The Patient Volume of Rural Primary Care Physicians

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I. Introduction
One of the most widely known facts about rural medical care is that rural residents have a lower health status level than their urban counterparts, and that for some groups within the rural population there are significant barriers to adequate care [6]. It is often assumed that the location of primary care physician practices in rural areas will fill a recognized medical service void and result in the establishment of permanent rural practices. The problem of an insufficient number of practices has been approached by attempting to alter physician locational choice, and encouraging the development of new practices through extensive community health planning and facilities construction.

The first approach equates the lack of successful medical practices with the rural health manpower shortage. The issue is to convince sufficient medical graduates to locate in rural areas, especially those who grew up in rural or small town environments.

Thus, the physician locational literature concentrates on the physician's decision making process in: (a) evaluating the rural/urban choice, and (b) deciding whether to leave or remain in rural practice [3,10,16].

Personal factors are the most important, such as compatibility with rural life and spouse.

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satisfaction, as well as previous exposure to rural practice. One study concluded that public policy could affect few of the major elements influencing physicians to locate in rural areas [10].

Other studies view successful practice development as an issue of community health planning—those factors associated with the likelihood of attracting a physician, or those activities in which a community can engage to attract a physician. Over time, the community planning approach has emphasized various solutions to the practices development problem. During the Hill-Burton era, for example, the stress was on facility construction, and the role hospitals could play in providing a base for physician practices.

More recent attempts, at least those supported by federal, foundation, and publicly raised monies, have concentrated on the establishment of primary care practices and clinics (including, where necessary, the building or renovation of appropriate facilities). Crucial to this process is the identification of community characteristics associated with both medical need and the ability to support a physician, especially a sufficient population base. The cost of establishing the proposed practice (required revenue) is calculated as well as the number of patient visits necessary to produce this required revenue. The required revenue is then measured against a projected amount derived by multiplying the service area population times the projected penetration rate (percent of population which will use the medical services) times the utili-
zation rate (anticipated visits per patient per year) times the charge per visit [4].
Various factors modify this basic formula, for example, the extent of Medicare/Medicaid aid and other third party coverage, the percent of elderly population, the percent of poverty population, etc. The resulting function is used by health planners as a "ballpark" figure. It is further affected by non-measurable influences such as established medical trade patterns, condition of the roads from population centers, etc.

During the last decade, American rural health policy has pursued both the physician location and community health development policy courses simultaneously: The have used state scholarships, loans and the encouragement of medical education such as family practice training, to encourage the supply of physicians trained for rural practice. Funding and technical assistance through the National Health Service Corps, the Rural Health Initiative and Health Underserved Rural Areas programs, etc., have also been used to promote the development of practices with the intent that at least some of them will become self-supportive over time [18].

The experience of both government and foundation funded rural practices during this time suggests the process of establishing permanent, financially viable rural practices is more complex than either the physician location or community health planning literature takes separately indicate. Despite over a decade of program development experience, and the infusion of millions of dollars, sponsored programs continue to be plagued with a high turnover for providers, low provider productivity, and low utilization. A study of National Health Service Corps physicians in the Northwest revealed only 42 percent elected to stay beyond their initial two-year commitment, and only 17 percent made the transition to private practice over a six-year period [22]. A recent study of publicly and privately sponsored clinics in West Virginia found that the clinics were operating at a median physician capacity of 65.5 percent, and only 44.2 percent saw patients at the normative standard of 4200 ambulatory visits per physician per year prescribed by federal funders [11].

The physician location and community health planning models are unable to predict which practice locations will succeed and which will not. The reason why many sponsored rural practices do not become self-sufficient is suggested to be that they serve low income populations (with lower rates of third party coverage, lower collection rates and more need for free or reduced fee care). Another explanation suggested by the authors is crucial. Practices vary in their ability to attract patients from a given population (Walach and Kretz, unpublished data). Some of the explanation has to do with lower utilization rates of certain rural populations. Rural persons may use health care less because they have lower expectations of the benefits of care or are used to waiting for an appointment or to see if a condition will clear up. But, even more of the variation in usage for a given practice results from how the demand for care is divided among the providers who potentially can serve a given rural population. That is, the community health planning model can predict what is the expected demand for care in a given population, but cannot explain why some providers have a heavy patient volume while others are operating below capacity, and why some populations prefer to seek care outside the community, leaving local doctors underutilized.

