A Comprehensive Care Program for Migrant Farmworkers

GEORGE L. HARPER, M.D.

A RELATIVELY simple traditional public health activity for migrant farmworkers and their families in 1963 evolved into a complex program of comprehensive care by 1968, largely through the efforts of highly motivated and imaginative personnel. In essence, field services were integrated with the operation of a clinic center and referral system developed by the San Luis Obispo County Health Department in California. In view of the current interest in comprehensive care and effective delivery systems, the process of this evolution may provide clues to some of the principles, methods, and techniques required to effectively reach a specific population and provide health care in the face of cultural, political, administrative, and physical obstacles.

Funded primarily by Federal appropriations (under the National Migrant Health Act of 1962) and administered by the Public Health Service, the program was started in the southern coastal part of San Luis Obispo County and later extended to the contiguous northern part of Santa Barbara County.

The area's economy is predominantly agricultural, with crops such as strawberries, beans, and celery that require seasonal workers for harvesting and packing. For many years Mexican braceros (farm laborers) were contracted as needed and supplemented by migrant workers from the California "migrant stream" until the bracero program was discontinued by Congress. Subsequently, large numbers of migrant families moved into California from Mexico (using other means of entry) and from southwest Texas.

In 1967 the distribution of the origins of 375 of the migrant families by "home base" (roughly defined as continuous residence of 3 months or longer) was California 20.8 percent, Texas 51.3 percent, Mexico 23.3 percent, and other western States 4.6 percent. Those from Mexico had arrived so recently that even an interim stopover in Texas or other waypoints en route was too brief to qualify as a "home base."

The distribution by race and ethnic background of these families was 93.4 percent white Mexican, 5.1 percent white Anglo-American, 0.5 percent American Indian, 0.3 percent Negro, and 0.7 percent unknown.

Before the program was developed specifically for the seasonal farmworkers' families, they had obtained fragmentary health services from a county hospital 30 miles away, from private physicians (if finances permitted) 5 or

Dr. Harper, formerly health officer of San Luis Obispo County, Calif., is now associate professor of community medicine, University of Arizona College of Medicine, Tucson.

more miles away, and from a public health nurse and a sanitarian who worked out of a health department district subcenter 10 miles away. The health department's well-baby clinic had been held in a local school and the family planning clinic at the subcenter.

The Program Starts

A modest project, intended primarily to survey the health problems of the migrant families, began in 1963 when a full-time public health nurse was hired to apply herself exclusively to these families. In 2 years, by exceptionally vigorous work, the project nurse defined the health problems in reliable qualitative terms and obtained a rough quantitative appraisal of the numbers of migrant farmworkers in the area and the scope of their health "needs" (the care requirements as seen by the staff and those expressed by the families to the staff).

The families' residences were scattered throughout a 40-square-mile area of sandy soil and eucalyptus trees interspersed with farms. Including the persons eventually served in Santa Barbara County, the specific beneficiary population was estimated to be 7,000 annually and 4,000 at peak harvesting season.

The nurse used various approaches to locate these families—contact with farmworker employment channels, visits to farms, the files of the district public health nurse and sanitarian, by scouting likely residential areas, and eventually by self-referral of the clients when the nurse became known. She noted that personal health problems were common and almost uniformly neglected; knowledge of hygiene and health was poor. Frequently, the persons with health problems also had crucial socioeconomic problems. For example, in some situations both parents worked in the fields all day and left children of all ages unattended at home. Thus the children's nutrition and general care were neglected. The lack of money for the essentials—food, shelter, clothing, medical care—was sometimes a result of inability to go to work for lack of an automobile or lack of a driver's license because language or other cultural barriers (such as admini trative procedures) interfered with obtaining a license. Much hardship was caused also by lack of continuous work opportunities—seasonal crop work is notoriously sporadic and unreliable as a dependable source of adequate income.

Backup resources. Health service backup resources initially were inadequate; referral was limited to various health department and county hospital clinics and to the county's mental hygiene clinic. Care at the 30-mile-distant county hospital was unsatisfactory because of staff attitudes and administrative barriers. During this time, the health department set up the area's first Head Start program, and the project nurse had a major role in organizing and coordinating the program. In addition to screening workups by a pediatrician, supported by health department nurses and laboratory services, a precedent was established by the Office of Economic Opportunity (arranged by telephoning headquarters in Washington) authorizing purchase of further diagnostic and therapeutic services with Head Start funds. (This became a standard provision nationwide in the Head Start programs in ensuing years.)

