

Comparing PrEP Accessibility and Users in Mid- and Large-Sized Urban Centres

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Introduction

- Geographic access to PrEP clinics and/or family physicians providing PrEP is a well documented barrier to PrEP access for many patients¹
- Barriers to PrEP access both prevent PrEP initiation and lead to increasing attrition of users over time
- Large urban centres have been the focus of prior studies; individuals in such areas tend to have good geographic access to PrEP
- US studies have shown increased travel times and fewer clinics per capita in rural areas, along with increased rates of HIV infection¹; similar Canadian studies have not been done
- Our study compares distance traveled to access PrEP in Hamilton and Toronto, as well as examining the Hamilton PrEP cascade compared to those in the literature
- We used these results to examine geographic barriers to PrEP access in a Canadian context

Methods

- We conducted a chart review of all patients in the Hamilton PrEP clinic from its initiation in 2013, including those who discontinued PrEP
- A chart review of the Toronto Maple Leaf PrEP clinic was also conducted in similar fashion
- We recorded number of clinic visits for each patient to construct the cascade of the Hamilton Clinic, as well as HIRI score, age, and postal codes of patients in both clinics
- Postal code coordinates were used to calculate average distance travelled to the clinic
- Distance travelled, age, and HIRI scores were compared in both clinics using a 2-tailed T test