For a new practice in a community, a crucial question is what determines the ability of the practice to attract patients or to penetrate the market. Two critical elements appear to be: A. The potential for patient receptivity to a new practice, as determined by a range of factors outside the physician's control, such as population mobility, the death or retirement of the resident physician, etc. and B. The opportunity for a new physician to interface with potential patients, such as the ability to work in the hospital emergency room, established referral patterns, and the community tradition of cooperation or competition. These factors do not suprceed the importance of positively disposed physicians or an adequate population base. Rather, they help construct a more complete framework for assessing practice development, and explain otherwise anomalous situations of low and high usage.

II. Methodology

This paper will integrate existing literature with some case study information gathered from a study, funded by the Robert Wood Johnson Foundation, of the financial viability of rural medical practices. The larger study attempted to examine the determinants of revenue and costs by analyzing the volume, scope of services and financing of rural health practices.

During the fall and winter, 1978-1979, intensive case studies were prepared of eleven rural primary care practices in the Northwestern, Western, Southwestern, Midwestern, and Mid-Atlantic regions of the U.S. All but one of the practices were located in towns of less than 2,500 population. The size of the practices ranged from solo providers to a group of five with two satellite clinics. Some practices were located in the same town as the hospital used for admissions, while others were up to 23 miles away. Some practices were non-sponsored (existing on patient revenue alone) while others received support from federal, state, and local governments, foundations, religious groups or private contributions. For each practice, extensive community/demographic profiles were prepared, in-depth financial/management data was collected, and personal interviews were conducted with providers, management and support staff.

III. Patient Potential For Receptivity to a New Practice

An issue left unexplained by both the physician location and the community health planning literature is why, even after a physician has been recruited to a community, and the community demographics indicate a favorable practice potential, the practice suffers from such low usage that it does not become self-supporting. The ultimate question is why patients do or do not come to a new provider.

The physician location literature does not address the possibility of low usage. These studies emphasize the physician's initial choice, and presume it is the positive disposition of the physician to rural practice which determines whether he/she will remain or leave. Presumably, positively disposed physicians find sufficient patients.

The community health planning literature can be divided into two groups on this issue. The first group predicts usage primarily from demographics, or demographics combined with other variables. Some studies suggest a statistical relationship between the size of the service area population (4,000) and successful development [22]. Essentially, however, this school of thought assumes that, based on national utilization predictors, if the population base exists, penetration and utilization will follow. (The BCRR Data Analysis Guide suggests that utilization should fall between 1.5 to 3.0 primary care encounters per six month period.) Studies such as the recent work by Holland in West Virginia [11].

For this discussion, a distinction will be made among the concepts of penetration, utilization and usage. Penetration will mean the number of persons who come to a practice. Utilization will mean the total number of patient visits per person per year to all providers. Usage will indicate the penetration rate times the number of patient visits for the particular practice. It is important to distinguish among the concepts because while high penetration rates may be difficult enough for a new practice to attain, patients may continue to divide utilization between the new provider and former sources of care.
TABLE 1. Access to Medical Care

<table>
<thead>
<tr>
<th>Type of Regular Care in 1976</th>
<th>Rural</th>
<th>Non-SMSA</th>
<th>SMSA</th>
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<tr>
<td></td>
<td>Urban</td>
<td>City</td>
<td>Other</td>
</tr>
<tr>
<td>Farm</td>
<td>88</td>
<td>82</td>
<td>71</td>
</tr>
<tr>
<td>Non-Farm</td>
<td>64</td>
<td>71</td>
<td>77</td>
</tr>
<tr>
<td>% Particular MD/DO</td>
<td>5</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
<td>% No Particular MD/DO</td>
<td>5</td>
<td>10</td>
<td>15</td>
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In the absence of this data, the two practices will be described briefly and then the literature on population mobility and health usage will be used to explain the phenomena of the two practices.

Practice R is a solo physician in a Southern town of 2,000 population in 1976, with a one-county service area of approximately 11,000. There are two other providers in the town, plus easy access roads to the nearest large town of 11,000 population. The physician had been recruited to town R by the hospital administrator and other local influential citizens when the community became aware of the existence of the physicians who had full practices. He had previously been in practice with another provider in the nearby large town. Physician R continued to draw some patients from his former practice. A significant proportion, however, also came from the local farming community, the town's principal employer, which brought a number of workers and their families to the community on a temporary basis.