Many of the migrant children were enrolled in Head Start and completed the course. Teachers, aides, and nurses were enthusiastic about the children's progress. The most spectacular case was that of 4-year-old Pancho, who was severely retarded due to hypothyroid function. Responding dramatically to treatment and named national Head Start Child of the Year, Pancho visited the President and other dignitaries at White House ceremonies.

The culture barrier. Barriers to effective care generally were financial, administrative, cultural, and geographic (distance and difficulty with means of transportation). Cultural problems involved the language barrier to communication and those attitudes and habits derived from a Mexican system of values translocated into an alien Anglo society. For example, many of the migrants cling to their primitive Mexican folk-culture concepts such as the belief in "Ojo de Venado"—eye of the deer or evil eye. The nurses and their helpers frequently encountered resistance and covert noncompliance because clients suspected them of using the evil eye. By contrast, although most professed to be of the Catholic religion (at that time still conservative on birth control policy at the parish level as well as at the Vatican), birth control

efforts were usually successful with acceptance of the pill or intrauterine contraceptive device. This success, needless to say, required intensive personal contact by the nurses and aides and rigorous home followup. However, among these people the husbands' attitudes sometimes seriously interfered with birth control efforts.

The Program Adapts and Expands

After the first 2 years, an equally dedicated and resourceful nurse replaced the original project nurse. The subsequent results of the program confirmed the cardinal importance of the quality of the key personnel in a situation where previously unknown needs are constantly surfaced and require creative and substantive response in terms of action, personnel, organization, facilities, and equipment.

At her request, a 4-wheel-drive vehicle was provided the new project nurse for improved access to the migrant families in their out-of-the-way homesites, and a full-time Spanish-speaking aide of Mexican descent was employed to help bridge the culture gap and to serve as an auxiliary to the nurse. This proved to be a very important addition, with end results of the nurse's efforts enhanced by a factor estimated at two to three times that previously yielded.

The aide soon became invaluable as a confidant and counselor to the clients, filling the culture gap much more broadly than the linguistic bridge. She also made a major contribution by driving a large station wagon especially purchased to provide transportation for the program beneficiaries. Almost daily, the aide transported people from their homes to clinics, hospitals, physicians' and dentists' offices, and social service facilities and back. Mileage for these services was about 1,600 to 2,000 miles a month. Later, more aides of similar background were employed. During this period the nurse also averaged 1,500 miles a month mileage, an indication of the intensity of fieldwork necessary. For a 9-month period nursing referrals to care resources numbered 1,218, of which 1,125 were completed.

Because of the apparent need for a local base and clinic, in 1966 the governing body of the county was persuaded to purchase a residential building in the vicinity of the migrant residence area. A zoning use-exception permit was obtained for operation of a public facility, and the building was remodeled to serve as a clinic, as a local staff base, and as a center for other needed services discussed later.

Personnel and organizational changes. Another nurse was added to the staff, more aides were hired, Neighborhood Youth Corps girls served as clerks, and several nurses gave volunteer time to the clinics. However, the chief project nurse (a registered nurse) found it difficult to search out new ways to meet the needs encountered because of the restraints of the traditional public health nursing program.

To allow the chief project nurse greater flexibility, the health department's hierarchy was reorganized so that the project nurses and aides were removed from the public health nursing division, with the chief nurse reporting directly to the health officer. A new position, "coordinator for migrant health," with specifications appropriate to a comprehensive socially oriented medical program, was created for the chief project nurse. She and her staff were then given only general supervision by the health officer, with freedom to adapt, innovate, and seek out new avenues of care. Their requests for new facilities, equipment, personnel, procedures, and supporting services were given careful attention—usually with positive results.

Intercounty coordination. By arrangement with operators of the migrant project in adjacent Santa Barbara County, migrant families there were referred to the clinic, and referral and followup were carried out by the field staff of that project. Through this arrangement a number of Spanish-speaking aides from the Santa Barbara project worked each clinic session and contributed substantially as interpreters and clinic assistants—explaining the patients' backgrounds, recording, weighing, taking blood pressures, and similar tasks. This working arrangement facilitated liaison between the projects and assured followup on clinic findings and recommendations for the area covered by both projects.

