

The United Farm Workers Clinic in Delano, Calif.: A Study of the Rural Poor

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"This study is objective but not impartial"—Camile Jeffers

MANY AUTHORS have documented the current "crisis in health care" with particular reference to rural areas (1-3) and to the plight of the poor (4,5). Only limited data, however, are available about the population which experiences both liabilities. Farmworkers and their dependents constitute such a group, since they live and work in rural areas and share many of the needs and expectations common to other underprivileged populations (6). Moreover, they are exposed to unique occupational hazards (7).

In the past several years, the unionization of California farmworkers has afforded an opportunity to obtain data on this group of rural poor by studying the records of the organized medical services provided under United Farm Workers Union (UFWU) contracts. This study is based on 1972 data from the Rodrigo Terronez Memorial Clinic, a facility established by the UFWU to serve the rural poor of the area around Delano, Calif. The pattern and direction of its service have been influenced by the lessons learned from other contemporary health delivery systems. Nevertheless, the clinic's operations are unusual, since its medical care is regarded by its providers as an organizing tool in the struggle for social change—part of a larger social movement on behalf of the underprivileged.

The purpose of the study is to evaluate the types of medical problems encountered by a specified population of the rural poor and to illustrate one system of health care delivery addressed to their documented needs. The implications of the data and the experience are discussed.

Background

The Rodrigo Terronez Memorial Clinic is located in the southern San Joaquin Valley, a largely agricultural, rural area in south central California. Most of the farming is characterized by large holdings, crop specialization, and reliance on hired labor. In the past 100 years, successive waves of Chinese, Japanese, Hindustani, Filipino, Italian, Spanish, Portuguese, Mexican, and

Yemenite immigrants have joined with Americans migrating from other parts of the United States in working the fields. Many of the laborers established migratory work patterns because of the markedly seasonal nature of the work.

Dating back to the 19th century, numerous groups have tried to organize such farmworkers in search of improved wages and working conditions. None succeeded, however, until 1966, when a coalition of factions created the United Farm Workers Organizing Committee (AFL-CIO), directed by Cesar Chavez. After a series of demonstrations, strikes, boycotts, and lawsuits dealing primarily with the table grape industry, approximately 80 percent of the industry's growers signed contracts with the union in 1969-70. These contracts established a health insurance fund financed by employer contributions. The UFWU leadership, in turn, devised a prepaid capitation health care system, based on a pilot model, for use in the Delano area, with hopes to expand if it was successful. From the system's inception, the leaders insisted that workers make a small co-payment at the time of the receipt of services. These funds were earmarked for the expansion of services to other UFWU members and to other persons in the area who were too old, too sick, or too poor to get acceptable care otherwise.

Target population. The planners of the Terronez clinic designated a target area to include all UFWU members and their dependents living within a 20-mile radius of Delano and employed by a grower who was paying into

Dr. Caleb Foote greets new patients in the waiting room of the Terronez clinic



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RURAL HEALTH

the union's health insurance plan. Under clearly specified circumstances, small numbers of other groups, such as UFWU staff members, also were permitted to join the prepaid group.

With considerable uncertainty because of poor data, the planners estimated the target population at 8,000 persons year round, with a 25,000 peak at the harvest season. During the 1971 harvest season, they obtained suggestions and support from potential consumers of the health services by attending meetings of ranch employees and by visiting private homes and workers in the fields.

Clinic services. Under the prepaid scheme, the clinic agreed to provide all necessary ambulatory services to the entire target population for a fixed fee per worker for each month that the worker was employed, regardless of the size of the worker's family. More specifically, the areas of service included full ambulatory pediatrics, medicine, surgery, and obstetrics-gynecology, as well as laboratory work, X-rays, social services, and counseling. With rare exceptions, each patient underwent a screening evaluation to provide a minimum data base, as part of a problem-oriented record system (8) and periodically scheduled chart review (9). Stress was placed on preventive care and optimal use of staff, but if a patient required diagnostic, therapeutic, or consultative ambulatory services that were not available at the clinic, the clinic paid for the service at the customary local rate of up to \$50 per service. The clinic physicians made every effort to avoid unnecessary hospitalization of patients, performing most evaluations on an outpatient basis. When necessary, they admitted patients to the local general hospital or referred them for specialty care outside the target area, usually to a few carefully selected physicians. Twenty-four hour emergency service was available in addition to the services provided during the usual 40-hour week of the clinic—from 11 am to 7 pm, Thursday through Monday. This schedule permitted patients to come to the clinic without missing work.

