The Doctor is Out: Physician Participation in the Rationed Access Day Work Stoppage in British Columbia, 1998/99

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ABSTRACT

Background: In 1998/99, the British Columbia Medical Association (BCMA) asked physicians to withdraw elective services on a series of 20 Rationed Access Days (RADs). This work stoppage was called to protest continued fee proration triggered by total physician billings exceeding a fixed budget cap. This paper examines how physicians' practice activity changed on RADs, the rates of participation in this job action and characteristics of those physicians who participated.

Design: Population-based cohort study of physicians based on administrative data.

Population: All full-time physicians billing the provincial healthcare plan.

Methods: Participation in the RAD initiative was inferred by comparing physicians' average daily billings on RADs, Sundays, holidays and regular weekdays. Using thresholds established from these distributions, the number of RADs observed by each physician in 1998/99 was calculated and examined in relation to their demographics, location and prior years of practice activity.

Results: For the 4,131 physicians studied, average daily payments on RADs were similar to those on Sundays and holidays but much lower than those on non-holiday, non-RAD weekdays. Using billing thresholds of $200 (for GPs) and $400 (for specialists), we found a high degree of participation with the study population observing a median of 15 of the 20 scheduled RADs. While there were some differences in participation among age groups, geography and the prior years of practice activity, the differences were small.

Interpretation: This study found high solidarity in the BCMA's 1998/99 RAD initiative. Most full-time fee-for-service FS physicians appeared to participate in at least three-quarters of the 20 scheduled RADs.

BACKGROUND

For 20 days in fiscal year 1998/99, physicians in British Columbia placed closed signs in their offices and stopped providing non-emergency services to their patients. The provincial medical association called for these Rationed Access Days (RADs) to protest the provincial governments' use of fee pro-rating as a way to recoup anticipated budgetary overruns.

Over the past 40 years, physician job action has been a not-uncommon occurrence in industrialized nations, with strikes, work stoppages and slowdowns staged in Europe (Aro and Hosia 1987; Cooper-Mahkorn 1999; Mechanic and Faitch 1970), the United States (Belkin 2002; James 1979; Kravitz et al. 1990), Australia (Arnold 1984), New Zealand (Malloch 1992) and Israel (Barnoon and Carmel 1987). Physician work stoppages also have a long, if not glorious, history within this country, including the 1962 Saskatchewan and the 1986 Ontario doctors' strikes (Badgley and Wolfe 1967; Stevenson, Williams and Vayda 1988). The common thread in most of these actions has been the goal to extract financial concessions and/or to prevent unwanted infringements on professional autonomy.

In the last few years, we have seen a resurgence of job action by physicians across Canada. Beginning in the mid-1990s, Canadians have witnessed job action in eight provinces with the intent of yielding financial gains and improving working conditions (Arnold 2001; Rich and McAllister 1996;

Sibbald 1998; Walker 2001). As opposed to the earlier full-fledged strikes, these recent actions have been more limited, including partial service withdrawals, resignation of hospital privileges and refusals to provide on-call coverage or see new patients. As provincial payers and regional health boards become more willing to place limits on physicians' financial opportunities or clinical independence, it is likely that such actions will continue when conflict arises.

Collective job action by physicians, while not uncommon, usually meets with considerable resistance by the public and physicians themselves (Sachdev 1986a). In deciding whether to participate, physicians must balance their ethical obligations with their financial and other desires (Meslin 1987). Physicians are often reluctant to participate for fear that withdrawing services would result in avoidable death and suffering, strain their relationships with patients and add to the ill-health burden of the most vulnerable(Sachdev 1986b). Physicians may also be reluctant to participate because of the loss of earnings that may never be recouped. Limited guidance can be drawn from work stoppages by other professionals, since physicians generally exercise more individual discretion in their work patterns and are thus less susceptible to external pressures to participate (such as from unions).

Physician strikes and work stoppages have been the focus of considerable research interest, directed mainly at quantifying their health and health service consequences (Barnoon et al. 1987; Bukovsky et al. 1985; Ellencweig 1990; Romer 1981; Ron et al. 1985; Slater et al. 1984; Slater and Ever-Haddani 1983). Less attention has been given to examining the extent to which physicians participate in job actions and, more specifically, the types of job action with which physicians may be more or less likely to comply. Rarely have third parties examined participation rates; usually rates are published by vested interests such as governments or medical associations. In one published study, Kravitz and colleagues (1989) found that only about half of physicians participated in the 23-day 1986 Ontario strike to protest the government's ban on extra billing. This action did not gain widespread public support nor was it successful in averting the ban (Iglehart 1986; Silversides 1986).

This paper examines the participation of physicians in the 1998/99 RAD work stoppage in British Columbia, the most widespread job action by physicians in Canada in the last decade. We asked two questions: What proportion of physicians participated in the RADs? and Was participation associated with physicians' demographic or practice-related characteristics? Since RADs were periodic, pre-arranged and spanned relatively short durations, we hypothesized that the RAD participation rates would be higher than those reported in the last large walkout 12 years earlier in Ontario.

