

An Evaluation of a Nurse Run-Outreach Clinic for Persons  
Who Are Homeless

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and

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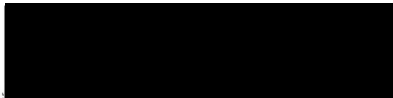
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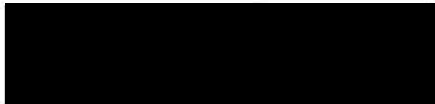
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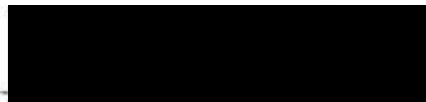
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## Introduction

Health care for people who are homeless is recognized as a growing national problem. Different models of service have been emerging in different environments to meet the health needs of people who are homeless. One model of service described in the literature is the nurse-run clinic, but there are few examples. The most relevant literature describes clinics run by nurses or nurse practitioners in Boston, Los Angeles, and New York City. None of the literature reviewed discusses methods of evaluating the effectiveness of the clinics.

In rural Southern Oregon, a nurse-run clinic for people who are homeless was opened as an outreach service in the Fall of 1988 by the Community Health Center, a non-profit organization, in response to the health needs of the area's increasing population of people who are homeless.

The study described herein evaluates the Community Health Center Homeless Outreach Clinic, using a model for the evaluation that was developed by the researchers. The purpose of the evaluation is three-fold:

1. To provide descriptive and qualitative data about the clinic and its effectiveness in meeting stated goals.
2. To contribute to the needed body of knowledge concerning models of nursing care for meeting the health needs of the growing number of people who are homeless.
3. To develop a framework for use in evaluating nurse-run clinics.

In the planning phase of developing the evaluation framework, discussions with the administrator of the clinic identified the following specific concerns.

1. The cost in relation to the benefits of the clinic.
2. The clients' satisfaction with the clinic services.
3. The types of health problems that can be managed by nursing care.
4. The value of using the nursing treatment protocols.
5. The community human support services organizations perception of the clinic.

These concerns, together with quantitative and qualitative data about the clinic, clients, health problems, nursing care and community network system are addressed in this study. In addition, the relevance of this study to future research and to the practice setting are described.

It is hoped that the results of this study will be useful to the Community Health Center in measuring



program accomplishments, as a basis for future planning, future program operations, and for public relations.

### Literature Review

The review of the literature is organized according to topics relating to people who are homeless: demographics, common factors, health problems, models of clinic services, and evaluation of clinical services.

#### Demographics

The transient nature of the population that is homeless makes it difficult to determine the number and scope of those who are homeless. The Federal Department of Housing and Urban Development estimates that 250,000 to 350,000 people are homeless in the U.S. today (Ropers & Boyer, 1987). Estimates from the Community for Creative Non-Violence place the figure much higher, at 2 to 3 million, and the National Coalition for the Homeless concurs, with a figure of 2.5 million (Hagen, 1987). This places the national average somewhere between 1 in 100 and 1 in 500. Demographics of people who are homeless in the U.S. have changed significantly since the 1960's and a growing body of data indicates that people who are homeless are younger, better educated, and more non-white than the skid row homeless of past generations (Wright & Lam, 1987).

These data indicate that since the 1960's the average age of men who are homeless declined from 44 to 36.5 years, the average years of education increased from 9 to 11 years, and the number who are white dropped from 49% to 15% (Wright & Lamb, 1987). Hagen (1987) reported that women now represent up to 50% of the people who are homeless, and Bassuk, Rubin, & Lauriat, (1986) reported that families, mainly consisting of young, single women with two to three children, constitute about 20% of people who are homeless.

The Oregon State Health Planning and Development Agency (1986) estimated that between 1 in 300 to 1 in 500 people are homeless in Oregon. It could be predicted from these figures that Jackson County, the location of the study's population, has between 277 and 1,384 people who are homeless. According to Crowley (1988), information from local agencies providing temporary shelter to people who are homeless reveals that 5,064, nearly 4% of this county's 138,000 population, were provided shelter during 1986. This number does not include the estimated 300 veterans who are homeless and accessing the nearby V.A. Domiciliary.

A health needs assessment of people who are homeless in Jackson County (Burton, Donlon, Meyer, & Stevens, 1988) described a sample of 34% women and 66% men with a mean age of 35 and 40, respectively.

Although not included as part of the sample, associated with the adults were 24 children with an age range of 1 to 15 years. Further, the sample indicated a population of 92% caucasians, 3% black, and 3% hispanic. It should be acknowledged that this skewed racial mix is characteristic of this geographic area. The educational level ranged from 3rd grade to college, with 70% who were high school graduates.

#### Common factors in people who are homeless

The changing composition of the homeless population is attributed to a number of factors, including poverty, deinstitutionalization of the mentally ill, and alcoholism. Sosin (1988) determined that many people were homeless simply because of poverty and that this group continues to grow.

Roth and Bean (1986) found that the first and most pressing need of those interviewed was for adequate housing, followed closely by the need for employment. Ball and Havassey (1984), in their survey of the psychiatrically disabled in San Francisco, found that concerns about the lack of material resources, employment, privacy, and safety far outweighed concerns about social, medical, and psychological problems.

The deinstitutionalization of the mentally ill is a significant and controversial factor in the increase of

the people who are homeless. Fisher, Shapiro, Breaky, Anthony, and Kramer (1986) report that between 1972 and 1984 the average daily inpatient census of state hospitals dropped from 11,000 to 2,050. According to Rossi and Wright (1987), Fisher, et al (1986), Pearson (1988), Bachrach (1987), and Lamb and Talbot(1986), between one fifth and one half of adults who are homeless are deinstitutionalized mental patients or are suffering from major mental illness.

On the other hand, Ropers and Boyer (1987) report a study by the Ohio Department of Mental Health which found little association between deinstitutionalization and homelessness. Only 6% of the homeless respondents reported a hospitalization during the time frame 1960-1980, and the study of discharged patients showed only 4% to be homeless. Sosin (1988) substantiates this by concluding that "Deinstitutionalization contributed to the increase in homelessness in a minor way" (p.377).

The literature reports a significant use of alcohol by the homeless. Ropers and Boyer (1987) reported that 65% used alcohol, with 26% of those abusing alcohol. Toon, Thomas and Doherty (1987) reported that alcohol-related problems were the chief complaint for 35% in their study, and Burton, et al, (1988) reported that 40% of their study indicated problems associated with alcohol use or abuse.

### Health Problems

Although the demographics and composition for persons who are homeless are changing, health problems continue to abound for this population because of lifestyle and lack of access to adequate health care.

According to Robertson and Cousineau (1986), 40% of people who are homeless have at least one chronic health problem. Pearson (1988) and Brickner, et al, (1986) found that respiratory infections and hypertension were the most frequently reported health problems; skin infestations and trauma were more frequently reported problems in the summer and respiratory illness and peripheral vascular disease the chief problems in the winter.

According to Cousins (1983), up to half of those who report health problems do not seek help from a professional, and of those who do seek care, most use emergency rooms. Providing health care to a population that does not place health care as a priority requires innovative measures.

McDonald (1986) argues that if better primary health care were available in a manner acceptable to the homeless, fewer health crises would occur, resulting in fewer hospitalizations and a decreased burden on the health care system.

The Jackson County Health Needs Assessment of the homeless population (Burton, et al, 1988) indicated that the common problems were dental (63%), respiratory (28%), and bone and joint problems, including sequelae of major trauma (24%). Treatment for health problems was received in an emergency room (37%), through private care (49%), or by self-care measures (51%) during illness.

#### Models of Health Care

Several innovative approaches for providing health care to the homeless have been initiated in Boston, Los Angeles, and New York City.

1) In Boston, at the Pine Street Inn, a group of nurses established a clinic in a large urban shelter for homeless men in 1972 (Lenehan, McInnis, O'Donnell, & Hennessey, 1985). Initially, the clinic was to operate for one month with all the nurses participating on a voluntary basis. Two nurses and one staff member were assigned every evening, including weekends, during the time men came for bed assignments. The clinic was held in the office of the lobby and, despite the limited privacy, seeing the clients in one room seemed to work; it was less formal, intimidating, and restricting. Information from the first month of the clinic led to the recommendation that physicians be available at the

clinic. The nurses, however, did not want to change what had worked so well and remained fiercely committed to retaining nurses as the primary caregivers.

The clinic today provides separate clinics for men and women. A nurse administrator oversees both clinics. The clinics share a full-time head nurse, a public health nurse, a psychiatric nurse clinician, a part-time psychiatric nurse, and two part-time clinic nurses. The nurses practice under written protocols, which, according to B.Bock (personal communication, October 1, 1988) are in the process of revision. Each unit also has coordinators, volunteer nurses, receptionists, advocates, and clerks. The clinic is also used as a teaching facility for nursing and medical students. Sixteen years later the Pine Street Inn is a flourishing model for health care for people who are homeless.

2) The Los Angeles Homeless Health Care Project is a consortium of community-based organizations (McGee, 1988). This project began in 1985 when Los Angeles was awarded a four-year \$1.3 million grant, one of 19 similar "health care for the homeless" demonstration projects throughout the United States funded by the Robert Wood Foundation and Pew Memorial Trust.

In response to the health problems of the homeless, the Los Angeles Homeless Health Care Project developed a program of primary medical and outreach care for the

city's homeless. The project provides health care at two clinic sites. The UCLA School of Nursing operates a health clinic in the Union Rescue Mission located in Downtown Los Angeles near City Hall. The Venice Family Clinic, a medical model clinic, is the other project clinic. The Union Rescue Mission, staffed by nurse practitioners, provides primary health care, social services, and referrals for homeless people on skid row. Transportation is also provided to and from shelters, and between the clinic and the county health centers where many patients are referred for further diagnostic and treatment services. In its first two years of operation, the UCLA School of Nursing Health Center provided nearly 8,000 health encounters, transportation services, and social services per year, nearly double its original objective (Mission Statement 1985).

A converted warehouse on the perimeter of skid row houses Para Los Ninos (for the children), a center which offers a variety of programs designed to decrease the incidence of child abuse and neglect among homeless families (McGee, 1988). Since May, 1988, Para Los Ninos has been home to a two-day-a-week medical clinic which offers care for children from birth through 18 years of age. The clinic, operated by the UCLA School of Nursing, was funded as part of a \$470,000, three-year special grant from the U.S. Department of Health and



Human Services, Division of Nursing. It is part of a larger project which includes the School of Nursing's Health Center for the Homeless at the Union Rescue Mission in downtown Los Angeles. McGee (1988) quoted Dr. Mary Gottesman, a lecturer at the UCLA School of Nursing who administers the funding of the program: "Part of the purpose of the grant is to show the cost effectiveness of nurse-provided care in a non-institutional setting" (p.9).

According to M.M. Gottesman, (personal communication, August 24, 1988), the cost of service per patient in the UCLA clinic is approximately \$50 in direct cost. The estimated direct and indirect cost per patient visit is \$90.