Practice S serves a Midwest farming area with a service area population of approximately 6,000, cross-cutting three counties. The population of the town was 900 in 1976, and the nearest large town with a hospital is 20 miles away. The population of the three counties has shown minor losses and gains in the past decade, but is very stable. The major activity in the service area is farming.

The effect of population mobility on the financial viability of rural practices has not been a major issue of inquiry. Population migration studies have mainly focused on the relations between migration and health status and health care utilization, especially on the international level. A pioneering study by McKinlay [17], however, suggests some insights for interpreting the phenomena of the two practices discussed above. McKinlay distinguishes between involuntary migration...
(for example, refugee groups) and voluntary migration (professional or skilled workers and their dependents seeking work) for the purpose of assessing impact. Involuntary migrants have experienced deterioration in health status, whereas voluntary migrants tend to already have high health status and experience higher health care utilization. In explaining this higher utilization, McKinlay summarizes the work of Shawal [24] who studied the over-utilization of health care in Israel of a population comprised significantly of voluntary migrants with high health status.

Another study examined the acceptance of physician extender services in two small communities in rural Maine [12]. The conclusion was that variables impacting on community innovation and acceptance of change (a new mode of medical care delivery) were directly related to population mobility, interaction with other communities (non-isolation) and population heterogeneity. Especially important was the population mobility, generated by a paper mill (the major employer) and an annual influx of summer tourism.

Population mobility seems to be an important intervening variable which affects usage of a new provider in a community of a given population base. The literature indicates that population mobility has two important consequences: (1) it breaks the ties to a former medical provider (2) it helps create a progressive atmosphere where new ideas and models of medical delivery are accepted.

It is interesting to note that Health Maintenance Organizations (HMO's) have been more successful in penetrating the market in areas of high population growth and/or high population mobility. A recent study conducted for the Federal Trade Commission hypothesized that the high HMO rate of growth in California (where 19.8 percent of the state's insured are HMO members, and more than half of the nation's six million plus HMO members reside) was due to "...the state's growing population, which brings to California people who do not have their own doctors" [9, p. 12]. HMO's are usually thought to be successful when they attract 5 to 10 percent of the population. The study cited above examined HMO penetration in nine areas of the country containing 4.6 million HMO enrollees. HMO market penetration ranged from 1.8 percent of the total population in Chicago to 22.2 percent in Hawaii. In all areas there was more than one HMO in existence. Individual HMO market penetration was as little as .1 percent of the population. In rural communities, by contrast, success may require a penetration rate of 50 percent or more.

**Change in Medical Trade Patterns Due to Physician Death or Retirement**

Just as population migration creates a situation of individual fluidity and receptivity to a new provider, so the death or retirement of a community's resident physician (or an important provider in a multiphysician community) may create a generally fluid situation conducive to the establishment of a new practice. The impact on a community by the loss of a physician has not been a subject of significant academic study.

In the present research conducted by the authors, physician death or retirement was found to be an important ingredient of patient switching in a number of the practices. Two case studies will be summarized here to illustrate the differential impact a physician's retirement can have on the initiation of a practice.

**Practice T. Physician retirement immediately preceding the establishment of a new practice.**

Practice T was a solo National Health Service Corps site in a Midwest town of 1,700 with a total service area population of approximately 6,000. The physician who located there was a native of the state who was familiar with the community. In the last two months preceding his joining the Corps, the resident physician announced his retirement. The Corps physician arrived in town within days of the retirement, and began practicing in the same office space and using the same receptionist as the preceding physician. Alternative providers were at a minimum of 15 miles away. Population penetration and utilization were high from the beginning, and within eighteen months, the practice was more than ninety percent self-sufficient.

**Practice S. Physician death or retirement a significant time before the location of a practice.**

Practice S was a private physician recruited to a Midwest town of 900 population with a total service area of approximately 6,000. In the late 1950's, the town had supported three physicians. After their death or retirement, a succession of replacement providers had located unsuccessfully, the last one leaving in 1972. But in the intervening years before the present physician arrived in the summer of 1977, consumers had established loyalties to physicians in three towns twenty or more miles away. Patients have been very reluctant to change from their regular providers despite the distance to travel.

Timing is crucial. If a new provider is established just prior to, or immediately following death or retirement of the resident physician, loyalties are transferred relatively easily. If an amount of time elapses sufficient for consumers to develop ties to more distant providers, it is difficult to break these patterns even when the new provider is located more conveniently.

