

# Defining Practice Populations For Primary Care



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MANITOBA CENTRE FOR HEALTH POLICY AND EVALUATION

Who is your doctor? Most of us at some time have been asked this question. But suppose the question meant: Who is the one family physician you always go to?—could you answer? What if the question meant: Is there a family physician, or even a clinic, that you go to most of the time?—could you answer then?

In a sense, those questions are being asked in this report by the Manitoba Centre for Health Policy and Evaluation. The answers, among others, could influence how primary care is delivered in Manitoba in the years to come.

MCHPE has been looking at the interaction between Manitobans and their family practitioners. More specifically, we have been looking at locations—such as a clinic—where four or more generalist physicians have set up practice, trying to answer questions like: How many different patients go to this practice each year? How often do they go? Do they go there more often than to another primary care facility?

We were asked by Manitoba Health to undertake this study because of increasing national interest in alternative models for paying physicians. Many, like the Advisory Committee on Health Services, feel that for primary care to improve, alternative funding and payment models are needed. Some alternative models are already being experimented with in other provinces. But each of those alternatives require, in some way, dividing a population essentially in response to the question "Who's your doctor?"

But before we go any further, there are two points we'd like to emphasize. First, these alternative funding models were not designed as mechanisms to reduce physician payments. Quite the contrary. The advantage they are said to have over current models is that doctors can place greater emphasis on patients and patients' needs and get rewarded for doing so, rather than seeing their income reduced. These alternatives, in fact, have just as much potential to increase a physician's income as they do to decrease it.

The second point we'd like to stress is that this report makes no attempt to endorse or make recommendations in favour of one funding mechanism over another. Our task is to assess the implications of using alternative funding. Can it work in Manitoba? What steps do we need to take before it can be considered?

## *Funding Models*

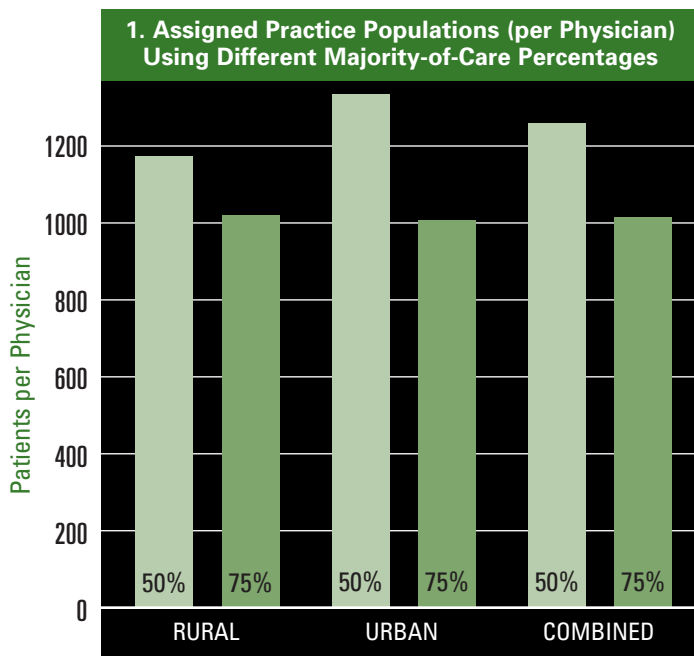
Currently, most of Manitoba's physicians are paid on a fee-for-service basis (some are on salary). Every time a patient visits a physician, a bill is sent to Manitoba Health for the visit plus any additional services provided, such as injections or pap tests or blood tests.

Critics of the current system say it sends the wrong message. It gives physicians incentives to provide many short visits, but no incentives—in fact disincentives—to fix multiple problems in one visit, or to provide, say, education or counselling—activities that take time. Put simply, physicians who choose to have

longer visits (hence treat fewer patients daily), in effect, see their pay cut.

The alternative models discussed in this report are said to reverse those incentives. Those models are *capitation funding* and *blended funding*.

Capitation funding, as the name suggests, is a per capita method of compensation. The amount of revenue a practice receives is based on an amount paid per patient (capitation fee) times the number of patients the practice treats (practice population)—regardless of the number of visits. Blended funding is a mix of two or more payment methods, such as capita-



tion supplemented with fee-for-service or salary components. These population-based models are lauded as being more patient-centred. Unlike fee-for-service, physicians are encouraged rather than discouraged to have one long visit with a patient instead of two or three short ones.

### Considerations

For either capitation or blended funding to be fair and adequate across practices, there are important issues to consider. First and foremost, physicians will be paid, at least in part, based on the number of patients they are expected to see over, say, the next one or two

years. So how do we know which patients will be seeing which physicians?

In other provinces where capitation funding has been used, it has usually involved registering patients with a practice, sometimes known as *rostering*. That is, patients state in writing who their doctor is, signing an agreement to seek all their primary care from that practice.