3) The Martinique Hotel is one of the largest hotels for homeless people in New York City (NYC) (Kozol, 1988). On the floor above the lobby is a room where crisis workers from Human Resources Administration and a medical team assigned by the NYC Department of Health have desks and phones. Emergencies of every kind are handled here. This researcher, who personally visited the Martinique Hotel, interpreted that to mean medical emergencies, but in fact a medical clinic does not exist in the Martinique. During an interview with M. Nicholas (personal communication, August 23, 1988), it was clarified that nurses from the NYC Department of

Health are present 4 days a week during daytime hours, primarily to track pregnant women, infants, and children. Services include health education, immunizations, and the WIC program. Referrals for sexually transmitted diseases are made to an affiliated medical clinic and other medical, mental health, and dental referrals are made to NYC Bellvue Hospital. A medically equipped van donated by singer Paul Simon to the NYC Bellvue Hospital is parked outside the hotel 2 days a week providing residents of the hotel access to medical care.

Safety for health care professionals in the clinics for the homeless was an issue that repeatedly emerged in the literature, personal communications, and observations.

Pearson (1988) quoted Alley and McConnell:

"This population is really good at picking a fight. In fact, the concept of security for the nurse practitioner is important. We do a lot of triage in the hall, and we use volunteers to help with the screening. If a client is hostile in the hall, we don't let him in the clinic. We tell them they are not welcome while they are abusive. We also advertise very clearly that we do not keep any narcotics in the clinic" (p.44).

Lenahan (1983) adds, "A staff member signed up the men in the clinic, called them in turn, and helped insure our safety from the violent or intoxicated" (p.1238).

Kozol (1988) described the lobby of the Martinique: "On the right as one enters is a sort of guard post, where visitors must either be signed in by residents or present good reasons for being in the building" (p.66). When one of the researchers visited the Martinique, it was necessary to address two guards at the front desk in the lobby, one of whom escorted her upstairs to the nurses' desks.

### Evaluation

In a study to determine client satisfaction with nursing center services, Bagwell (1987) found that client satisfaction was directly related to improved health by seeking follow-up care and complying with suggested treatment. It was emphasized in this study that literature related to nursing center services could not be found. Although the questionnaires and interviews used to determine client satisfaction were physician/client oriented, the author considered that questions were useful and specific enough to be helpful in eliciting client satisfaction responses pertaining to

clinic waiting time, courtesy, client-nurse relationships, range of services, and quality of care.

A search of the literature did not reveal methods of evaluation for nurse-run clinics or clinics for the homeless. Methods of evaluation were implied, however, in personal communications with Boston and Los Angeles clinics, but no written models were available upon request.

### Summary

The incidence of people who are homeless is increasing nationwide. Concurrently there is an increase in a population with multiple health needs. While the literature discussed medical and nurse practitioner model approaches to providing health care to people who are homeless, little information was found that discussed nursing models of care, and no specific information was found regarding methods of evaluating the effectiveness of nurse-run models of clinic services.

This study describes and evaluates the effectiveness of a Community Health Center's nurse-run clinic for people who are homeless in rural Southern Oregon, and demonstrates the use of an evaluation model.

## Methods

### Framework

The development of a framework for evaluation as outlined in Stecher (1988) starts with the basic research questions to be answered. Research questions that were addressed in the study were generated from the practice setting and the clinic administrator. The focus areas of the clinic evaluation were developed from the specific questions.

1). CLINIC: What is the cost in relation to the benefits of the clinic?

2). CLIENT: Are clients satisfied with the clinic services?.

3). HEALTH: What types of health problems can be managed by nursing care?.

4). NURSE: What is the value of using the Nursing Treatment Protocols?

5). COMMUNITY: What are the community human support services organizations perceptions of the clinic?

The Homeless Outreach Clinic guidelines set out the goals and objectives for the clinic as well as quality assurance standards.

According to Stecher (1988), the purpose of a program evaluation is to compile and analyze data to answer the research questions. The results of the

analysis will be used to measure program accomplishments and will be used as a basis for planning and funding, future program operations, and public relations.

Many of the questions relate to perceptions of various segments of the community. To encompass the totality of questions, a model was designed which combined goal-oriented and responsive approaches (Stecher, 1988), using quantitative and qualitative data collection methods. Blum (1974) discusses the nature of evaluation in planning and evaluating health care. Blum emphasizes that the position being taken by the evaluator be stated and that the criteria by which the evaluation is being compared be identified. His evaluation levels were also used to guide the development of the model.

The resulting model provides for evaluation from the perspectives of the clinic, client, health, the nurse, and the community, it incorporates the stated goals of the clinic as the expected outcomes, relevant observations, and an evaluation of the effectiveness of the clinic in terms of the stated goals.

The conceptual model for the evaluation can be described by a grid (Table 1.). This grid allows for identification of the data to be collected and the source of the data for each of the areas of focus. For an expanded description see Appendix A.

Table 1 Categories of Evaluation by Focus Area

	DESCRIPTION	STATED OBJECTIVES	OBSERVED OUTCOMES	EFFECTIVENESS PER GOALS	
CLINIC	data	site, hours, staffing, supplies, funding	clinical objectives	cost analysis # of services provided, meds, transports	per analysis
	source	observation, interview with administrator	Homeless outreach manual Budget analysis	client records clinic records budget analysis	observed outcomes
CLIENT	data	demographics	target population data	# from target population client satisfaction.	per analysis
	source	client record	Homeless outreach manual (H.O.M.)	client record client satisfaction quest.	observed outcomes
HEALTH	data	health prob. frequency of types, duration of Sx.	program objectives	problems treated, problems referred.	per analysis
	source	client records	Jackson Co. Health Needs Assessment H.O.M.	client records	observed outcomes
NURSE	data	role perception, tasks performed	program objectives	# treated by protocol, # with no protocol, # records complete supplies.	per analysis
	source	observation, interview	H.O.M. Protocols	observation, interview, client records	observed outcomes
COMMUNITY	data	agencies & organizations transportation	program objectives	# referred/accepted, problems, comm. perception	per analysis
	source	clinic record, interview	H.O.M.	interviews, comm. agencies & orgs.	observed outcomes

### Setting

The Community Health Center Homeless Outreach Clinic is a model of health services providing nursing care to people who are homeless. This is a unique model of service in this area, and is the only health service directed specifically toward meeting health needs of people who are homeless.

The evaluation was conducted for the Community Health Center (CHC), a non-profit health clinic providing services to low income people. The CHC operates the nurse-run clinic as a satellite health care service for people who are homeless in Jackson County, a rural area in Southern Oregon. This outpatient clinic provides care at no cost to the client, is staffed by two RNs, is open four hours a week, and is housed in the facilities of The Salvation Army.

Clients at the nurse-run clinic are seen on a drop-in basis where general intake information is collected by a Volunteer in Service to America (VISTA). Subsequently, the nurse sees clients to make assessments, care plans, interventions, and/or necessary referrals. An average of ten clients are usually seen during the weekly four-hour clinic.



### Sample

The sample for the study was composed of three groups:

1. Clinic clients and their medical records.
2. The administrator and the two clinic nurses.
3. Ten community human support services organizations

The first group was the population of people over the age of 18 who were homeless and used the services of the Community Health Center Homeless Outreach Clinic at The Salvation Army. A sample of 60 clients was expected during the data collection period. A six-week data collection period was initially proposed; however, because of clinic location and time changes, fewer than the expected number of clients were seen. The data collection period was extended to three months to provide for an adequate sample.

The criteria for inclusion in the study for the homeless population were as follows:

1. Homeless (persons who said they had no home).
2. Over 18 years of age
3. Signed consent to participate

The second group consisted of nurses and the administrator of the clinic.

The third group consisted of 10 community agencies which either provided care on a referral basis or supportive services to the clinic or clients. This third group of agencies contacted included: hospital emergency rooms (2), Jackson County Health Department, V.A. Domiciliary, Jackson County Mental Health, Alcohol Rehabilitation, Gospel Mission, The Salvation Army, Adult and Family Services, Access, and the Jackson County Medical Society.

#### Human Subjects

1. The clinic subjects observed were a convenience sample of clients who came to the clinic and agreed to participate in the study. They were asked to sign an informed consent form for participation in the research study (See appendix B). The risks involved to the clients were minimal as their identity was not used in the compilation of the data.

2. The clinic nurses and administrator were informed of our request for their participation by a letter (See appendix C). There were no anticipated risks to the nurses and administrator.

3. Community agencies were asked by letter to participate in the study, and were contacted by phone by the researchers (See appendix D). There was no

anticipated risk, as agencies were not identified by name in the research study.

### Procedures

The procedures for the description and evaluation of the clinic were by primary data collection through direct observation and secondary data collection through review of all clinic and client records. Interviews were conducted with agencies accepting referrals, selected community human service support organizations (CHSSO), health care providers in the community, and the nursing staff and administrator of the CHC. Direct observations were made of clients and of nursing practice in the clinical setting during the four hours per week the clinic is opened. Records of all clients participating in the research were reviewed for completeness according to quality assurance standards as stated in the CHC Homeless Outreach Services Manual (CHCHOSM), (Crowley, 1988) including health problems, treatment, referrals, use of the nursing treatment protocols, and demographic statistics. Client Satisfaction Questionnaires (CSQ) elicited the target population's views of the clinic. A pilot study using five clients was conducted prior to the use of the CSQs to determine readability and comprehensibility. All agencies accepting referrals from the clinic were

interviewed for information on follow-up care provided. Selected CHSSOs were interviewed for their perception of the clinic. Nursing staff at the CHC Homeless Outreach Clinic and the administrator at the CHC provided data on the clinic administrative operations.

### Instruments

A Client Satisfaction Questionnaire (See appendix E) and open-ended interview guides (See appendix F), developed by the researchers, were used for data collection. The instruments were designed to collect data relevant to the categories of evaluation stated in the conceptual framework and to address the research questions specific to this study.

### Data Collection

#### Direct observation in the clinic

Each of the two researchers, at different times, spent four hours in direct observation in the clinic to collect qualitative and descriptive data. The data collected included information about the clinic, the setting, patient flow, staffing, the general feelings in the clinic, the nursing tasks performed, and the availability of medications and supplies. Notes were kept in field note logs.

#### Interviews with the nurses in the clinic

The clinic nurses were asked by letter to participate in the research project. The two nurses in the clinic were interviewed by use of an open-ended interview guide at the end of the three-month period of data collection. The nurse interviews collected descriptive information about the community network that the clinic refers to, and the CHSSOs that provide transportation, medications, and social services. The nurses were also interviewed for qualitative information concerning their feelings about functioning in this type of clinical role, and about the usefulness of the nursing treatment protocols in managing client care.

#### Interview with the clinic administrator

The clinic administrator was asked by letter to participate in the research project. One of the researchers interviewed the administrator, by use of an open-ended format, near the end of the data collection period for descriptive information about the clinic functioning, staffing, hours, funding, budget plan, how well the clinic is able to operate within the budget, and about the cost per patient in the clinic.

Interviews with agencies accepting referrals for patient care

Agencies accepting referrals from the clinic were informed by letter of the research project, and told that one of the researchers would contact them by phone for information about clients who have been referred for care. The researchers contacted agencies by phone at the end of the three-month data collection period to gather information regarding the number of referrals that were actually seen, to ascertain if there were any problems with the client getting to the referral source, and to establish the time elapsed from the referral to the time the client was seen at the referral source.