Unpublished data from the 1977 Health Interview Survey helps explain why the time lapse between the death or retirement of a physician and the establishment of a new practice is so important. Table 2 shows the time of the most recent visit to a provider of persons who visit physicians. For a specific community, one might conjecture that over eighty-five percent of those people who utilize

<table>
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<th>TABLE 2. Most Recent Visit* of Those Persons Who Visited a Physician, by Geographic Region and Place of Residence</th>
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<tr>
<td><strong>Selected Characteristic</strong></td>
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<tr>
<td><strong>Geographic Region</strong></td>
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<tr>
<td>Northeast</td>
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<tr>
<td>North Central</td>
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<td>South</td>
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<td><strong>Place of Residence</strong></td>
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<tr>
<td>SMSA</td>
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<td>Outside SMSA</td>
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Source: Selected Unpublished Data from 1977 Health Interview Survey, National Center for Health Statistics, Public Health Service

*Includes persons reporting care at a private doctor's office, doctor's clinic, or group practice.

Data are age-adjusted to the 1970 civilian non-institutionalized population.
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physicians would have had to make an alternative care decision by one year after their resident physician had retired or died. In five years, only three percent of the population would not have already made an alternative care decision. While one visit may not mean stable patient loyalties have been established, repeat visits might, and this will occur usually within two or three years.

The death or retirement of the resident physician seems to be an important juncture in a community's medical trade patterns. If a new provider is not available to maintain the established trade patterns, patients will develop loyalties to a variety of other providers. These ties can become quite strong over time, and are resistant to change from a new provider trying to re-form the original trade patterns.

Change in Medical Trade Patterns Due to Patient Dissatisfaction.

All indications are that patients do not change their medical providers easily. In the O Cottage Research Corporation survey mentioned earlier (a random sample representative of the U.S. population), almost two thirds of the respondents were found to have known their doctor for more than five years. Moreover, seventy-five percent rated the quality of medical treatment available to their family as "good," and only eight percent of those who had switched doctors had done so because of dissatisfaction [2].

There is little information to reveal how many persons in a specific population are sufficiently dissatisfied with their current source of care to switch to a new provider. This is important for new rural providers because, if patients are generally satisfied with their source of medical care even though it involves considerable travel. A study of a three-physician National Health Service Corps practice in Utah indicated that after an intervening five years (1971-1976) only one percent more of the respondents said they utilized their home county practice for general medical care (sixty-six percent in 1976 versus sixty-five percent in 1971). During this same period, the number of persons who said they regularly obtained non-medical consumer goods in the county increased by four percent [14]. Not only had the penetration rate not increased significantly over time, but at least some persons who shopped for other goods close to home were still willing to travel for medical care.

The existing literature on patient dissatisfaction with physician services which results in physician switching does not distinguish between those who might be considered "chronic doctor shoppers"--those persons who are always dissatisfied with their medical care and see numerous different doctors throughout the year, and persons dissatisfied with their care for what might be considered an objectively sound medical or personal reason. The major inquiry into the subject of doctor shopping was a survey of urban Utah households conducted in 1974. The three major reasons for physician switching were (1) could not get an appointment within a week; (2) first doctor not helping patient, and (3) verify the diagnosis of the first doctor [18]. The incidence of doctor shopping overall was much higher than anticipated--64 percent of respondents said they had changed doctors at some time in the past of their own volition. But the prevalence of current doctor shoppers--those who have an episode of illness during the past year for which they had consulted a second physician without referral--was quite low, only four percent [20].

The absence of community survey research, it is difficult to positulate the incidence of dissatisfaction potential switchers in a rural population. One might hypothesize that in a medical shortage area, more people would be dissatisfied due to the lack of alternatives. That is, given a very limited number of providers, there would be more potential for personality conflicts, the absence of appropriate specialties, long waits for appointments, etc. On the other hand, the rural health research described above indicates that rural consumers have strong attachments to their providers as well as lower expectations for the type of care that they will receive. Thus, they would be more content with their current source of medical care even though it would be objectively more problematic.

The existence of doctors shoppers is important to a new rural practice for two reasons: (1) they represent a base level of utilization as persons dissatisfied with their present medical care who are more easily converted to a new provider, and (2) as initial utilizers of a practice they help to spread news of its existence and quality of care in the community. The study cited above concerning patient switching in an urban area does not auger well for building a rural practice based on doctor shopping volume. If one applies the Olsen figure of four percent (patients who switched because of dissatisfaction during the previous year) to a service area population of 6,000, one could only expect 240 patients during the first year due to doctor shopping. Using the eight percent figure found by Cahal survey would yield only 480 patients, assuming the physician obtained all the doctor shoppers as patients.