Financing. The employer contributed 10 cents per worker per hour worked to the health plan. The plan is administered by a board of trustees composed of equal numbers of growers and UFWU officers. The board also determined the benefits which would be paid and under which conditions. The rate of 10 cents per hour worked was determined by the current union contract. The money was paid to the health plan only when the worker actually worked and ceased immediately when he was laid off. A worker employed 200 hours a month (the average during harvest season) had \$20 deposited in his name in the health plan. The Terronez clinic contracted with the health plan to provide full ambulatory services to the worker and his dependents for \$6 per month, leaving the remainder (up to \$14) to pay for other benefits such as hospitalization, surgery, ambulance service, death benefits, and so forth. If a worker worked for 50 hours in 3 months, 100 hours in 6

months, or 150 hours in 9 months, his benefits in the Terronez clinic were assured for that interval, even if he stopped working and his employer stopped paying premiums. To qualify for the other benefits (for example, hospitalization) the worker would have to work 250 hours in 3 months, 500 hours in 6 months, or 750 hours in 9 months. In this way, a worker fully employed for 3½ months could earn complete health plan benefits for 9 months.

Clearly, the only way such services could be provided for such limited financial input was with the use of the insurance principle by which premiums of unaffected people effectively subsidized the care of affected people. Moreover, patients seen at the Terronez clinic were asked to pay as co-payment \$2 for the physician visit (up to five visits for the same problem, then physician visits were free); \$2 for unlimited laboratory tests ordered by the physician; \$2 for unlimited X-rays ordered by the physician; and \$2 for unlimited medications ordered by the physician. The maximum bill for a visit was thus \$8. For after-hours visits, the patient was asked to pay a \$3 extra charge for a maximum of \$11.

Each UFWU member in the Delano area was given the choice of accepting the Terronez clinic as the source of his health care or signing out of the system and obtaining private medical services from local physicians unaffiliated with the clinic. Less than 100 persons signed out of the clinic system. This small number is the only objective measure of the clinic's acceptance by the local UFWU membership. Unfortunately, the important test of "outcome"—comparing morbidity and mortality rates before and after the Terronez clinic was established—is impossible because of the absolutely inadequate data available before the clinic opened.

Clinic personnel. The full-time professional staff included four physicians (family practitioners), three registered nurses, and one RN nurse-practitioner who provided emergency coverage. Two of the physicians had completed an internship in internal medicine, one had completed an internship in surgery, and one had completed a rotating internship. The physicians, as well as the nurses and laboratory and X-ray technicians, joined the staff as a result of national recruiting campaigns that emphasized the clinic's philosophy. They all shared the belief that the clinic was an organizing tool for the union and therefore were willing to work at minimal wages. Most of them, in fact, received only room and board plus a small stipend. The clinic staff members were recruited from among residents of the community and were trained in the requisite skills for their jobs. All staff members were bilingual, knowing English and Spanish to varying degrees. Translators were usually available for Arabic and the various Filipino dialects.

Expansion of services. The perennial problem of poor followup of migrants was reduced by expanding the UFWU clinic system. Three other UFWU clinics were

established in California soon after the Rodrigo Terronez Memorial Clinic began to operate and are currently staffed with full-time physicians and nurses. Thus, as the same workers moved back and forth from one area to another in the usual migrant patterns, the continuity of their medical care did not have to be broken. Similar clinics are planned in California and in other States with large numbers of farmworkers.

Clinic finances. Largely as a result of the staff's atypically low wages, the Terronez clinic has remained solvent throughout its operation. Salaries and operating costs (rent, utilities, office supplies, telephone, and so forth) constituted 55 percent of the total budget in the study year. The costs of clinic services (laboratory and X-ray supplies, tests performed outside the clinic, consultations with specialists, and so forth) made up the remainder. A modest profit, realized because of the low expenditures for salaries, aided in the expansion of the UFWU clinic system to other locations.

Recording of patient visits. All patients' visits were recorded at the time of visit. A "patient visit" was defined as a "face to face meeting between a patient and a health care provider in which some significant medical service was given to the patient" (10). Telephone conversations, correspondence, home visits, group screening programs at work camps, group patient education sessions, and the like were not included. Only major diagnoses were listed—those affecting decisions about treatment, rather than incidental observations. Statistically, no distinction was made between initial and followup visits for the same condition. Therefore the data indicate the relative frequency of consultations about a type of condition, rather than its true incidence or prevalence. Such data appear to be more relevant to future planning, since they permit decisions as to the need for specific equipment or services.

