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Changes Over Time in Attitudes Towards Health Care Policy Options

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ABSTRACT

Objective: To obtain information from a cohort of physicians about their attitudes toward current health policy options and initiatives and compare their current attitudes with their attitudes in 1993.

Design: Mailed surveys in 1993 and 1999.

Participants: Family medicine residency-trained physicians who achieved certification between 1989 and 1991 and resided in Ontario in 1993.

Main Outcome Measures: Extent of approval of health policy options and initiatives and extent of agreement with statements about the health care system.

Results: Over 84% of physicians responding in 1993 responded in 1999, although the overall response rate in 1999 was lower (53%). Although the group expressed approval (80%) for the use of evidence-based medicine, less than forty percent approved of other policy options and initiatives. They were particularly disapproving of changes in physician resource policies and in the acute care sector and of possible primary care reforms. Significantly greater disapproval was seen in 1999 for most policy initiatives first inquired about in 1993. However, in 1999 significantly fewer agreed than in 1993 that some government policies (eg. regarding physician income caps) result in negative outcomes.

Conclusion: Many of the policy initiatives that have occurred since 1993 to restructure the health care system and limit the growth of the physician supply were initially viewed favourably by these physicians and are now viewed unfavourably, probably because of their impact on these physicians and their patients. The level of disapproval of proposed initiatives to reform primary care suggest reform should be approached cautiously and in consultation with the profession.

Key words: physician attitudes; health policy; health care reform

INTRODUCTION

The1990s have seen extensive changes in physician human resource policies and health care policies that affect the practice of Canadian physicians. Since the Federal/Provincial/ Territorial Ministries of Health issued their communique on medical human resources in 1992,[1] medical school enrollment and residency program places have been curtailed. Containment of the cost to governments of physician incomes has also been a policy priority although how this policy has been achieved has varied across the provinces and has changed somewhat over time.[2] Constraining physicians' incomes has not only led to little increase in professional income during this period, it has also made it more difficult for family physicians to obtain needed consultations for patients with specialists,[3] some of whom have sought to reduce their workload to avoid income penalties associated with exceeding income thresholds. In Ontario, some policy changes were aimed at expanding the types of health care providers available (nurse practitioners, midwives) and providing a common regulatory framework for all health professions.[4,5] These changes have introduced new providers into the system who may compete, at least to a minor extent, with services traditionally offered by family physicians. As their numbers grow, they could also pose an economic threat, although increased fragmentation of care may also become a problem.

There have been other important policy changes which related directly to the practice environment in which physicians work. The down-sizing of the hospital infrastructure has reduced the number of beds available in Ontario hospitals (a process already underway by 1993 when this cohort was first studied [6]). During the past several years hospitals have also merged and restructured their services to cope with sharp decreases in their operating budgets. Often this has involved moving more surgical procedures to short-stay (out patient) units and reducing the length of stay of hospital patients; thus, patients are discharged home earlier. At the same time, Ontario has made major changes in home care and long term care delivery, which are now coordinated through Community Care Access Centres (CCACs). CCACs' responsibilities include home-based health and support services for patients discharged from hospital.[7]

Canada has continued to experience an out-migration of physicians during the 1990s. However, the nature of that outflow has changed. In previous decades, specialist were more likely to leave the country than primary care physicians. This situation reversed itself in the 1990s and recently more primary care physicians have moved.[8] In part, this may be seen as a product of both Canadian and American health care policy changes. American policy, which promotes "managed care" has led to extensive recruitment of broadly trained, Canadian primary care physicians.[9] In Ontario, the rate of out-migration of primary care physicians has been higher than the national

average. In 1993, there were 99 GP/FPs per 100,000 population while in 1997, the last year for which data are available, this had fallen to 86/100,000 population.[8]

This paper examines how a cohort of physicians who were certified in family medicine between 1989 and 1991 has responded to the policy environment and examines the extent to which their attitudes toward policy initiatives and options has changed since 1993, when they were first surveyed.[10]

METHODS

Sample

Members of the cohort were identified in 1993 by the College of Family Physicians of Canada (CFPC). To be eligible physicians must have resided in Ontario in 1993 and been certified by the CFPC between 1989 and 1991 after completing a residency in family medicine.

