

The Call of the Canadian Physician

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Abstract

The 2007 National Physician Survey shows that 70% of physicians are on call each month. Slightly fewer female and family physicians are on call compared with male physicians and other specialists. A higher proportion of physicians under the age of 45 take on-call duty, see more patients while on call and provide more patient care than do those over 45 years. But the older doctors – both family physicians and other specialists – are on call for more hours each month than are their younger colleagues. Physicians in group or inter-professional practices are more likely to have on-call responsibilities, but they do fewer hours each month than do those in solo practice.

On-call duty, which is defined in the 2007 National Physician Survey as time outside of regularly scheduled activity during which physicians are available to patients, is part of the job for 70% of Canadian physicians. (The 2007 National Physician Survey was a collaborative census survey of all licensed physicians conducted by the College of Family Physicians of Canada, the Canadian



Medical Association [CMA] and the Royal College of Physicians and Surgeons of Canada [RCPSC]. It had more than 19,000 responses, with a response rate of 32%.) The majority of physicians do hospital in-patient calls (69%), and they average 130 hours per month of on-call duty in addition to the 52 hours per week that they already work. The survey results provide a detailed picture of this essential part of medical practice. Unless otherwise stated, all differences noted are statistically significant to the level of $p < .001$ using chi-square, analysis of variance or t test, where appropriate.

Who Is On Call?

Over two thirds of family physicians and general practitioners (68%) and 73% of other specialists report doing on-call duty. Rural doctors are more likely to do it (80%) than are urban doctors (70%). A slightly larger proportion of male physicians report on-call duty (71%) compared with their female colleagues (68%), and a higher proportion of doctors under the age of 45 years were on call compared with those 45 or older (Table 1).

In general, physicians in a group practice are more likely to report doing on-call work (74%) than are solo practitioners (65%). Physicians 45 years or younger show the same participation rates regardless of practice organization, but the older physicians (45-plus years) are more likely to have on-call duties if they are in a group. Variations are also observed based on the physician's main patient care setting, with 83% of those practising primarily in academic health sciences centres reporting on-call duty compared with two thirds of those in private offices or community clinics and 30% of those in free-standing walk-in clinics.

Doctors who take on-call duties also tend to work more hours per week (excluding call) than do those who have no on-call duties (55 hours versus 45 hours per week). Four of five doctors paid primarily by a mix of remuneration modes report having on-call responsibilities compared with just over two thirds (68%) of physicians receiving 90% or more of their professional income from the traditional fee-for-service method of payment.

In terms of overall professional satisfaction, little difference is seen between the cohort of physicians who provide after-hours services and those who do not.

Table 1. Percent reporting on-call responsibilities by age and gender

Age Group	On-Call Duty?	Family Physician (%)	Other Specialty (%)	Total (%)
<45 years	Yes	72	83	77
	No	25	10	19
	NR	3	6	5
	Total	100	100	100
45+ years	Yes	66	68	67
	No	31	26	29
	NR	3	7	5
	Total	100	100	100
NR	Yes	61	68	64
	No	34	22	28
	NR	5	11	8
	Total	100	100	100
Total	Yes	68	73	70
	No	29	21	25
	NR	3	7	5
	Total	100	100	100

NR = no response.

Source: National Physician Survey (2007); see http://nationalphysiciansurvey.ca/nps/2007_Survey/Results/ENG/National/pdf/Q30/Q30a_CORE.only.pdf.

How Are Physicians Coping with On-Call Duties?

In terms of overall professional satisfaction, little difference is seen between the cohort of physicians who provide after-hours services and those who do not. Not surprisingly, there is a difference when rating their ability to balance their personal and professional commitments. The 2007 survey results show that two thirds of the doctors who do not take on-call duty are satisfied with their balance compared with 54% of those who do. In the 2004 survey, when an open-ended question asked about the most stressful part of being in the medical profession, respondents cited on-call duties more than any other stressor (National Physician Survey 2004, conducted by CFPC, CMA and RCPSC members). However, some respondents are still satisfied even though on-call duty is a regular feature of their profession: "Despite being on call all of the time ... I am very happy with my choice of career" (National Physician Survey 2004 conducted by CFPC, CMA, and RCPSC).

Regardless of on-call duties, physicians most often indicated health system funding as the biggest impediment to delivering care to patients (56% overall). The availability of personnel was more frequently considered an impediment by those physicians who do call (52%) than those who do not (38%), as was external demands on their time (41% versus 32%).

Table 2. Type of on-call work by age and gender for family physicians

	Male (%)	Female (%)	NR (%)	Total (%)
Overall, FPs who do on-call duty (%)	74	70	64	70
Types of duties performed by on-call FPs:				
Obstetrical	13	20	18	16
Hospital in-patients	58	48	48	54
Non-hospitalized patients – telephone availability only	21	24	19	22
Non-hospitalized patients – telephone availability/see patients as required	38	34	43	37
Emergency room	30	22	27	27
Nursing home, LTC facility	35	28	32	32
Other	11	14	11	12

FP = family physician; LTC = long-term care; NR = no response.

Source: National Physician Survey (2007); see http://nationalphysiciansurvey.ca/nps/2007_Survey/Results/ENG/National/pdf/Q30/Q30a_CORE.only.pdf.

four of the seven on-call categories (Table 2).

A comparison of rural and urban physicians shows that differences exist in terms of the type of on-call care they provide. One quarter of rural doctors take obstetrical calls, whereas only 13% of urban physicians provide the same. Urban doctors are doing slightly more on-call work for non-hospitalized patients ($p < .010$), but rural doctors are far more likely to do emergency on-call work (64% rural versus 37% urban) and nursing home/long-term care calls (40% versus 16%).