Although most recent studies of patient care and family practice surveys use the 18-category classification of the International Classification of Diseases (ICD), some authors have found the ICD inadequate for ambulatory patients (11). In practice, the physician often cannot firmly establish the diagnosis at the patient's first visit, but the ICD requires a specific etiological diagnosis. The ICD, moreover, gives little emphasis to functional disease, which accounts for a significant portion of the symptoms encountered in ambulatory patients. The classification also requires frequent cross-coding for diseases of combined systems, and the classification of infectious disease demands a confirmation of the specific etiological agent. Even more cumbersome are such artificial separations as those caused by coding diseases of the bones and joints under "Orthopedics" and coding fractures and sprains under "Accidents." For these and other reasons, the clinic staff used its own disease classification system, which included 203 items arranged by organ system.

Only relatively confirmed diagnoses were coded. The staff denoted other diagnoses as "deferred." Visits

without physician participation were recorded as such rather than being listed under the presumed diagnosis that necessitated the service. Immunizations, for example, were recorded as such and were not listed under well-child care.

Certain kinds of diseases were effectively prescreened for treatment away from the clinic. Most patients with reportable work-related illnesses were referred to company contract physicians, in compliance with State law, unless the illnesses occurred when the company physician was not available. Thus, the clinic's statistics cannot be used to evaluate the incidence or types of work-related injuries for farmworkers.

Results

The age and sex characteristics of the population served by the Terronez clinic in 1972 are summarized in table 1. In that year there were 260 regular workdays and 106 days off (leap year) and 23,141 patient visits to the clinic. Women in the childbearing years used the clinic services the most frequently. The total visits by males,

Table 1. Characteristics of patient population, by age group and sex, Rodrigo Terronez Memorial Clinic, 1972

Age group (years) and sex ¹	Number of visits	Percent of total visits ²
0-2:		
Male	1,023	4.5
Female	959	4.3
3-10:		
Male	1,282	5.7
Female	1,210	5.4
11-20:		
Male	1,469	6.5
Female	1,529	6.8
21-30:		
Male	1,511	6.7
Female	2,309	10.3
31-40:		
Male	1,255	5.7
Female	1,584	6.9
41-50:		
Male	1,307	5.8
Female	1,594	7.1
51-60:		
Male	1,239	5.5
Female	970	4.3
61-70:		
Male	2,111	9.4
Female	405	1.8
71 and over:		
Male	717	3.2
Female	30	0.1
Total	22,504	100.0

¹No data on patient's age and sex were available for 637 visits (2.8 percent).

²The age group 0-20 years accounted for 33.2 percent of the total visits, the age group 21-50 accounted for 42.5 percent, and the age group 51 and over accounted for 24.3 percent.

RURAL HEALTH

however, slightly outnumbered those by females (53 to 47 percent) because the frequency of visits by men over age 50 was disproportionately high. Because of the large number of unmarried men among UFWU members, the final statistics reflected a male predominance.

A cross-check of the data revealed that most of the men over 50 were of Filipino origin; they had been part of one of the early waves of immigrant laborers, and most were unmarried—a few had young wives. Most patients of Arabic background were men from Yemen who, like the Filipinos, had come to the area without their families in the preceding 5 years. The following table shows the ethnic origin of the population served by the clinic in 1972:

<i>Ethnic group</i>	<i>Number of visits</i>	<i>Percent of total visits</i>
Mexican-American	16,665	72.8
Filipino	3,864	16.9
Anglo	1,223	5.4
Arabic	887	3.9
Other	233	1.0
Total	22,872	100.0

¹269 patient visits (1.1 percent) were not coded by ethnic group.

In table 2, the use of clinic services in 1972 is summarized according to visit type, personnel used, treatment given, and disposition chosen. During the year studied, 5,286 persons received care. Visits of all types averaged 4.4 per person for the year; physician visits averaged 3.4 per person. Each physician had an average of 15.5 patient visits per workday and cared for an average of 1,322 patients over the year.

Although 9 percent of the total visits were after regular clinic hours, only 51 true emergencies (0.2 percent of the total visits) were recorded during the year studied. Definitions as to what constitutes a true emergency varied among the physicians, but basically all indicated that emergencies were limited to cases in which postponement of treatment for 1 hour would probably adversely affect the outcome.