Conflict of interest disclosure: none

Results – Distance Comparisons

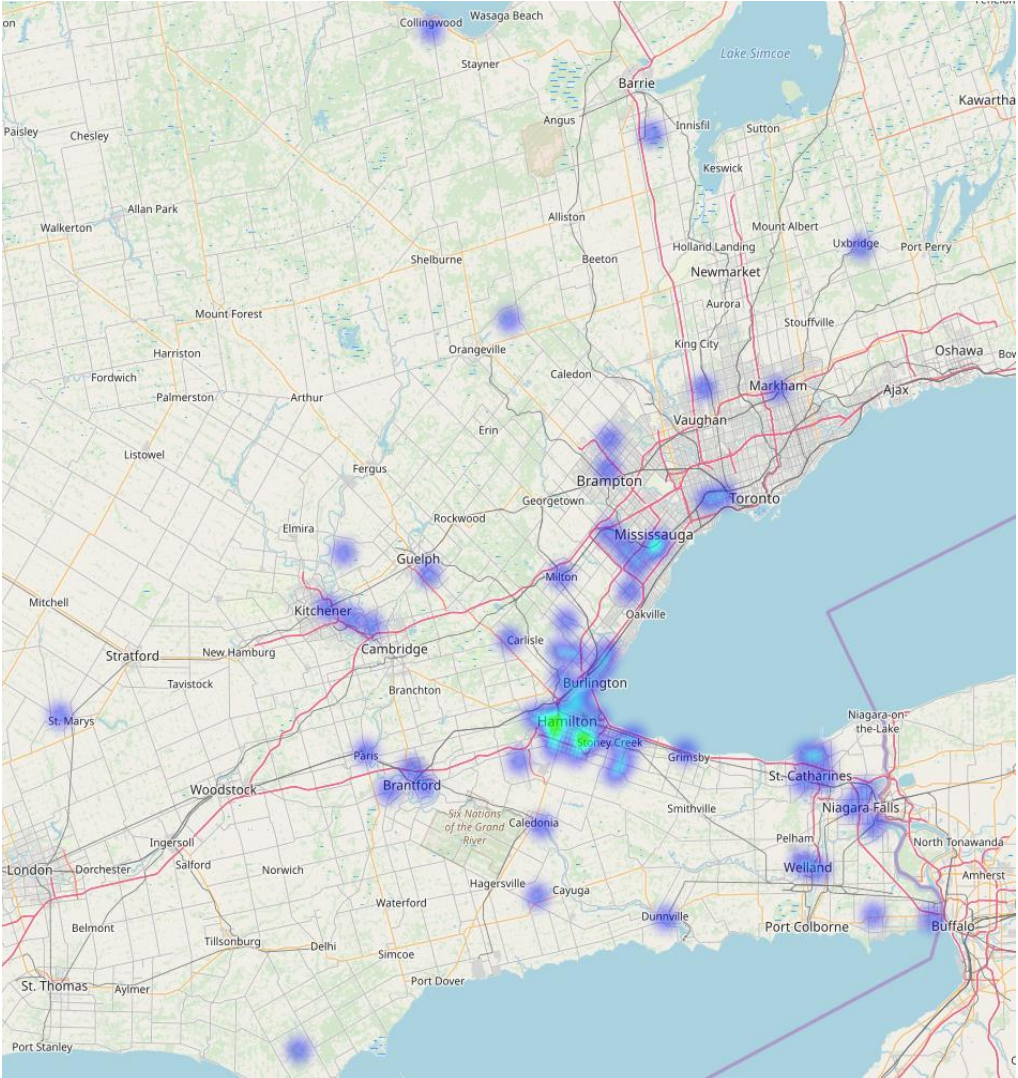


Figure 1: Hamilton Heatmap

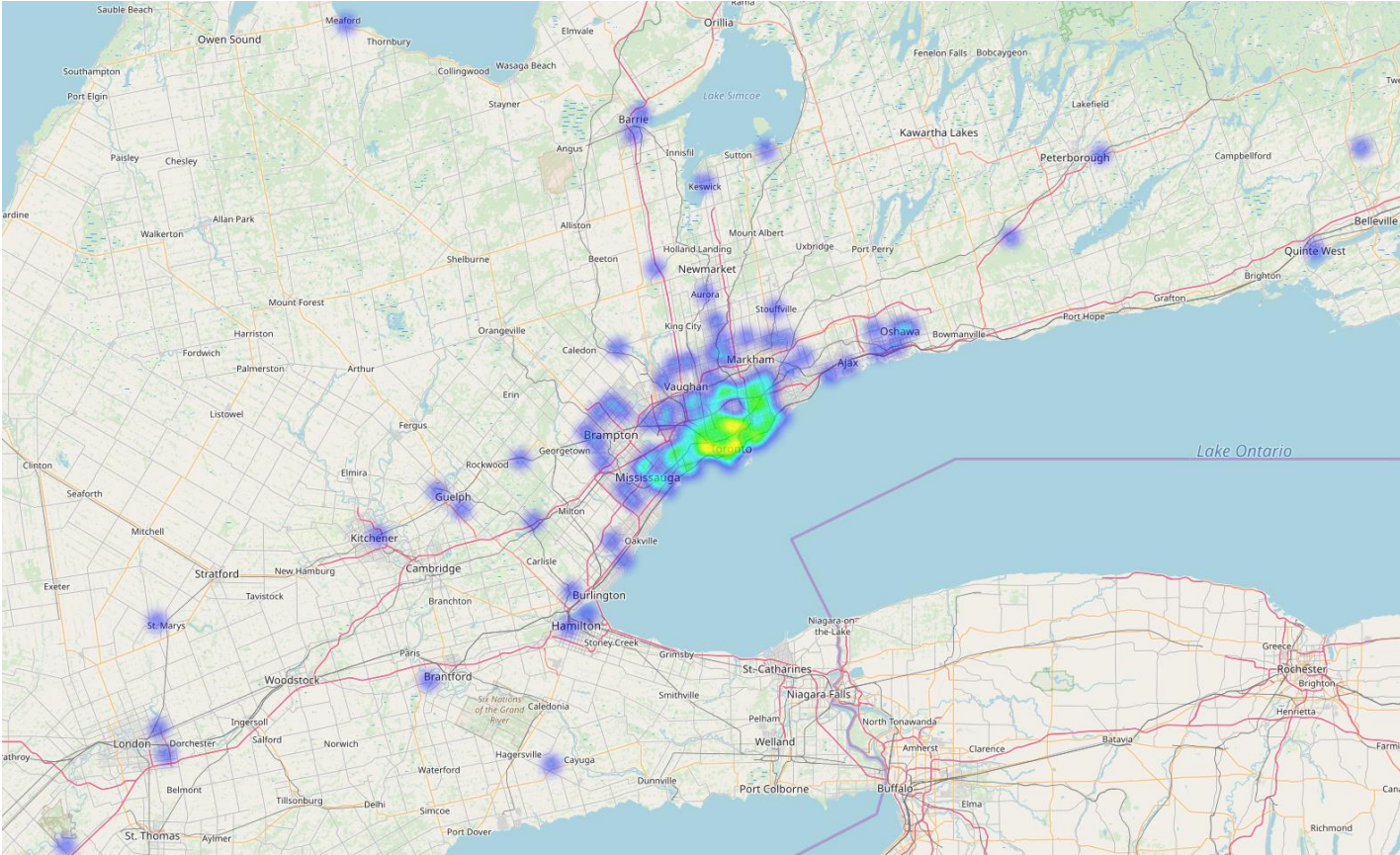


Figure 2: Toronto Heatmap

Table 1: Distance Comparisons (km)

	Toronto	Hamilton
Average	11.20	22.13
Standard of Deviation	113.232	38.90
P Value	(p<0.001)	

