Evaluation of Physician's Assistants in Gilchrist County, Florida

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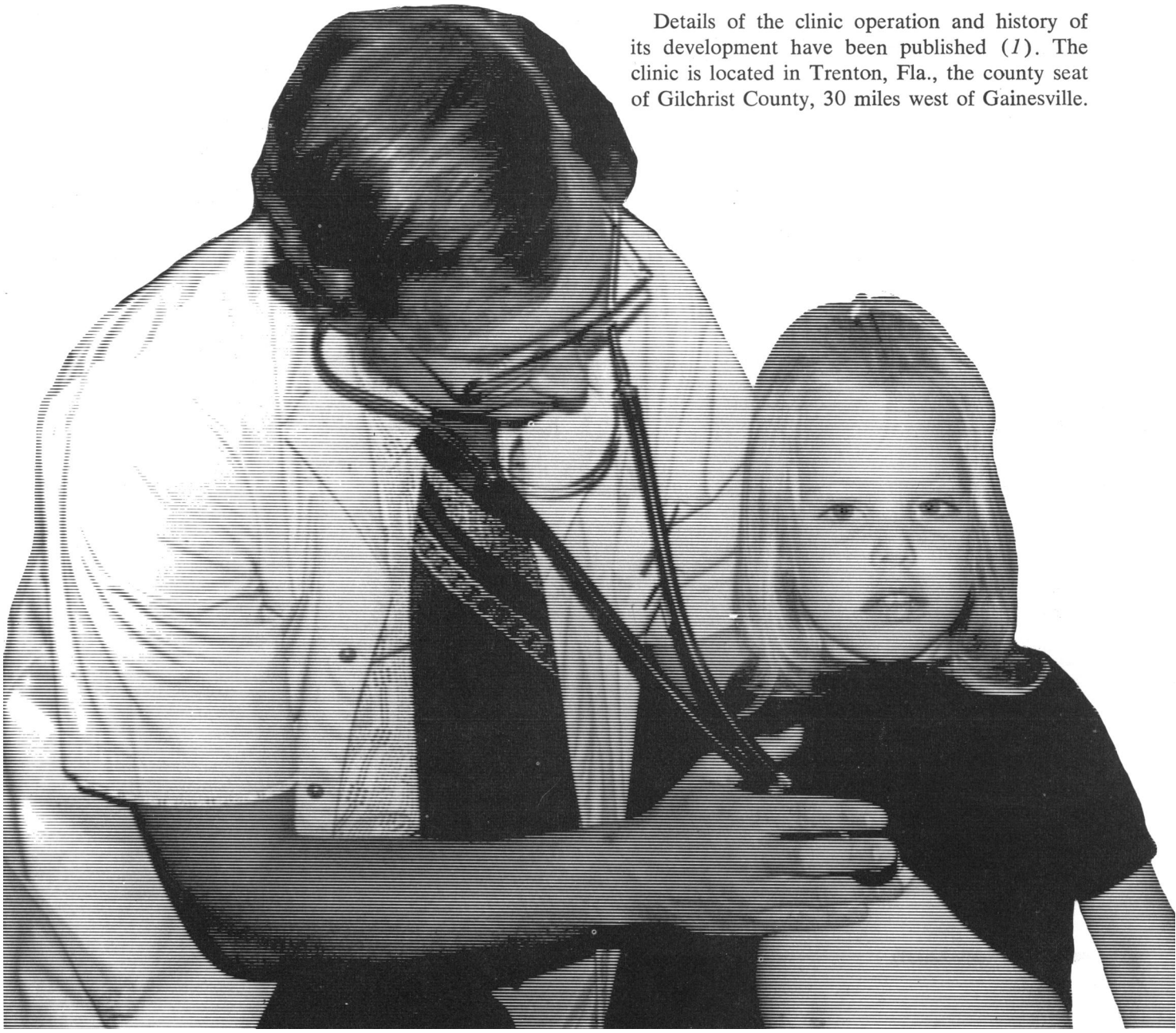
PHYSICIAN'S ASSISTANTS have been providing primary health care for the residents of a physicianless rural county since August 1971. This is a report of the impact of two physician's assistants on the population in the community as revealed by two sociological surveys and an analysis of events within the practice setting.