Some Concluding Comments on Patient Volume

The two traditional approaches to predicting utilization fail to explain penetration and utilization in ostensibly optimal situations. Neither national utilization rates applied to a particular population base, nor consumer preference surveys, are good predictors of penetration and utilization in a specific new medical practice. Since most rural consumers have already established sources or care, usage of a new practice is more a function of breaking established patient/physician relationships than it is of any objective measure of medical need.

The presence of a severe shortage or the recent retirement or death of a physician provide the potential for a new practice to acquire a sizeable patient population as soon as it begins operation. If these situations are not present, there is likely to be a very slow build-up, requiring the physician to attract patients dissatisfied with their current sources of care and to identify and attract recent community residents.

Most rural communities with very sparse populations will find it exceedingly difficult to build up the necessary patient volume. Urban practices have similar patient penetration problems, but since they must reach only a very small proportion of the population to generate sufficient volume and revenue, it is more likely that they can do so in a shorter period of time. Thus, it would appear that larger communities would be able to attract a higher physician-to-population ratio. That is, as the penetration rate for economic self-sufficiency rises, lower physician-to-population ratios are likely to emerge. In deciding whether a community can absorb another physician, therefore, one needs to look at both the physician-to-population ratio, size of the population, and necessary penetration rate for economic self-sufficiency.

Community and patient factors crucial to patient availability for new medical practice have been examined in the discussion so far. The ability of a practice to then identify these
potential patients and attract them to the practice are the most critical steps in determining the penetration rate of the practice.

IV. Opportunities for Patient Identification

The authors' research has begun to identify access points in the medical environment which seem to present significant opportunities for patient identification. These are: hospital emergency room coverage and referral systems.

Emergency Room Coverage

In all the hospital-based, and in some of the non-hospital based practices, emergency room coverage was shared on a rotating or special assignment basis. Several physicians who related examples of particular care they had provided to a patient in an emergency and how this had won them the entire extended family as patients. Except for anecdotal instances, however, there is little information about how rural persons used the ER, and why this would be an important source of entry to a community. Generalizations from specific anecdotes in the authors' research suggest why this is so, and provide some avenues for future inquiry.

Emergency room coverage is an important source of identifying patients because: a) there is some evidence that rural persons over-utilize and improperly utilize emergency rooms for primary care; these may be persons without strong ties to a provider who would be easily converted to a new physician; b) ER visits are times when the consumer is broken loose from the regular provider of care and may be more susceptible to conversion than at other potential times; c) ER visits that are true emergencies are times when patients are in most need of help, and may feel exceptionally grateful for the services provided; d) the visit to an ER may be an event or personal trauma and significance which might receive widespread communication to other community residents.

The experience of those physicians who do not have ER privileges is an indicator of their importance. In one practice studied by the authors, resident physicians in the hospital town had recognized the potential of the emergency room had for bringing patients and new physicians together. It was the hospital policy that any physician who had admitting privileges could not serve on the ER staff. The emergency room was staffed by physicians employed by an emergency room corporation which brought doctors from a distance specifically for this purpose. The newly locating physician related that in the first months of his arrival, the hospital was undergoing contract negotiations with the ER corporation, and anyone could work there. During these months he met many new consumers who became his patients. Within a few months, however, the contract had been finalized, and the physician found his source of new patients vanished. It was only then that he began to realize the significance of the ER staffed by a separate group of physicians.

Referral systems as sources of patient identification

Referral systems can have both negative and positive effects on new practice volume. Key elements seem to be traditional patterns of competition or cooperation in the community and whether there were overlapping spheres of service created by the arrival of a new physician (either solo or in a group).

Little is known about the way primary care physicians receive and use referrals. The following insights and anecdote are presented as an effort to guide future research.

Generally, the receiving of referrals and the development of referral patterns were easier in communities with an existing physician. Although there were some notable examples of animosity, situations of cooperation or neutrality were more common. In some cases, the older resident physician immediately began to cut back his practice with the arrival of the new physician, almost forcing the "overflow" patients to go to the new provider. In many situations, the resident physician was eager to have the new provider back up and used the other provider to cover during vacation periods, etc. While cases of direct referrals were not common, the resident physician often gave tacit approval to the new practice by closing his own. Thus encouraging the new patients to use the new physician, by acts of cooperation, or by serving on the recruitment committee which sought out the new doctor.