Questionnaire

The questionnaire sought information about a wide range of topics including the physicians' current status in medicine, their practice and changes they had made since 1993. All physicians were asked to provide updated demographic information about themselves, their hours of professional work in 1999 and their professional income. Of interest in the analysis reported here is that physicians were asked the extent of their approval of 18 current or possible policy options. Of these, 12 policies had been enquired about in the questionnaire they received in 1993.[10] The remaining six items referred to policy options that have become important in the intervening years (e.g., use of evidence-based medicine, capitation payment, rostering of patients to family physicians or primary care agencies, returning hospitalized patients to the community earlier). In both questionnaires, a five point response scale (1 = strongly disapprove to 5 = strongly approve) was used. Physicians were asked to express extent their (1 = strongly disagree to 5 = strongly agree) with eight statements about the health care system, three of which were also posed in 1993. Finally, their overall assessment of the health care system was captured on a 5 point quality scale. The test/retest reliability for the policy items used in 1993 had been high. Several of the statements about the health care system had been used in other surveys.[10,11]

Survey implementation

The survey was fielded in January of 1999 after approval by the local Research Ethics Committee. A card expressing thanks for physicians' participation or reminding them to reply was sent 10 days later. Two subsequent mailings were sent to non-respondents. Data collection closed in June 1999. Respondents were informed that their current responses would be linked to their previous replies.

Data handling and analysis

Data were entered with a data-base using the Statistical Program for the Social Sciences (SPSS, version 9.0) and audited. Logistic regression was used to examine the characteristics of respondents and non-respondents. Descriptive statistics were used to describe the respondent group. Bivariate associates were examined using χ^2 analysis for non-parametric data and t - test

for parametric data. Where appropriate, McNemar's Chi Square were used. Associations of $p \leq 0.01$ were regarded as significant while associations between 0.05 and 0.01 were considered interesting.

RESULTS

Response Rate

Two hundred and ninety-three physicians responded in 1999 (response rate 53%). We could not link one respondent to the previous survey as identifying information was missing. When respondents to the 1999 survey were compared with non-respondents on demographic variables, no difference was seen between these groups' gender, location in 1999, year of certification, or medical school of graduation. However, members of the cohort who responded to the 1993 survey were significantly more likely to also respond in 1999. Nearly 85% (N = 247) of those who responded in 1999 also responded in 1993.

Respondent Characteristics

Of the respondents in 1999, nearly 57% were female physicians. Most respondents (91%) had remained in family medicine while about 8% had retrained in a medical specialty and 3 (1%) had left medical practice. Most family physicians were in private group practice (65%); 10% were employed by Community Health Centres or had capitated practices (Health Service Organizations), while 23% were in solo practice. Fifty-nine percent of family physicians earned 95% or more of their professional income from fee-for-service billings. Only 7% of the cohort were located in rural areas of Canada; 87% were in urban centres, while 6% of respondents had left the country. Almost 88% of respondents were married. The median net professional income for the group was between $100,000 - $124,999, with women reporting a somewhat lower income than men. As a group, female physicians also reported working fewer hours professionally than male cohort members.

Attitudes toward heath policies and policy options

As seen in Table 2, the only health care policy examined that was favoured by these physicians in 1999 was the use of evidence-based medicine in practice (80% approve or strongly approve). All of the other policies and policy options were approved of by less than 40% of the respondents. The greatest disapproval is found for policies related to physician resources, particularly reduction of the number of postgraduate training positions (78% disapprove) to constraints on resources in the acute care setting (61% disapprove) and capitation payments for patients (54%).

While both men and women approved of the use of evidence-based medicine, women showed somewhat greater approval (See Table 3). They were also more approving than men of the regular review of physicians' practices conducted by the licensing body in Ontario. They were

less likely than men to disapprove of rostering of patients to primary care organizations although the majority of both male and female physicians disapprove. Compelling new medical graduates to practise in underserviced areas was the only policy option disapproved of more by female physicians than males.

