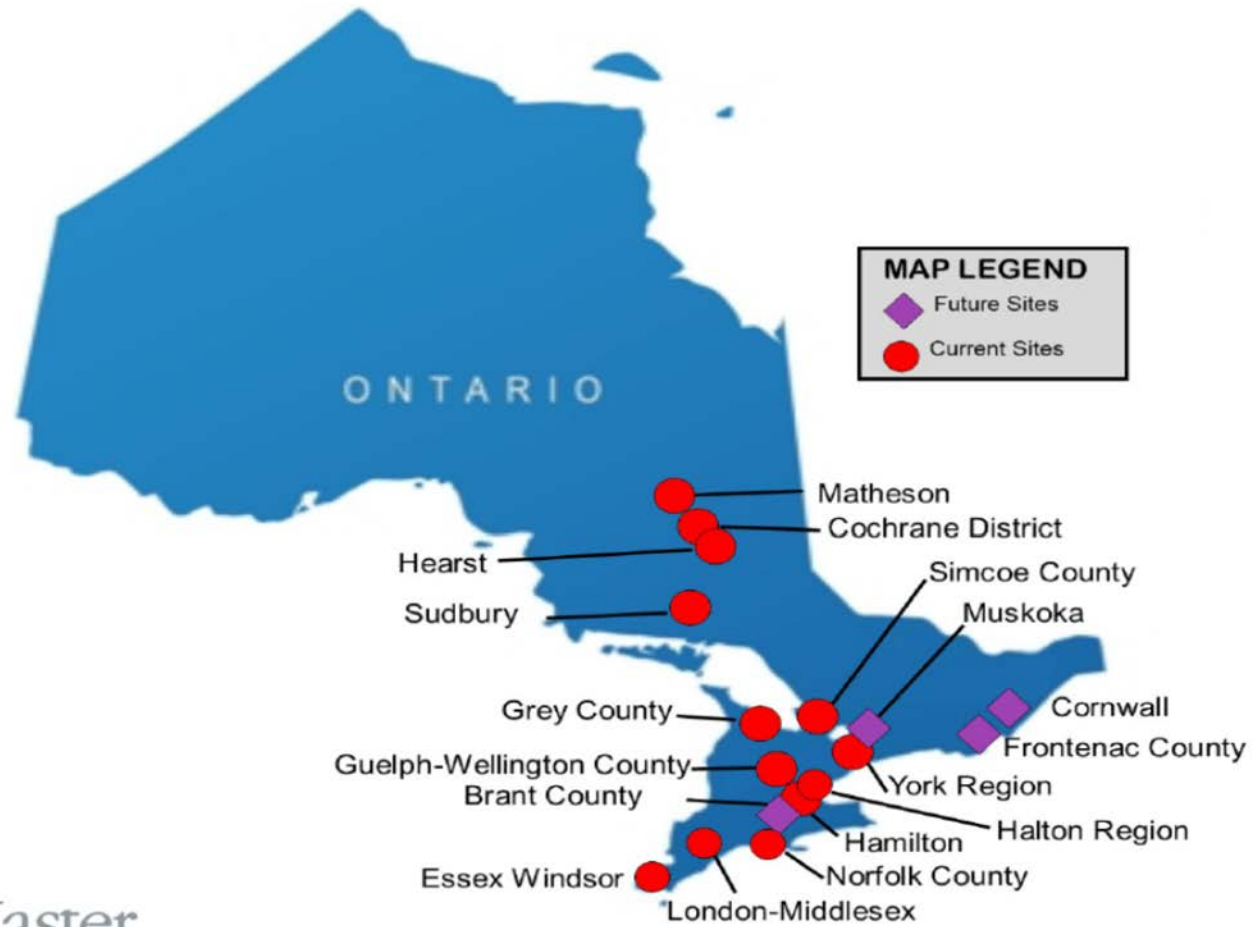
Record: 1 of 1 Unfiltered Search

Form View





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## Our Experience

23

Ongoing Participants

25% participation



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# Diabetes

8/23 (34%)

## CANRISK Score

6/23 (26%)

Moderate or High

Treated for Hypertension

12/23 (52%)