The clinic. A weekly evening general clinic was opened in the center building in the fall of 1966, with a generalist physician, nurses, and aides in attendance. A well-baby clinic previously held at a school nearby was transferred to

the center, and the nurses and aides were available for continuous "drop-in" service at the center. To illustrate the magnitude of this consultative and paramedical care, the records show 1,490 nursing "visits," in the center and elsewhere, for a 9-month period and 1,860 "primary conditions" diagnosed during actual clinic hours for a comparable 9-month period. The 1,490 figure does not include "visits" tallied for well-baby and similar traditional public health clinics. This means that, in addition to traditional activities and the collaborative physician-nurse services for the 1,860 clients, the nurses for this period consulted with and treated patients 1,490 times without direct physician involvement.

The clinic was equipped with X-ray and automatic film processing equipment, a new electrocardiograph instrument, a basic clinic laboratory fitted into the former kitchen, a pharmacy, customary clinic room gear including gynecologic instruments, and a large waiting room which was also used for health education purposes. The X-ray machine was an innovation for a general clinic—for economy and space, a portable compact model of modest cost served well.

A qualified laboratory technician was hired on an hourly basis to perform basic blood and urine analyses while clinics were in session. Specimens for microbiological examination and serologic tests for syphilis were sent to the health department laboratory, and specimens for chemical determinations were sent to a nearby private laboratory. The nurses, and to a lesser extent the aides, operated the X-ray machines and the electrocardiograph. The nurses were readily trained to screen-read for normal and abnormal electrocardiograms.

A gynecologic clinic, attended by an obstetric-gynecologic specialist, was scheduled at the facility two evenings a month. A pediatric clinic was held simultaneously with the general clinic. Soon another weekly general and pediatric clinic was started so that patients seen at clinics previously in the week could be followed up before the weekend.

The team approach to care is revealed by the following breakdown of 1,860 clinic visits for a 9-month period to April 1968; 1,454 visits or almost 80 percent were recorded in which both a nurse and physician saw the patient.

	Patients	
Patient seen by—	*Number*	*Percent*
Physician and nurse	1,454	78.2
Physician only	60	3.2
Nurse only	318	17.1
Not recorded	28	1.5

Source of referral to clinics was studied for the same 9-month period. As shown below, the availability of the clinic became well known to the client population; word-of-mouth recommendation accounted for 42.4 percent, or more than twice as many as any other category, of referrals.

Source	*Percent patients*
Family or friends	42.4
Nurse	18.6
Aide	16.9
Health educator	10.0
Self	6.1
Other	6.0

Night and weekend coverage was provided by the nurses and aides by responding to telephone calls from distressed clients. Home telephone numbers of the staff had been given to the patients, and quite often aides and occasionally nurses were called out nights or weekends to appraise a patient's condition and arrange for emergency transportation to the hospital, if necessary.

Scope of care. Eventually, the full spectrum of preventive and firstline therapeutic care became available at the center: well-baby clinics, preschool examinations, immunizations, counseling, and screening of all patients for hypertension, diabetes, tuberculosis, syphilis, anemia, and kidney disease. All types of birth control methods were made available—the most commonly used was the Lippes loop intrauterine device. Each family planning patient received a complete physical examination initially and a Papanicolaou test annually, and incidental gynecologic conditions were treated.

Most patients, with either acute or chronic conditions, were treated at the clinics. Drugs were obtained from the center's pharmacy and were dispensed by the physician at the time of treatment. For economy, the formulary was stocked chiefly with generic drugs. For many patients treatment was continued at home, usually by the program's nurses or aides, sometimes by referral to the health department's

home therapeutic care program (entitled "home health service" under Medicare).

Referral system. It was necessary to refer all patients who needed dental care to other resources, and many patients needed specialists for further diagnostic study and treatment. In addition to resources previously used, a complementary network of referral services was developed and frequent calls were made on internists, pediatricians, surgeons, urologists, and other specialists. Patients were often transported by an aide using the program's vehicle. Generally, a reduced-fee schedule was obtained from these private resources; Medicaid had never significantly come into play for these people because of eligibility requirements. The criteria used for selecting physicians for clinics and as referral specialists were sympathy for the beneficiary population and professional competence. However, it was difficult to find physicians interested in serving this population.