Physicians residing outside Canada in 1999 differed in their attitudes from those who stayed in the country for only three health care policy options (Table 3). They were significantly more approving of regulations requiring re-certification of physicians every ten years (13% disapprove compared to 41% remaining in Canada). They were somewhat more favourably disposed to capitation payments for patients (31% disapprove compared to 56% of those in Canada) and to legislation to increase the range of services that can be delivered by other qualified health professionals (38% disapprove compared to 55% of those in Canada).

To examine differences in attitude by payment and practice structure, we created five groups based on type of practice and whether or not they billed predominantly (95% or more of billings) through the fee for service mechanism. Practice information was available only for physicians who had remained family physicians, which reduced the number involved in this analysis by practice type. Three differences seen were between physicians working in Health Services Organizations and Community Health Centres (HSOs/CHCs) and other physicians. HSO/CHC physicians were more approving of legislation increasing the range of health services which can be delivered by other health professionals and of providing financial incentives to physicians to delegate routine primary care to them. They also approved of performance monitoring by the College of Physicians and Surgeons more than other physicians. Physicians in solo practice were least approving of rostering of patients to family physicians.

Changes in attitudes towards health care policies and options

Physicians were significantly less likely to approve of various health care policies and options in 1999 than they were in 1993 (Table 4). Of the twelve policy options considered by respondents to both surveys, no significant change in attitudes occurred to only two policies: in both time periods, a minority of respondents approved of licensing of midwives to conduct uncomplicated births while the majority disapproved of contracts for medical students obliging them to practise in under serviced areas for a fixed period beyond graduation. (See Table 4). Less disapproval was seen for levying financial penalties on new graduates who begin to practice in overserviced areas, although 1999 disapproval (58%) remains high; in 1993, 69% disapproved. For the nine remaining policy initiatives considered, more physicians disapproved of the policy in 1999 than had disapproved in 1993.

The most dramatic shift in attitude occurred regarding reduction in medical school enrolments. In 1993, the majority, 52% approved of this policy while in 1999 only 9% approved. A similar, but less extreme, shift in approval was seen in the policy to apply stricter immigration requirements to limit further the number of foreign doctors being licensed in Canada (60% in 1993; 21% in 1999). Interestingly, attitudes toward an established policy in Ontario, regular review of physicians' practices by the licensing body, also became much more negative. In 1993, over half (55%) had approved of this policy while only 35% did in 1999. Another policy, the decision to reduce postgraduate training positions, which was already unpopular among the cohort, saw a large reduction in approval relative to previous support. In 1999, only 3.1% approve of it compared to 9.5% in 1993.

Perceptions of the current health care system and change over time in perception.

Respondents expressed strong agreement with statements suggesting that patients had less access to health care in 1999 than in 1993 and that waiting times had increased to obtain services for their patients, including specialist referrals (see Table 5). Over 91% agreed that current government policies have made practice more stressful. Few significant differences were noted by physician characteristics.

Three statements regarding the role of government in health care delivery system made in 1993 were repeated in 1999 (see Table 6) and strength of agreement or disagreement with them was sought. Respondents were significantly less likely to think in 1999 that income caps result in a deterioration of the quality of care than they were in 1993. Although 60% agreed or strongly agreed that medicare has reduced the individual's personal responsibility for health, nearly 81% had done so in 1993. More agreed in 1999 (43%) than in 1993 (30%) that government has a role to play in the distribution of physician resources, although the majority were undecided or disagreed that the government should have a role.

Overall assessment of the Ontario health care system

In both 1993 and 1999, these physicians were asked to give their overall assessment of the health care system in Ontario, using a five point (excellent to poor) quality scale. In 1993, 45% had rated the health care system as very good or excellent. This percentage fell dramatically in 1999 when less than 15% of respondents assigned the health care system a very good rating. (See Table 7.) This downward shift in their assessment is seen both when considering the responses of all survey respondents in each time period and the smaller, matched pair group that responded in both time periods.