More than three-quarters of the clinic visits (76.8 percent) involved physician services, but no record was made of unscheduled telephone or hallway conversations, completion of administrative forms, or the like. Other types of patient visits without physician contact included visits for tuberculosis and other skin tests (1,548 visits), serial blood pressure checks (49 visits), immunizations (263 visits), scheduled laboratory procedures (250 visits), and X-ray tests (350 visits).

Patients arriving without a scheduled appointment and requesting to see a physician were given the option of scheduling an appointment for another day, waiting until their designated physician or a substitute could fit them in, or leaving without being seen. Only 295 patient visits (1.3 percent of the total) ended without the patient seeing a physician.

The relative frequency of the most common specific diagnoses made at the clinic during the study year are

Table 2. Patient utilization by kind of visit, appointment compliance, personnel used, treatment given, and disposition chosen, Rodrigo Terronez Memorial Clinic, 1972

<i>Item</i>	<i>Visits</i>	<i>Percent of total visits</i>
Kind of visit:		
By prearranged appointment . . .	15,037	65.0
Walk-in during clinic hours	6,008	26.0
Walk-in during off hours	2,096	9.0
Total patient visits	23,141	100.0
Visits by appointment:		
Kept at original time	13,026	65.9
Rescheduled	2,011	10.1
Failed	4,772	24.1
Total appointments given	19,809	100.0
Personnel used:		
Physician and others	17,724	76.8
Nurse (RN) alone	3,296	14.2
Health aide alone	248	1.0
Laboratory technician alone	262	1.1
X-ray technician alone	400	1.7
Other combinations	1,211	5.2
Total visits	23,141	100.0
Treatment given by physician:		
None	6,683	38.1
Emergency medications only	327	1.9
Prescription only	10,249	58.4
Other	279	1.6
Total visits	17,538	100.0
Patient disposition after physician visit:		
Return by appointment	10,395	58.6
Return as needed	5,577	31.5
Referred to specialist	258	1.5
Hospitalization	239	1.3
Other	1,255	7.1
Total visits	17,724	100.0

¹No data available on treatment given in 188 physician visits (1.0 percent).

shown in table 3. Clearly, not all diagnoses represent the same degree of etiological specificity. First and followup visits are not differentiated. Since more than one diagnosis could be coded for a patient on a single visit, the total number of diagnoses in table 3 does not equal the total number of visits. Moreover, on 2,204 occasions (7.0 percent of the total diagnoses), the physician indicated a deferred diagnosis, pending further evaluation.

Common diseases were indeed common at the clinic, but the staff also diagnosed and treated a significant number of exotic conditions, including documented cases of pemphigus foliaceus, juvenile pernicious anemia, hereditary spherocytosis, primary pulmonary hypertension, hyatidiform mole, cerebral arteriovenous malformation, lepromatous leprosy, schistosomiasis, disseminated coccidioidomycosis, primary myxedema, and Graves' disease.

Medication was prescribed in less than half (44.4 percent) of the total visits and in more than half (57.6 percent) of the physician visits.

A drug formulary was established for the clinic with the cooperation and approval of the staff physicians. It originally included only 150 items but was expanded during the study year to include 190 medications, not counting different dosages or forms of the same parent medicine. Virtually all (99 percent) of the prescriptions written by clinic physicians in 1972 were filled with formulary drugs. The drugs most frequently prescribed in 1972 were as follows, listed with the usual prescription size and the total tablets dispensed during the year:

<i>Drug and dosage (mg)</i>	<i>Usual prescriptions (number of tablets)</i>	<i>Total tablets dispensed</i>
Isoniazid, 100	200	114,228
Acetaminophen, 325	50-100	65,357
Ferrous sulfate, 300	100-400	62,620
Aspirin, 325	100-200	36,635
Chlorpheniramine maleate, 4	20-100	30,720
Trichlormethiazide, 4	35-140	28,643
Folic acid, 1	50-200	25,845
Phenobarbital, 15	30-100	21,894
Phenoxyethyl penicillin, 250	40	18,356
Reserpine, 0.25	35-70	16,930

The medicines dispensed reflect the extent of the clinic's prophylactic programs against tuberculosis (isoniazid) as well as the relative frequency of visits for pregnancy (ferrous sulfate, folate), hypertension (trichlormethiazide, reserpine), upper respiratory infections (aspirin, chlorpheniramine), seizure disorders (phenobarbital), and penicillin-sensitive infections.