However, an alternative approach is to establish a practice's patient population based on prior patterns of use. With this method, patients don't have to register with one physician. The nuances of this approach to defining practice populations is the focus of this study.

We studied practices of four or more full-time generalist physicians. These would be the likely targets for alternative funding because groups with less than four physicians might have difficulty providing 24-hour service (one of the goals of providing improved primary care). We looked at 29 groups—14 in rural areas and 15 in urban areas (Winnipeg and Brandon)—examining patterns of use over a recent three-year period.

We started out by saying: if a physician is going to be paid per patient, we first need to know how many patients that physician is seeing. So, how do we count patients, given that we also know that many people see more than one physician? Clearly a "most-of-the-time" consideration was in order.

So the term *assigned practice population*—or APP—in this summary refers to patients who received the majority of their care from the same practice (though it could be any of the physicians within that practice). For example, if a patient was treated in clinic A three times in a year, and clinic B only once, that patient (for purposes of our study) would be "assigned" for payment purposes to Clinic A.

This led to another consideration. What should be the cut-off point for defining people as "regular patients" of a particular clinic? Should a majority-of-care definition mean they receive fifty? sixty? seventy? percent of their care there?

### Findings

We decided to see what effect, if any, different percentage cut-offs had on the size of an APP. It made a big difference. For instance, using a

50% definition (meaning they received at least half their care from the same group) an average of 1338 patients per urban physician were classified as regular patients. But with a 75% definition, that number fell to 1010 per physician—a 25% drop (Fig. 1).

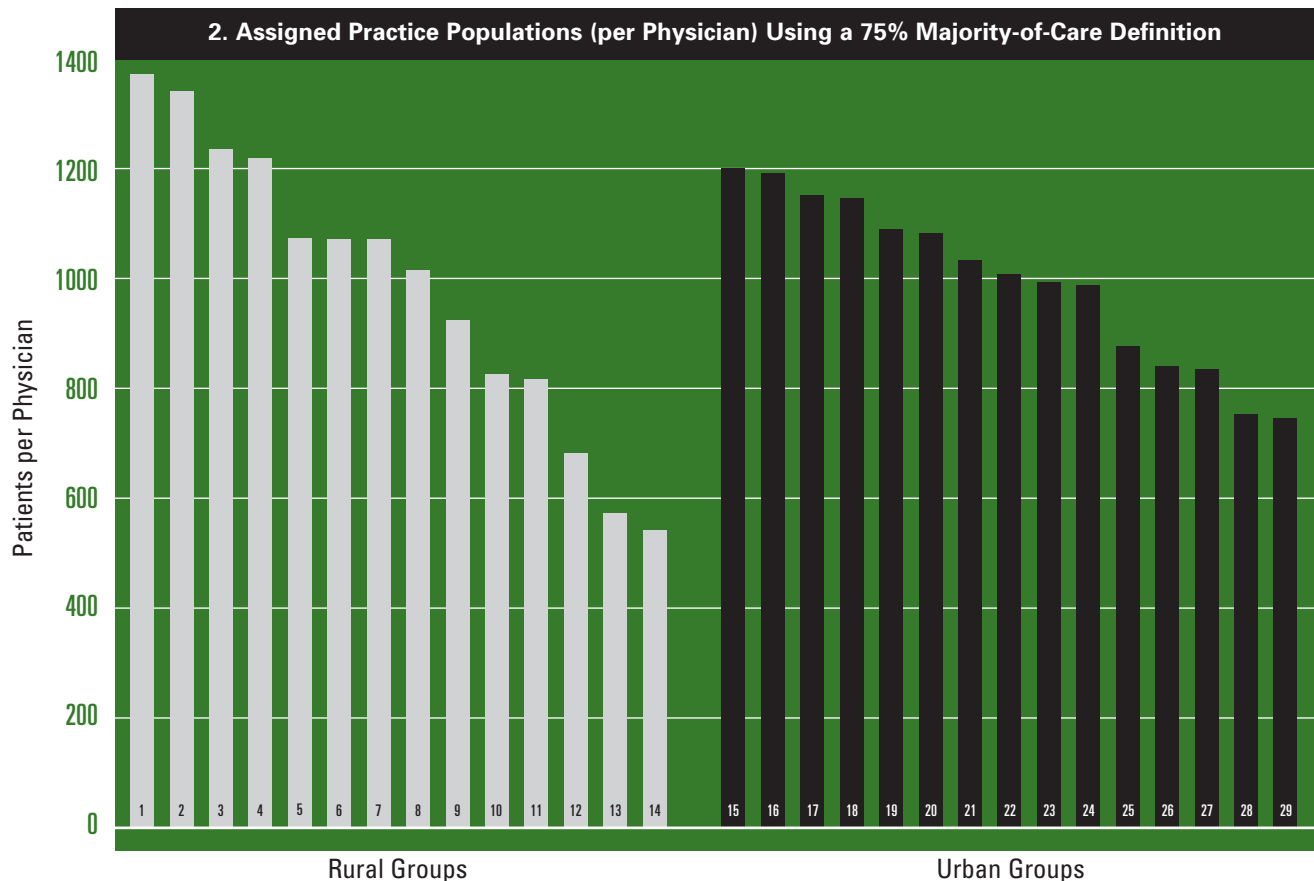
Changing how many years of data we used also caused variations. Two years of data compared to three did not change the average number of patients per physician much, if at all. But using one year of data, those averages fell considerably, especially in rural groups. It seems that anything less than two years of data is unreliable.