Background on Rationed Access Days (RADs)

At the time of the RAD work action in British Columbia, over 90% of physician services were paid on a fee-for-service (FFS) basis according to a schedule proposed by the British Columbia Medical Association (BCMA). The remaining services were reimbursed through other means, including salary, sessional payments and capitation (Kazanjian et al. 2000). During the 1990s, *hard* or *soft* expenditure caps were introduced in most Canadian provinces to constrain growing physician services budgets (Barer, Lomas and Sanmartin 2000). In British Columbia, legislation passed in 1992 (later known as the *Medicare Protection Act* [1996]) established a process to administer the hard cap placed on physician expenditures. Under this legislation, the Medical Services Commission (MSC), a body created to oversee the physician services budget, was given the authority to pro-rate fees to balance each year's physician expenditure budget. When faced with the prospect that the hard cap was likely to be exceeded, the MSC periodically adjusted physicians' fees downwards so that there would be no cost overruns. Beginning in 1996/97 and continuing through 1998/99, the MSC responded to increasing budgetary shortfalls with pro-rating at progressively higher levels of discounting. Conflict arose between the government and the BCMA, the latter viewing the use of pro-rating as a progressive devaluation in the value of their services (BCMA 1999).

Beginning in March 1998, the BCMA implemented a series of Rationed Access Days (RADs) where members were asked to withdraw from providing all non-urgent services (BCMA 1998c; Pemberton 1998b). Physicians could limit services provided, secure in the knowledge that they would still, collectively, receive the fully agreed amount. Notice was given to the public well in advance that on these specified days elective surgeries would be cancelled and doctors' offices would be closed to non-urgent care. The public was instructed to seek care on RADs as they would on a typical Sunday (e.g., call the designated on-call doctor or go to an emergency room) (BCMA 1998a). The BCMA's objectives of the RAD initiative were to reduce overall

expenditures and mitigate the need for further pro-rating (BCMA 1998a) and to attract "public attention to the underlying issues of [inadequate] healthcare funding" (BCMA 1998b). By inconveniencing the public, physicians sought to apply pressure on the government to add funds to the medical services budget and abandon the use of pro-rating. The BCMA estimated that about 95% of physicians participated in the first three RADs called in March 1998 (Pemberton 1998a). The policy was expanded to 20 weekdays scattered in one- to five-day blocks throughout fiscal year 1998/99. Job action was halted after the government abandoned pro-rating doctors' fees in February 1999 and substantial new funds were added to the budget in early 2000 (BC Ministry of Health 2000).

METHODS

This study used physician billing and registration data from the provincial healthcare plan to examine the practice activity of physicians in British Columbia on the 20 RADs in 1998/99. The study population included all *full-time* physicians, defined as those making claims to the plan on more than 100 days, over at least 10 months and whose FFS payments were ≥ 40th percentile for their specialty during the study year. These criteria were used to exclude part-time physicians, physicians paid primarily by salary, sessional payments or capitation and physicians with extended absences during the study year. We chose the 40th percentile to be consistent with the lower bound of the Canadian Institute for Health Information (2001) definition of physician full-time equivalence. We excluded part-time physicians and those with extended absences because of the likelihood that these physicians would have no or limited billings on RADs for reasons other than participation in the work stoppage. We also excluded: (a) emergency physicians who continued to provide services; and (b) laboratory physicians and radiologists for whom practice billing arrangements make it difficult (using administrative data) to ascertain the activity of individual physicians. Study physicians were grouped as general practitioners (GPs), medical specialists (including general internal medicine, internal medicine subspecialties, pediatrics and psychiatry) and surgical specialists (including general surgery, surgical subspecialties, anesthesiology and obstetrics and gynecology) based on their specialty of record on March 31, 1999.

Physician participation in the RAD initiative was gauged by examining the billing level on each RAD on the assumption that participating physicians would have relatively low or no billings on these days. One would expect that many participating physicians would have some billings because they were expected to continue to deliver (or arrange for the delivery of) urgent care. To account for this likelihood, physicians were deemed to have observed a RAD if their billings fell below a threshold amount, empirically derived from their billing patterns on other days. The thresholds were chosen to be above most physicians' average Sunday and statutory holiday billings (when we assume that most care is urgent) but well below their average weekday billings (where there is a mix of urgent and elective care).

We measured the extent of each physician's participation in the RAD initiative by counting the number of RADs in 1998/99 in which billings were below the threshold amount (maximum 20). We further corrected for the possibility that physicians may not have been working on these days for other reasons (e.g., vacation) by adjusting our estimate downward by the proportion of *regular* workdays in each month when the physician did not bill. For example, if a physician had billings below the threshold on two RADs held in a particular month, but billed on only 11 of the other 22 regular weekdays in the same month, the estimate for his or her RAD participation in this month would be scaled back by 50% (i.e., the physician would be counted as having observed one RAD rather than two).

