

Capacity and Practice Features of Downtown Vancouver Primary Care

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OBJECTIVES

To accurately describe the features of primary care currently available in downtown Vancouver, including its capacity, availability, and accessibility.

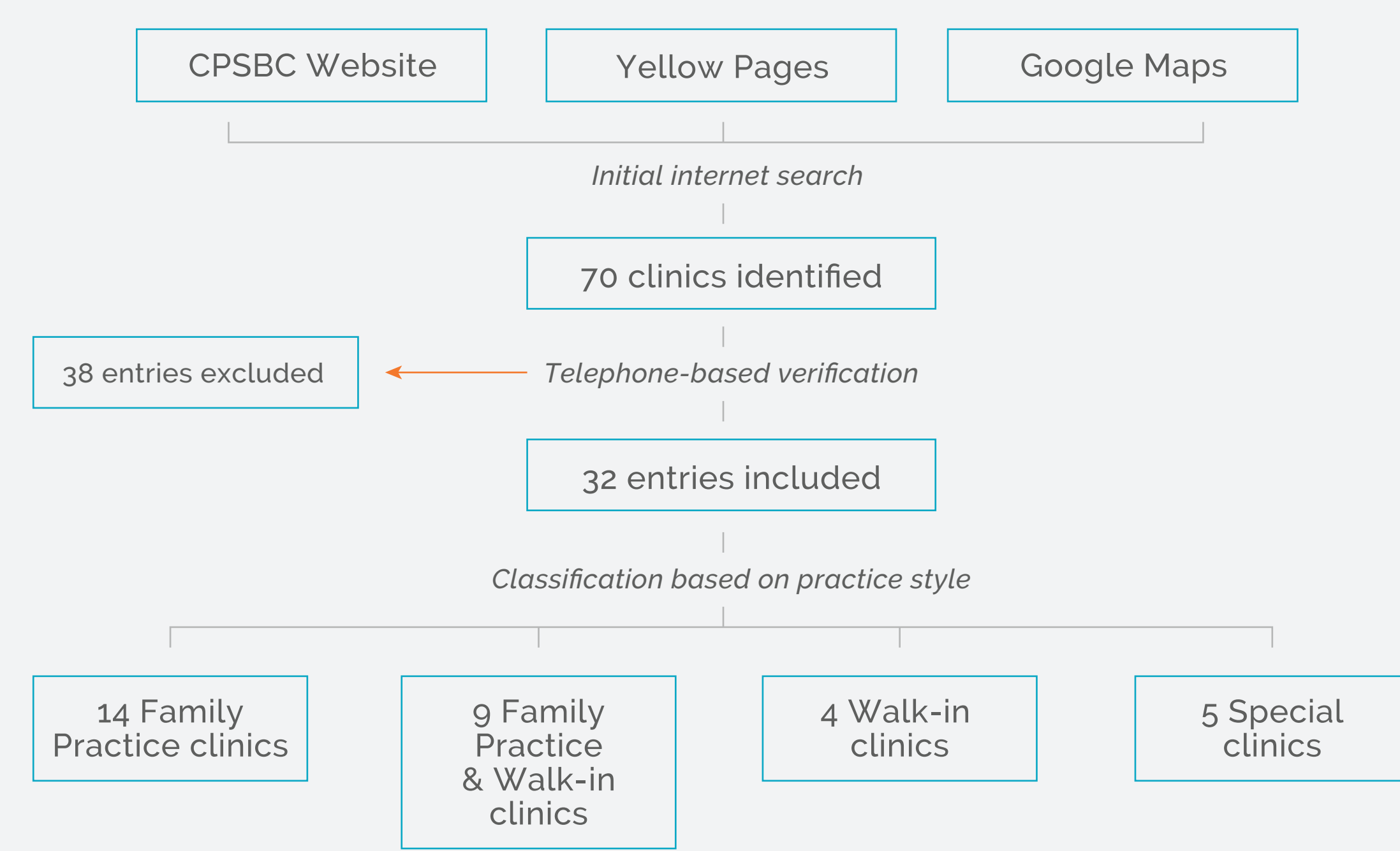
METHODS

This observational cross sectional study is a part of the **Models and Access Atlas for Primary Care at Providence Health Care (MAAP-PHC)** project. The study was approved by Providence Health Care Research Ethics Board. An initial inventory of all clinics in the downtown area was created by searching three sources: College of Physicians and Surgeons of BC (CPSBC) website, Yellow Pages, and Google Maps. (Fig.1)

Our survey tools are modeled after a pioneering study in Nova Scotia (MAAP-NS).¹

- **MAAP-PHC After Hours survey** (response rate 100%) - a review and analysis of the content of After Hours voice messages, typically heard by patients, of the downtown Vancouver primary care clinics.
- **MAAP-PHC Working Hours survey** (response rate 84%) - where we phoned each clinic and spoke to the office assistant or if available, office manager using a standardized survey about how the clinic is organized, current staffing arrangements, booking procedures, etc.

The surveys were completed from Mar. to Nov. 2016.