So the following findings are based on three-year patterns, and arbitrarily, a 75% definition.

- There were huge differences in the sizes of assigned practice populations. For instance, the largest APP averaged 1378 patients per physician; the smallest averaged only 544 per physician (Fig. 2). In other words, the biggest practice was more than two and a half times the size of the smallest.
- City dwellers were far less likely to see just one family doctor. Among all the urban

patients studied, only 38% were regular patients. This compares to almost 60% for rural patients.

- The proportion of regular patients was vastly different from one practice to the next, ranging from as high as 68.1% to as low as 14.9%.
- The patient characteristics (like age, gender, health status and socioeconomic status) were quite different from practice to practice. Some APPs had large proportions of healthier patients, others considerably more patients in poor health. Some practices treated mostly patients from poor neighbourhoods (typically the sickest people), others mainly patients from wealthy neighbourhoods (typically the healthiest people). Some APPs consisted of many older patients (highest users of primary care), others had a large percentage of young patients (lowest users of primary care).
- The older the patient, the more likely he or she sought care from just one practice. Regular patients also tended to be healthier and from the more affluent neighbourhoods.



Which brings us to *low-users*, individuals that see a physician only once or twice in two to three years. They represent nearly one in five of the patients visiting the 29 groups. They also present a bit of a conundrum in that they don't really fit our majority-of-care definition. By definition, one-visit users receive 100% of their care from the one practice each goes to. Therefore, each is a "regular patient," just like someone who sees their physician four out of five times. But is that fair? Should low-users really be considered regular patients?

### *What does it all mean?*

Perhaps the most surprising thing to come out of our study is that so many Manitobans go to more than one practice for their primary care. If Manitoba Health were to pursue alternative funding schemes, these patterns suggest that for many people, having to register with one physician might be problematic. Defining practice populations based on usage patterns offers a practical and workable option. This report underscores several points for consideration if such an approach were to be used.

The percentage cut-off used to determine when a patient is a regular patient had a considerable influence on how many regular patients a practice had. Which is ideal: fifty percent? sixty percent? seventy percent? A definitive answer is beyond the scope of this study. However, there are several related issues to be considered.

Many assigned practice populations were relatively small. That is, several groups didn't seem to have enough regular patients to move to a funding system based solely on capitation and still be viable. This was especially true for many (though not all) rural clinics. So an adjustment for such locations might be applied to a capitation formula.

In addition, some assessments would have to be made to determine the minimum size that APPs can be for a clinic to be financially viable. It's easy to see that a 50% versus a 75% majority-of-care definition could have a part to play in such assessments.

And what about low-users? Should they be excluded from assigned practice populations? We don't recommend it. But we do suggest that in modelling alternative funding formulae, some adjustments be made corresponding to the proportion of low-users.

What all these points suggest is that for Manitoba, a blended funding system—capitation with other components, such as fee-for-service—would likely be the most appropriate.

How many years of data should be used? We recommend two. As mentioned, anything less seems unstable, anything more changes little. Furthermore, two require less data than three or more. And the data would be more recent, more sensitive to changes in practices that encourage patients to become regular users or discourage them from it.

One of the most important findings of this report is that regardless of the alternative payment approach, capitation or blended, the mix of patients *must* be considered for the system to be fair. For example, practices with higher percentages of patients that are elderly or sicker or from poor neighbourhoods—groups that need more health care—should be proportionately compensated. Funding should factor in age and gender, as well as socioeconomic factors and health status.

In other provinces, practice populations for capitation or blended funding systems have been defined by essentially asking people directly "Who's your doctor?" Patients registering in writing with one physician is the common model. The approach taken in this report, defining practice populations based on usage patterns, is far less common. Our study is not a blueprint for using such an approach, but rather a working sketch that highlights several critical issues that would need to be considered to make it work fairly.

*Summary by RJ Currie, based on the report: Defining Practice Populations for Primary Care: Methods and Issues, by Verena Menec, Charlyn Black, Noralou Roos, Bogdan Bogdanovic and Robert Reid.*

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