Interviews with community human service support organizations

Community organizations which serve the clients seen in the clinic were contacted by letter informing them of the research project. A researcher, using an open-ended format, telephoned key personnel in select CHSSOs to assess their perspective of the CHCHOS clinic. Agencies contacted included: Hospital Emergency rooms (2), Jackson County Health Department, V.A. Domiciliary, Jackson County Mental Health, Alcohol Rehabilitation, Gospel Mission, The Salvation Army, Adult and Family

Services, Access, and the Jackson County Medical Society.

Review of client records

Data were collected from client records of all clients participating in the research during the three-month data collection period. The information collected included demographics, the number of people seen who were from the target population, the number of clients treated, the number and type of health problems seen, which ones were treated in the clinic, which ones were referred for care elsewhere, the number of people who were referred, the time from awareness of symptoms to being seen in the clinic, and for those being referred, the time elapsed from being seen in the clinic to the time being seen at the referral site. The client records were evaluated for completeness per quality assurance (QA) standards, stated in the CHCHOSM.

Clinic records were reviewed for the following data:

Medications dispensed, transportation units provided, and other social services provided by the clinic.

### Client Satisfaction Questionnaire:

A Client Satisfaction Questionnaire, developed for this study, was given by the clinic staff to all clients participating in the research during the three-month data collection period. The Client Satisfaction Questionnaire (CSQ) was pretested by five clients for readability and comprehensibility. The five questionnaires were filled out without difficulty by the clients, marking appropriate yes and no categories. None of the CSQs were marked with all yes or all no answers. Two of the five had written comments indicating they were pleased with the clinic services provided.

### Documents and information used as standards for evaluation

Researchers reviewed the following documents: Community Health Center Homeless Outreach Services Manual, (which contains the quality assurance and program standards), nursing treatment protocols, Jackson County Health Needs Assessment, (Burton, et al, 1988), and the budget analysis.



### Analysis

The evaluation of the nurse-run clinic consists of qualitative and quantitative data.

### Clinic

The clinic location, hours, funding, staffing and nursing function were described. The number of services provided were tallied and compared to the expected standard. The budget and operating costs of the clinic were enumerated and compared to the expected standard. The cost of care in the clinic was compared to the cost of care in the Community Health Center, emergency rooms, and private care. The written clinic goals used as a basis for the expected outcomes were described.

### Client

The clients' perceptions of the clinic in terms of accessibility, safety, helpfulness, and waiting time were evaluated with the Client Satisfaction Questionnaire. Responses in each category were described by percentages.

The analysis of the demographics included the range and mean for age. Percentage male and female and percentage black, white or other race were computed. Marital status was tallied and reported by the percent single, married, divorced, separated, or widowed. The

range and mean of years of education were calculated. Current occupations were computed and categorized. The percentages for people living in their own home, with friends, in a shelter, or not housed were tallied. The length of time in the current situation was calculated with range and mean times, including the length of time homeless.

### Health

The types of health problems seen were analyzed for frequency by type of problem and percentage of the total for each problem. The length of time from beginning of symptoms to being seen in the clinic was analyzed by the mean time, range, and correlation by types of problems. The number of health problems treated in the clinic and the number of health problems referred for care were analyzed by computing the percentage of the total seen or referred, and were correlated with the type of health problems treated or referred.

### Nurse

The number of patients treated by the nurse was computed as the percentage of patients seen and compared to the expected standard stated in the clinic goals. The percentage of patients who were referred for care and those completing the referral was calculated, as

well as the mean and range time from referral to care at the referral site. The percentage of patients who did not receive the necessary care, medications, or supplies as described in the nursing care plan was calculated. The percentage of medical records that were complete according to the standard was calculated.

The number of health problems treated according to the nursing treatment protocols was calculated, as well as the number of health problems for which there were no written protocols.

Qualitative data of the nurses' perception of their roles in a nurse-run clinic was described.

#### Community

The community referral system and the general support from the community, as well as any problems patients had in accessing care, were discussed. The community perception of the clinic was described.

#### Framework

The framework used for the evaluation was discussed in terms of strength and weakness. From the researchers' experience in using the framework, recommendations regarding its generalization for use in similar clinical settings were made.

On the basis of the synthesis of the data, it was determined if the nurse-run clinic provided the care intended as stated in the goals, what the costs and benefits of this model of service were, and if the clinic was seen by the staff, community and clients as providing care to the target population in a manner that is acceptable, accessible and safe. The usefulness of the nursing treatment protocols was discussed along with the types of health problems that can be managed by a nurse within the scope of nursing practice. Any identified gaps in services were described and possible solutions discussed.

## Findings

### Introduction

The findings are organized according to the five focus areas of the framework identified for this study: clinic, client, health, nurse, and community. Each area is addressed using a format of descriptive data followed by quantitative data describing each of the areas of study. Inferences are made about the observed outcomes to answer the five research questions for this study and to compare outcomes to the related program standards and objectives as stated in the Community Health Center Homeless Outreach Services Manual (CHCHOSM). Data were collected during a 3-month period (May 2 through August 2, 1989)

### Clinic

This section describes the clinic at the two different sites that were used during the data collection period. Following the clinic descriptions, the quantitative data is presented.

The clinic for people who are homeless is currently held at The Salvation Army Shelter, on Crews Road, in Medford. During the data collection period, in an attempt to reach more of the target population, the

clinic was moved to a location closer to town. The move resulted in a decrease in the number of clients served; consequently, the clinic site was moved back to the original location at the Salvation Army Shelter. Participant observations were made at both clinic sites. When the clinic returned to its original site, the clinic hours were also changed to coincide with shelter check-in and meal time, to enable greater accessibility for clients.

Because of these changes and the decrease in numbers of clients anticipated, the data collection period was extended from six weeks to three months.

The clinic is staffed by two registered nurses employed by the Community Health Center (CHC). They are assisted by a volunteer RN and a VISTA worker. The VISTA worker does the initial clinic registration and intake forms, lets clients know about other services available in the community, keeps statistics, and directs clients to the nurse when it is their turn to be seen. The nurses take histories, examine the clients as indicated by their problems, conduct a nursing assessment and formulate a treatment plan. They frequently discuss problems with each other, and use the Nursing Treatment Protocols and other written materials, such as the Rural Health Services Manual from California and the Non-Prescription PDR, as guidelines. The nurses

may make referral appointments for the clients, or if the clients prefer to make their own appointments they are given the necessary information to do so.

Data from participant observations were collected at both clinic sites. One observation was at The Salvation Army Main Office, close to downtown Medford. The other observation site was The Salvation Army Shelter on the outskirts of Medford. One researcher recorded observations for a four-hour period at the clinic held at the downtown Salvation Army office, and the other researcher recorded observations for a four-hour period at the clinic held at The Salvation Army Shelter.

Clinic held at The Salvation Army downtown office.

For this clinic site, two rooms were utilized, one for client intake, the other for nursing assessments. As there was not much privacy between the two rooms, music was the predominant audiologic stimulant. "Puff the Magic Dragon" and "If I had A Hammer" were playing at an elevated volume. One nurse was working in the clinic on this day in an office-type room. A peach-colored sheet was used as a curtain to divide this room in half. The music flowed in from a vent in the wall next door. There were two clients seen on this morning.

On this day, it was observed that Client Satisfaction Questionnaires were not distributed.

Clinic held at The Salvation Army Shelter.

The Salvation Army Shelter was the site of the other clinic observation. The clinic was set up in one of the family dormitories. The intake was done by a Volunteers In Service To America (VISTA) worker in the sitting room, with a card table for a desk. The room had two couches and some tables and was carpeted. It was comfortable in a lived-in fashion. The windows looked out on walkways or patios where people congregated to wait for meals. One nurse worked in a dorm room, furnished with a set of bunk beds and two single beds. She had a card table for her supplies and folding chairs. The other nurse worked in a small furnace closet, with a small desk and cupboard for supplies and folding chairs. This closet opened out onto the sitting room where people waited and were registered. The feeling in the clinic was relaxed and personable. The VISTA worker offered people iced tea and crabapples that someone had donated. The people made themselves comfortable and talked while they waited. The clients were given the option of having the researcher present or not, and none refused. Client



Satisfaction Questionnaires were handed out to most clients seen that day.

This section will describe the observed outcomes as they relate to the specific Program Objectives I, II, IV, and VI, as outlined in the CHCHOSM and Research Question #1.

PROGRAM OBJECTIVE I: A minimum of one thousand (1,000) nursing assessments will be provided to homeless persons through scheduled outreach clinics located at the Salvation Army Shelter in Medford.

(This estimated number was derived from a "best guess" based on two clinics per week)

According to client records, a total of 43 clients were seen during the data collection period, May 2 thru Aug. 2, 1989. These 43 clients made a total of 76 visits to the clinic. According to the clinic statistical records, there were 119 visits. A review of the client records and clinic statistical records reveals that there were visits listed on the clinic statistical records for which there were no client records (for example, four family members treated for lice by the volunteer nurse and camp physicals done for six children). During one participant observation period, a man came in with a laceration on his leg, which was checked, cleaned, and bandaged by the nurse

along with instructions for wound care; there was no record for this client. Thus, the figure of 119 is probably the more accurate of the two figures describing the number of visits, but the analysis will be done on the 76 records that exist.

The expected number of visits for this time period, according to the grant proposal, was 250, 174 more than were actually seen.

PROGRAM OBJECTIVE II: The registered nursing staff will provide a minimum of two hundred fifty (250) referrals of homeless persons from the outreach medical clinics to more traditional medical settings, for the purposes of further diagnostic evaluation and treatment.

A major function of a nurse-run clinic, in addition to primary care, is appropriate referral. As a satellite it was expected that the homeless clinic would serve as a referral source for the parent CHC.

The expected number of referrals was 63; the actual number was 26, 37 less than expected. The majority of referrals were to the CHC for treatment, or to Jackson County Mental Health or substance abuse centers for treatment.

PROGRAM OBJECTIVE IV: Medication assistance will be provided to a minimum of five hundred (500) homeless persons.

The expected amount of medication assistance was 125. The actual number was 44, 81 less than expected. Most common medications dispensed were non-prescription pain medication, cold and allergy medications, vitamins, and vouchers for prescription medications people were unable to purchase.

Twelve clients were provided with supplies. The most common supplies were bandages, socks, powder, and toothbrushes.

PROGRAM OBJECTIVE VI: Transportation will be assured, when appropriate, for a minimum of two hundred fifty (250) persons, for the purposes of keeping medical appointments, through a cooperative agreement with external community agencies.

The number of clients assisted with transportation was expected to be 63, the actual was 2, a difference of 61.

RESEARCH QUESTION #1: What is the cost in relation to the benefit of the clinic?