Background

Details of the clinic operation and history of its development have been published (*1*). The clinic is located in Trenton, Fla., the county seat of Gilchrist County, 30 miles west of Gainesville.



Its operation during the first year was restricted to residents of Gilchrist County, except for emergencies.

As a result of the community's inability to entice a physician to Trenton, meetings were initiated by community representatives with members from the Department of Community Health and Family Medicine at the University of Florida College of Medicine. It was proposed that physician's assistants, supervised by physicians from the department, be used to deliver primary care. The proposal was accepted and implemented.

The reasons for the involvement of department physicians were twofold. First, we were in the process of implementing a training program for physician's assistants and a family practice residency program. We saw this as an opportunity to provide an educational facility for both types of trainees. Second, we were interested in studying several important factors in the use of physician's assistants who were not under the umbrella of an institutional or physician employer. The specific factors considered vital to this evaluation were quality of care provided, acceptance by the physician's assistants of this responsibility, acceptance by the community and the patients treated, acceptance by the physicians of the surrounding communities who previously had provided care for this population, favorable attitudes toward cost and accessibility of health care services, and lessening apprehension of county residents about the lack of health and emergency care facilities.

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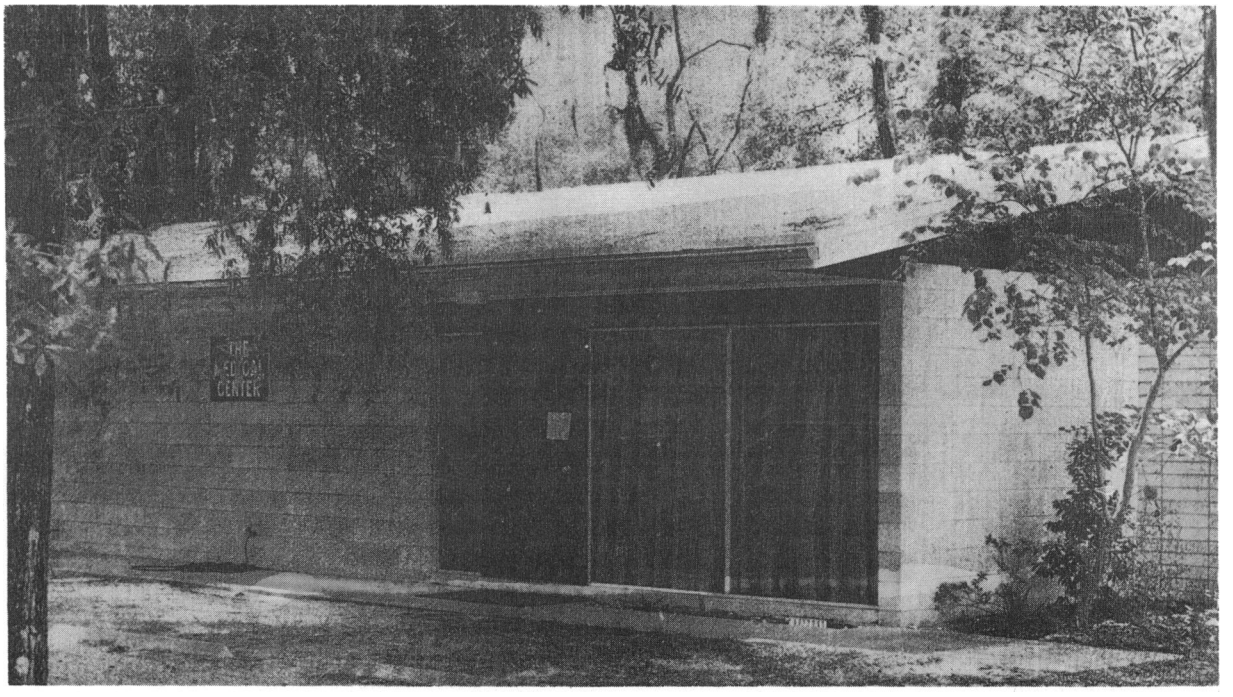
A review of the content of primary ambulatory care practices revealed that the majority of problems presented (approximately 80 percent) are either minor injuries or illnesses or of an uncomplicated and repetitive nature, for which diagnosis and treatment are appropriate to the training of a physician's assistant. This encouraged us to depart from the conventional physician-provider model of health care services.