There are few surprises when looking at on-call duty by main patient care setting. As expected, those in community hospitals and academic health sciences centres do a lot of in-patient on-call work (about 90%) and emergency room coverage (48% and 44%). Physicians in a private office or clinic are most likely to do obstetrical calls (18%), although community hospital-based doctors are close behind at 15%.

There is a clear pattern of on-call duties when looking at the results by age of the physician. The older the physicians, the less likely they are to provide on-call coverage for obstetrics, in-patients or emergency rooms. However, when looking at on-call duties for non-hospitalized

Table 3. Average number of on-call work hours per month

Age Group	Hours for FPs/GPs (n = 19,900)	Hours for Other Specialists (n = 19,006)	Hours for All Physicians (N = 38,906)
<35	123	111	118
35–44	137	117	127
45–54	136	123	129
55–64	130	135	133
65+	155	148	151
NR	122	117	119
Total	135	125	130

FP = family physician; GP = general practitioner; NR = no response.

Source: National Physician Survey (2007); see also http://nationalphysiciansurvey.ca/nps/2007_Survey/Results/ENG/National/pdf/Q30/Q30b_CORE.only.pdf.

What Type of On-Call Activities Do They Do?

There are many, and sometimes overlapping, types of on-call activities that physicians provide, and the 2007 survey questionnaire attempted to capture the most prevalent ones. For this section of the article, a subset of those physicians who reported doing on-call duty has been analyzed by type of duty provided.

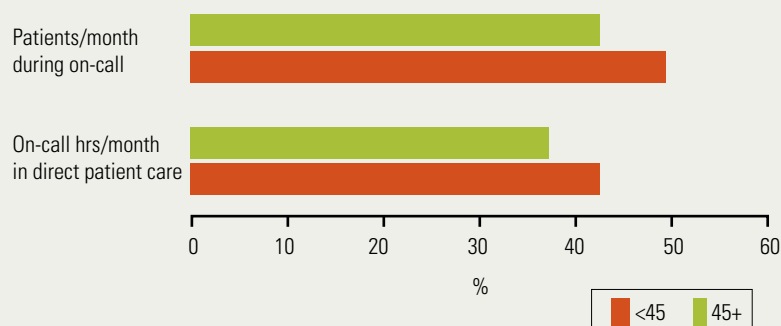
Results show that non-primary care specialists are more likely than family physicians to be on call for hospital in-patients (85% versus 54%) and emergency rooms (52% versus 27%), whereas family physicians are more likely to have nursing home or long-term care responsibilities (32% versus 2%) outside their normal working hours. Of particular interest are the results by gender. Among family physicians, female doctors were more likely than their male colleagues to report having on-call duties for obstetrics but had lower participation rates than men for

patients and nursing home/long-term care facilities, the older physicians assume more of the responsibility.

Who Is On Call Most Often?

It was stated above that physicians in a group practice versus a solo practice are more likely to be on call, but it appears that for those in a group practice the welcome trade-off is less volume of on-call duty each month. Those in a group or inter-professional setting average 120 hours per month compared with 158 hours per month for solo physicians.

While the percentage of physicians who do on-call work tends to decrease with age, the call load varies depending on their broad discipline. Among family physicians who do on-call work, there is no clear pattern by age (Table 3). For other specialists, the older the physicians, the higher the average time

Figure 1. On-call hours spent in direct patient care and patients seen while on call, by physician age group

Source: National Physician Survey (2007); see http://nationalphysiciansurvey.ca/nps/2007_Survey/Results/ENG/National/pdf/Q30/Q30d_CORE.only.pdf.

they spend on call. In fact, the cohort of all physicians 65 years or older who do on-call duty (40% overall) averaged over 150 on-call hours per month, as opposed to the average of 130 hours per month for physicians of all ages.

Older physicians (45 years or more), however, spend fewer hours actually providing patient care while on call than do younger doctors, and they see fewer patients during on-call hours (Figure 1). In the case of non-primary care specialties, the differences are very small. These older specialists spend three hours less per month in direct patient care ($p < .05$). A slightly wider gap is seen among family physicians, where the younger ones (under 45 years) spend seven more hours per month offering treatment to 11 more patients than do older family physicians.

Almost half of physicians who do on-call duty have spent continuous 24-hour periods of on-call time in direct patient care (47%). The likelihood of this is higher for rural physicians (52%) than urban ones (45%). This is also more likely if the doctor's main patient care setting is an academic health sciences centre (53%) or community hospital (61%).

Of those who have spent 24 hours continuously on call, 80% have been required to provide direct patient care immediately after these 24-hour periods. This experience is reflected in the following comment from a physician on the 2007 survey: "The worst part of my practice is doing call, which at times involves over 24 hours of continuous clinical care."

Summary

The majority of physicians (70%) participate in on-call activities, a figure that has fallen only slightly from a decade ago, when it was 74%. There is a wide variety in the amount, type and intensity of this work, which is considered by many to be a stressful yet necessary part of the medical profession.

On-call responsibilities vary depending on the physicians' age, gender, discipline, location and characteristics of their practice. The 2007 survey figures show that while being in a group or inter-professional practice increases the likelihood of physicians being expected to do on-call work, the amount of time spent on call is optimized through sharing with colleagues.

The largest gap was observed between physicians in academic health science centres, where more than four of five doctors participate in on-call duties compared with only 30% of those in free-standing walk-in clinics.

Physicians under 45 years old are more likely to be on call but are not on

duty for as many hours as older physicians. They do, however, see more patients during their time on call and spend more hours providing medical care.

On-call responsibilities are clearly an important part of the total workload of Canadian physicians, and further refinement is warranted in methods for capturing accurate data, over time, within the environment of changing models of care and payment arrangements. **HQ**

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