Funding for the clinic is generated from a number of sources. The total initial operating funds include: The Carpenter Grant (the major contributor) \$10,000, fundraising \$3,000, contributions \$175, a VISTA Grant, and a local match (coming out of CHC funds). The total operating budget was \$28,254. An allotment of \$200 was made for supplies from the local match funds. The basis for figuring the cost of care per unit of service (\$13.17) was calculated from the direct funding source (\$13,175) divided by the anticipated units of service (1,000).

$$\$13,175/1,000 = \$13.17 \text{ cost/unit of service}$$

The cost of care per unit of service is based on the direct funding available and does not include the estimate of costs of the supportive services from the CHC and VISTA (indirect funding) because these services/indirect funds would be available to CHC for use alternatively if the Homeless Outreach Clinic ceased to exist (see Table 2).

Table 2  
Funding Sources

Source	Amount
<u>Direct Funding</u>	
Carpenter Grant	\$10,000.
Fundraising	\$ 3,000.
Contributions	\$ 175.
	<hr/>
	\$13,175.

Indirect Funding

Refers to the estimate of value of supportive services made available from the CHC if needed.

Personnel	\$13,259.
Travel and operating expenses	\$ 4,995.
	<hr/>
	\$18,254.

In comparison to services provided by other agencies in the community, the Homeless Outreach Clinic is cost effective as an initial step in assessing and treating health problems of the homeless (See Table 3).

The Jackson County Department of Public Health was not included in the following table because only primary health care services for limited health problems were provided: sexually transmitted diseases, immunizations, and family planning.

Table 3

Basic Charges for Health Care in the Community

Agency	Basic Charge/Visit
VA Domiciliary outpatient clinic	\$127.00
VA Domiciliary outpatient mental health clinic	60.00/hr
Counseling thru Homeless Outreach Clinic	13.33/hr
Ashland Community Hospital ER	75.00
Providence Hospital ER	85.00
Rogue Valley Medical Center	60.00
Private Pediatrician	39.00
Community Health Center	32.60
Homeless Outreach Clinic	13.17
Homeless Outreach referral to CHC	28.25

## Client

This section will describe selected individual clients seen during the participant observations at the two clinic sites, describe client satisfaction inferred from data from the Client Satisfaction Questionnaires, and present the demographic data describing clients seen during the study period.

Client profiles are presented from the participant observations in the clinics in order to convey an impression of the diversity of persons and issues to which the nurses must respond. The first two clients were observed in the clinic held in downtown Medford at The Salvation Army office.

### Client # 1.

The first client was a male traveling through Medford who had been treated a week before for diarrhea in an Emergency Room in Washington. The medications he had been given were not helping the problem and the diarrhea persisted after 7 days. He was well groomed and casually but cleanly dressed. His face wore the signs of fatigue and continual sun exposure. The nurse's assessment led to a series of phone calls to develop the nursing care plan: the Medford CHC, the Emergency Room in Washington, the Ashland CHC, and the private home of the CHC Nurse Practitioner. As none of

these attempts resulted in helpful information, the nurse managed the situation independently. She offered the client a place to stay at The Salvation Army Shelter, arranged stool cultures for Ova & Parasite x 3 days with white blood cell analysis at Rogue Valley Medical Center Laboratory, and telephoned for an appointment for him to be seen at the Medford CHC for follow-up. Transportation was provided to the Hospital Laboratory by the VISTA worker for this day only; the client was advised by the nurse that he needed to arrange for his own transportation to get to and from the hospital for the next two days. The nurse called and arranged for him to stay at the shelter for four days and nights. She then called the Medford CHC and made an appointment for an evaluation on Friday. After discussing fluid replacement, the client left with the VISTA worker and the nurse finished her charting. This client's record was not among the client records submitted for this study; therefore, it was not possible to follow up on the final outcome of this man's problem and his statistics were not included in the analysis.

#### Client #2.

The second client, a middle aged male, came into the clinic with a complaint of headaches. The nurse seemed to know this client and spoke easily with him.

The conversation was therapeutic, and enabled the client to discuss the grief he felt over the loss of his wife three years ago. His treatment plan included advice to limit coffee consumption and encouragement to keep busy with his writing and other projects.

The following client profiles were from observations from the clinic after it was moved back to The Salvation Army Shelter on the outskirts of Medford.

Client #3

The third client was an 18-year-old woman who had recurrent abdominal pain. The nursing assessment included a review of the client's written history, discussion of any findings that were listed, and measurement of weight and blood pressure. The client appeared at ease as the nurse developed good rapport through her careful assessment of the history. As the nurse went through the history, asking questions about the client's comments, the client began to add more information, relating the beginning of the abdominal pain to an abortion she had 3 years ago, and her concern that since then she has not been able to become pregnant.

The nursing treatment plan included a complete evaluation at the CHC, health teaching about the necessity of a good diet, weight control, the need for



regular exams, pap smears, birth control, and resources in the community where services could be obtained. The client was given the number of the CHC to call, as she preferred to arrange her own appointment. She thanked the nurse for her services.

#### Client #4

The fourth client observed was a woman in her late thirties. She was traveling with her husband, two daughters, and recently widowed sister-in-law. She had scoliosis and osteo-arthritis and was out of her medication, Naprosyn. She planned to start a new job soon, but currently had no money and needed the medication right away.

The care plan included samples of Ibuprofen and a referral to the Medford CHC for a prescription of the Naprosyn.

The client expressed her appreciation for the help and stated, "We're not takers, we just need to get settled."

#### Client #5

John was the fifth client observed. He told the nurse, "I hoped you were here, I need you to look at my leg. I stabbed myself." He was wearing jeans. The nurse told him to find a towel to put around himself and take off his jeans so she could see his leg. He

returned wearing shorts. He joked the whole time the nurse cleaned and dressed the wound on his leg. He had cut himself with his pocket knife while he was opening a carton at work. The nurse instructed him in the care of the wound and what to look for if it became infected.

Client #6

The sixth client observed had been in the clinic several times before, according to her record. She was a middle-aged woman with stringy, dirty gray hair. She was dressed in jeans and a stained tee shirt, and wore a jacket even though the day was hot. She sat on the couch awaiting her turn, staring straight ahead and not talking with anyone. The nurse saw her, asked the VISTA worker for her record, and called her by name, asking how she was and "What can we do for you today?" She came into the closet and with an expressionless face said she needed a toothbrush.

The nurse asked her how things were going for her. She replied that she was still dry and had gone to an AA meeting in Eugene and just got back, but she left her toothbrush there. She had been camping out since her return. The nurse asked if she needed help getting in to mental health or help getting Social Security Disability again, but she said she was going to go back

to the Jehovah Witness Church first. The nurse gave her a toothbrush.

The following section describes the observed outcomes relating to research question #2, and presents the demographics of the sample.

RESEARCH QUESTION #2: What is the client's satisfaction with the clinic services?

Client Satisfaction Questionnaires (CSQ) were to have been distributed to all clients at the clinic during the data collection period of the study. They were to have been distributed by the VISTA worker at the end of a clinic visit. During the participant observation periods in the clinic, not all clients were given questionnaires to complete and it is unknown how many questionnaires were given out but not returned. The VISTA worker stated that everyone given a questionnaire completed and returned it. From the total 43 clients seen, 29 questionnaires were returned.

The results of the CSQ indicated a favorable response of the clients to the clinic. The clients indicated the clinic was accessible and provided a service they perceived as being helpful (see Table 4).

Table 4

Client Satisfaction Questionnaire Results

Question	Total N	Yes	No	N/A
Easy to find out about?	29	29=100%	0	0
Easy to locate?	29	29=100%	0	0
Long wait to be seen?	29	0	29=100%	0
Feel safe at clinic?	29	29=100%	0	0
Helped by nurse?	29	28= 97%	0	1
Liked the way they were treated	29	29=100%	0	0
Knew they were referred elsewhere?	29	17= 59%	10=34%	2
If referred, able to get there?	29	19= 66%	2= 7%	10

The following statements are some of the additional written comments:

"Real good nurses, assistance, and medical supplies. Plus pleasantness, kindness, and consideration."

"Thank You and God Bless."

"The staff is doing a good job."

"Thank You."

"It makes a vital contribution to the community"

"Friendly and cooperative--knowledgable, but seems to be lacking in equipment and facility to care for patients, therefore having to refer to other facility. When there is no money or transportation, don't eat well and sick, it makes it hard."

"Just thanks."

"Thank You."

"Great."

"Good concerned people who work for the clinic,  
from transportation to good nurse."

"Medford needs doctors and nurses who are willing  
to give of themselves to helping the poor and the  
homeless. Without this clinic there is no hope  
for medical treatment without insurance or money.  
I pray to our Lord that this clinic remains open."

### Demographics

The mission statement of the Homeless Outreach  
Manual for the target population states: "Clinic  
services are available to any homeless individual who  
requests to be seen."

The demographic descriptors derived from client  
records and summarized in Table 6 present a  
comprehensive profile of the 43 persons who made the 76  
clinic visits for which there were records, during the  
observation period. The data includes their years of  
education, occupation, time in current living situation,  
and time they have been homeless.

Ninety-eight percent of the people seen in the  
clinic were from the target population, very close to  
the projected 100% (see Table 5).

Table 5  
Description of Clients

Sample size		N=43	
Age	Mean	36 yrs.	
	Range	1-64 yrs.	
		N	percent
Sex	Male	31	72
	Female	12	28
Race	Black	1	2
	White	38	88
	Other	3	7
	Unknown	1	2
Marital Status	Single	13	30
	Married	10	23
	Divorced	13	30
	Separated	4	9
	Widowed	3	7
Occupation	Entry level skills	9	21
	Some training	5	12
	Trade	12	28
	Profession	4	9
	Housewife	2	5
	Child	3	7
	Unknown	8	19
Time in current living situation	<1 month	21	49
	1-3 months	11	26
	4-6 months	0	0
	6-12 months	0	0
	>1 year	1	2
	unknown	10	23
Time homeless	<1 month	1	2
	1-2 months	15	35
	3-5 months	9	21
	6-12 months	5	12
	1-5 years	4	9
	>5 years	9	21
Not homeless	1	2	
Living Situation	Own apartment	1	2
	Shelter	35	81
	Not housed	3	7
	Friends	1	2
	Unknown	3	7

(cont. Table 5, description of clients)

Years of Education	Mean	12 yrs.
	Range	9-16 yrs.
	Information not available	
	N=15	35%
Children	N=	3

### Health

This section will describe the observed outcomes as they relate to the types of health problems seen at the clinic for people who are homeless, the differences in the types of health problems treated at the clinic versus the types of health problems anticipated from the prior Jackson County Health Needs Assessment (Burton, et al, 1988), and will address Research Question #3.

A wide range of health problems was seen in the clinic. The most common problems were skin problems, respiratory problems, cardio-vascular problems, mental illness, and problems relating to substance abuse. Many of the problems seen in the clinic were chronic health problems (38% of the visits).

The length of time from the onset of symptoms until people were seen for acute conditions was a mean of 8.6 days, with a range of 1-60 days. Mean times from onset of symptoms to being seen for care in the major categories of illness were: gastro-intestinal problems (1.6 days), musculo-skeletal problems (11.25 days), drug

related problems (12 days), and dental problems (10.8 days). (For a complete description see Appendix G)

There were some differences in the types of health problems treated at the clinic versus the types of health problems anticipated from the prior needs assessment (see Table 6).

Table 6

Comparison of Reported Health Problems: Jackson County Needs Assessment and Homeless Clinic.