The number of observed RADs in 1998/99 was examined in relation to the physicians' age, sex, place of practice, participation in the three RADs in the prior year and overall practice activity. A practice location variable was constructed by assigning physicians to 83 administrative local health areas using their billing postal codes. These local health areas (LHAs) were grouped into *urban, semi-urban* and *rural* groups based on population density. Population density was calculated by dividing the estimated 1996 population by the number of square kilometers in each LHA. The thresholds for constructing these units were determined by looking for natural patterns in the observed frequency distribution. Participation in the three RADs held in March 1998 was calculated in a manner similar to that described above. Practice activity was measured for the prior year by grouping physicians into specialty-specific payment deciles (using total billings on non-RADs). Kruskal-Wallis chi-square statistics were used to test for significant differences in RAD participation among these categories. Further details of the methodology are available elsewhere (Hanvelt et al. 2000).

RESULTS

A total of 4,131 physicians (2,533 GPs and 1,598 specialists) met the selection criteria, representing 58.8% of B.C. physicians submitting FFS claims to the provincial government in fiscal year 1998/99. We excluded 478 emergency, laboratory and radiology specialists, as well as 2,890 part-time physicians (1,808 GPs and 1,082 specialists) who billed on fewer than 100 days, during fewer than 10 months and/or had payments less than the 40th percentile of their peers. The study population accounted for 83.6% and 79.4% of all FFS payments made to GPs and specialists respectively during the study year (excluding payments to emergency, laboratory and radiology specialists). The mean age of the study physicians was 45 and 48 years for GPs and specialists respectively. The excluded GPs were slightly younger (mean 44 years, $p<0.001$) and the specialists slightly older (mean 49 years, $p<0.001$). The study cohort was also less likely to be female (17.1% of study cohort vs. 37.3% of excluded physicians; $p<0.001$) and to be urban-based (46.6% of study cohort vs. 57.0% of excluded physicians; $p<0.001$).

Figure 1 shows the average gross FFS payments made to the study physicians during 1998/99 by the type of day. On regular Wednesdays, Sundays and statutory holidays, the mean billings for GPs were $735 (s.d. 290), $143 (s.d. 176) and $189 (s.d. 178) respectively. Only Wednesdays are presented here, but mean payments for other weekdays were similar (range: $734 to $826). On the 20 RADs, mean billings ($184, s.d. 230) fell between those on Sundays and holidays, much lower than those on a typical weekday. For specialists, we observed a similar pattern. Average gross billings on RADs ($329, s.d. 324) were somewhat higher than those on Sundays ($165, s.d. 170) and holidays ($190 s.d. 243) but much lower than those on a typical Wednesday ($1,101, s.d. 643). The range of the other regular weekday payments for specialists was $934 to $1,140.

In choosing thresholds to indicate RAD participation, we required amounts flexible enough to account for urgent care that physicians may have provided on RADs but specific enough to identify physicians who chose to ignore the directive. Based on the billing distributions on regular days during the study year (Figure 1), we chose thresholds of $200 for GPs and $400 for specialists. The vast majority of physicians (94.4% of GPs and 91.8% of specialists) bill more than this on a regular weekday and less than this on a typical Sunday or holiday (81.7% of GPs and 93.6% of specialists). Higher thresholds would have increased the proportion of GPs classified as not working on an average Sunday (e.g., 93% at $400 threshold vs. 81.7% at $200) but also reduced the proportion classified as working on a typical Wednesday (e.g., 87% with a $400 threshold vs. 94.4% at $200). A similar tradeoff was found with increasing the threshold amounts for specialists (e.g., 99% correctly identified as not working on a typical Sunday but only 81.3% correctly identified as working on a typical Wednesday). Thus, we believe that these thresholds provide reasonable sensitivity and specificity and have face validity.

Using the $200 and $400 thresholds, Figure 2 shows the cumulative percent of physicians by the total number of RADs they observed. Overall, these results reveal a high degree of participation, with the study population billing under the thresholds on a median 15 (interquartile range 5.8) of the 20 scheduled RADs. We found that 84% of physicians participated in at least 10 RADs. GPs appeared to have somewhat greater participation than medical or surgical specialists ($p<0.001$) but the differences were small (mean 2.2 and 1.2 RADs respectively). In the aggregate, we found that physicians participated in approximately 70% of the total number of possible RAD days (total RAD days summed across physicians, divided by total possible RAD days