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Hypertension on 1<sup>st</sup> visit

12/23 (52%)

Fall Risk (TUG test)

11/23 (48%)



## Costs

- Approx \$2,500 - \$3,000 initial equipment cost  
(Computer, WatchBP, scale, posters, etc)
- Staffing

# Overdose Prevention Site



# Opioid Related Mortality

Kingston: 7.9/100,000

Provincial Average: 6.2/100,000

Toronto: 6.5/100,000

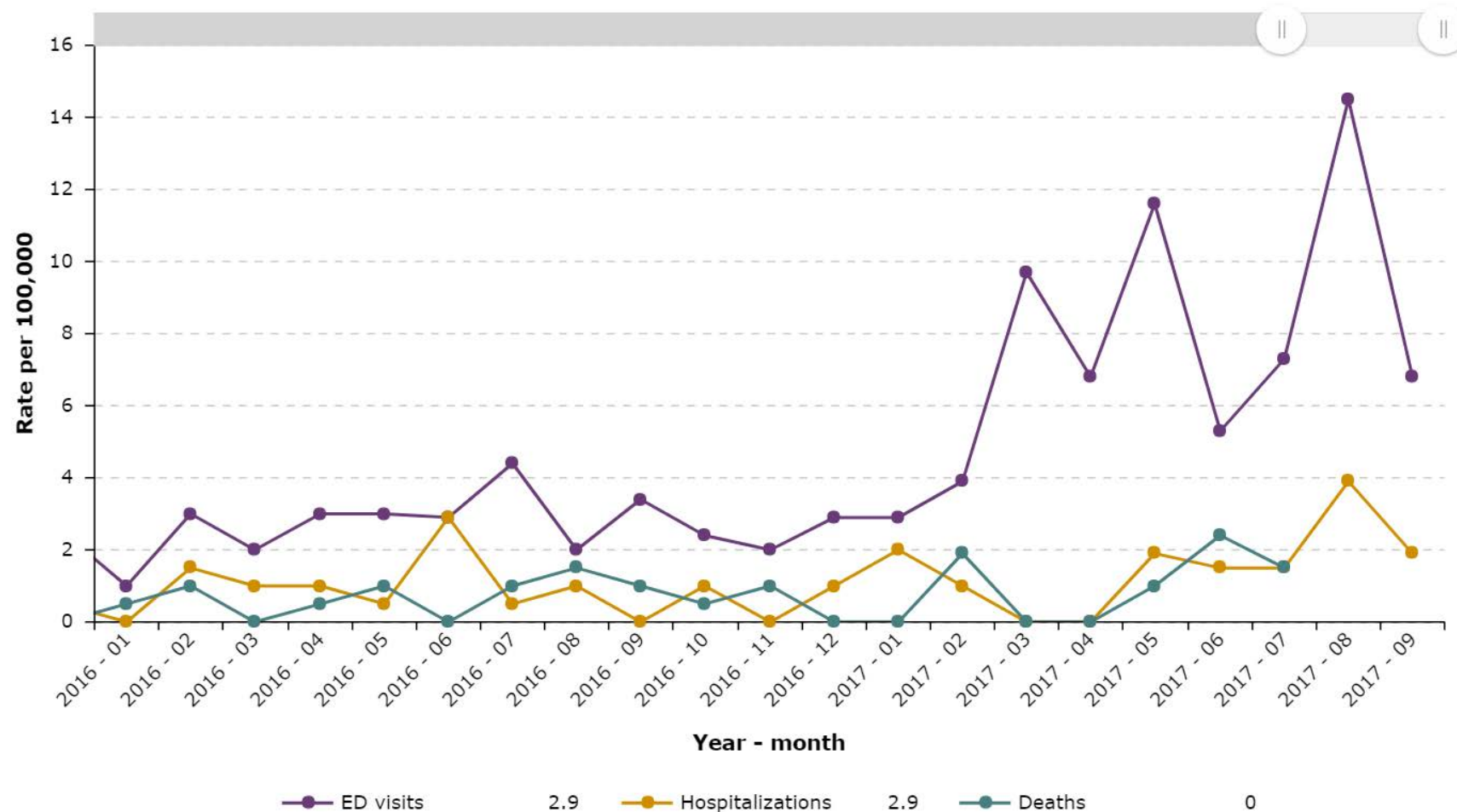
(Ontario Public Health, 2016)

