

## Family Physician Shortage Estimates

### Introduction

Canada has seen increases in the number of practising family physicians (FPs) in recent years. Between 2004 and 2009 the counts rose from 32,029 to 34,403 family physicians. However, there are many factors that can lessen the effective supply of FPs so that a shortage situation occurs despite the gains in overall numbers of FPs. These factors are examined below and estimates made as to their affect on the family physician supply.

### Changes in hours spent on direct patient care

Age group	Hours spent by FPs on Direct Patient Care per week (excluding on-call)				Difference between 2004 and 2007	
	2004		2007		Hours	%
	Mean	n	Mean	n		
<35	35.6	1273	34.8	887	-0.8	-2.2%
35-44	33.6	2,903	33.2	2,421	-0.4	-1.2%
45-54	35.0	3,473	33.8	3,435	-1.2	-3.4%
55-64	35.4	2,016	34.1	2,519	-1.3	-3.7%
65+	31.5	697	28.2	904	-3.3	-10.5%
Total	34.5	10,362	33.4	10,166	-1.1	-3.2%

Source: 2004 & 2007 National Physician Survey (NPS), CFPC, CMA, & RCPSC.

Between 2004 and 2007 family physicians of all age groups reported fewer hours spent on direct patient care. Physicians 65+ had the biggest drop at 11%. Overall, there was a decrease of 3.2% or 1.1 hours/week among all family physicians. [This figure is backed up by a similar calculation with respect to the number of patients seen per week which saw a 3.8% decrease between 2004 and 2007].

Based on the 2004 National Physician Survey (NPS), family physicians averaged 45 weeks of work per year. There were 32,029 FPs in Canada based on CMA counts of members and non-members. The shortfall of physician service hours between 2004 and 2007 can be calculated as follows:

1.1 Hrs/wk x 45 wks/year x 32,029 FPs. = 1,585,436 shortfall hours.

To calculate the number of doctors this represents, the shortfall hours are divided by the estimated total hours worked by each physician in 2007:

$$\frac{1,585,436 \text{ hours}}{45 \text{ wks/yr/MD} \times 33.4 \text{ hrs/wk/MD}} = 1,055 \text{ FPs}$$

Therefore 1,055 extra FPs were needed in 2007 to provide the same number of hours of direct patient care hours as was provided in 2004.

Although 2007 is the most recent national survey information on the workload, we might assume that the time spent on direct patient care by family physicians would continue to decrease. But for

the purposes of this methodology, we have taken the conservative approach of assuming no change in direct patient care hours provided by FPs between 2007 and 2009.

**1,055 extra FPs are needed in 2009 to provide the same number of hours of direct patient care hours that was provided in 2004.**

### **Changes in Patient Population**

Up-to-date information on population growth is available from Statistics Canada. If we assume that the family physician population should keep pace, we would need 4.3% more physicians in 2009 than in 2004. This equates to 4.3% of the 32,029 physicians in 2004 which is 1377.

**1,377 extra FPs are needed in 2009 to keep pace with overall population growth**

### **Unmet Need for Family Physicians**

In 2004, there were approximately 5 million people who did not have a family physician. It is currently estimated at 5.4 million, based on the 2008 Canadian Community Health Survey (CCHS) and an assumption that if 16% of those 12 and over do not have an FP then likely at least 16% of those under twelve also don't have one. The most recent survey information on patients seen by FPs per week is the 2007 figure of 113 patients per week.

Given the aging population and the increase in chronic diseases such as high blood pressure, diabetes and arthritis it would not be unreasonable to assume that the 5.4 million Canadians per year will see their FP on average three times per year based on OECD data and the Canadian Institute for Health Information Data (CIHI). If this is the case, the shortage of FPs in 2009 attributable to this unmet need is calculated by tripling the number of patients to get the number of unmet patient visits per year. This is divided by the average number of patients seen by FPs each year (2007 NPS patients/week and 2004 NPS weeks/year).

$$\frac{(5,400,000 \times 3) \text{ patient visits/year}}{113 \text{ pts/wks/MD} \times 45 \text{ wks/year/MD}} = 3,186 \text{ family physicians}$$

**3,186 extra FPs are needed in 2009 to meet the needs of the population that have no family physician.**

### **Family physicians with a focused practice**

Not all FPs provide comprehensive care to a wide spectrum of patients. Many have added special interests to their practice or completely focused on one particular area such as emergency medicine, obstetrics, palliative medicine, sports medicine, etc. In fact, 27% of FPs reported in the 2007 NPS that they spent 90%+ of their time in a focused area of practice. This is not to say these physicians are not grouping together to cover off all the services required for comprehensive care of a population. Given the difficulty in measuring the interdependencies of

this phenomenon with other physicians and other health care providers, no adjustment will be made for this in the estimate of FP shortages.

**Total shortfall of family physicians in 2009**

Estimated additional number of Family Physicians needed by 2009 is as follows:

- a) 1,055 FPs due to reduced hours spent by FPs on direct patient care
- b) 1,377 FPs due to population increases
- c) 3,186 due to unmet need [these are not double counted with b)]

**5,618 extra physicians are required between 2004 and 2009  
(1,055 + 1,377 + 3,186 = 5,618)**

Fortunately, Canada continues to see increases in the number of family physicians in recent years (although more than a third of all FPs are 55 or older). Between 2004 and 2009 the number of licensed FPs increased by 2,374 from 32,029 FPs to 34,403 FPs. Subtracting this change from the estimated additional FPs required (5,618) gives a shortfall of 3,244.

**It is conservatively estimated that Canada currently has a shortfall of  
3,244 family physicians.**

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