From August 16, 1971 (when the clinic was opened) through August 15, 1972, there were 3,380 total patient visits which included scheduled patients, drop-ins, home visits, and emergencies. Analysis of 480 consecutive patient visits revealed that the content of the practice closely resembled the content of other primary care practices (*2*).



The 480 visits were for the following conditions:

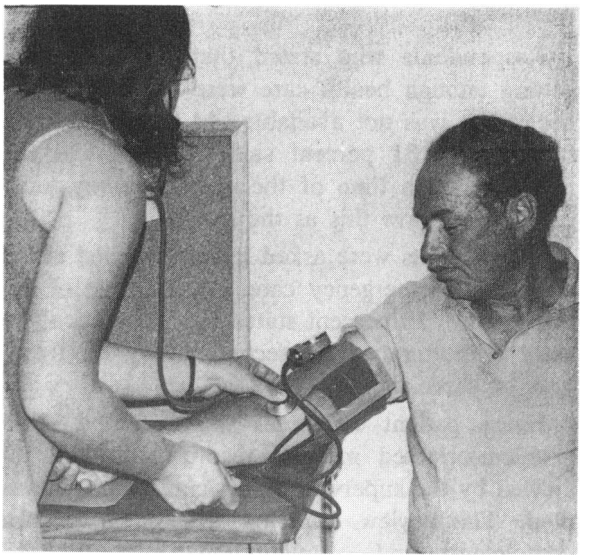
Conditions	*Number of patients*	*Percent of illnesses*
Respiratory disease	123	26
Cardiovascular disease	67	14
Skin disease	53	11
Mental or emotional disease	43	9
Trauma	38	8
Musculoskeletal disease	33	7
Gastrointestinal disease	24	5
Kidney or bladder disease	24	5
Endocrine disease	20	4
Liver or gallbladder disease	5	1
Other	50	10
Total	480	100

The supervising physicians were present at the clinic an average of 4 days a week for 2 to 3 hours. The physician's assistants lived in the community and manned the clinic round-the-clock throughout the week. Expectations of medical competence of the physician's assistants were that they would be able to accurately identify and adequately treat common injuries and illness. Most importantly, they were expected to identify and refer patients with conditions beyond their competence.

Method

Dr. Gary Spencer of the Department of Sociology at the University of Florida (now at the University of New York at Syracuse) conducted a survey of the residents of Gilchrist County before the clinic opened and repeated the survey 1 year later. Bias on the part of the providers of care at the clinic and myself was thus minimized. The first survey covered the demographic characteristics of the population and their health habits and attitudes. The second survey, taken at the same time of the year, covered the same areas and included questions relating to the clinic.

Trained interviewers, directed by Spencer, administered a questionnaire to the female heads of households (who usually make health decisions for the family in southern rural populations). The interviews took 40 to 60 minutes and contained questions relating to family and individual health attitudes, experiences, and practices. A random sample (1,700) was obtained and validated from the county population of 3,500—approximately 800 families. The sample in both surveys included more than one-third of the county's family population. Eighty-five percent of the original respondents participated in the second survey which provided an excellent comparison.



