Primary Care Physicians' Views on Access and Health Care Reform: The Situation in North Carolina

Peter S. Millard, MD, Thomas R. Konrad, PhD, Adam Goldstein, MD, and Jane Stein, MS
Chapel Hill, North Carolina

Background. This cross-sectional study assessed physicians' satisfaction with the current insurance-based reimbursement system and preferences for the two most frequently discussed health care reform proposals, and estimated the association between demographic and practice characteristics and attitudes toward health policy issues and reform plans.

Methods. A random sample of 300 physicians was drawn from state licensure files of general practitioners, family physicians, and pediatricians practicing in North Carolina. All sample physicians were sent a schematic outline of the two major health reform alternatives and a 1-page self-administered questionnaire to determine their attitudes toward the current health care system and their preferences for health reform alternatives.

Results. Sixty-nine percent of physicians responded to the survey. The responses indicated dissatisfaction with the current system and strong beliefs that access to care is inadequate in this diverse state with a large poor and rural population. Nearly one third of the physicians reported having insufficient information to choose between plans. Among physicians expressing a preference, 37% preferred managed competition, 38% preferred continuing the current system, and 25% preferred a single-payer system.

Conclusions. A uniform opinion about health care policy is a thing of the past for American medicine. Because terms used in the health reform debate (especially "managed competition") are ambiguous and set in the context of an increasingly diverse medical profession, no single direction of health reform (much less a specific plan) secures widespread understanding or support from a large proportion of physicians. None of the plans will please all of the doctors all of the time.

Key words. Health care accessibility; health policy; insurance, health, reimbursement; physician's practice patterns; North Carolina. *(J Fam Pract 1993; 37:439-444)*

The last several years have witnessed major ongoing discussions of health care reform nationally and in many states. Health care professionals, economists, and legislators have proposed a myriad of solutions to the problem of inadequate access to basic health care for millions of Americans who are uninsured or underinsured. The two most frequently discussed health care reform plans are generally recognized as a managed competition approach[1] and a universal single-payer system.[2] Surveys revealing strong public dissatisfaction with the current health care system illustrate that the public, while divided in its preferences for health care reform, generally favors a single-payer, Canadian-style system.[3] When confronted with statements challenging a particular health reform scheme, however, support weakens, reflecting public apprehension about plans that appear complex and costly.

The public may assume that physicians grasp the merits of various health care reform plans. After all, hundreds of articles on health care reform have appeared in medical journals across the country. The imperative for physician input to health care reform is particularly high as physicians will need to uphold a new set of regulations under a new system while maintaining a focus on their patients' best interests.

Submitted July 30, 1993.

From the Department of Family Medicine (P.S.M., A.G.), the Cecil G. Sheps Center for Health Services Research (P.S.M., T.R.K., J.S.), and the Department of Social Medicine and Program on Health Professions and Primary Care (T.R.K.), University of North Carolina at Chapel Hill. Requests for reprints should be addressed to Thomas R. Konrad, PhD, Cecil G. Sheps Center for Health Services Research, CB #7590, 725 Airport Rd, 2nd Floor, University of North Carolina, Chapel Hill, NC 27599-7590.

© 1993 Appleton & Lange
ISSN 0094-3509

Despite the importance of physicians to health care reform efforts, their opinions about the major health care reform proposals have received little attention.[4] The extent to which physicians feel they understand the major health care reform proposals is also unknown. The objectives of this study were (1) to assess physicians' level of satisfaction with the current insurance-based reimbursement system and to determine their knowledge about and preferences regarding the two most frequently discussed health care reform proposals: managed competition and a single-payer system; and (2) to measure the association of demographic and practice characteristics with preferences for health policy reform alternatives.

We hypothesized that no clear-cut physician preference for a health care reform scheme would emerge because of the tremendous diversity among practicing physicians by specialty, income, job location, job type, and organized professional interests. We also hypothesized that dissatisfaction with the current system would be high and that support for the current multipayer system would be strongest among those physicians who were well established in practice and who felt that access to care was not a major problem. Finally, because a single-payer proposal is generally thought to be a greater departure from the current system than is managed competition, we expected that physicians who were dissatisfied with the current system would be more likely to favor a single-payer plan.