Results – Prep Cascade and Population Comparisons

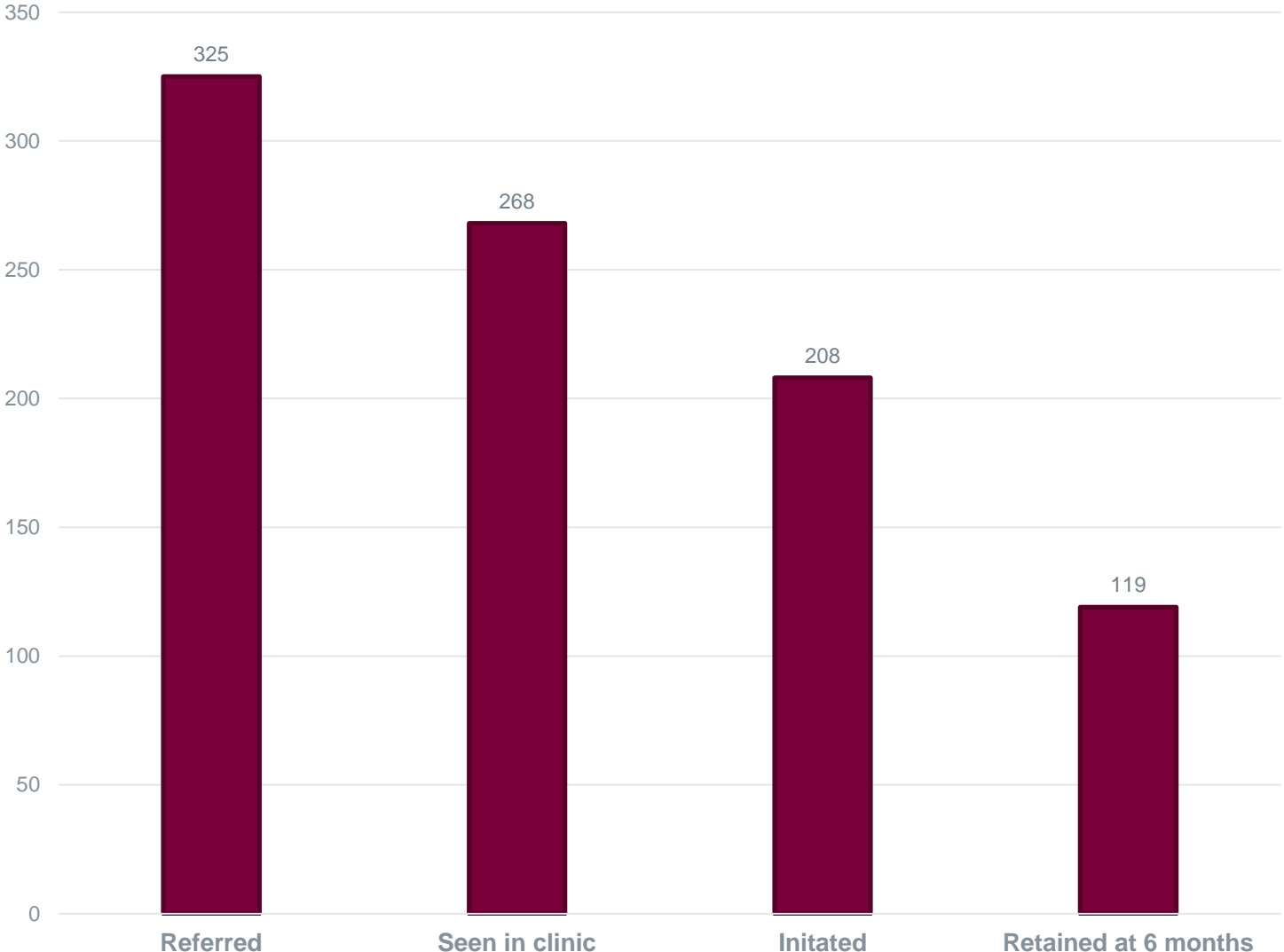


Figure 3: PrEP Cascade

Table 2: Average HIRI Comparisons

	Toronto	Hamilton
Average	17.78	15.31
Standard of Deviation	8.36	7.72
P Value	0.000006*	

Table 3: Average Age Comparisons

	Toronto	Hamilton
Average	33.09	35.81
Standard of Deviation	9.40	12.40
P Value	0.0007*	

Discussion and Conclusions

- Individuals in Hamilton travelled almost twice as far to access PrEP as those in Toronto
- Age and HIRI scores showed slight differences between Toronto and Hamilton; these are unlikely to be clinically relevant
- These results concur with American studies showing reduced access to PrEP in less urban areas¹
- The PrEP cascade also shows higher drop-off rates at all time points compared to American urban studies (43% at 6 months vs 21% at 7 months)³; this could potentially relate to reduced geographic access, although this would require further investigation to confirm
- This study points towards the need for both increased numbers of PrEP clinics in small- to mid-sized urban centres and rural areas, as well as the potential benefits of family physicians being able to prescribe PrEP and thus increase access
- Limitations of our study include only using distance travelled as a metric of geographic access, as well as only comparing age and HIRI scores rather than other demographic factors

Bibliography

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