Figure 1

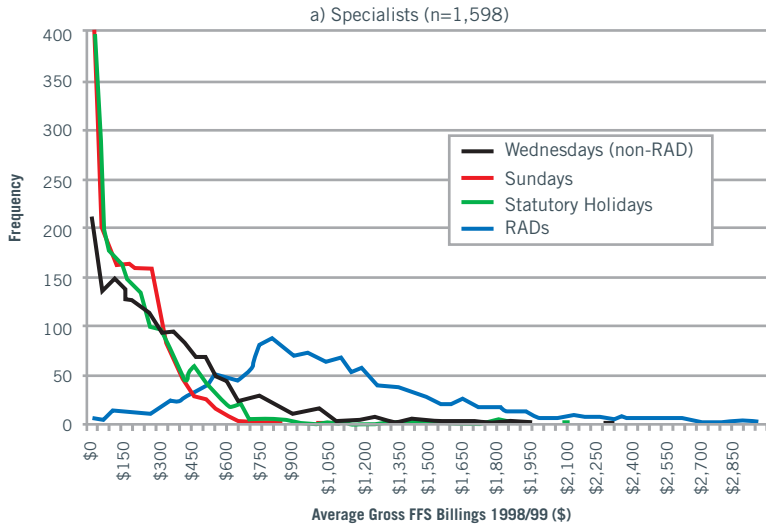
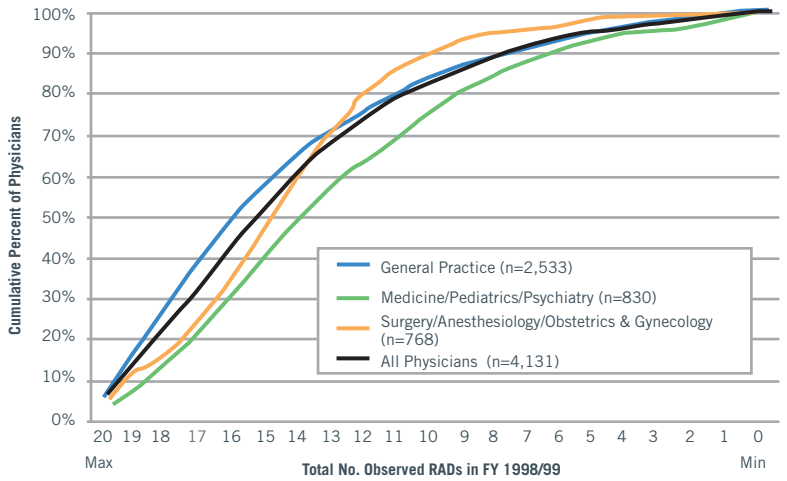


Figure 2



summed across physicians). Adjusting the number of RADs by the number of regular weekdays worked in each month (to account for other absences from work) had a small effect, reducing the number of RADs by a mean of 1.0 (s.d. 1.4).

Figure 3 reports the median number of observed RADs by the physicians' demographic characteristics and practice activity in the prior year. For specialists, age had no significant bearing on the degree of RAD participation. For GPs, younger (<41 years) and older physicians (65+ years) participated in slightly fewer RADs than did middle-aged physicians, but the differences were small (less than one RAD). No statistically significant differences by sex were found for either specialists or GPs. Geographic location was a distinguishing characteristic: semi-urban physicians tended to have the highest rates of participation and rural physicians the lowest (about a two-RAD difference). We found relatively small but statistically significant differences in participation among physicians in various income deciles based on the previous years' practice activity. The median number of observed RADs was smallest for physicians in the lowest decile (14.5) and the highest two deciles (14.5 and 13.9). When stratified by physician type, these differences were significant only for GPs and medical specialists.

Participation in the three RADs implemented in March 1998 was also strongly predictive of RAD participation in the study year. For those physicians participating in all three of the prior-year RADs, the median participation in 1998/99 was 17.2 of the 20 RADs (interquartile range 4.6). Conversely, physicians who observed none of the 1997/98 RADs participated in an average of only 6.9 during 1998/99. Adjusting the number of RADs by the number of regular weekdays worked in each month did not change the significance of the above results. The adjusted analyses are available from the authors upon request.

DISCUSSION

Our findings suggest that physicians in British Columbia strongly supported the Rationed Access Day (RAD) work stoppage called for by their medical association. Overall, physicians cumulatively provided no (or minimal) services on almost three-quarters of the 20 RADs. Thus, while some doctors disregarded the association's request for ethical or other reasons (Steffenhagen 1999), they were clearly

Figure 3: Number of 'Observed' RADs in 1998/99 by Physician Demographic and Practice Characteristics