Motor Vehicle Fatalities: 5.2/100,000

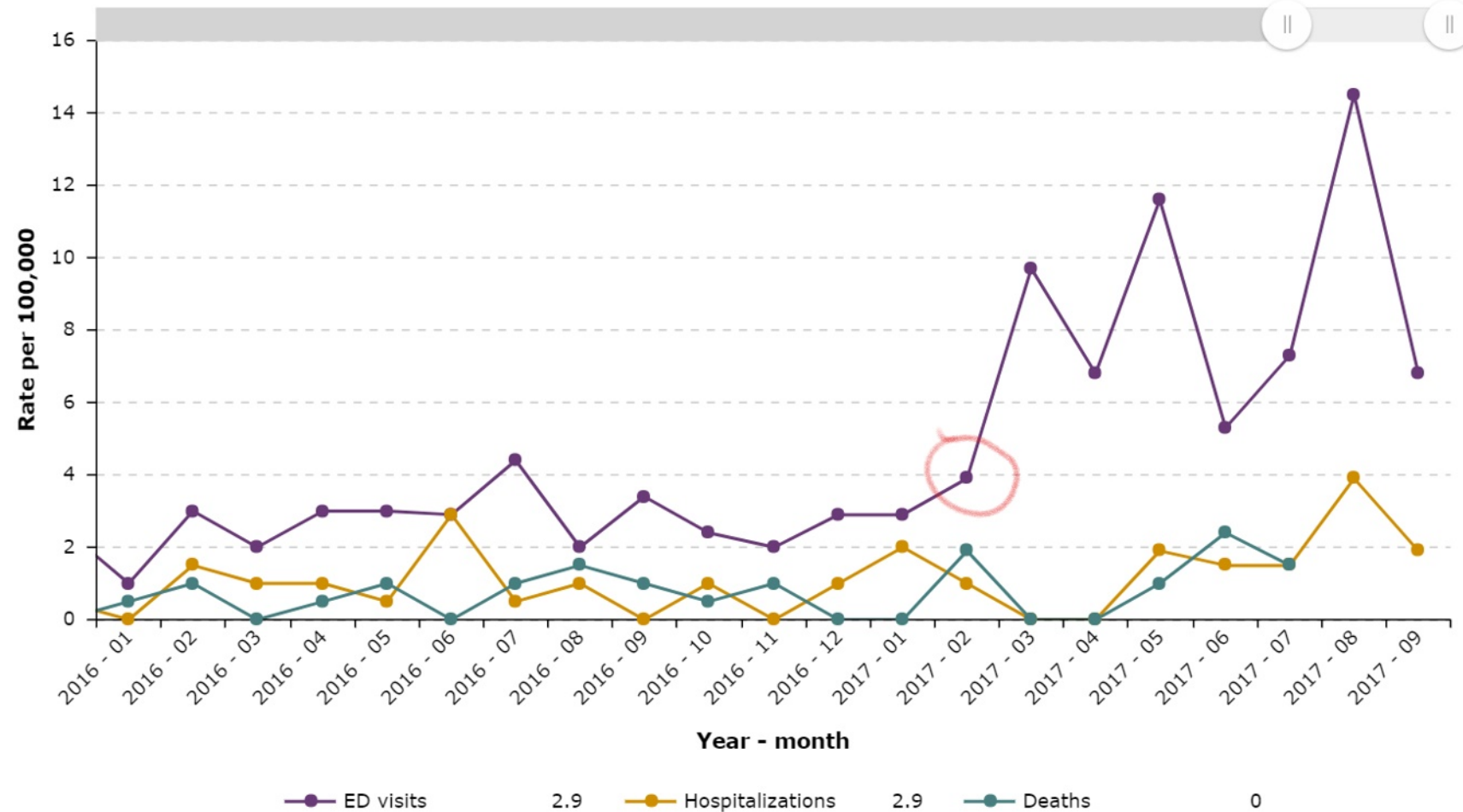
(Transport Canada, 2016)