Most physician visits (58.6 percent) resulted in a definite appointment for a return visit for followup evaluation (table 2). Telephone consultation with specialists comprised the majority of staff-physician contacts with specialists. Table 4 reflects only the 258 patients referred to specialists who were given detailed summaries for outpatient evaluation. Under the prepaid plan, the clinic would pay only for visits to specialists it had authorized but permitted pregnant women living far from the clinic to have their deliveries outside the community without losing prepaid benefits.

In addition, patients were often referred for specialized X-ray and laboratory procedures, such as upper gastrointestinal studies (66 referrals), barium enemas

Table 3. Frequency of physician visits, by diagnosis, Rodrigo Terronez Memorial Clinic, 1972

<i>Type of disease</i>	<i>Number of visits</i>	<i>Rate per 1,000 visits</i>	<i>Percent of total visits</i>	<i>Type of disease</i>	<i>Number of visits</i>	<i>Rate per 1,000 visits</i>	<i>Percent of total visits</i>
Integumentary	725	41	2.3	Neurological	276	16	0.9
Eczema, neurodermatitis	155			Seizure disorder	88		
Contact dermatitis	84			Psychiatric	562	32	1.8
Acne	33			Psychosomatic complaints	300		
Hematopoietic	133	8	.4	Depression	126		
Iron deficiency anemia	99			Traumatic	849	43	2.7
Respiratory	793	45	2.5	Lacerations	400		
Asthma	193			Blunt trauma	197		
Pneumonitis	179			Infectious	4,792	269	15.3
Chronic obstructive pulmonary disease	142			Viral syndrome	2,231		
Acute bronchitis	105			Tuberculosis	632		
Cardiovascular	1,719	97	5.5	Otitis media	291		
Essential hypertension	931			Otitis externa	290		
Congestive heart failure	258			Coccidioidomycosis	152		
Valvular/septal cardiac disease	225			Group A streptococcal disease	147		
Arteriosclerotic heart disease	101			Endocrinologic-allergic	745	42	2.4
Gastrointestinal	929	52	3.0	Diabetis, insulin-independent	362		
Ulcer disease	331			Diabetes, insulin-dependent	126		
Diarrhea, nonneonatal	76			Other	3,557	200	11.4
Cholelithiasis, -cystitis	49			Preventive complete examination	797		
Genitourinary	2,335	131	7.5	Well-child care	733		
Normal pregnancy	1,065			No abnormality found	669		
Urinary tract infection	269			Family planning	269		
Prostatic hypertrophy	111			Obesity	245		
Urinary tract stones	80			Conjunctivitis	183		
Musculoskeletal	1,577	87	5.0	Deferred diagnosis	2,204	124	7.0
Sprain, strain	526			Miscellaneous skin tests, immunizations, prescription refills, uncodable items)	10,107		32.2
Back pain, unspecified	271			Total	31,303		100.0
Osteoarthritis	210						
Fracture	185						

*The total diagnoses' (31,303) exceed the number of patient visits (23,141) or physician visits (17,724) because many patients had more than 1 medical problem.

RURAL HEALTH

(19), mammography (11), thermography (9), electroencephalography (7), intravenous cholangiography (5), thyroid radioactive uptake and scan (3), and Schilling test (3). Specialists also visited the clinic for special sessions with patients and for staff education. None of these other types of contacts with specialists are reflected in tables 4 and 5.

Nonobstetrical hospitalizations of the clinic patients are classified in table 6 by the reason for admission. The highest proportion (27.3 percent) of these hospitalizations were for corrective surgery. Next in rank was cardiovascular disease (13.6 percent). Nonelective conditions prompted 65 percent of the total nonobstetrical hospitalizations.

Discussion

The planners of the Rodrigo Terronez Memorial Clinic were painfully aware of the lack of adequate data on which to base policy decisions. Consequently, they arranged to collect data about this clinic to facilitate planning when similar clinic services were extended to UFWU members and their families at other locations.