DISCUSSION

Cohort members are generally less approving of current and planned heath care policy initiatives than they were in 1993. Particularly, they are concerned about changes in physician resource policies, constraints on the acute care sector and possible primary care reforms. Interestingly, although 72% had supported shifting resources from the acute care sector into preventive care and health promotion in 1993,[10] in 1999, 73% disapproved of constraining resources in the acute care sector. This suggests that it is not the policy direction itself but the way that the policy has been implemented and the extent of the constraints imposed that are the source of their disapproval. Respondents report concern about the results of this policy initiative which they feel has led to increasing difficulty in accessing services for their patients and made practice more stressful. Most agree that hospital beds are now more difficult to find, that it takes longer to obtain services for patients and that patients must wait longer to see specialists for needed services. Only 21% approved of returning hospitalized patients to the community earlier, another impact of acute care sector reform.

Dramatic shifts have occurred in respondents' attitudes towards physician resource policies that were initiated. In 1993, before the impact of reductions in medical school enrolments were known, about half approved of reducing medical school enrolments; nearly a third were neutral while less than 20% disapproved.[10] In 1999, this picture reversed itself with half disapproving, about one third neutral and less than 10% approving the reductions. Similar reversals in attitude are seen regarding stricter immigration requirements on foreign physicians. The growing perceived shortage of primary care physicians may have informed these attitudes. In 1993, over-supply of physicians[12] was still a concern and many cohort members were struggling to build their practices.[13] They may now be in communities where unmet demand for physician resources is an issue.[14]

Perhaps because of their experience with policy changes in physician resources and the acute care sector, these physicians now also disapprove of proposed changes in the primary care sector. One quarter or less of the respondents approved of capitation payments for patients, delegation of more routine primary care tasks to other qualified health professionals and rostering of patients to family physicians or primary health care agencies, all key elements of proposed primary care reforms. Other surveys have reported greater support for primary care reform, particularly among family physicians.[15] It is not clear whether the differences observed are a function of how the questions were posed or the increasing concern that reforms to date have not gone smoothly and have had an adverse impact on both patients and the practice environment.[16,17]

Less attitude change is seen toward policies that would restrict physician location choice. Respondents continue to disapprove of moves to oblige medical students to practise in under-serviced areas for a fixed period of time beyond graduation. Women remain significantly more opposed to this policy option than men. However, in 1999, fewer physicians disapprove of financial penalties for new graduates who begin to practice in overserviced areas and a difference by gender is no longer observed. Whether this reflects a change in attitude or simply that fewer "over-supplied" areas now exist is not known. Continuing gender differences regarding attitudes towards constraints on practice location decisions are probably linked to the fact that female physicians are more likely to have spouses/partners who are full-time participants in the labour-force than males. As well, the women are more likely to report that they would only relocate if their spouse/partner's career needs are met.[18]

The attitudes expressed by physicians differed somewhat by the practice decisions that they had made, whether the decision was about migration, style of practice or method of remuneration. It is tempting to think that exposure to different practice environments leads to differing attitudes (eg. those moving to the U.S. are more approving of the use of other qualified health personnel and rostering because they have experienced working in health maintenance organizations). However, it is equally plausible that the attitudes of the physician influenced the choices that they made. Thus, solo practitioners were less approving of peer review by the College of Physicians and Surgeons of Ontario, a type of peer review that occurs normally within a group. Physicians who have already chosen to work in HSO/CHCs where other qualified health professionals share patient care responsibilities were much more supportive of increasing the range of health services other qualified health professionals deliver. Unfortunately, our study cannot help us unravel this problem. The cohort is not large enough to examine such issues. When they were first studied in 1993, many had already made basic practice decisions.

This study has several limitations. First, although intensive efforts were made to follow the cohort, only 53% responded. Despite this, no discernable biases in response (by gender, school of graduation, year of certification or location) were found. The attitudes of those responding in both 1993 and 1999 were similar to the overall group of respondents in 1993 and 1999. We should also note that possible reasons for attitude change discussed are mainly inferred only primary care from the data rather than directly asked of the respondents. Our cohort includes physicians who sought certification in Ontario.