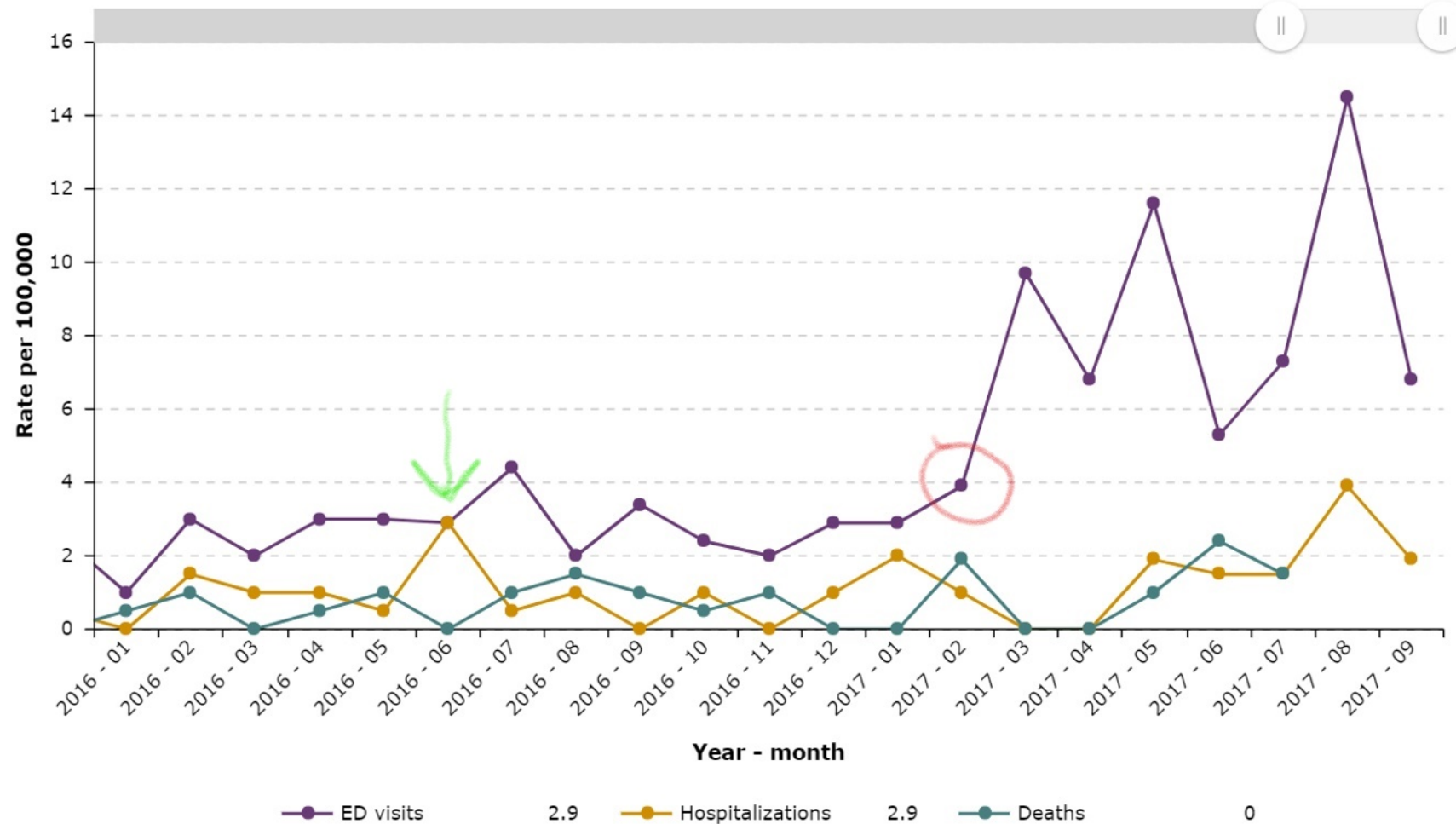
**Rates of opioid-related morbidity and mortality,  
Kingston, Frontenac and Lennox & Addington Public Health, 2003 - 01 – 2017 - 09**