In the initial planning, a number of major decisions were arbitrarily made. The planners placed high priority on the provision of emergency services, for example, defibrillation. The equipment for this procedure, however, was never used during the year studied. Conversely, the planners did not provide for obstetrical deliveries at the clinic, expecting that all these would

Table 4. Referrals of nonhospitalized patients to specialists, by referral physicians's specialty, Rodrigo Terronez Memorial Clinic, 1972

Specialty	Referrals	
	Number (N=258)	Percent of total
Obstetrics-gynecology	56	21.6
For delivery only	13	.....
Other	43	.....
General surgery	41	15.9
Ophthalmology	33	12.8
Orthopedics	30	11.6
Otolaryngology	22	8.5
Urology	20	7.8
Internal medicine	19	7.4
Pulmonary	4	.....
Gastroenterology	4	.....
Neurology	3	.....
Cardiology	2	.....
Other	6	.....
Dermatology	7	2.7
Plastic surgery	6	2.3
Pediatrics	4	1.6
Neurosurgery	3	1.2
Other or unspecified	17	6.6

Table 5. Distribution of hospitalized patients by type of hospitalization, Rodrigo Terronez Memorial Clinic, 1972

Type of hospitalization	Number (N=239 ¹)	Percent of total
Obstetrical	92	38.5
Patient admitted locally	77	.....
Patient referred with complications after initial hospitalization locally	2	.....
Patient requested referral for delivery outside community	13	.....
Nonobstetrical	147	61.5
Elective	51	21.4
Patient admitted locally	0	.....
Patient referred for hospitalization with specialist	51	.....
Nonelective	96	40.1
Patient admitted locally	28	.....
Patient referred for hospitalization with specialist	68	.....

¹Total local hospitalizations were 107 and total referred hospitalizations were 134; the 2 patients referred with complications after initial hospitalization locally were counted only once to reach total of 239 hospitalizations.

take place at the local hospital. Two women gave birth at the clinic with little warning. In a similar way, a host of decisions that were made about the types and the provision of services and supplies demonstrate the difficulties of planning without the requisite data.

Extrapolation from the Terronez clinic data presents difficulties. The clinic both began, and continues to operate, with an incompletely defined population. The seasonal work of a proportion of this population, its marked mobility, and its irregular payment of union dues, plus the fact that the clinic had not yet converted to a computer-monitored census, made it impossible to clearly delineate the population at risk. To reduce administrative difficulties, the planners decided that all eligible workers and their dependents would automatically be members of the UFWU prepaid plan unless they specifically signed a release. The data in this paper therefore relate only to those people who came to the clinic for care. There are no reliable data on the persons eligible for care who sought medical care outside the clinic system, although reportedly their number was small.

The atypically low wages paid the Terronez clinic staff have enabled the facility to be financially viable. Its administration recruited health professionals and local people who shared the philosophy of the clinic and were willing to give up customary wages to support the idea. Such recruitment was difficult but not impossible. The financial limitations, however, slowed expansion of the UFWU clinic system.

In spite of these limitations, the Terronez clinic data have facilitated the establishment of the three additional UFWU clinics in California serving similar populations. At each of the four clinics, the planners discovered that a certain minimum number of staff members and services was required to make each

operation truly functional and self-perpetuating. In reviewing the reasons why small town family practice recruitment programs had failed, Harrell (2) concluded that medical students and house-staff physicians had neither been exposed to nor were prepared for the problems of rural practice. He noted, moreover, that a minimum of four family physicians was needed in a clinic with close hospital affiliations. With this number, the inconveniences of a call schedule were minimized, and the mutual intellectual and cultural stimulation of fellow physicians was maximized.

The experience of the Terronez clinic appears to confirm Harrell's observations. Staff members born and raised in rural areas had the least difficulty in adapting to their new surroundings and appeared to be the staff members most willing to continue working in the setting. Each physician tended to become most proficient in the areas of his special interest and experience, and the other physicians profited from his expertise. Emphasis was also placed on the development and advancement of the staff members recruited from the local community, who had been trained to assist as laboratory technicians, health aides, and administrative workers. They were encouraged to pursue



Rodrigo Terronez Memorial Clinic in Delano, Calif., just before construction was completed

their education, and three of the nine began taking college courses; one of these had a strong potential and desire for medical school.

The tenor of services at the Terronez clinic was somewhat different from that at other rural health facilities. Although there are 52 other clinics in California for farmworkers, only 21 are open more than 30 hours a week, and only 1 has emergency coverage (12). The Terronez clinic, in contrast, is open 40 hours a week and affords 24-hour emergency service. Most of the other clinics depend on governmental funds in one form or another for maintenance, even on a part-time or seasonal basis. The Terronez clinic specifically excludes all government funds except those from the few patients (less than 5 percent) for whom Medicare or Medi-Cal is the only source of payment; it thereby avoids the posturing and power struggles inherent in the search for grants and their renewal (13,14).