Environmental health. An important part of the program was a systematic effort by a Spanish-speaking sanitarian from the health department to improve living conditions. Funded by the project, the sanitarian's activity was concentrated on housing, and he consulted frequently with the nurses and aides. Most of the houses occupied by the migrants were substandard, many extremely dilapidated, with water supplies and sewage disposal systems frequently defective and screening often lacking. While some dwellings were condemned and razed, many substandard conditions were corrected as a result of the sanitarian's counseling approach. This required pressuring landlords, which occasionally had political repercussions despite the tactful manner used.

A typical hygiene problem was that of families using pages from periodicals for toilet paper. On the landlord's instructions, the paper was collected and taken outside twice a week for burning in order to avoid clogging the sewage drains. A drive to educate the people on the importance of using toilet paper was undertaken and supplies were dispensed. Moderate success was ultimately accorded this campaign. The sanitarian's report states "in one instance we traced a dysentery outbreak to flies in the toilet area contaminating food in the kitchen. Adequate screening and fly control with proper disposal of toilet paper eliminated this problem."

Community support and ancillary aspects. Through intensive public relations activities—chiefly the project nurses working closely and vigorously with women's clubs and similar community organizations—the program obtained a surprising degree of sustained public interest. There were many articles in the local press and, as intended, a coming-out by voluntary organizations and individual persons to help with drives for clothing, food, household utensils, and to participate personally.

As a parallel process, the county board of supervisors responded positively to all requests for locally funded components—the special vehicles, clinic equipment, and remodeling and furnishing the center. Later, adjacent property was acquired and made into additional parking space, at cost, by the county public works department.

To make available comprehensive social services, other agencies were offered space on a part-time basis in the center. Employment and rural legal-aid services were thereby accessible regularly, and the welfare department established a local office one block away at the invitation of the health department to occupy the district public health nurse's office vacated as a result of the consolidation of services at the new clinic-center. Previously, the nearest welfare office was 30 miles distant at the county seat, for practical purposes inaccessible to many of the center's clients. A variety of other services became available at the center, such as driver training by local citizens, English-language classes in the evenings by a social worker who volunteered her time, and sewing classes 2 evenings a week by volunteer home economics students from a local college.

The spirit of the facility was expressed in a report by the nurse-coordinator as follows:

> We have found that since we have established our new Migrant Center that it has become a town hall, a dog pound, a legal-aid office, a sewing center, a driver training school, a dental health education center and an emergency care center for medical needs. People

come to the clinic with many different problems that must be solved by a variety of agencies in the community. They come for advice and to gain sense of direction. Since the clinic has become established, it has put the area on the map and acted as a catalyst so that other agencies have been induced to extend services there. Recently established are new welfare, social security and employment offices.

For the migrant families who arrived in the area without food or shelter, food was stocked at the center and help was given in locating a place to live. The food stock was limited to canned milk, peanut butter, and oatmeal cereal, but occasionally it made the difference between hunger and sustenance.

Discussion

Developmentally, the approach was empirical, with new program components originating as responses and fitting into place as organic outgrowths. This is in contrast to theoretical prestructured planning attempting to anticipate demands, needs, and wants, and the myriad intricate relationships involved in the dynamics of delivery of services. Parenthetically, it has been our experience that, even with categorical programs such as infectious disease control and family planning, the carefully planned approach converts in the developing operational stages to empiricism because so many variables cannot be anticipated or, if anticipated, quantified accurately in advance.

Of salient importance in the project were the principles of organizational flexibility and of establishing a working atmosphere conducive to the entire staff's responding creatively to needs without arbitrary or traditional restraints. In the area of personal health service, the traditional restraints of public health nursing have been particularly troublesome. The immediate solution in our project was to remove the medical program from the direct influence of the regular public health nursing staff and to employ nurses not inhibited by traditional training or experience.

The bridging of the culture gap by involving a concept of communication encompassing more than language greatly facilitated access to the clientele. Establishment of a local multipurpose facility made delivery of care far more efficient and effective and provided a focus of community identity for the migrant families. The location of the center coupled with provision of transportation overcame the barrier of distance. Further, the adaptive methods of providing services by the staff surmounted the cultural and administrative barriers imposed by various agencies.