		General Practice				Medical Specialists				Surgical Specialists				All Physicians			
		n	median	(iqr)	p-value	n	median	(iqr)	p-value	n	median	(iqr)	p-value	n	median	(iqr)	p-value
Age	<41	902	15.3	(6.1)	<0.01	184	13.0	(6.0)	NS	198	14.5	(4.1)	NS	1,284	14.8	(5.8)	<0.01
	41-50	960	15.8	(6.0)		321	13.5	(6.6)		307	14.7	(4.1)		1,588	15.0	(5.5)	
	51-60	519	16.1	(5.4)		225	14.0	(7.3)		215	14.7	(5.0)		959	15.2	(6.1)	
	61+	152	15.3	(8.1)		100	13.6	(8.0)		48	13.8	(4.5)		300	14.8	(7.4)	
Sex	Male	2,027	15.7	(6.2)	NS	685	13.7	(6.8)	NS	714	14.6	(4.4)	NS	3,426	15.0	(6.0)	NS
	Female	506	15.7	(4.9)		145	13.0	(5.6)		54	14.5	(4.3)		705	15.1	(5.5)	
Geography	Urban	989	16.0	(7.1)	<0.001	526	13.7	(7.8)	<0.05	410	14.2	(4.4)	<0.05	1,925	15.0	(6.8)	<0.001
	Semi-urban	765	16.5	(4.3)		188	14.0	(4.5)		206	15.1	(4.3)		1,159	15.9	(5.0)	
	Rural	778	14.4	(5.7)		116	12.3	(6.9)		151	14.6	(3.9)		1,045	14.0	(5.5)	
Income	D1(Low)	253	15.4	(6.5)	<0.001	80	13.2	(7.0)	<0.001	72	14.7	(3.8)	NS	405	14.5	(6.0)	<0.001
Decile	D2	253	15.4	(4.8)		83	14.8	(5.7)		78	15.0	(4.1)		414	15.1	(4.8)	
1997/98	D3	253	16.0	(6.0)		83	14.0	(4.6)		76	15.0	(4.2)		412	15.2	(5.9)	
	D4	254	16.0	(5.0)		82	14.9	(4.7)		77	14.9	(4.6)		413	15.6	(5.4)	
	D5	253	16.3	(5.4)		85	14.4	(5.5)		79	15.0	(4.4)		417	15.5	(5.4)	
	D6	253	16.0	(6.3)		83	13.0	(6.9)		75	14.9	(4.1)		411	15.0	(5.9)	
	D7	254	16.0	(6.5)		82	13.6	(7.8)		77	14.1	(4.4)		413	15.0	(6.7)	
	D8	253	15.5	(6.0)		83	12.5	(7.2)		76	14.9	(4.7)		412	15.0	(5.8)	
	D9	253	15.5	(7.0)		83	13.0	(7.8)		78	13.3	(4.3)		414	14.5	(6.3)	
	D10 (High)	254	14.7	(7.5)		86	11.0	(8.9)		80	14.0	(6.1)		420	13.9	(8.0)	
RADs	0	134	7.7	(9.1)	<0.001	69	6.2	(9.0)	<0.001	35	10.5	(8.7)	<0.001	238	7.7	(9.9)	<0.001
Observed	1	304	11.7	(7.4)		160	10.0	(6.1)		112	13.6	(3.3)		576	11.8	(6.8)	
in 1997/98	2	768	14.9	(5.6)		290	13.3	(5.7)		333	14.4	(3.6)		1,391	14.5	(5.0)	
(max 3)	3	1,327	17.0	(4.2)		311	15.9	(4.8)		288	15.4	(4.9)		1,926	16.7	(4.6)	
Total		2,533				830				768				4,131			

Note: 'iqr' refers to interquartile range. P-values relate to Kruskall-Wallis non-parametric chi-quare approximations. Medical specialists include specialists in internal medici psychiatry and pediatrics (and their subspecialites). Surgical specialisties include general surgery, obstetrics and gynecology, anesthesiology, and the surgical subspecialties.

a minority. Furthermore, we have likely underestimated RAD participation, given that some physicians may have made on-call arrangements with others to cover the delivery of urgent care.

The proportion of physicians supporting RADs was significantly higher than the 45-52% self-reported physician participation rate found in the 1986 Ontario strike (Douglas et al. 1988). While differences in methods (self-report vs. utilization analysis) may explain some of the discrepancy, other reasons are more likely to explain the greater solidarity in British Columbia. More serious health effects may have been anticipated in the Ontario strike since it was continuous and open-ended, while the RADs were periodic, pre-arranged and occurred over relatively short spans (one to five days). Thus, because patients' concerns could largely be planned for and accommodated on days surrounding the RADs (an option not available in Ontario), physicians may have been more willing to withdraw their services in the British Columbia circumstances.

The RAD withdrawal was also likely to have smaller effects on participating physicians' incomes. Doctors participating in the Ontario strike lost income for every day they participated and would have had to recoup this income by working longer hours and/or additional days following the strike. In the British Columbia environment of fixed budgets and proration, physicians were reassured that the effect of RAD participation on their collective earnings would be negligible (BCMA 1998d). And indeed, facing a fixed budget, participating physicians were simply choosing to absorb the *clawback* in *day-sized lumps*. To the extent that RADs reduced total billings, this would have the effect of reducing the amount of fee proration that was necessary. The only financial problem for participating physicians under such circumstances was the *free rider* problem posed by non-participating physicians who would benefit personally from the actions of the larger group. In an environment where the physician service budget is a *common property resource* (Hurley and Card 1996), this negligible net effect for individual physicians can only materialize if all, or most, physicians participate. Of course, if physicians simply provided the RAD services on other days, not only would the total effects be negligible (because of the fixed budget), but the effects on pro-rationing would also be negligible (see below).