The experience of the Terronez clinic has broad implications for rural health care for indigent groups in other respects as well. The need for professionals to be fluent in the patient's language is rarely stressed sufficiently. Fluency helps the professional to obtain the requisite information and cooperation from a patient, while offering both the patient and his family comfort when it is needed. With 1 month of hourly preparatory lessons and daily practice, the Terronez clinic staff learned fluent Spanish during the first year of the operation.

The clinic's utilization statistics revealed that more than 90 percent of the services could be performed within a 40-hour week if the hours were scheduled so as to maximize accessibility for a working population with limited transportation. Most of the patients came to use the appointment system effectively, so that ultimately 76 percent of the patient visits were by appointments.

Viral syndrome, hypertension, and normal pregnancy were found to comprise nearly 15 percent of the total diagnoses made. Therefore, the physicians experimented with training other staff members to screen, diagnose, and treat the uncomplicated aspects of these conditions. These attempts were generally well received by the other staff members and the patients, but the staff members assuming these new responsibilities required considerable preparation.

Table 6. Nonobstetrical hospitalizations of patients, by reasons for admission, Rodrigo Terronez Memorial Clinic, 1972

<i>Reason for admission</i>	<i>Total nonobstetrical hospitalizations</i>	<i>Percent of total</i>
Corrective surgery (nonorthopedic)	40	27.3
Elective	23	
Nonelective	17	
Cardiovascular disease (non-cerebrovascular)	20	13.6
Elective	6	
Nonelective	14	
Neoplasia	16	10.9
Elective	8	
Nonelective	8	
Infection	14	9.5
Elective	0	
Nonelective	14	
Orthopedic surgery	11	7.5
Elective	2	
Nonelective	9	
Diagnostic surgery (for example, biopsy)	9	6.1
Elective	9	
Nonelective	0	
Cerebrovascular disease	6	4.1
Elective	1	
Nonelective	5	
Trauma	4	2.7
Elective	0	
Nonelective	4	
Psychiatric conditions	3	2.0
Elective	0	
Nonelective	3	
Other conditions	24	16.3
Elective	2	
Nonelective	22	
Total admissions	147	100.0

The staff physicians considered that their training had prepared them admirably for most cases in ambulatory practice but valued and profited from the advice of outside specialists. They expressed a need for ready access to specialists in obstetrics and gynecology (complicated deliveries), general surgery, ophthalmology, otolaryngology, urology, and dermatology, although often telephone consultations were sufficient. The rate of hospitalization of clinic patients was low compared to that for the general U.S. population, reflecting the physicians' primary orientation to outpatient practice and the generally good health of the young working group that largely constituted the target population.

As a group, the staff physicians experienced little difficulty working with a formulary but encountered other problems. Because California State law prohibits the dispensing of prescription medicines to patients except by a licensed physician or pharmacist, the physician personally handed each medicine to the patient. This procedure permitted the physician to reinforce his instructions, but it caused considerable congestion and inefficiency, and obtaining a full-time pharmacist for the clinic became a high priority.

The demographic data from the clinic are roughly comparable to those from other comprehensive health centers serving the medically indigent in both urban and rural settings. Other farmworkers clinics, dealing almost exclusively with the migrant population, have reported lower proportions of workers over age 50 (12,15,16). The Delano population demographically resembled the urban and rural indigent groups served by eight comprehensive health services projects of the Office of Economic Opportunity (10).

The clinic's utilization patterns also approximated those seen in other general practices and in urban neighborhood health centers (NHCs). Campbell (14) reported that 63 percent of the patients at a Cleveland NHC kept scheduled appointments, while 31 percent of the center's patients were seen as walk-ins. Strauss and Sparer (10) found a range of 3.3 to 5.7 physician visits annually per registrant (calculated person at risk) among eight OEO NHCs located in both urban and rural settings and a range of 3.6 to 6.3 patient visits annually when all services performed were counted. According to the U.S. Health Survey, the national average was 4.3 physician visits per person for 1967 (17). In that survey, any consultation with a physician was considered a physician visit, whether in person or by telephone and whether for examination, diagnosis, treatment, or advice. The survey's definition thus differed significantly from the more limited one used at the Terronez clinic. The Terronez clinic averaged 3.4 person-to-person physician visits per patient per year. This figure represents a maximum rate, since utilization was not 100 percent, and there was no way to ascertain the exact population at risk.