Health Problem	Jackson Co. N=59	Homeless Clinic N=43
Respiratory problems	28%	14%
Cardiovascular	20%	11%
Gastrointestinal	13%	7%
Genitourinary	2%	0%
Bone and joint	24%	8%
Head	20%	6%
Neurological	2%	3%
General	34%	3%
Dental	63%	7%
Skin	0%	19%
Mental Illness	19%	8%
Drug Problems	13%	2%
Alcohol Problems	25%	6%

(Note: persons in both studies could report more than one health problem.)

RESEARCH QUESTION #3: What are the types of health problems that can be managed by nursing care?

Of the health problems seen in the clinic, 48% were treated by the nurse, 24% were both treated by the nurse and referred for further care, and 28% were referred elsewhere for care.



The nurses were most often able to treat without making a referral: skin problems (trauma 66%, dermatitis 67%), respiratory problems (67%) cardio-vascular problems (88%), and musculo-skeletal problems (50%).

The problems most often referred were: neurological problems (100%), problems associated with diabetes (100%), alcohol (60%), and drug related problems (50%) (see Appendix H for complete description).

Details of the client management process (treatment and referral), are presented in the next part of this report (Nurse, Section II, III, and IV).

### Nurse

This section will describe the observed outcomes as they relate to Quality Assurance Standards 1 and 3, Program Objective V, and Research question #4.

Data collected from the two clinic nurses regarding their nursing roles and functions will be divided into five sections which will include:

Section I     The nurses' perceptions of their clinical roles as assessed by the open-ended interview format (Appendix E).

Section II    The usefulness of the Nursing Treatment Protocols.

- a. according to the two nurses' perceptions.

- b. according to quantitative analysis of the nurses' notes on client records.
- Section III The number of clients the nurses were able to treat and the number of clients they needed to refer.
- Section IV The number of clients who were able to complete the referral process.
- Section V The completeness of the nurses' notes on client records.

Section I: The nurses' perceptions of their clinical roles.

The two nurses were interviewed for their perceptions of their functioning in this clinical role and the types of problems they encountered. The same five questions on the open-ended format guide (see Appendix F ) were used by each researcher to interview each nurse. These questions addressed issues that were thought to be particularly relevant to the effectiveness of the clinic services.

Question #1 Would you share your feelings and perceptions of your professional nursing role in this clinic setting?

First Nurse:

"It feels good."

"It is one of the few places where you can use your full potential."

"There is good backup."

"I never feel out on a limb, consultation is only a phone call away."

"I never feel unsafe here, there are enough people around and the clinic seems important to everyone, everyone keeps an eye on us."

Second Nurse:

"Triage is the obvious reason."

"I feel really adequate in this role within my scope of practice. I like that role."

"I make a lot of referrals, I am an initiator, facilitator, and advocate of health care."

"I am a caring witness to people as they explain their life situation."

"I think realistically that is kind of a tender position to be in." "I'm personally exploring that role."

"People have a lot of physical and emotional problems, realistically I can only give them a limited amount of my time."

"It's an addicted population that we see most, it concerns me to keep my communication therapeutic; protective of me and aware of them."

"My personal feelings...I love the role because I learn alot from other people; that's why I like doing it."

"I think it has personally and professionally expanded me."

Question #2: Would you explain the referral process when you determine a client needs care beyond what can be provided here in the clinic?

First Nurse

"Referrals are based on the protocols, nursing practice, and the severity and urgency of the symptoms."

"I feel the need to do some advocacy to get clients into the referral services." "If they just call, the wait is too long."

"Follow-up on the referrals is a problem."

Second Nurse

"It varies, for the most part if we give them the name and phone number and they arrange for an appointment themselves, there is a good chance they will go."

"If we set it up, for example at the CHC, the patient usually won't show up for the appointment."

"There are two conditions under which I will make an appointment for the client:

1. If my making the appointment ensures the care happening.
2. If the patient or client is in such a crisis that I see they are incapable of acting on their own behalf."

"We assess how emergent the referral is to basic care, for example, if a woman with kids needs glasses, immunizations, and shoes no longer fit, I'll have her call Lions, the Health Department, and The Salvation Army for shoes. The opposite: if a woman has vaginal bleeding, cramping and fever, I'll make the appointment".

"I'll assess for myself what their own capability of getting there is. I won't make an appointment for someone who won't keep it."

Question #3 a) What problems are experienced by the clients in getting to the clinic or a referral site?

b) What arrangements are available if clients need help with transportation to obtain care?

First Nurse

- a) "Patients don't have problems getting to the clinic now."
- b) "Transportation is difficult now. There is no

liability insurance to cover transporting patients."

"The VISTA worker is a woman and we are not comfortable having a woman doing the transportation by herself."

"People need to get to referrals on their own. We have bus tokens or can give people gas money."

Second Nurse:

a) "Personal motivation and lack of transportation."

b) "Talk to the Major."

"Salvation Army Volunteer."

"VISTA Volunteer."

"Bus money is occasionally available."

"Sometimes no arrangements are available."

"They walk alot, about two miles."

Question #4 What support services are available to assist clients to receive medications or social services they need?

First Nurse

Medications:

"We have some non prescription medications here in the clinic that we can give to people."

"Some prescription medicines are available from the CHC."

"We need some way to get medicines for people who have chronic problems and need the medicines on an on-going basis."

Support Services:

"We refer mostly to The Salvation Army, or to Mental Health or drug and alcohol treatment services."

Second Nurse

Medications:

"Over the counter medications are available here in the labeled cabinet."

"Prescription medications are obtained through the Community Health Center Medication Grant Program. All drugs are \$3 per medication, mostly for acute problems. Clients are informed that this is a revolving fund and are highly encouraged to pay, but are given the medication if they have no money."

"At St. Vincent de Paul, clients go through their intake process, and get vouchers for their medications."

"With the CHC Voucher Program, clients is given a voucher for their medication. They are asked to pay this back. It's mostly for chronic problems."

"There's always a way people can get meds."

Support Services:

"I think they are limited."

"They are all non-profit agencies with limited budgets."

"Crisis Intervention Services (CIS) publishes an annual referral guide for social support services."

"The VISTA Volunteer created a referral guide specifically for the homeless."

"The Nurse could write a note to the Major to allow a patient to stay here until a bus ticket came through."

As an example of coordinating care through community support services, Crisis Intervention Services of Jackson County and The Salvation Army negotiated a successful intervention to a crisis situation for one person, a black diabetic male from Los Angeles. His blood sugar was out of control and he had foul smelling ulcers on his leg. He received a 10-day supply of antibiotics from the Emergency Room, but could not qualify for The Salvation Army Beneficiary Program to remain housed in this area long enough to get his health problems stabilized. He felt at risk for racial problems in this predominantly white area, and was impaired by decreased mobility. He was issued, through the combined efforts of the above mentioned agencies, a



one-way ticket to Los Angeles to return to his familiar hospital and relatives.

Section II The usefulness of the Nursing Treatment Protocols

- a. according to the two nurses' perceptions
- b. according to the quantitative analysis of the nurses' notes on client records.

Nursing Interview Question #4: Are the nursing treatment protocols useful in your assessment of clients?

RESEARCH QUESTION #4: What is the value of using the Nursing Treatment Protocols?

- a. The nurses perceptions

First Nurse

"The protocols were useful, particularly when we were starting out."

"We use them less as we have the information internalized."

"There are gaps in the protocols. Sometimes the information isn't complete enough."

Second Nurse

"Yes, Nursing Treatment Protocols are useful, but

most clients have problems for which we have no protocols."

"The presenting problems are so complex, in reality, it's the nurse practitioner that I call."

"The nurse practitioner reviews charts every week, and signs them off. She leaves sticky notes if she has further comments."

"The Rural Health Nursing Protocols are also used."

"Lots of consultation".

b. The use of the Nursing Treatment Protocols according to review of client records addresses Quality Assurance Standard #3; however, protocols developed for the clinic are only one information base used to guide practice.

QUALITY ASSURANCE STANDARD #3: Interventions are based on the individuals' assessment, past history, practitioners' scope of practice and medically approved treatment protocols.

According to the quantitative analysis of the nurses' notes on 43 client records who made 76 visits and presented with 84 health problems, 8% of the health problems were treated according to the protocols, and 8% were not treated according to the protocols. Those not treated according to the protocols were treated in a manner very close to the protocols, but substitutions

were made, such as using Betadine for cleansing rather than soap and water. For 83% of the health problems seen no protocols have yet been developed (For a list of the problems not covered by the protocols, see Appendix I).

Section III: Number of clients treated and referred

According to the client records, the nurses saw 43 clients for a total of 76 clinic visits during the data collection period. The clinic projection for percentage of clients treated by the nurse was 75% with 25% being referred elsewhere for care. During the data collection period 85% were treated or partially treated by the nurse, and 61% were referred, a higher than projected referral rate (see Table 7).

Table 7  
Nursing Visits May 2 - August 2, 1989

	N	%
Total clients seen by the nurses	43	100
Total clients treated by the nurse	16	38
Total clients referred for treatment only	6	14
Total clients treated and referred	20	47
Unknown-record not complete	1	2
Total treated by the nurse	36	85
Total referred	26	61

Section 1V: Number of clients who completed the referral process

Evaluation of the number of clients who were or were not able to complete the referral process was surveyed through client records and telephone contact with other agencies (see Table 8).

Table 8  
Results of the Referral Follow-up Survey

	N	%
The number of clients referred to CHC	25	
Those who completed the process	9	36
Those who did not complete the process	16	64
Range (Time until seen for referral)	1-8 days	
Mean time until seen for referral	2 days	
Referrals made to other agencies	15	
Other agency referrals completed	9	60
Other agency referrals not completed	6	40

The referral agencies did not provide the expected follow-up data about how long it took for clients to be seen.

It was noted the more acute the problem, the greater response to the referral. Incompleted referrals tended to be for complete physical exams, preventative, or chronic problems.

Section V: Completeness of nurses' notes.

The client records were reviewed for completeness according to the Quality Assurance Standard #1, Program Objective #5, and the Program Procedure entitled Intake Assessment as stated in the Community Health Center Homeless Outreach Services Manual.

QUALITY ASSURANCE STANDARD #1: Written assessment and treatment plans shall be maintained for each person seen at the outreach clinic and reviewed by the Medical Director at quarterly intervals.

PROGRAM OBJECTIVE V: Screening and referral services will be provided as indicated, for mental and emotional illness, or for chemical addiction or dependency, for one hundred percent (100%) of program participants.

The Community Health Center Homeless Outreach Services Manual Program Procedures entitled Intake Assessment indicates that the client records shall have the following information: demographic data, family status, length of time homeless, veteran status, life style changes, medical history, medical risk factors, mental illness history, substance abuse history, medication currently used.

The records were complete (79-100 %) for most items except for one area, follow-up on referrals. Of the records that had referrals, 19% had follow-up information on the referral, 81% had no follow-up information (see Table 9).