Methods

We obtained the names, addresses, and demographic and practice characteristics of North Carolina's 2824 active family physicians, general practitioners, and pediatricians from the North Carolina Board of Medical Examiners. The study population consisted of a random sample of 300 practitioners (200 family physicians and general practitioners and 100 pediatricians) drawn from this file.

A 1-page mail survey questionnaire was sent to the sample physicians in March 1993 along with a 1-page document containing a cover letter from the authors (P.S.M., T.R.K.) and a simplified schematic drawing and summary (Table 1) comparing the two major reform plans. Two additional mailings were sent to nonrespondents; data collection was complete by early May 1993. Physicians were asked to report their method of compensation (ie, primarily salary or fee-for-service); the proportion of their patients participating in a prepaid plan or health maintenance organization (HMO); the degree of satisfaction they felt with the current insurance-based system; their perceptions of the adequacy of access to health care in North Carolina; and their opinion of a Canadian-style single-payer health plan, a multipayer system of managed competition, and the current multipayer system. Finally, we asked respondents to rate each of the three alternatives according to their own preference for health care reform. Practice location zip codes, available from the licensure file, were matched to census data to determine whether physicians were practicing in a county within a metropolitan statistical area (MSA) or in a federally designated primary medical care health professional shortage area (HPSA).[5]

Cross-tabulations of predictor variables with physicians' attitudes toward the current system and preferences for each alternative plan were constructed. Mantel-Haenszel chi-square tests and Wilcoxon two-sample tests assessed the association between physician characteristics and attitudes about the health care system and choices of health care plans. Inspection of the magnitude and direction of the bivariate relationships between predictor and outcome variables guided the construction of multivariate models designed to explain differential support for each of the three plans. Separate logistic regression models were employed to assess predictors of preference for each of three options. Candidate predictor variables for use in the models included dichotomous representations of specialty; physician demographic characteristics (age, sex, race); practice location (MSA vs non-MSA; HPSA vs non-HPSA); mode of practice (salaried vs fee-for-service, low vs high proportions of prepaid practice); and attitudes (satisfaction with the current health system and belief about the adequacy of access to care).

Results

Of 229 survey questionnaires returned, 22 were unusable (ie, evidenced retirement, outmigration, death, or discontinuance of primary care medicine; or were returned by the post office as undeliverable). Usable questionnaires returned by 207 yielded an overall response rate of 69%. Not every respondent answered every question. Comparable response rates were obtained from family and general practitioners (71%) and pediatricians (66%). There was no evidence of response bias by specialty, sex, race, or practice location characteristics. In North Carolina, pediatricians are significantly more likely than family physicians and general practitioners to be female and salaried and have a greater proportion of patients participating in prepaid plans (Table 2).

One hundred thirty-nine of the respondents (69%) were either strongly or moderately dissatisfied with the current insurance-based system, and 154 (76%) felt that access to care was not adequate in North Carolina. We examined zero order relationships between the predictor

Table 1. Comparison of Managed Competition and Single-Payer Health Care Plans

Question	Single Payer	Managed Competition
Who provides the overall management?	A single public entity.	Insurance companies.
On what basis are providers employed?	No cooperative arrangements. Providers can belong to a group practice, HMO or clinic or hospital staff, or be self-employed.	Regional cooperative arrangements among physicians, hospitals, and insurers (provider networks). Providers can belong to a group practice, HMO or clinic or hospital staff, or be self-employed.
How do patients get a provider?	Patient choice.	Employer or group contracts with provider.
Will everyone be served?	Everyone will have coverage. Access depends on presence of providers. No exclusions for any reason.	Everyone will have coverage. Access depends on presence of providers. May not be cost-effective for insurers to cover rural or inner-city areas. No exclusions for any reason.
How are prices set?	Possibly negotiations between government and regional organizations of providers.	Negotiations between insurance companies and providers.
How does the system get paid for?	Many options, mostly taxes: payroll, income, sales, combination of several. Generally includes global budgeting.	Plans purchased by employers, individuals. Large employers can opt out. Public funding to cover unemployed. A tax-supported system is also possible.
How will quality of care be measured?	Undetermined.	Insurance companies responsible. State will set standards and measure quality. Results will be available to consumers.
How will Medicaid and Medicare relate to the plan?	Medicaid and Medicare both folded in.	Medicaid probably folded in with federal support. Medicare may or may not be folded in.
What cost savings are anticipated?	GAO: $67 billion saved on administrative costs nationally in year 1; with universal coverage, $3 billion will be saved immediately.	Not clear. Supporters assume that competition for an area and profit motive for insurance companies will ensure low costs. May be an initial increase in cost.
How will expenditures be controlled?	The government will negotiate with provider organizations. Current Medicare administrative costs are about 2.2%. Canada: mandated cap on expenditures; annual global budgets or capitation.	Insurers will negotiate prices with providers. Competition key to control of expenditures. Current insurance administrative costs average about 14%. May or may not be a mandated cap on expenditures.