Physician services constituted a smaller proportion of the total services at the Terronez clinic—77

percent—than at other facilities serving farmworkers in California—90 percent (16) or than at an urban NHC—88 percent (18). The smaller proportion was presumably due to the Terronez clinic's greater use of ancillary workers employing expanded skills.

Greenlick and associates (18) conducted a study in Portland, Ore., and their results have direct relevance to the Terronez clinic experience. Comparing a comprehensive private group practice with an OEO comprehensive neighborhood health center in Portland, they found no significant differences, except for increased walk-in and after-hour visits and more psychiatric problems for the OEO population. The proportion of failed appointments for the Terronez population closely approximated that for the medically indigent OEO group, but in the proportion of services provided by appointment and on a walk-in basis, in the daytime and after hours, the Terronez population resembled the general membership of the private group practice. High no-show rates make medical care planning extremely difficult. According to the Terronez clinic's experience, walk-in patients tend to come at times of peak activity (late afternoons, Saturdays, Sundays) because they find these times more convenient, even though their waits are comparatively longer than at other times.

No such ready comparison with other facilities is possible as to the frequency of patient visits according to the condition diagnosed, since the Terronez clinic staff elected to use its own classification system rather than the ICD. Those conducting most other studies of ambulatory care have reluctantly used the ICD, only to reach such unsettling conclusions as the one that "non-sickness" constitutes the most common diagnosis, accounting for up to 24.9 percent of the total visits (11). These difficulties underscore the need for some reevaluation of the ICD and modification of it for use in ambulatory settings.

The Portland study (18) provides data on morbidity, based on a modification of the ICD, which are roughly comparable to such data from the Terronez clinic.

Types of diagnoses	Percent of total visits	
	OEO center	Terronez clinic
Preventive medical services	15.0	15.8
Symptoms of undiagnosed disease . .	10.5	10.4
Burns and traumatic injuries	10.3	4.0
Diseases of respiratory system	9.6	10.8

Conclusion

The data from the Terronez clinic appear to correlate well with statistics from other sources, both urban and rural. They help to characterize a comprehensive health service center operating in a rural setting without government funds. The high degree of self-selection of the clinic's staff is believed to have contributed to the facility's strength, but it also limits its future expansion and duplication.

Several authors have pointed out that centralized, comprehensive clinics funded in other ways might attract professionals to rural settings, either for private

solo or group practice, thereby helping to meet the pressing need for primary care in such areas (1,4).

For a variety of reasons, rural consumers traditionally have exerted little pressure on their local institutions to push them toward reform (3). Yet consumer involvement in terms of true partnership in policy decisions (19), maximal use of local resources and people (20), and development of local talent (21) forces a more permanent commitment from all involved. Ultimately, the role of the consumer will have to be acknowledged.

Educative theory (14) postulates that people who participate in identifying a problem, thinking through a proposed solution, and working on its execution will be less resistant to the change. They will be more likely to persevere in its enactment and more likely to learn from the experience. Somers (22) concludes that a health care consumer's own philosophy of life, lifestyle, self-discipline, and sense of responsibility for his own health are more important than the specifics of the medical facilities or medical financing available to him.

Isaacs and associates (23) appropriately remark that the crisis in health resources does not arise merely out of poor management, inefficient use of technologies, or even governmental uncertainty. The most important determinant of the kind of health care people receive remains the level of struggle for better health care by those whose health is at stake and by those who render the care.

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SYNOPSIS

RUDD, PETER (Clinical Scholars Program, McGill University) *The United Farm Workers clinic in Delano, Calif.: A study of the rural poor. Public Health Reports, Vol. 90, July-August, 1975, pp. 331-339.*

Data on the utilization of services and morbidity were obtained for 1972 from the Rodrigo Terronez Memorial Clinic in Delano, Calif., a health care facility operated without government funds,

which was established to serve the rural poor, specifically farmworkers and their dependents. There were 23,141 patient visits in the study year. The average number of physician visits per patient was 3.4; 65 percent of the visits were by appointment, 9 percent were after hours, and 1 percent resulted in hospitalization. Only 0.2 percent constituted true emergencies. Ninety-nine percent of the prescriptions written at the clinic were from a 190-item drug

formulary developed by the staff physicians.

The data on the clinic are roughly comparable with those from other urban and rural comprehensive health centers. The Terronez clinic, however, differed significantly from most of these other centers in its orientation. It served as an organizing tool for a labor union trying to mobilize agricultural workers in the area so they would act together to improve their living conditions.