Although the strong disapproval of many health policy initiatives and options found in this survey may be a function of increased naysaying or gradual disillusionment of a group of

physicians who were earlier in their medical careers in 1993, we think this is unlikely to be the sole cause of the increasing disapproval seen toward health care policy initiatives. Some attitude changes reflect greater acceptance of governments' roles in health care policy. These physicians are more likely to agree in 1999 that government has a role to play in determining the distribution of physicians resources but they did not approve of the physician resource policies that had been developed. Fewer agreed in 1999 than in 1993 that physician income caps result in a deterioration of the quality of care or that medicare reduces the individual's sense of responsibility for health. Further, the physicians strongly approved of evidence based medicine, an area in which the profession itself has played a leading role.[19] The attitudes currently held toward health care policy issues are similar to those recently reported in another survey of primary care physicians in Ontario.[15] Their views on the health care system in Ontario are also shared by other groups.

CONCLUSION

In our paper about these physicians' attitudes in 1993, we noted "currently there seems to be a reservoir of goodwill and willingness to consider changes in the health care delivery system".[10,p.2111] Unfortunately, a little more than five years later, willingness to consider changes in the health care system has decreased markedly. The erosion of physicians' approval of the health policy initiatives, proposed or undertaken, should be of concern to policy makers. Primary care reform may be much more difficult to initiate because of it. Involvement of the profession in the design and implementation of primary care reform will be important to its success.

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Table 1

Characteristics of Respondents in 1999

Respondent Characteristic	Men		Women		Total*	
	N	%	N	%	N	%
ALL RESPONDENTS	126	44.2	166	56.8	292	100
Current Practice Status						
Family Medicine	115	89.2	151	92.7	266	91.1
Medical Specialty	11	8.5	12	8.3	23	7.9
Left Medicine	3	2.2	0		3	1.0
+Type of Practice						
Group	63	59.4	92	68.7	155	64.4
Solo	32	30.2	24	17.9	56	23.3
CHC or HSO	11	10.4	18	13.4	29	10.1
+Fee for Service						
95% or more of income	61	54	95	63.3	156	59.3
Location						
Rural	13	10.1	7		20	6.8
Urban	109	84.5	145	89.0	254	87.0
Outside of Canada	7	5.4	11	6.7	18	6.2
Marital Status						
Married	117	91.4	136	85	253	87.8

	N	$\bar{x}$ sd	N	$\bar{x}$ sd	N	$\bar{x}$ sd
Mean Hours of Professional Activity (sd)	117	49.0 (12.4)	159	39.4 (14.3)	276	43.5 (14.3)
Median Net Professional Income	123	100,000-124,999	157	75,000-99,999	280	100,000-124,999

*** Total respondents was 293, some missing values**
+Available for family physicians only

Table 2
Extent of Approval of Health Policies and Policy Options in 1999

	Strongly disapprove or disapprove		Neutral		Strongly approve or approve		Total
	N	%	N	%	N	%	N
Use of evidence-based medicine in practice	6	2.1	51	17.8	230	80.1	287
Incentives to physicians who wish to practise in community health centres or other forms of salaried group practices	96	33.3	84	29.2	108	37.5	288
Regular review of physician's practices by the College of Physicians and Surgeons	69	24.1	117	40.9	100	35	286
Licensing of midwives to conduct uncomplicated births	87	30.4	98	34.3	101	35.3	286
Regulation requiring physician recertification every ten years	113	39.5	93	32.5	80	28.0	286
Financial incentives to groups of physicians who delegate routine primary care tasks to nurses, nurse practitioners or other qualified health personnel	140	49.1	73	25.6	72	25.3	285
Giving district health councils or regions a greater role in managing health care resources, services and personnel within their communities	113	40.4	101	36.1	66	23.6	280
Returning hospitalized patients to the community earlier	135	47.2	90	31.5	61	21.3	286
Rostering of patients to a family physician	139	48.4	86	30	62	21.6	287
Contracts for medical students obliging them to practise in under serviced areas for a fixed period after graduation	164	57.3	57	19.9	65	22.7	286
Stricter immigration requirements to limit further the number of foreign doctors being licensed in Canada	124	43.5	106	37.2	55	19.3	285
Legislation increasing the range of health services which can be delivered by other qualified health personnel	154	53.7	85	29.6	48	16.7	287
Rostering patients to primary care agencies	181	64	63	22.3	39	13.8	283
Constraining resources in the acute care setting	204	72.6	57	20.3	20	7.1	281
Reduction of the number of postgraduate training positions	222	78.2	52	18.3	10	3.5	284
Capitation payment for patients	151	54.3	91	32.7	36	12.9	278
Reduction of medical school enrolment	173	60.7	87	30.5	25	8.8	285