Table 9  
Completeness of Records

Area	Complete		Incomplete		Missing	
	N	%	N	%	N	%
Demographics	35	81	8	19		
Family status	43	100				
Time homeless	43	100				
Vet Status	42	98	1	2		
Life Style	34	79	9	21		
Medical History	43	100				
Risk Factors	40	93	3	7		
Mental Illness	39	91	4	9		
Substance Abuse	41	95	2	5		
Current Meds	38	88	5	12		
Assessment	41	95	1	2	1	2
Intervention	42	98			1	2
Follow-up	5	19	22	81		

### Community

The next section will describe the observed outcomes as they relate to Research Question #5 and use data organized around Program Standard #1.

RESEARCH QUESTION #5: What are the community human support services organizations perceptions of the clinic?

PROGRAM STANDARD #1: Target Marketing:

Community Health Center shall engage itself in

the widespread marketing of medical services to serve the homeless; said marketing shall be specifically targeted to the homeless population throughout Jackson County by providing service to a heterogeneous homeless population representative of users of The Salvation Army Shelter (80%), and other homeless support systems (20%), such as the Gospel Mission and St. Vincent de Paul.

The main referral source in the community is the Community Health Center(CHC). Because the clinic for the homeless is an outreach project from the CHC, the referral appointments are easily facilitated. Other frequent sites of referral have been to The Salvation Army, CERVES (a coalition of emergency social services), On Track for alcohol and drug rehabilitation, Jackson County Health Department, Jackson County Mental Health, Veterans Administration, and private dentists.

Ten community agencies that were used as referrals were contacted to assess their knowledge of the clinic and their perception of the clinic services: 6 were aware of the clinic and 4 were not. Of those that were aware of the clinic, 3 referred people to the clinic for care. A comments from a key agency person interviewed was: "they must be doing a good job, because they (CHC)

always do a good job." Personnel at The Salvation Army feel the clinics are doing very well. They wish that they had better facilities for the nurses to use and that the clinic could be held twice a week. They feel the change back to the shelter was good, because the shelter is less intimidating for people and there is better availability in the evening hours.

One interviewee who felt he was in a good position to hear complaints said, "I haven't heard a single thing that was not positive." He felt very supportive of the clinic and the efforts that the Director had made towards its success. He frequently makes referrals to the homeless clinic, because the services at his agency are limited to a specific population and cannot assist other family members who have medical problems.



### Interpretation

The effectiveness of the clinic for the homeless in relation to the stated agency goals and participant observations will be discussed according to the five focus areas of this descriptive evaluation: clinic, client, health, nurse, and community.

#### Clinic

As reported in the literature, clinic facilities that are most effective in reaching people who are homeless are provided in an area where homeless people congregate. With the clinic's move back to the shelter, the clinic census increased. The clinic hours' coinciding with the times most people would be at the shelter for the evening meal and to check-in for lodging provides greater access to care.

The nursing staff provides client care in limited, makeshift work space with minimal storage area for supplies. In spite of these inconveniences, the clinic provides an opportunity for accessible, low-cost primary health care that has not existed in this geographical area up to this time. The feeling in the clinic appears to be relaxed, comfortable, and acceptable to the clients, who express gratitude for the service. The Salvation Army, according to the Major in charge, would

like to provide nicer facilities for the clinic and still maintain the comfortable atmosphere. The clinic staff appeared to work harmoniously together.

The number of clients seen in the clinic fell short of the proposed goal. The difference in the proposed and actual statistics reflect the changes made in the clinic location and hours, which affected the decrease in number of clients seen. Also, the clinic was initially planned for two days a week, but there were not sufficient funds to provide staffing to do so.

Since 119 units of service were recorded on the Clinic Statistical Summaries and only 43 client records recording 76 client visits were accounted for, there appears to be inaccurate documentation of services, misplacement of records, or failure to provide the researchers with the records.

Because the number of clients seen was less than the expected goal, there was also a decrease in the number of referrals that had been anticipated and medications dispensed.

One unmet health care need identified is a system to provide clients with medications needed for chronic health problems on a continuing basis.

There was a surprisingly low number of transportation units of service. Perhaps the statistics were not all recorded, but the given numbers would

indicate that this area is in need of attention. In addition, it appears that transportation assistance remains a difficult problem.

Observed outcomes indicate that there is a discrepancy between the projected cost of providing a unit of service at \$13.17 and the actual cost. The lower-than-expected numbers seen in clinic are responsible for this figure. The move of the clinic to The Salvation Army Main Office also contributed to the decrease of numbers. After the clinic moved back to The Salvation Army Shelter, the average number of clients seen per week was 14. The following projection can be made from the 14 clients seen per week:

$$14 \times 4 = 56 \text{ clients per month} \times 12 \text{ months} = 672 \text{ clients seen per year.}$$

Dividing the yearly budget of \$13,175 by 672 clients/year, a figure of \$19.60 per unit of service results. Example:

$$\$13,175/672 = \$19.60 \text{ cost/unit of service}$$

The anticipated cost of service was not met because it was dependent on the proposed 1,000 clients seen. As this goal was not met, the cost per client seen was higher. At the present level of service this figure is

still cost effective in relation to the cost of care in the private sector for outpatient services.

In order to meet the stated objective of providing a unit of service for \$13.17, 21 clients must be seen per clinic. This is probably a reasonable figure with two nurses seeing approximately 2.5 clients per hour over a 4-hour period. When the volunteer RN becomes well enough oriented to work independently, the cost of care may improve further.

Comparison of the clinic costs with the cost of care in the Los Angeles clinics (sponsored by the UCLA School of Nursing) of \$50 direct cost per client visit and \$90 per visit including indirect costs is favorable.

### Client

The goal of serving the target population of people who are homeless was met. Results of the demographic analysis reflected a similarity in the population composition to the demographics seen in the Jackson County Needs Assessment (Burton, et al, 1988), which leads the researchers to believe they were seeing a fair cross section of the target population. This was a concern of the administrator since the clinic was housed in a shelter with the Beneficiary Program. The Beneficiary program allows some clients to remain living at the shelter for longer periods of time while they are restructuring their lives. A large portion of this

population using the clinic could create a biased sample. One factor that may decrease the bias is the use of the shelter's evening meal hour as a time for the clinic. Many people who don't stay at the shelter do come for meals.

The demographics of the clients reflected a very similar population to the population in the Health Needs Assessment (Burton et al). The racial mix of the research sample reflected the racial mix of the study area, predominantly a white population. The mean age of the research population (36 yrs.) is the same as reported nationally. The educational level is similar, 12 years the mean for the research sample and 11 years the national mean. (Wright & Lam, 1987).

National figures for the percentage of women who are among the homeless are from 20% (Bassuk, Rubin, & Lauriat, 1986) to 50% (Hagen, 1987). The research sample shows 28%.

In the sample of this study, there were two distinct groups of people among the homeless. One group, the largest, were homeless for less than six months. This group seemed to be victims of circumstance, lost jobs, poverty, family break up, substance abuse, or poor planning, and were trying to reestablish their lives. The other group were homeless

for longer than five years, and seemed to have chosen, become habituated, or trapped in that life style.

During the data collection period, it was discovered that three different client record forms were being used, resulting in inconsistent demographic information being collected. This resulted in some gaps in the demographic data. More time spent in planning, orientation, and involvement of the clinic staff in the research project might have alleviated these problems.

The Client Satisfaction Questionnaire (CSQ) indicated that the clients were satisfied with the clinic services. Clients found the services accessible, easy to find, safe, and with little waiting time for service. Clients liked the way they were treated and felt they were helped by the nurse. If they were referred, most felt they could get to the referral site.

The clinic observations supported the results of the CSQs, with the clients appearing relaxed and expressing their thanks for the service. A further indication of client satisfaction is reflected in the frequency with which several clients returned to see the nurses. In observation of one frequent clinic client, one researcher had the impression that this was the only place where someone would listen to her and really cared about her as an individual. After several visits, according to the nurses, she started communicating some

of her more difficult problems, such as depression, chronic mental illness, and substance abuse.

Problems were encountered with CSQs not being given to all clients. This lapse was validated during both researchers' observations. The actual number of CSQ's given to clients is unknown. It would have been helpful to number the CSQ's so that it would have been known how many were given out and how many were returned. The researchers had anticipated a larger number for a more representative sample.

### Health

The high percentage of health problems the nurse was able to treat independently was impressive. The nurses saw their role as providing triage, but they were able to treat independently and completely over one third of all the persons presenting at the clinic sites.

The more incapacitating the presenting problem, the quicker the client sought medical assistance. Chronic problems were often neglected longer and were harder to treat.

There were differences in the types of health problems seen in the clinic and those that were anticipated from the Needs Assessment (Burton et al). Some of the differences possibly reflect the different approach to assessing health problems. The Needs

Assessment approach was historical interviewing for most common health problems people perceived, while the clinic assessment focused on actual current problems.

### Nurse

The nurses perceived their clinical roles as being very positive. They liked the broad scope of practice that this environment promoted and felt they could work to their full potential. They indicated consultation support was always available and was an important issue in their feeling comfortable with their role. The target population expressed appreciation to the nurses for their services.

Frustration was expressed by the nurses in dealing with the part of the population that had addiction problems. These clients appeared to be manipulative and it created difficulty for the nurses in judging how much responsibility they would take toward following instructions and referrals.

The nurses also expressed frustration about problems encountered with arranging transportation.

Transportation had been arranged through the Salvation Army VISTA worker who was covered by the Salvation Army liability insurance and was able to use The Salvation Army van. This arrangement was not effective. The clinic can assist with bus tickets or gas money.



Sometimes other agencies can help, and sometimes the clients end up walking to the CHC, a distance of two miles.

The extent of the nurses' frustration with the problem was summarized with one nurse's response: "We are working on a solution." "It's hard, I can't have too much money in my pocket. The need is so great, that I find it hard to resist helping out with money from my own pocket."

The nurses expressed a feeling that much of their role was triage. They also reflected that clients were good about differentiating what kinds of problems the nurses can manage and what problems need to be seen somewhere else.

Safety for the nurses was an issue repeated in the literature. The nurses and clients both commented that the Salvation Army felt like a safe environment for the clinic. The nurses felt that the clinic was important to the clients and the Salvation Army personnel.

Nursing Treatment Protocols were found by the nurses to be useful, but limited. Protocols did not exist to treat many of the commonly encountered problems, and existing protocols had a narrow spectrum of acceptable treatment. The nurses were resourceful at finding other references for treatment when there were gaps in protocols.

Client records were complete in the area of history, assessment, and intervention, but frequently lacked follow-up information. Legibility was sometimes a problem in deciphering nursing notes on client records.

Although CHC quality assurance standards (QA) state that records will be reviewed by the nurses at the end of each clinic session, and quarterly by the Medical Director, there is no documentation in the records to indicate this is being done.

Consultation between the two nurses during the clinic session was observed. Nurse interviews indicated that the nurse practitioner is reviewing client records weekly. There is no documentation in the records to validate this review and it is not required by the QA standards.

### Community

The community agency most often referred to was the Community Health Center (CHC) clinic. Those referrals were generally processed smoothly and feedback was good between the CHC clinic and the clinic for the homeless because of the shared personnel and services.