HMO denotes health maintenance organization; GAO, General Accounting Office.

variables and the two attitude variables; only mode of payment was significantly associated with attitude. Physicians who were compensated primarily on a fee-for-service basis were more likely to be satisfied with the current system and to believe that access to care was adequate. There was a nonsignificant trend for women physicians and older physicians to be more dissatisfied with the current system and to believe that access to care was not adequate. Despite the fact that all physicians in the survey were presented with a schematic outline of the plans, 15 pediatricians (23%) and 46 family physicians and general practitioners (33%) stated that they had insufficient information to judge the merit of a single-payer plan. Even higher proportions (20 pediatricians [31%] and 51 family physicians and general practitioners [36%]) felt that they lacked the necessary information to judge the merit of a managed competition plan.

The survey asked physicians to rank their preference among the two alternatives and the current system. Physicians were deeply divided on their first preference for health care reform. Of the 207 responding physicians, 189 indicated a preference; of those 189, 70 (37%) favored managed competition, 71 (38%) favored retaining the current system, and 48 (25%) favored a single-payer plan. The proportion of physicians favoring each of the three plans according to specialty, demographics, practice characteristics, and attitudes is shown in Table 3. Opinions about access to and satisfaction with the current system of care directly correlated with expressed preferences for each of the alternative health plans. In addition, practice location and method of compensation were associated with preference for plan. Among those practicing outside of MSAs, 37% indicated a single-payer plan as their first choice while those working in MSAs

Table 2. Characteristics of North Carolina Primary Care Physicians

Characteristic	Family Physicians and General Practitioners	Pediatricians	P Value
Responded to survey, n (%)	141 (71)	66 (66)	NS
Age, y	46.9	44.5	NS
Male, %	79	62	≤.008
White, %	92	92	NS
Patients in prepaid plan (mean), %	17	20	≤.04
HPSA practice location, %	19	11	NS
Metropolitan practice location, %	56	65	NS
Salaried, %	35	49	≤.06

HPSA denotes health professional shortage area.

Table 4. Predictions of Preferences for Single Payer and Managed Competition Plans

Physician Characteristic	Single Payer, OR (95% CI)	Managed Competition, OR (95% CI)
Family or general practice	0.37 (0.17–0.81)	1.66 (0.81–3.4)
Age >45 y	1.53 (0.70–3.4)	0.53 (0.25–1.1)
Metropolitan practice location	0.29 (0.13–0.63)	1.5 (0.75–3.1)
Salaried	1.94 (0.88–4.3)	NA
>10% HMO	NA	2.4 (1.2–4.8)*
Dissatisfied with current system	7.88 (2.5–25.1)	1.97 (0.94–4.2)

*P <.05.

OR denotes odds ratio; CI, confidence interval; NA, not applicable; HMO, health management organization.

were most likely to prefer managed competition. Physicians on salary were more likely to choose either one of the alternatives to the current system than were physicians working under fee-for-service reimbursement.

The final logistic regression models relating predictors to preferences for each of the two alternative health plans are shown in Table 4. Family physicians and general practitioners were less likely to support a single-payer plan compared with pediatricians (OR = 0.37; 95% CI,