The relatively high rate of participation found in this study is also surprising given a 1987 survey in which 72.4% of B.C. physicians stated that they disapproved of the "withdrawal of non-emergency services by physicians in the event of inadequate income settlements." But again, the explanation is likely to be found in changed circumstances with open and often bitter conflict concerning the fixed budget caps characterizing the landscape in British Columbia from the mid-1990s onwards (Fayerman 1998a; Fayerman 1999). Compared to the strikes of earlier times, it is also likely that the RADs were designed in such a way as to reduce physicians' anxiety about financial loss and the public's concern about adverse health consequences.

We also found relatively few or no differences in the degree of RAD participation among different categories of physicians. The similar rates of support by GPs and specialists and by men and women found here are not unlike what transpired during the Ontario strike (Kravitz et al. 1989). The lower levels of support for RADs in rural locales compared with urban or semi-urban areas likely relates to the smaller supply of physicians (Kazanjian et al. 2000), who are faced with fewer choices to offer their patients in the event of their absence. Although physicians could arrange coverage rota on RADs, such arrangements would have been more difficult in areas with fewer physicians across whom to spread the load. Similarly, the lower participation rates among physicians in the highest two income deciles may reflect less flexibility for these physicians to shift their patients' care to other days because there are few other days not already fully committed. It may also be that those with higher incomes simply felt less compelled to respect the BCMA initiative, for any number of political, financial or quality of care reasons.

This study has several limitations worthy of mention, relating mostly to our use of administrative claims data to measure RAD participation. RAD support was inferred using thresholds in total payments and no attempt was made to differentiate elective services (the target for RADs) from ***urgent*** services (exempt from RADs). Thus, for each RAD, some false-positive and false-negative assignments were undoubtedly made. However, such misclassifications were likely to have been rare; we found substantial face validity of our thresholds using typical Sunday and Wednesday payments.

A second limitation relates to the examination of individual physicians only, which did not show how physician groups may have shared care on RADs. This may result in an underestimate of RAD participation, but again this error is likely to be relatively small. It suggests that, if anything, involvement may have been even more extensive than found here.

Third, we did not examine the practice activity for part-time physicians and those paid through salary and sessional mechanisms. While substantial in number, part-time physicians accounted for only a minority of the FFS expenditures. Finally, we did not examine morbidity or mortality outcomes that may have been associated with the RADs, a far more challenging task well beyond the scope of the current study.

To meet the RAD objective of limiting physician billings to temper the need for further pro-rationing, two outcomes of the job action were necessary. First, the majority of physicians needed to have shut their practices to elective patients on RADs. This paper found that this goal was largely achieved. Second, services that would have been delivered on RADs would need to have been *permanently foregone* and not simply shifted to other days. Using a multivariable model to explain changes in FFS payments between 1997/98 and 1998/99, we found that approximately two-thirds of the expenses saved on RADs were displaced onto other days (Hanvelt et al. 2000). Thus, while physicians on the whole participated in the RAD initiative, it is likely that the potential savings to the physician services budget fell well short of the association's stated budgetary objectives.

While RADs may not have achieved the objective of reducing the need for fee pro-rationing, they likely succeeded in meeting the other goal of the action – applying pressure on the government by inconveniencing the public (but not too much; public polling data at the time suggested that support for RADs was mixed (Fong 1998)) and raising concern about "underfunding" and having to "work for free" (Fayerman 1998b). An agreement between the government and the medical association reached following the RADs saw new funds added to the budget and the abandonment of pro-rationing (BC Ministry of Health 2000).

Our case study of the job action in British Columbia is consistent with the view that withdrawal of or preventing access to services is likely successful only when certain conditions are met. These include providing ample warning to the public of impending work stoppages, ensuring that the action is perceived to pose no immediate threat to the health of patients (through continued provision of urgent/emergent care), yet at the same time causing enough inconvenience for individual patients that they bring pressure to bear on their elected officials. In addition, service withdrawals seem more likely to be successful if there are few adverse consequences to the financial health of participating physicians. It is also worth noting that this action took place against a backdrop of relative prosperity in the province and wage increases in other sectors of the economy. A RAD-style policy would be far more likely to raise the ire of the public, if it were orchestrated in circumstances of slow economic growth, high unemployment and flat or declining wage trends in other sectors and for other healthcare workers. This conflict also occurred when the incumbent government was, for a variety of reasons, losing its political support.

In sum, a confluence of favourable circumstances and minimal potential consequences appears to lie behind the remarkably high participation rate and success of the 1998/99 physician RAD policy in British Columbia. Given similar circumstances elsewhere or at other times, we would expect to find similar policies being exercised successfully by provincial medical associations.

References

Arnold, P.C. 1984. "Australian Doctors on Strike." *British Medical Journal Clinical Research Ed.* 289(6438): 175-77.