Table 3

Differences in Attitudes Toward Health Care Policies in 1999

		N	Strongly disapprove or disapprove %	Neutral	Strongly approve or approve %	Significance*
BY GENDER						
Use of evidence-based medicine in practice	Male	128	4.0	25.6	70.4	p= 0.001
	Female	158	0.6	11.8	87.6	
Regular review of physician's practices by the College of Physicians and Surgeons	Male	127	35.2	36.0	28.8	p=0.001
	Female	158	15.6	44.4	40.0	
Rostering of patients to primary care agencies	Male	126	71.0	13.7	15.3	p=0.009
	Female	156	58.2	29.1	12.8	
Contracts for medical students obliging them to practise in under serviced areas for a fixed period after graduation	Male	128	48.8	23.2	28.0	p=0.028
	Female	157	64.4	17.5	18.1	
BY PHYSICIAN LOCATION						
Legislation increasing the range of health services which can be delivered by other qualified health personnel	Canada	270	54.8	28.5	16.7	p=0.032
	U.S.	16	37.5	43.8	18.8	
Regulation requiring physician recertification every ten years	Canada	269	41.3	33.8	24.9	p=0.001
	U.S.	16	12.5	12.5	75.0	
Capitation payment for patients	Canada	262	55.7	32.1	12.2	p=0.020
	U.S.	16	31.3	43.8	25.0	

* χ^2_4 is based on full five point approval scale

Table 3, continued.....

			N	Disapprove %	Neutral %	Approve %	Significance**
BY PRACTICE TYPE AND EXTENT OF FEE-FOR-SERVICE (ffs) BILLING							
Financial incentives to groups of physicians who delegate routine primary care tasks to nurses, nurse practitioners or other qualified health personnel	group	95%+ffs	103	56.3	24.3	19.4	
	group	<95%ffs	53	47.2	24.5	28.3	
	solo	95%+ffs	37	48.6	32.4	18.9	p=0.007
	solo	<95%ffs	16	50.0	37.5	12.5	
	hso/chc	<95%ffs	28	25.0	17.9	57.1	
Legislation increasing the range of health services which can be delivered by other qualified personnel	group	95%+ffs	103	56.3	32.0	11.7	
	group	<95%ffs	53	58.5	34.0	7.5	
	solo	95%+ffs	39	59.0	23.1	17.9	p=0.006
	solo	<95%ffs	16	50.0	31.3	18.8	
	hso/chc	<95%ffs	28	28.6	28.6	42.9	
Regular review of physicians' practices by the College of Physicians and Surgeons	group	95%+ffs	102	23.5	43.1	33.3	
	group	<95%ffs	53	32.1	35.8	32.1	
	solo	95%+ffs	39	30.8	48.7	20.5	p=0.004
	solo	<95%ffs	16	37.5	62.5	-	
	hso/chc	<95%ffs	28	10.7	28.8	60.7	
Rostering patients to a Family physician	group	95%+ffs	102	51.0	28.4	20.6	
	group	<95%ffs	53	41.5	34.0	24.5	
	solo	95%+ffs	39	66.7	28.2	5.1	p=0.022
	solo	<95%ffs	16	43.8	50.0	6.3	
	hso/chc	<95%ffs	29	34.5	27.6	37.9	

** χ^2_8 was based on a collapse, to a 3 point approval scale to avoid small cell size

Table 4

Comparison of Attitudes in 1993 and 1999 Toward Current and Possible Health Care Policy Initiatives