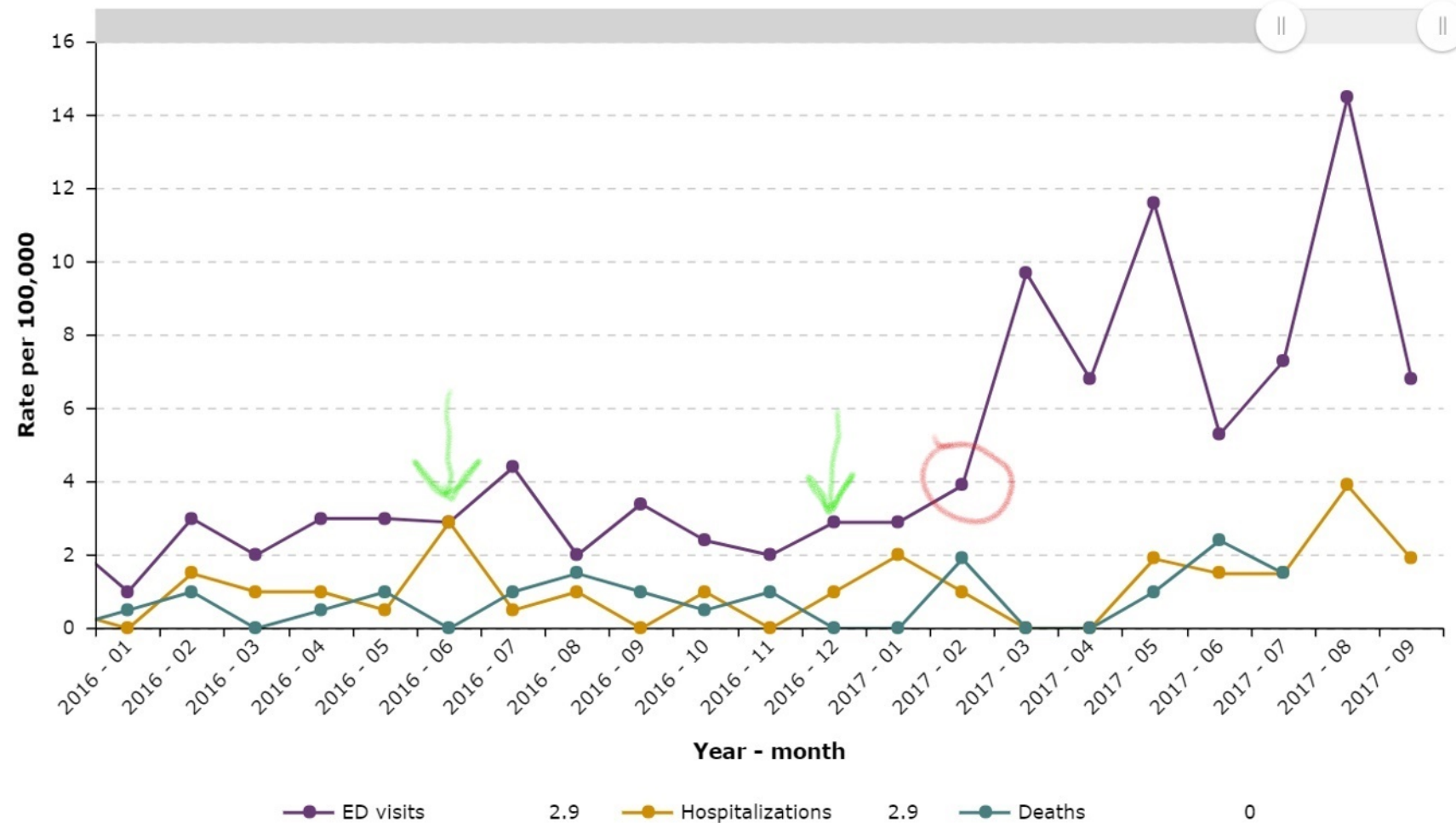
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