The majority of community human support services surveyed were aware that the clinic existed, expressed positive comments about the clinic, but had little or no

contact with the clinic itself. Some key support agencies reported that they were not aware of the services, hours, and location of the clinic. When further information about the clinic was offered to the agencies by the interviewer, some requested the information and others did not. It is recommended that marketing strategies be implemented toward these key support agencies.

### Summary, Recommendations and Comments

Access to health care for people who are homeless is difficult; the difficulty in obtaining health care may increase their health problems. The effective, innovative clinical modes of providing health care to people who are homeless have one common denominator: they are housed in places where people who are homeless tend to congregate.

The Community Health Center (CHC) Homeless Outreach Clinic, housed in The Salvation Army Shelter in Medford, provides a weekly, four-hour, nurse-run clinic to assess health needs, and provides treatment and referral as indicated to the clients seeking care.

This study of the clinic provides a comprehensive evaluation of the services from the perspective of the clinic, the client, the health problems seen, the nursing role, and the community. The five areas are described on the basis of researcher observations and interviews, use of a Client Satisfaction Questionnaire, and review of client records and clinic statistics. The observed outcomes are presented as they relate to the stated goals of the Homeless Outreach Clinic, and the effectiveness of the clinic is discussed. The procedures for the description and evaluation of the clinic were by primary data collection through direct

observation and secondary data collection through review of all clinic and client records. Interviews were conducted with agencies accepting referrals, selected community human service support organizations, health care providers in the community, and the nursing staff and administrator of the CHC. The clinic had been in operation since the Fall of 1988. Data were collected from May 2 through August 2, 1989.

Within the broad evaluation, the following specific areas of concern were addressed:

1. The cost in relation to the benefit of the clinic.
2. The clients' satisfaction with the clinic service.
3. The value of using nursing treatment protocols.
4. The types of health problems that can be managed by nursing care.
5. The community human support services organizations' perceptions of the clinic.

### Clinic

The clinic site at The Salvation Army shelter was a comfortable, non-threatening site for the clients and nurses alike, despite the accommodations being somewhat crowded and makeshift. Because there was a change in clinic site and resultant decrease in the number of clients seen during the research data collection period, the clinic saw fewer than the number of clients

projected. The cost per client visit at the clinic did not meet the projected cost per client visit of \$13.17 because fewer clients than anticipated were seen. The calculated cost was \$19.60, still a cost effective figure considering the cost of care elsewhere in the community (\$28-\$85/visit for primary care). That figure will decrease as the number of clients seen increases.

Organizational problems that need to be further addressed include transportation for clients to referral sites, supplying medications on a regular basis for people with chronic illness, and accurate record keeping.

### Client

The clinic met the goal of reaching members of the target population. Ninety-eight percent of clients seen were homeless. Fifty-eight percent had been homeless less than 6 months. The group of people who had been homeless for shorter periods of time, in general, were the ones who were more often victims of circumstance, poverty, and poor planning, and were trying to reestablish homes. The demographics of the population seen were similar to the national demographics reported in the literature for age (M=36 years), distribution of male (72%) and female (28%), and years of education (M=12 years). The racial mix was more similar to the

racial mix of this geographic area: a predominantly white population (white 88%, black 2%, other 7%, unknown 2%).

The clients of the clinic were very pleased with the service provided. The clinic was perceived as providing a helpful service by 97% of the clients seen, being easily accessible by 100%, and a safe environment by 100%. The clients expressed their gratitude directly to the nurses, as well as reflecting it in the Client Satisfaction Questionnaires. Some people who had been chronically homeless began to use the clinic on a regular basis and started to make progress with some of their mental illness and addiction problems. Many clients returned for follow-up visits or for help with different problems.

### Health

Clients were seen in the clinic for a wide variety of health problems. The types of health problems seen were similar to those reported in the literature as frequent problems among people who are homeless. Skin (19%), respiratory (14%), and cardio-vascular problems (11%) were the major problems seen. Mental illness (8%) and substance abuse (8%) were also presenting problems. Chronic health problems accounted for 38% of the visits. Clients came to the clinic for help sooner when their

problems were incapacitating or were interfering with their lives than when the problems were chronic or preventative in nature.

Of the health problems seen in the clinic, the nurses treated 48% by themselves, partially treated and referred 24%, and referred 31% elsewhere for care.

### Nurse

The two nurses working in the clinic perceived their roles as being very positive and fulfilling. They felt their skills were well used in this setting, and they received words of thanks from the clients for the service.

The nursing treatment protocols were perceived as being somewhat helpful, but not complete enough. There were no protocols for 82% of the health problems that were encountered. The nurses used consultation with the CHC staff for problem-solving when there were no protocols or other reference materials available to assist in developing the nursing care plans.

Frustrations were encountered by the nurses in working with a population with addiction problems. Because of the clients' addictive behaviors the nurses had difficulty determining the clients' ability to follow through with recommended health care.



Transportation for clients to assist in completion of referrals was also a problem. Referrals that tended to be completed were ones for acute problems or for needed medications. Referrals for chronic problems or general physical exams and prevention measures were less often a priority with the clients and frequently were not completed.

Nursing records were generally complete, with the exception of information on follow-up of referrals made.

#### Community

Although most community agencies contacted for their perception of the clinic were aware of the existence of the clinic, they had little sense of the effectiveness of the clinic. Further marketing needs to be directed toward agencies which also serve the target population.

#### Framework

The framework for the evaluation--evaluating five areas: clinic, client health, nurse and community, by descriptions, stated objectives, observed outcomes, and effectiveness per the stated goals--worked well as a guide for a comprehensive view of the clinic services. It forced looking at the clinic from a very broad perspective and enriched the amount and quality of data collected. The framework provided an easy vehicle for

the data analysis and provided a logical method for organizing the data.

Problems encountered with the framework were decisions about where focus area items fit when they were closely related.

#### Recommendations for the Community Health Center

Expansion of clinic space within The Salvation Army Shelter to provide a more comfortable and functional work area for the nurses needs to be explored.

For the purpose of being consistently able to track demographic information, a standard form could be agreed upon, and other forms destroyed.

Transportation problems need to be addressed and resolved. It is unclear if the problem is with the record keeping or that the system for providing transportation is not working well.

Obtaining on-going medications for people with chronic health problems warrants further planning.

Systems for documenting statistics so that all services are accounted for exist; however, they are not providing totally accurate information, resulting in less than complete documentation of services. Revision of this system is recommended to provide more complete documentation of services.

Nursing Treatment Protocols could be more useful if they were expanded to include more of the common health problems encountered by the nurses. Additionally, the spectrum of the existing protocols could be broadened to include alternative effective methods of treatment based on the availability of the supplies at the clinic.

Documentation of follow-up on referrals on records could be facilitated by developing a standard method or format for getting the follow-up information.

In order to validate medical/nursing reviews by the Medical Director/ Nurse Practitioner for quality assurance, it is recommended that reviews be documented in the records.

More emphasis could be placed on marketing the clinic services to key agencies in the community on a regular basis. The potential exists for increased referrals of the target population to the clinic if key agencies possess accurate and pertinent information about clinic services. This could possibly be done by a volunteer.

#### Comments

Strengths and limitations of the study:

The study was facilitated by the long term involvement of the researchers with the clinic from its inception. Because there was genuine interest shared by

the clinic staff and the researchers in the results of the study, there was a high degree of mutual support and cooperation. The research questions guiding the study were developed from specific areas of interest the administrator of the clinic had about the clinic. The use of multiple data sources--i.e., the broad-based framework and the qualitative and quantitative analysis of the data--enhanced and enriched the quality of the results.

The contribution this nurse-run clinic provides to the homeless population is best reflected within the rich descriptions of the persons served and their comments about the clinic on the Client Satisfaction Questionnaires. A strong human quality prevails throughout the study.

There would have been more complete data if orientations for the total clinic staff about the research needs and clinic intake forms had been provided and if the Client Satisfaction Questionnaires had been numbered so that the number not returned could have been calculated. Changes were made in the clinic intake forms used for health history and demographic information prior to the study, but the old forms were not removed from the supplies and were sometimes used, giving the researchers some incomplete data.

Confounding data occurred with discrepancies between

the number of clients seen in the clinic according to client records and clinic statistical summaries.

Recommendations for further study include:

Marketing strategies effective in reaching the population of people who are homeless.

Marketing strategies are most effective in reaching the community human support services agencies.

The correlation between the high incidence of substance addiction and homelessness.

The etiology and treatment of addiction.

Usefulness of the framework for evaluation in other community clinical settings.

Significance of the study:

Further documentation of the ability of nurses to function in an independent clinic role.

Documentation on the usefulness of Nursing Treatment Protocols as a tool for promoting independent clinical roles for nurses.

Documentation of the satisfaction of people who are homeless with a clinic run by nurses.

Documentation of the types of health problems that can be managed and have the potential to be managed by nursing care.

Documentation of the cost effectiveness of a nurse-run clinic.

Development of a framework for the evaluation of clinics run by nurses.

Implementation of recommendations from the study within the clinic.

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APPENDIX A

## Expanded Description of the Framework Grid

### Description will illustrate:

Clinic: Data on site location, hours of operation, staffing, supplies available, and funding, will be collected

through direct observation and an interview with the administrator.

Client: Data on demographics related to sex, age, race, education, family status, occupation, living situation, and homeless history, will be collected from client records.

Health: Data on health problems, frequency, and duration, will be collected from client records.

Nurse: Data on the nursing role in the clinic will be collected by direct observation and interviews with the clinic nurses.

Community: Data on the community network established for referrals, the community social services network, and the services they provide, including transportation, will be collected from clinic records and interviews with the clinic nurses.

Stated Objectives of the clinic will be enumerated from clinic documents.

Clinic: Data on clinic program objectives and cost will be collected from the Community Health Center Homeless Outreach Services Manual (HOM), and the Budget Analysis (Donlon, 1988).

Client: Data on the goals stated for the established client target population will be collected from the HOM-Standard I.

Health: Data on health problems will be collected from the Jackson County Health Needs Assessment (1988), and HOM.

Nursing: Data on program objectives for the nurse will be collected from nursing treatment protocols and quality assurance standards in the HOM.

Community: Data on the objectives for the community involvement will be collected from HOM-Standard VI.

#### Observed Outcomes

Clinic: Data on cost analysis, cost of care in the clinic, and cost of care in other community settings, will come from the budget analysis. Number of services provided, medications dispensed, and number of patients transported will come from clinic records. Information on how many patients did not receive the care recommended in the nursing care plan and why will come from client records.

Client: Data on the number from the target population will come from client records. Client satisfaction with clinic services, information on client perception of accessibility, availability, and safety of the clinic, will come from the client satisfaction questionnaire.

Health: Data on the number and types of health problems treated in the clinic, referred elsewhere for care, and length of time from referral to appointment at the referral site, will be collected from client records.

Nurse: Data on the number of clients treated according to protocols, number and type where there were no protocols, and number of records that were complete, will come from review of client records. General availability of supplies, medications, equipment, and the nurses perceptions of their clinical roles, will come from interviews with the clinic nurses and direct observation.

Community: Data from agencies participating in referrals, problems encountered, number of patients referred and number seen at referral sites, will be collected from interviews with referral agencies. Data on the community human services support organizations (CHSSO) perspectives of the clinic services, will be collected through interviews with CHSSO's.