	N		Strongly disapprove or disapprove %	Neutral %	Strongly approve or approve %	Significance*
Licensing of midwives to conduct uncomplicated births	235	1999	30.2	34.5	35.3	ns
		1993	30.2	28.9	40.9	
Financial incentives to groups of physicians who delegate routine primary care tasks to nurses, nurse practitioners or other qualified health personnel	232	1999	49.1	25.4	25.4	0.002
		1993	35.4	29.3	35.1	
Legislation increasing the range of health services which can be delivered by other qualified health personnel	234	1999	55.6	30.3	14.1	0.000
		1993	37.1	34.2	28.6	
Regular review of physician's practices by the College of Physicians and Surgeons	231	1999	26.0	39.4	34.7	0.000
		1993	13.4	31.6	55.0	
Regulation requiring physician recertification every ten years	234	1999	40.2	32.5	27.3	0.000
		1993	31.2	30.3	38.5	
Giving district health councils or regions a greater role in managing health care resources, services and personnel within their communities	228	1999	40.8	36.4	22.8	0.000
		1993	26.3	36.0	37.7	
Reduction of medical school enrolment	232	1999	59.5	31.5	9.1	0.000
		1993	16.3	31.9	51.7	
Stricter immigration requirements to limit further the number of foreign doctors being licensed in Canada	231	1999	42.4	36.4	21.3	0.000
		1993	17.4	22.9	59.8	
Contracts for medical students obliging them to practise in under serviced areas for a fixed period after graduation	231	1999	54.5	21.6	23.8	ns
		1993	58.5	20.8	20.8	
Financial penalties to medical school graduates who begin practice in over serviced areas	233	1999	57.5	22.3	19.2	0.000
		1993	68.7	20.2	10.1	
Reduction of the number of postgraduate training positions	231	1999	78.8	18.2	3.1	0.000
		1993	69.7	20.8	9.5	
Incentives to physicians who wish to practise in community health centres or other forms of salaried group practices	233	1999	31.8	30.9	37.3	0.000
		1993	19.3	29.6	51.1	

* McNemar's chi square

Table 5

Attitudes Towards in the Health Care System and Health Care Delivery in 1999

	Strongly disagree or disagree		Neutral		Strongly agree or agree		Total
	N	%	N	%	N	%	N
Hospital beds are more difficulty to find for patients than in 1993	5	1.8	16	5.6	263	92.6	284
Current government policies have made practice more stressful	6	2.1	19	6.7	260	91.2	285
Health care cuts have decreased patients' access to care	11	3.9	22	7.7	251	88.4	284
It takes longer to obtain services for patients than in 1993	6	2.1	27	9.5	250	88.3	283
Patients must wait longer now to see specialists for needed services than in 1993	4	1.4	29	10.3	249	88.3	282
Medicare has reduced the individual's personal sense of responsibility for health	50	17.5	70	24.5	166	58.0	286
Physician income caps result in a deterioration of the quality of care	93	32.9	65	23.0	125	44.2	283
Government has a role to play in determining distribution of physician resources	70	24.7	97	34.3	116	41.0	283

Table 6

Change Between 1993 and 1999 in Physicians' Perceptions of Health Care System

	N		Disagree or strongly disagree %	Neutral %	Agree or strongly agree %	Significance*
Government has a role to play in determining distribution of physician resources	234	1999	26.1	31.2	42.7	0.016
		1993	25.6	44.0	30.4	
Medicare has reduced the individual's personal sense of responsibility for health	236	1999	15.7	24.2	60.2	<0.001
		1993	6.4	12.7	80.9	
Physician income caps result in a deterioration of the quality of care	234	1999	32.9	20.9	46.2	<0.001
		1993	20.1	24.8	65.2	

* McNemar's chi square

Table 7

Overall Assessment of the Health Care System in Ontario in 1993 and 1999

	Matched Pairs * N = 229				All			
	1993		1999		1993 (N=384)		1999 (N=274)	
	N	%	N	%	N	%	N	%
Poor	1	.4	9	3.9	3	0.8	11	4.0
Fair	18	7.9	74	32.2	40	10.4	90	32.8
Good	102	44.5	113	49.1	172	44.8	133	48.5
Very Good	105	45.0	34	14.8	164	42.7	40	14.6
Excellent	3	1.3	0		5	1.3	0	

* McNemar's Chi square done on collapsed (3 point) scale as counts in extreme cells were low. Difference between years is significant, $p < 0.001$ (binominal distribution used).