1. Models and Access Atlas of Primary Care in Nova Scotia (MAAP-NS), Department of Family Medicine, Dalhousie University

RESULTS

DOWNTOWN VANCOUVER'S GEOGRAPHIC BOUNDARIES & LOCATIONS OF IDENTIFIED CLINICS



Type of clinic	Definition	# of clinics in downtown
Family Practice (FP)	At least one family physician who offers primary care services to a regular patient base whom can schedule for an appointment or walk-in	14
Walk-in (WI)	At least one family physician who offers primary care services to the public on a walk-in basis and the clinic describes itself as a "walk-in clinic"	4
Family Practice and Walk-in (FPWI)	Meets requirements for both FP and FPWI	9
Special	At least one family physician who offers comprehensive primary care to patients who meet a specific requirement such as: youth, HIV positive, addiction, etc. Only patients who meet this requirement can make an appointment or walk-in OR Clinics requiring payment in addition to MSP for regular primary care service.	5
Excluded	<ul style="list-style-type: none"> Any clinic address not in the downtown area Not a community-based primary care clinic (e.g. methadone clinic) Clinic closed (e.g. family physician retired) Phone number belongs to family physician who works as a locum or does not provide any clinical services Clinic does not have a family physician 	38
Total number of FP, FPWI, and Special		32
Total number of clinics found		70

DEFINITIONS & METHODS USED TO ESTIMATE CAPACITY OF THE CLINICS:

Doctor shifts: Each "doctor shift" is defined as one family physician working for a 3-hour period in the morning, afternoon, or evening.

Typical week: Working Hours Survey provided a "typical week" schedule that identified the number of family physicians working during each "doctor shift".

Full-time Equivalents (FTEs): One FTE is assumed to be 10 doctor shifts per week, or approximately 30 hours of time seeing patients. *Number of FTEs = Number of Doctor Shifts / 10*

Patient capacity: Patient capacity was defined as potential number of patients that could visit a clinic during a "typical week". For each clinic, capacity is calculated using this formula: *Capacity = Doctor shifts x 3 hours x Appointments per Hour*

Extrapolation of patient capacity measurements: Given the survey's high response rate, averages of the collected data were used to fill in for the few clinics for which data was unavailable.

PATIENT ATTACHMENT

We created two methods to estimate the number of patients receiving the majority of their primary care at a particular clinic. In both methods, we used previously published literature on primary care in British Columbia.²

Method 1 for estimating patient attachment using the FTE

$$\begin{matrix} \text{Average number of} \\ \text{unique patients} \end{matrix} = \begin{matrix} \text{Number of FTEs} \\ \text{FP clinic} \\ \text{FPWI clinic} \\ \text{WI clinic} \end{matrix} \times \begin{matrix} \text{High responsibility doctor (1541)} \\ \text{Mixed responsibility doctor (1894)} \\ \text{Low responsibility doctor (2455)} \end{matrix} = \text{Number of unique patients of that clinic}$$

Method 2 for estimating patient attachment using average number of "patient contacts"

$$\begin{matrix} \text{Yearly patient} \\ \text{capacity} \end{matrix} = \begin{matrix} \text{Weekly Patient Capacity} \\ \text{FP clinic} \\ \text{FPWI clinic} \\ \text{WI clinic} \end{matrix} \times 50 \text{ weeks} = \text{Number of unique patients of that clinic}$$

$$\begin{matrix} \text{Average number of} \\ \text{unique patients} \end{matrix} = \begin{matrix} \text{High responsibility doctor (4.04)} \\ \text{Mixed responsibility doctor (2.97)} \\ \text{Low responsibility doctor (1.43)} \end{matrix}$$

2. McGrail K, Laverigne R, Lewis SJ, Peterson SL, Barer M, Garrison SR. Classifying physician practice style: a new approach using administrative data in British Columbia. *Med Care.* 2015 Mar;53(3):276-82.

ESTIMATED CURRENT DOCTOR & PATIENT CAPACITY PER CLINIC

Indicator	FP	FPWI	WI
Number of clinics ¹	14	9	4
Number of FP FTE's, median	1	2.35	1.7
Number of family physicians per FTE	2:1	2.6:1	3.2:1
Number of hours clinic is open/week, median	45	64	56
Capacity for possible number of patients seen/week, median	171	258	205.5
Estimate of number of patients attached to each clinic [Method 1]	1,541	4,450	4,174
Estimate of number of patients attached to each clinic [Method 2]	2,116	4,343	7,185

3. Survey response rates for each clinic category are as follows: FP: 86%, FPWI: 89%, WI: 75%

KEY FINDINGS

- >50% of "clinics" listed to be in downtown do not actually provide primary care
 - 32 primary care clinics in downtown Vancouver
 - 27 provide primary care to the general population
 - 5 are restricted to special populations
- 103 Family Physicians are working in 44.6 full time (5 days/week) positions in downtown Vancouver (240 family doctors mentioned in the CPSBC website)
- An estimated 83,000-123,000 patients are attached to these clinics
- Family physician maternity care is very limited in downtown Vancouver

LIMITATIONS

Except for measurement of availability of on-call coverage by surveying voicemail messages, the rest of the collected data on practice style and capacity of the downtown primary care clinics are **self-reported information**.

The measures introduced in this report including types of clinics (FP, FPWI, WI, SPECIAL) as well as practice features "Capacity", "FTE", and "Patient Attachment" have been created by the research team and have not been **externally validated**.

Number of doctors practicing at clinics (especially at WI and FPWI clinics) was found to vary over the course of the survey period.

Little is known about whether people working in the downtown area, but living elsewhere and who are attached to a family doctor, see that doctor near home or work. People do not necessarily seek care near the place of their residence. 23% of downtown residents do not describe themselves as attached to primary care clinics and may seek care elsewhere.⁴ The residential population of downtown Vancouver is approximated to be 125,000 in 2016 (BC Stats, Population Projections).

Furthermore, there is no information indicating how many patients generally visit more than one clinic in a year.

4. My Health My Community. (2015). Community Profile - Vancouver. Retrieved November 11, 2016, from <https://www.myhealthmycommunity.org/Results/CommunityProfiles>

CONCLUSION

The majority of primary care capacity currently available in downtown Vancouver is provided by Family practice/walk-in and walk in clinics (2 of which have closed since this study was completed). There are multiple individual physicians providing services for single FTE spots. Using the clinic, rather than a specific family doctor, as a unit of planning and measure for attachment may be more relevant to future primary care planning.

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