Effectiveness per stated goals will be determined through analysis of the data.

APPENDIX B

## Oregon Health Sciences University

## CONSENT FORM

Cassandra Donlon and Janet Meyer, are students at the Oregon Health Sciences University under the supervision of Donna Jensen PhD, Associate Professor in Graduate Nursing, and are conducting a research project entitled: Evaluation of a Nurse Run Clinic for Persons Who are Homeless. The purpose of the study is to evaluate the services of the clinic and to determine patient satisfaction.

You may be asked to participate in a personal interview with one of the nurse researchers. The interview will last about 1/2 hour. You may be asked to fill out a questionnaire; your anonymity will be preserved. A nurse researcher will be present while the nurse is collecting information about you. Your records may be reviewed for information by the nurse researchers.

Some clients may feel inconvenienced by the presence of another nurse and the extra time that is taken for the interview or questionnaire.

A potential benefit to you is an opportunity to have your opinion valued. A potential benefit to medical science is that an evaluation of the clinic may show how well a nurse run clinic provides health care.

"I understand that neither my name nor my identity will be used for publication nor publicity and that all information is held in strict confidence by the researchers".

There will not be any cost to you for participating in the study.

The researchers or the nurse at the clinic will be available to answer any questions that you might have.

"I understand that I may refuse to participate or withdraw from from this study at any time without affecting my relationship with or treatment at the nurse run clinic at the Salvation Army."

The Oregon Health Sciences University, as an agency of the State, is covered by the State Liability Fund. If you suffer any injury from the research project, compensation would be available to you only if you establish that the injury occurred through the fault of the University, its officers or employees. If you have any questions, you may call Michael Baird, M.D. at (503) 279-8014.

"I have read the foregoing and agree to participate in this study".

Signature \_\_\_\_\_ Date \_\_\_\_\_

Witness \_\_\_\_\_ Date \_\_\_\_\_



APPENDIX C

Dear \_\_\_\_\_,

As part of our research study evaluating the Community Health Center Homeless Outreach Clinic, conducted through Oregon Health Sciences University, we would appreciate a time to interview you about your participation in the clinic.

Information from the interview will be used as part of the research study. Participation in the interview is voluntary.

Thank you for your assistance.

Sincerely,

Cassandra Donlon, RN

Janet Meyer, RN

Graduate Nursing Students  
Oregon Health Sciences University

APPENDIX D

Dear

The Community Health Center Homeless Outreach Clinic has been in operation at The Salvation Army Shelter for the past six months.

As part of a research study through Oregon Health Sciences University, we are evaluating the services provided by the Homeless Outreach Clinic. We would like to contact you, with your permission, to talk to you about your perception and awareness of the services that are being provided.

One of the researchers will be contacting you within the coming week.

Thank you for your assistance.

Sincerely,

Cassandra Donlon, RN

Janet Meyer, RN

Graduate Nursing Students  
Oregon Health Sciences University

APPENDIX E

## Client Satisfaction Questionnaire

Please let us know what you think about the clinic.

1. Was it easy to find out about the clinic?  
Yes. \_\_\_\_\_  
No. \_\_\_\_\_
2. Was it easy to find the clinic?  
Yes. \_\_\_\_\_  
No. \_\_\_\_\_
3. Did you wait long to see the nurse?  
Yes. \_\_\_\_\_  
No. \_\_\_\_\_
4. Did you feel safe at the clinic?  
Yes. \_\_\_\_\_  
No. \_\_\_\_\_
5. Did the nurse help you with your problem?  
Yes. \_\_\_\_\_  
No. \_\_\_\_\_
6. Did you like the way you were treated?  
Yes. \_\_\_\_\_  
No. \_\_\_\_\_
7. Is the nurse sending you somewhere else for help?  
Yes. \_\_\_\_\_  
No. \_\_\_\_\_
8. If yes, will you be able to get there?  
Yes. \_\_\_\_\_  
No. \_\_\_\_\_

If there is anything else you would like to tell us about the clinic, please use this space.

Thank You! Your ideas help us make the clinic better.

APPENDIX F

Open Ended Interview Format:

Clinic Nurse:

Would you share your feelings and perceptions of your professional nursing role in this clinic setting?

Would you explain the referral process when you determine a client needs care beyond what can be provided here in the clinic?

What problems are experienced by the clients in getting to the clinic or a referral site? What arrangements are available if patients need help with transportation to obtain care?

What support services are available to assist patients to receive medications, or social services they need?

Are the Nursing Treatment Protocols useful in your assessment of patients?

Administrator:

Would you describe how the clinic functions, such as where it is located, the hours, the staffing pattern, and the responsibilities of the staff members and volunteers.

Would you explain the funding for the clinic, the budget, and financial statements? We are also interested in what you estimate the cost of care per patient to be.

Community Human Services Organizations:

The Community Health Center has been running a Homeless Outreach Clinic at The Salvation Army for the past six months. Are you aware of the clinic?

What are your perceptions of the services offered by this clinic?



APPENDIX G

Number and Type of Health Problems Treated by the  
Nurse, Time from Beginning of Symptoms to Receiving  
Care

<u>Problem</u>	<u>Number N=84</u>	<u>% of total</u>	<u>Time elapsed</u>
<b>Neurological</b>			
Seizure	1		45 days
Head Trauma	1	3%	5 days
Neuralgia	1		chronic
<b>Headaches</b>	5	6%	M: 16 days R: 1-60 days Chronic: 1
<b>Cardiovascular</b>	9	11%	1 day: 1 Chronic: 8
<b>Skin</b>			
Trauma	9	11%	M: 3.2 days R: 1-14 days
Dermatitis	6	7%	M: 12.4 days R: 2-30 days
Infection	1	1%	5 days
<b>Musculo Skeletal</b>	7	8%	M: 11.25 day R: 3-21 days
<b>Respiratory</b>	12	14%	M: 5.25 days R: 2-14 days
<b>Gastro-Intestinal</b>	6	7%	M: 1.6 days R: 1-2 days Chronic: 2
<b>Diabetic problems</b>	1	1%	2 wks.
<b>Obesity</b>	1	1%	Chronic
<b>Anemia</b>	1	1%	5 days
<b>Mental Illness</b>	7	8%	Chronic: 7
<b>Alcohol Related</b>	5	6%	Chronic: 5
<b>Drug Related</b>	2	2%	M: 12 days R: 10-14 day
<b>Dental</b>	6	7%	M: 10.8 days R: 1-42 days
<b>Eye</b>	2	2%	Chronic
<b>Womens Health</b>	1	1%	NA

## Follow-up visits

Problem	# of people	# of visits
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---

 Skin

Trauma	3	5
Respiratory	3	
Cardiovascular	3	
Diabetes	1	
Musculo Skeletal	2	4
Headache	1	
Dental	1	
Mental Illness	1	

---

 Total

15

9

Time Elapsed, beginning of symptoms to visit:

M: 8.6 days

R: 1-60 day

Chronic Health Problems: N: 32    38% of visits

Length of time unknown: N: 4    5% of visits

APPENDIX H

Type of health problems by number and percentage that were treated by the nurse, referred elsewhere for care, or were partially treated by the nurse and referred for continued care

Problem	Treated		Referred		Both Rx & R	
	n-40	48%	n-24	31%	n-20	24%
Neurological			3	100%		
Headache	2	40%	2	40%	1	20%
Cardiovascular	8	88%	0		1	12%
Skin						
Trauma	6	66%	0		3	33%
Dermatitis	4	67%	2	33%	0	
Infection	0		0		1	100%
Musculo-Skeletal	4	50%	2	25%	2	25%
Respiratory	8	67%	2	17%	2	17%
Gastro-Intestinal	1	20%	1	20%	3	60%
Diabetes	0		1	100%	0	
Obesity	0		0		1	100%
Anemia	0		0		1	100%
Mental Illness	1	14%	3	42%	3	42%
Alcohol	2	40%	3	60%	0	
Drug	0		1	50%	1	50%
Dental	3	50%	2	33%	1	17%
Womens Health	0		1	100%	0	
Eye	1	50%	1	50%	0	

APPENDIX I

Nursing Treatment Protocols

Number of health problems treated according to the  
written protocols: N:7 8%

Number of health problems not treated according to the  
written protocols: N:7 8%

Number of health problems for which there is no written  
protocol: N:70 83%

Problems for which there are no written protocols:

Chronic	Acute
Alcohol abuse	Abdominal pain
Allergies	Allergic Dermatitis
Arthritis	Animal bites
Blood pressure	Asthma
Diabetes	Athletes foot
Decubitus ulcer	Cellulitis
Depression	Contusions, Hematomas
Drug abuse	Dental
Eye, lazy	Disorientation
Headache	Dizziness
Neuralgia	Eye injury
Obesity	Flu, viral syndrome
	Head Injury
	Lumps
	Muscle spasm
	Numbness
	Shingles

AN ABSTRACT OF THE THESIS OF

CASSANDRA M. DONLON

AND

JANET L. MEYER

For the Master of Science in Nursing

Date receiving this Degree: June, 1990

Title: An Evaluation of a Nurse-Run Clinic for Persons  
Who Are Homeless

Approved: 

Donna Jensen R.N., Ph.D. Associate Professor

Thesis advisor

This study is an evaluation of a clinic housed at The Salvation Army shelter serving people who are homeless. The clinic is run by nurses as an outreach service from the non-profit Community Health Center in Medford, Oregon.

The areas of concern addressed by this study are: the cost in relation to the benefit of the clinic, the clients' satisfaction with the clinic service, the types of health care that can be managed by nursing care, the value of the nursing treatment protocols, and the community human support services organizations perception of the clinic. These areas of concern, and descriptive and quantitative data about the clinic, clients, health, nursing, and the community were



evaluated using a broad based framework developed for the study.

The study was conducted from May 2 to August 2, 1989. The clinic made some changes in location and clinic hours during the data collection period, causing a decrease in the anticipated number of clients seen. The methods for the study included interviews with the nurses, clinic director, and community agencies, as well as observations in the clinic and review of client records and clinic statistical records. A Client Satisfaction Questionnaire was developed and used to elicit the clients' views of the clinic.

The study found the clinic to be meeting or approaching its goal in most areas. The cost of services was higher than estimated because of the decrease in numbers of clients seen, but, at \$19.60 per client, was still below the cost of all other medical services in the community. The clients were very pleased with the service, and many made return visits and were able to begin making some positive changes in their health status. Of the health problems seen in the clinic, the nurses were able to treat 48%, referred out for care 31%, and partially treated and then referred 24%.

The nurses found their roles fulfilling, and for the most part, very positive. The protocols that were written for them were not complete; they covered only

18% of the health problems encountered. The nurses were able to utilize other resources to fill in the gaps in the protocols.

Most of the community agencies contacted were aware of the clinic, but had little knowledge of the services available or opinion on the clinic's effectiveness. The agencies that worked closest with the clinic were very pleased with the services given.

The framework developed for the evaluation worked well to provide a comprehensive evaluation format and provided an easy vehicle for data analysis.

Data from the study have been useful in implementing changes in the clinic.

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