By incorporating into this facility a laboratory, X-ray equipment, and a pharmacy, it was made as complete a frontline clinic service as possible and minimized problems attendant to referral for laboratory service and filling of prescriptions and effectively controlled costs for these services.

The team approach with the nurse as coordinator of the team and the nurses and aides respectively performing "physician assistant" and nursing-level tasks contributed significantly to effectiveness and efficiency. Close liaison with welfare department social workers was maintained through the sharing of office and interview space. Public relations activities, volunteer participation, news media interest, and community support with the resultant political backing were all crucial determinants of the buildup and success of the enterprise. Coordination of the two projects under separate political control in the two counties was accomplished chiefly by establishing meaningful cooperative working procedures involving interchange of operational personnel.

As of 1968 several important problems remained unresolved. Because of restrictions imposed by California law, only physicians and pharmacists can legally dispense prescription drugs. However, if the nurses could have been so authorized, program efficiency and effectiveness could have been enhanced. The rationale for this position is that nurses are clinically trained (in contrast to pharmacists), that field duty nurses are in a much better position to follow up and observe patients receiving drugs, and that nurses generally maintain a close working relationship with the prescribing physician. For an effective family planning program, it is essential that nurses, and perhaps aides as well, dispense pills at clinics and at clients' homes.

Another serious program deficiency was the inability to obtain funds for underwriting hospitalization at nearby facilities. The only available facilities for inpatient care, the county hos-

pitals, were severely inadequate in terms of distance, admission barriers, poor care, and failure to supply records.

Conclusions

Use of outreach techniques by the San Luis Obispo County Health Department helped to locate and introduce non-English-speaking migrant families to health care services and performed a two-way interpretation of what services were required as well as how patients might follow through on health advice.

The combination of useful services and a growing perception by this subcultural population of indigent and medically indigent families of their own importance led to the development of a sense of community among this group and movement toward meaningful relationships with the larger community.

A particularly important result of the outreach program is that the power structure of the county is now concerned about equality of opportunities for the migrant families and, by inference, has greater awareness and concern for other disadvantaged groups.

Hill-Burton Grants Reach 10,000

The Hill-Burton program, which for nearly 23 years has been assisting the nation in filling its health facility needs through a Public Health Service grant and consultation program, has awarded its 10,000th grant.

The 10,000th grant was an award of $549,817 to help construct a comprehensive rehabilitation pavilion to be part of the Villa Rosa Rehabilitation Center in San Antonio, Tex. The pavilion, which will be one of the 10 structures comprising the rehabilitation center, will cost an estimated $1.8 million. Other structures in the rehabilitation complex, to be located on a 50-acre site adjacent to the new University of Texas South Texas Medical School, will bring the total cost of the project to an estimated $6.5 million.

The new center will be a satellite of the 830-bed Santa Rosa Medical Center, one of the largest privately owned nonprofit hospitals in the United States. With the addition to the Villa Rosa center, the medical center will become the focal point for comprehensive health care for San Antonio and southern Texas. In addition to care for acute conditions, the hospital presently provides services ranging from dental to psychiatric care.

Plans for the new 286-bed center call for treatment and rehabilitative services for both the physically and mentally handicapped; for example, patients suffering from drug addiction, alcoholism, amputation, blindness, mental illness, cancer, heart disease, cerebral palsy, deafness, or paraplegia.

The Hill-Burton program is now placing special emphasis on aiding facilities that can reduce the pressure on hospitals and thus help curb skyrocketing medical costs.

A total of $3.3 billion has been awarded to private and public nonprofit community hospitals and related facilities through the Hill-Burton program, administered by the Health Facilities Planning and Construction Service, since its inception in 1946. In addition to hospitals and rehabilitation facilities, other types of health facilities aided by the program include long-term care facilities (including nursing homes), public health centers, diagnostic or treatment centers (outpatient facilities), and public health laboratories.

The Hill-Burton program has reflected a strong shift over the years from construction of new facilities to the remodeling and replacement of existing facilities. During the past year approximately 90 percent of the Hill-Burton funds have been used for this purpose. Hill-Burton State agencies have collectively reported that half of the nation's hospitals require modernization. To fill this need and the modernization need of other health facilities will cost about $11 billion. Additional health facilities needed are expected to cost $6 billion.