Following are the responses of the 260 clinic users who participated in the second survey:

Factor and question	*Survey 2*	
	Number	*Percent*
Utilization of clinic:		
Adult use of clinic in 1 year	83	32
Child use of clinic in 1 year	145	56
Home visit from clinic in 1 year	10	4
Provider:		
Care provided by physician's assistant alone	204	78
Care provided by nurse, physician's assistant, or physician	56	22
Patient acceptance:		
Liked physician's assistants—		
Very much	204	78
Somewhat	46	18
Not at all	10	4
Ease of talking to physician's assistant (compare to physicians)—		
Easier	80	31
Same	155	59
More difficult	25	10
Patient cost acceptance:		
Compare clinic to other settings—		
More economical	152	58
Same	98	38
More expensive	10	4
Accessibility:		
Compare geographic accessibility to other settings—		
More accessible	218	84
Same	26	10
Not as accessible	16	6
Compare time accessibility (waiting time and ease of getting appointment)—		
More asscessible	192	74
Same	52	20
Not as accessible	16	6
Attitudes:		
Compare quality of care to other settings—		
Better	36	14
Same	195	75
Not as good	29	11

Results

Respondents who stated that they were not getting enough health care were asked if it was because it was not available. At the time of the first survey, 31 percent said that this was the reason. At the time of the second survey, only 0.3 percent gave this as the reason.

Respondents were asked if they worried about the lack of emergency care. At the time of the first survey, 26 percent stated they worried all or most of the time; at the second survey, the figure was 14 percent.

Every patient encounter was recorded on a problem-oriented medical record form and reviewed by the supervising physician before it was filed. The review included assessment of the completeness and documentation of subjective and objective findings and the appropriateness of laboratory orders or procedures to support the assessment of the problems identified. The treatment plan was scrutinized for thoroughness and compatibility with assessment. Flow charts, used regularly for chronic conditions, provided graphic evidence of efficacy of therapy.

The opinion of the six supervising physicians regarding quality of care, as evidenced from consultations, discussions, and chart review, was that it was exceptionally good. Ten percent of the patient encounters resulted in consultation or referral to the physician or institution of their choice. Another 10 percent resulted in a discussion (without referral or consultation) of the patient's case with the supervising physician. These were initiated either by the physician's assistant when he wanted to discuss his findings or treatment or by the physician superviser when there were minor disagreements on the data base, the assessment of the problem, or the plan of therapy. For 80 percent of the visits, patients were adequately and appropriately treated by the physician's assistant with no required or requested input by a physician. In no instance was there a disagreement so serious as to jeopardize the patient because of inappropriate treatment.

Acceptance by physicians who had treated the residents of the county before the establishment of the clinic was evidenced by the fact that, of the 16 physicians identified in the survey who were named by 85 percent of the respondents as being their regular physicians, 13 either referred patients to the clinic for some care or provided clinical summaries for patients treated by them to facilitate followup care by the physician's assistant.

Many factors other than those cited were evaluated but will not be published until the raw data are further refined. For example, hospitalization rates for adults in the county dropped from 15 percent at the time of the first survey to 10 percent at the time of the second. However, yearly variations in hospitalization rates are not available. If we compare clinic users to nonusers we cannot determine from these data whether there was a self-selection process in effect.

Health perception data, comparison of health care from the two surveys, health interference with daily activities, and many other results are being studied and prepared for future publication.

The evaluation of acceptance of the physician's assistant by the patient and the quality of care provided have been studied in many other practice settings. Invariably these evaluations are good to excellent when the physician's assistant is introduced by an established physician or institution. The study results presented here indicate that the physician's assistant, removed from the favorable bias of the institution or physician employer, is an acceptable provider of health care in a primary ambulatory setting for most of the problems presented. It is important that no evidence of additional hazard to the patients has emerged from this study.

Summary

Two physician's assistants have been providing health care to a rural physicianless county for the past 2 years. Two population surveys were conducted to seek medical socioeconomic attitudes and health care information. The first survey was conducted before the physician's assistants began their activities, and the second was conducted 1 year later. Comparison and evaluation of data, plus analysis of practice content, indicate that this model of health care is at least comparable to conventional ambulatory care settings in terms of acceptance, cost, quality, accessibility, impact, and population attitudes.

REFERENCES

(*1*) Henry, R. A.: Utilization of physician's assistants in Gilchrist County, Florida. Health Serv Rep 87: 687, October 1972.

(*2*) Brady, P. G., and Reynolds, R. C.: Rural medical practice. Postgrad Med 51: 249 (1972).