Table 3. Support for Alternative Systems, by Physician Category

Physician Category	Current System No. (%)	Single Payer No. (%)	Managed Competition No. (%)	P Value
General/family practice	51 (41)	26 (21)	49 (39)	NS
Pediatrics	20 (32)	22 (35)	21 (33)	
Age ≥45 y	35 (47)	21 (28)	19 (25)	NS
Age <45 y	36 (32)	27 (24)	51 (45)	
Male	57 (41)	33 (24)	50 (36)	NS
Female	14 (29)	15 (31)	20 (41)	
White	66 (38)	42 (24)	65 (38)	NS
Nonwhite	5 (31)	6 (38)	5 (31)	
HPSA practice location	13 (41)	9 (28)	10 (31)	NS
Non-HPSA practice location	58 (37)	39 (25)	60 (38)	
Metropolitan practice location	44 (40)	19 (17)	47 (43)	≤.03
Nonmetropolitan practice location	27 (34)	29 (37)	23 (29)	
Fee-for-service income	51 (46)	22 (20)	39 (35)	≤.002
On salary	17 (24)	25 (35)	30 (42)	
More than 10% prepaid	20 (31)	12 (19)	33 (51)	NS
Less than 10% prepaid	43 (41)	33 (31)	30 (28)	
Satisfied with current system	40 (64)	5 (8)	18 (29)	≤.0001
Dissatisfied	31 (25)	43 (34)	52 (41)	
Access to care adequate	28 (60)	6 (13)	13 (28)	≤.0001
Access to care inadequate	43 (30)	42 (30)	57 (40)	

HPSA denotes Health Professional Shortage Area.

0.17 to 0.81). Physicians who were dissatisfied with the current system were almost eight times more likely to support a single-payer system (OR = 7.88; 95% CI, 2.5 to 25.1), whereas those physicians practicing in an MSA were less likely to support the single-payer option compared with their rural counterparts (OR = 0.29; 95% CI, 0.13 to 0.63). Salaried physicians were 2.5 times more likely to support managed competition (OR = 2.4; 95% CI, 1.2 to 4.8). When the variable describing HMO participation was substituted in the logistic regression for the salary vs fee-for-service variable, those physicians whose patient populations were made up of more than 10% HMO patients exhibited a similar tendency to prefer managed competition. Older physicians were less supportive of a managed competition plan, but this relationship was not statistically significant (OR = 0.53; 95% CI, 0.25 to 1.1). Sex, working in an HPSA, and dissatisfaction with the current system were not significant predictors of preference for managed competition. Logistic regression models examining predictors of support for the current system (not shown) yielded no additional insights.

Discussion

North Carolina's primary care physicians are dissatisfied with the current insurance-based reimbursement system. Salaried physicians are particularly dissatisfied with the current insurance-based reimbursement system and feel that health care access is inadequate. This association may well be the reason they have chosen to work in a salaried position, rather than working in the fee-for-service sector.

Despite extensive media attention devoted to health care reform proposals, a large volume of medical literature devoted to the topic, and the availability of a 1-page enclosure describing alternative plans, almost one third of North Carolina primary care physicians reported having insufficient information to judge the two leading proposals for health reform. In this respect, physicians' assessments of the issues are not markedly different from those of the general public, who remain confused about health care issues and uncertain about how to solve the current health care crisis.[6] Similar confusion apparently exists among physicians, suggesting that health care policymakers and medical leaders face a challenging task in presenting the alternatives in an easily digestible form to busy practitioners.

North Carolina's primary care physicians' ideas about the direction health care reform should take are weakly but predictably related to their position within the current health care system. Not surprisingly, the base of support for the current multipayer insurance system, at least in the primary care sector, seems to come from those physicians who are older, work on a fee-for-service basis, and do not believe that there is a significant problem of access to care. Pediatricians, rural physicians, and those who are more dissatisfied with the current system tend to be more supportive of a single-payer plan, whereas physicians in family or general practice, those in urban areas, and those on salary prefer managed competition.

These findings demonstrate that increased physician support for a single-payer system is likely to hinge on increasing dissatisfaction with the status quo. This may arise from more contact with persons who have had limited access to care, as well as from the difficulty of securing adequate, timely remuneration from patients and numerous public or private insurers. On the other hand, physicians with greater exposure to HMOs are more likely to support the managed competition approach, and such support is not tied to dissatisfaction with the current system. From the viewpoint of physicians participating heavily in HMOs, health care reform in the direction of managed competition is not a departure from the existing system but rather an expansion of it. Further growth in HMOs and other capitated systems may increase physicians' acceptance of managed competition.

These results may not be generalizable to other states or other specialties. North Carolina has one of the largest and most diverse rural populations in the United States, including many low-income and African-American families, and has had a notably high infant mortality rate over the last decade, posing significant challenges for its health care system. Although HMOs came late to North Carolina, rapid growth in enrollment and physician participation has occurred, and the state contains at least one of each major type of HMO. There is little reason to assume, however, that North Carolina physicians differ from those in other states in their exposure to reform concepts: four different reform bills under consideration by the legislature received extensive local press coverage.