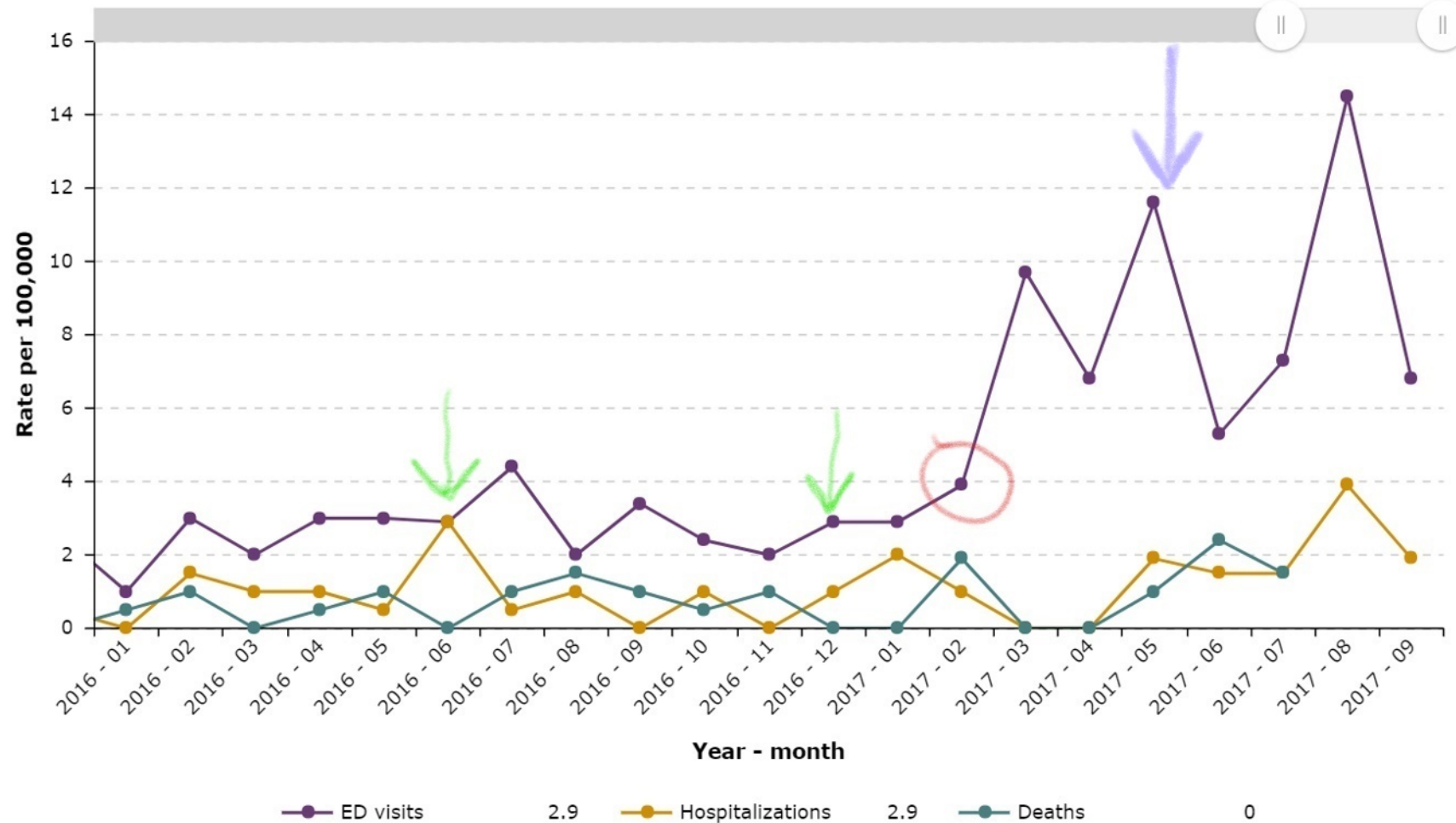
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KFL&A  
Public Health