Arnold, T. 2001. "Emergency Rooms Fill Up As N.B. Doctors Strike for Second Day: Negotiations Resume." *National Post*, 10 January, p. A5.

Aro, S. and P. Hosia. 1987. "Effects of a Doctors' Strike on Primary Care Utilization in Varkaus, Finland." *Scandinavian Journal of Primary Health Care* 5(4) Suppl: 245-51.

Badgley, R.F. and S. Wolfe. 1967. *Doctors' Strike.* Toronto: Macmillan of Canada.

Barer, M.L., J. Lomas and C. Sanmartin. 2000. "Re-Minding Our Ps and Qs: Medical Cost Controls in Canada." *Health Affairs* 15(2): 216-234.

Barnoon, S., S. Carmel and T. Zalcman. 1987. "Perceived Health Damages During a Physicians' Strike in Israel." *Health Services Research* 22: 142.

B.C. Ministry of Health. 2000. "Framework Memorandum with the British Columbia Medical Association." <http://www.hlth.gov.bc.ca/msp/general/msc/mscagree.html>.

Belkin, L. 2002. "In First Such Walkout, Doctors Strike in Brooklyn." *New York Times,* 13 September, p. A1.

British Columbia Medical Association. . 1998a. "A Message to My Patients: Why Reduced Activity Days?" British Columbia Medical Association.

British Columbia Medical Association. . 1998b. "Essential Information regarding RADs [Dr. Granger R. Avery]." Vancouver: British Columbia Medical Association.

British Columbia Medical Association. 1998c. "Office Closures Possible in March: Doctors Seek Ways to Meet Government Health Care Deficit [press release]."

British Columbia Medical Association. 1998d. President's letter [Dr. Granger R. Avery]. Vancouver: British Columbia Medical Assocation.

British Columbia Medical Association. 1999. "President's letter [Dr. Jim Lane]. Vancouver, British Columbia Medical Association.

Bukovsky, I., A. Herman, D. Sherman, P. Schreyer, S. Arieli and E. Caspi. 1985. "Perinatal Outcome Following Physicians' Strike." *Israel Journal of Medical Sciences* 21(10): 804-07.

Canadian Institute for Health Information. 2001. "Full-time Equivalent Physicians (FTE) Report, Canada, 1999/2000." Ottawa, ON.

Cooper-Mahkorn, D. 1999. "German Doctors

Strike Against Health Budget Cuts." *British Medical Journal* 9 January, p. 76.

Douglas, J. and N. Balsara. 1986. "55 Percent of GPs Reject Call for Walkout." *Globe and Mail,* 13 June, p. A1.

Ellencweig, A. Y. and T. Ginat-Israeli. 1990. "Effects of the Israel Physicians' Strike on the Treatment and Outcome of Acute Appendicitis in Jerusalem." *Israeli Journal of Medical Science* 26(10): 559-63.

Fayerman, P. 1998a. "Budget 'War With Victoria' Focus of Doctors' Meeting." *Vancouver Sun,* 6 July, p. A3.

Fayerman, P. 1998b. "Doctors Step Up Pressure, Announce More Closures." *Vancouver Sun*, 21 April, p. A1-A2.

Fayerman, P. 1999. "Doctors Take Funding Case to Prime-Time TV." *Vancouver Sun,* 9 March, p. A4.

Fong, P. 1998. "Public Backs Freeze on Doctors' Pay." *Vancouver Sun,* 1 April, p. A4.

Hanvelt, R.A., R.J. Reid, D. Schneider, N. Pagliccia, K. McGrail, M.L. Barer, and R.G. Evans. 2000. "The Effects of Rationed Access Days (RADs) on Physician Fee-for-Service Payments in B.C." *Health Human Resources Unit* 00:1, 14-16. <http://www.chspr.ubc.ca/hhru/hhru00-1.pdf>.

Hurley, J. and R. Card. 1996. "Global Physician Budgets as Common-Property Resources: Some Implications for Physicians and Medical Associations." *Canadian Medical Association Journal* 154(8): 1161-68.

Iglehart, J.K. 1986. "Canada's Health Care System (Part II) " *New England Journal of Medicine* 315: 778.

James, J.J. 1979. "Impacts of the Medical Malpractice Slowdown in Los Angeles County, January 1976." *American Journal of Public Health* 69: 437-48.

Kazanjian, A., R.J. Reid, N. Pagliccia, L. Apland and L. Wood. 2000. "Issues in Physician Resources Planning in B.C.: Key Determinants of Supply and Distribution, 1991-96." *Health Human Resources Unit* 2000:2. Vancouver, B.C., Centre for Health Services and Policy Research. <http://www.chspr.ubc.ca//hhru/pdf/hhru00-2pgme.pdf>.

Kravitz, R.L., M.F. Shapiro, L.S. Linn and E.S. Sivarajan-Froelicher. 1989. "Risk Factors Associated With Participation in the Ontario, Canada Doctors' Strike." *American Journal of Public Health* 79(9): 1227-33.