At the time of this writing, the White House Task Force on Health Reform has not yet released its recommendations. If some form of managed competition is proposed, however, the positive response of HMO-physicians to that solution suggests that such an alternative will have majority support among those physicians. On the other hand, the smaller group of physicians who support a single-payer system have a distinct profile in terms of specialty, practice location, and dissatisfaction with the status quo and its capacity to provide access to basic health care. Pediatricians have historically expressed social positions in an organized fashion[7] and typically see

larger proportions of Medicaid and underserved patients than do family physicians or general practitioners.[8] As a result, they may be more sensitive to the problem of access and more likely to favor a system where patients' health insurance is not tied to a workplace-based plan, as is found in many managed competition proposals. Rural physicians may favor a single-payer system because they are skeptical about how managed competition can ensure coverage for rural residents.[9]

Conclusions

A strong, united opinion about health care policy is a thing of the past for American medicine. With an increase of almost 30% over the last decade to more than 600,000 members, the medical profession has brought into its ranks a sizable number of women and minorities. The demographic change has been matched by a shift in the landscape of medical practice as increasing proportions of physicians are involved in various kinds of salaried practice and novel economic arrangements with hospitals, insurance carriers, and other corporate entities, leading to an unprecedented diversity of medical viewpoints and interests. Physicians practicing in diverse specialties and located in different types of communities and practice organizations experience different effects of the present health care reimbursement and delivery system. Their reactions, like those of the proverbial blind men approaching the elephant, suggest that they are describing a health care system quite different from one another's, and that they are unified only in the knowledge that it is big, incomprehensible, and liable to kick them for no predictable reason. When something as complex and unclear as the current debate about health care reform is set loose in the context of an increasingly diverse medical profession, it should be no surprise that no single direction of health care reform, much less a specific plan, will secure widespread understanding, support, or even condemnation from most of the nation's doctors.

As this study has shown, even a relatively homogenous group of primary care physicians in a single state is divided about fundamental issues like the desirability of the current health care system and its capacity to provide access to care. Hence, it seems likely that unless diverse physician groups take leadership and articulate positions, most practicing physicians will have little say in this current debate, whether that debate is played out at the state or national level.

Acknowledgments

This study was supported in part by grant No. HA-R-000016-02 from the US Office of Rural Health Policy, Department of Health and Human Services, and grant No. R01 HS 06544-0 from the Agency for Health Care Policy and Research.

The authors wish to express their appreciation to Carol Porter for programming and data management assistance, to Judy Gilmore for managing survey data collection, to Donald Taylor and Jeanne Lambrew for research assistance, to Christopher Hogan of the Physician Payment Review Commission for providing geographic data, and to Gordon DeFriese and Thomas Ricketts for providing support.

References

1. Enthoven A, Kronick R. A consumer-choice health plan for the 1990s: universal health insurance in a system designed to promote quality and economy (two parts). N Engl J Med 1989; 320:29–37, 94–101.
2. Grumbach K, Bodenheimer T, Himmelstein DU, Woolhandler S. Liberal benefits, conservative spending. The Physicians for a National Health Program proposal. JAMA 1991; 265:2549–54.
3. Blendon RJ, Donelan K. The public and the emerging debate over national health insurance. N Engl J Med 1990; 323:208–12.
4. Blendon RJ, Donelan K, Leitman R, et al. Physicians' perspectives on caring for patients in the United States, Canada, and West Germany. N Engl J Med 1993; 328:1011–6.
5. US Health Services and Resources Administration. List of designated primary medical care health professional shortage areas. Federal Register. 1992:4854–4892.
6. Kelly C, Gemeinhardt E. Public attitudes about health care reform. Stat Bull Metropol Insurance Co 1992; 73:2–10.
7. Halpern SA. American pediatrics: the social dynamics of professionalism. Berkeley: University of California Press, 1988.
8. Mitchell JB. Physician participation in Medicaid revisited. Med Care 1991; 29:645–53.
9. Kronick R, Goodman DC, Wennberg J, Wagner E. The marketplace in health care reform. The demographic limitations of managed competition. N Engl J Med 1993; 328:148–52.