Kingston Community  
Health Centres  
Centres de santé  
communautaire de Kingston



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# OPS Community Paramedics

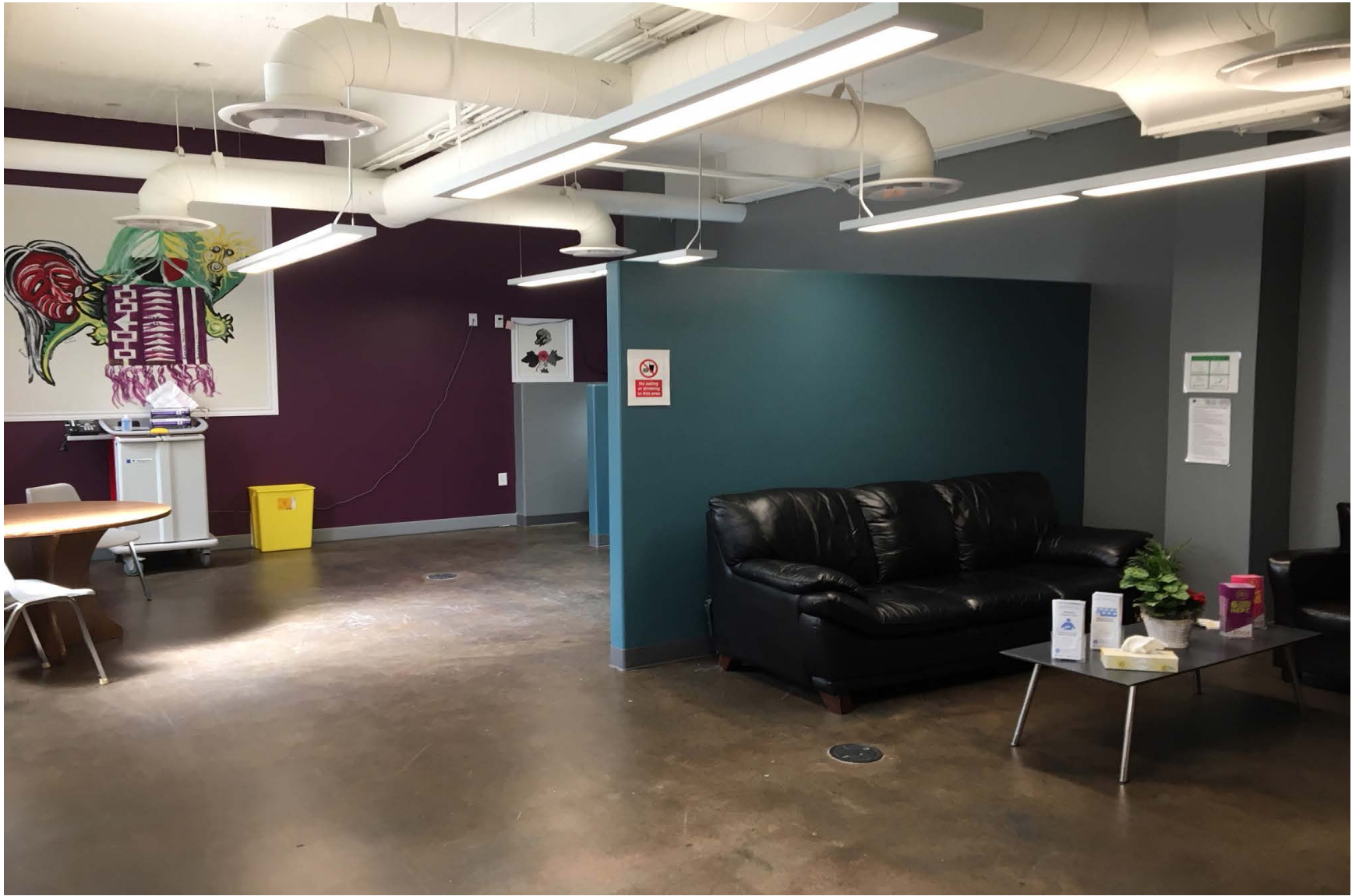
















# Challenges

- Uniform (or anything “official” for that matter)
- Pop up injection sites
- Trust

## The Stats

- So far 40 people have used the OPS
- They typically stay around 30 min
- Fentanyl/Heroin and Crystal Meth are what are mainly used



# In Summary



# Thank You



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