Kravitz, R.L., L. Linn, N. Tennant, E. Atkins and B. Zawaki. 1990. "To Strike or Not to Strike: Housestaff Attitudes and Behaviours During a Hospital Work Action." *Western Journal of Medicine* 153: 515.

Malloch, J.A. 1992. "Resident Hospital Doctors Strike." *New Zealand Medical Journal* 105(931): 135.

Mechanic, D. and R.G. Faitch. 1970. "Doctors in Revolt: the Crisis in the English National Health Service." *Medical Care* 8: 442.

Medicare Protection Act. RSBC 1996. 286.

Meslin, E.M. 1987. "The Moral Costs of the Ontario Physicians' Strike." *Hastings Center Report* 17(4): 11-14.

Pemberton, K. 1998a. "Doctors Shut Offices in a New Set of Closures." *Vancouver Sun*, 6 December, p. B4.

Pemberton, K. 1998b. "Doctors Protest Crimps System: Nearly 7,000 Physicians Will Close Offices Today to Protest Funding." *Vancouver Sun,* 6 March, p. A1-A2.

Rich, P. and J. McAllister. 1996. "Ontario Doctors Dig In." *Medical Post,* p. 1.

Romer, M.I. 1981. "More Data on Postsurgical Deaths Related to the 1976 Los Angeles Doctor Slowdown." *Social Science and Medicine* 15: 161.

Ron, A., D. Karsh, A. Zipkin and M. Kahan. 1985. "Use of Medical Care by Children During a Physicians' Strike." *Medical Care* 23(6): 789-98.

Sachdev, P.S. 1986a. "Doctors Strike: an Ethical Justification." *New Zealand Medical Journal* 99: 412-14.

Sachdev, P.S. 1986b. "Ethical Issues of a Doctors' Strike." *Journal of Medical Ethics* 12(1): 53.

Sibbald, B. 1998. "In Your Face: A New Wave of Militant Doctors Lashes Out." *Canadian Medical Association Journal* 158: 1505-09.

Silversides, A. 1986. "Nonparticipation by Many MDs Will Likely Soften the Blow of Walkout." *Globe and Mail,* 6 December, p. A1.

Slater, P.E., P. Ever-Hadani, Y. Adler and A.Y. Ellencweig. 1984. "Emergency Department Utilization during a Doctors' Strike." *American Journal of Emergency Medicine* 2(6): 486-90.

Slater, P.E. and P. Ever-Haddani. 1983. "Mortality in Jerusalem during the 1983 Doctors' Strike." *Lancet* 3: 1306.

Steffenhagen, J. 1999. "29 Doctors Break with BCMA over Reduced-Activity Days." *Vancouver Sun,* 13 March, p. A5.

Stevenson, M.H., A.P. Williams and E. Vayda. 1988. "Medical Politics and Canadian Medicare: Professional Response to the Canada Health Act." *Milbank Quarterly* 66(1): 65-104.

Walker, A.G. 2001. "Nfld. MDs Resign En Masse from Government-Related Committees." *Medical Post.*

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Provider's Perspective

The Doctor is Out: An Influence on Government Policy

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This reasonably technical article outlines how the authors were able to determine participation rates of B.C. physicians in the "Rationed Access Day" or RAD protest action initiated by the British Columbia Medical Association (BCMA) in 1998/1999. The action was initiated by BCMA to draw public attention to physician billing caps and ostensively to save money for the payment plan. The article suggests a costing methodology based on a comparison of billings by 4,131 physicians on particular days before (normal billing period) and during the RAD action. It presents a convincing argument that the vast majority of the physicians studied (84%) participated on at least 10 of the potential 20 RADs identified by BCMA. The high degree of participation was thought to be the result of the mitigation of patient inconvenience allowed by scheduling RADs. While the RAD process did not appear to have resulted in savings to the plan (since work seemed to been shifted to other time periods), it was deemed to have been successful in that the BCMA was able to get the B.C. government to increase funding for BCMA members and to change policy on how billing caps were administered. The study concludes that, given the success of this form of protest, other medical associations may look to implementing a similar rationing action as a way of influencing government policy.

Provider's Perspective

The Doctor is Out: Will Other Professions Follow this Lead?

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The paper by Reid et al. will be of interest to healthcare managers as it indicates how B.C. physicians successfully withdrew elective services, under specific conditions, to protest continued pro-ration of fees by government, to offset total physician billings exceeding a fixed-budget cap. The end result was an agreement that saw new funds added to the budget and the government's abandonment of pro-rationing. Will this type of protest now be followed in other provinces and by other professions? Healthcare managers would be wise to initiate plans which address this form of protest. While the process described would be deemed successful from the physicians, perspective, it would be of interest to know (i) the patient's perspective, including mortality or morbidity outcomes; and (ii) the overall economic impact on the province, including the financial impact on emergency departments during the rationing of services.