In communities without a resident physician, where the new practice was rebuilding medical trade patterns or developing a new one, referrals to the new physician seemed more rare. Although one would expect more competitive behavior from a resident physician in the same community, who might feel threatened by the arrival of a new provider, this situation seemed to arise more often where the new provider was located some distance from previously existing sources of care. One might speculate that community resident physicians had a commitment to retaining the service area intact, while providers at a distance saw the community in purely revenue terms and the new physician as cutting into this territory.

V. Opportunities in the Medical Environment for Attracting Patients

The opportunities in the medical environment for attracting new patients is discussed here as an inter-related but separate issue from identifying new patients. That is, the medical environment provides certain opportunities to identify patients such as the emergency room or receiving a referral from another physician, but the new practice may have to have something particular to offer in order to cause those identified patients to switch providers.

There is some evidence from the literature that the quality of medical care provided by a practice is an important ingredient in both doctor shopping activity (patient switching), and general levels of consumer satisfaction. In the survey of doctor shoppers in an urban area, persons who had high confidence in physicians generally were still prone to be doctor shoppers. But when asked about specific elements of the quality of their care, doctor shoppers were likely to have opinions which indicated a dissatisfaction with the quality of care they had received [15]. The authors conclude "lack of confidence and dissatisfaction with performance (are) significant reasons for doctor switching when measured by specific questions pertaining to specific doctors" ([15] p. 331).

Other studies have also examined elements which contribute to patient satisfaction, and enable one to isolate medically related ingredients of patient satisfaction. Doyle and Ware [7] studied six factors hypothesized to be related to patient satisfaction. "Physician Conduct" (art and technical aspects of quality of care) was found to be the most important. This factor plus "Completeness of Facilities" explained 50 percent of the variance in general satisfaction ratings.

Research needs to be conducted to determine the extent to which quality of medical care issues determine patient switching to a new provider in a rural area. The authors' research, however, sheds some light on the second important reason for doctor shopping identified by Doyle and Ware—"Completeness of Facilities." The development of
patient loyalty seemed most possible for prac-
tices offering full range of medical services—
including lab facilities, x-rays and surgery. It
should be noted that the existence of prevent-
tive services (health education, outreach,
health screening) which many persons see as
more related to the actual level of health of
rural persons, do not seem to have this same
ability to generate patient loyalty. Future
data analysis by the authors will explore more
fully the relationship of patient loyalty to
scope of medical services.

VI. Conclusion

The conditions necessary to establish
economically visible rural practices are quite
complex. Placing a physician into a communi-
ty-sponsored clinic in a physician shortage
area is not always as clear-cut a choice as it
may appear. First, the available patient popu-
lation depends on already established utiliza-
tion patterns of the community. If the popula-
tion being considered is actively using physi-
cians in communities 20, 30, or even 50 miles
away, then the physicians-to-population ratio
need not be referred to include the physi-
cians from outside the shortage area. In any
case, the potential client population available
to the new practice must be adjusted to take
into account the existing medical trade patterns.

To the extent that a new practice is being
placed or started in a community which has not
had a medical practice for some time, it is
likely, except in those rare instances of sub-
stantial geographical isolation, that the new
practice will have to struggle to re-
develop former medical trade patterns. To
the extent that the concerned population is grow-
ing, turning over, or is highly dissatisfied with
existing providers, however, the new practice
will find more patients available within the
potential patient population. How the new
practice identifies this potential population as
well as its ability to "market" the practice as
something different, i.e., "better," are crucial
facts in establishing the practice's initial
market penetration rate. For a new rural
practice to reach 40, 50 or higher penetration
rate is certainly no easy task.

The difficulty of establishing a sizeable
patient following is very important in deter-
ming the financial solvency of rural prac-
tices today. As the total number of physicians
in the country increases by 60 percent, from
1975-1990 [8], the importance of identifying
the potential client population and of market-
ing the practice will grow. While physicians
may be able to provide an ever expanding
scope of services to their patients, perhaps to
attain a particular practice volume level, they
must first have patients come into the practice
itself. This underresearched area of market
penetration and patient capture is, therefore,
likely to receive much more attention from
the medical profession in the very near
future.

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