It Takes a Village: A Multidisciplinary Model for the Acute Illness Aftercare of Individuals Experiencing Homelessness

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Abstract: Homeless individuals are often uninsured and are more likely than the housed to utilize acute health care services and experience longer hospitalizations. Currently in the United States, there are fragmented services available for the aftercare of these patients to ensure continuum of care, promote healing, and avoid re-entry into the acute care system. The Fourth Street Clinic Respite Program was created to address these issues. Patients are referred to the program from local hospitals and other service providers. Based on the acuity of illness and need for nursing care, patients are admitted to one of four programs: (1) Shelter-based Day Bed Program, (2) Temporary Emergency Housing (Motel) Program, (3) Tuberculosis Housing Program, or (4) Nursing Home Program. Aftercare patients receive medical, social, and behavioral health services and are discharged to local shelters when stable. The aftercare program provides a safe refuge for recovery from acute illnesses for those experiencing homelessness.

Key words: Multidisciplinary care, aftercare, physical illness, homelessness, uninsured.

Mr. P is a middle-aged homeless man seen intermittently at the clinic. He now presents with acute cellulitis of his leg requiring oral antibiotics, analgesics, and bed

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Received November 30, 2004; revised February 21, 2005; accepted February 25, 2005.

rest. He has recently been staying on the street and is not ill enough to require hospitalization. He is well known for noncompliance with medications and follow-up.

Ms. B was recently admitted to the hospital after being involved in a motor vehicle accident. After 4 weeks in the hospital and several surgeries to address multiple fractures, she is ready to be discharged. She requires 2–3 weeks of recuperative care at a skilled nursing facility and 1–2 weeks of intravenous antibiotics. The major impediment to her discharge is that she has nowhere to go. She is passing through the area, has no job, no residence, no family, and no insurance.

Estimates of individuals and families experiencing homelessness in the United States on any given night vary from 350,000–800,000 and from 2–3 million per year.[1] Often, a medical illness can be the cause of homelessness as well as a barrier to ending it. Homeless individuals, especially adults, typically lack adequate health insurance and often experience multiple medical problems.[2,3] They have difficulty in accessing and maintaining care and are more likely than housed individuals to use acute care hospitals with increased hospitalization rates, prolonged hospitalizations, and increased mortality.[4–8] These factors contribute to the challenge of providing a continuum of health care for those experiencing homelessness.

Once care is accessed via an ambulatory clinic, urgent care setting, or emergency room, the discharge disposition of homeless individuals is often difficult and resource intensive. It can be very challenging for the clinician to ensure the best possible chance of healing and to prevent complications and re-entry into the acute care system. Although there is considerable literature on the housing of mentally ill homeless individuals,[9,10] there is very little written about recuperation from physical illnesses and resources available for the aftercare of discharged homeless individuals. Although not extensively available across the United States, there are several models of such recuperative services for homeless people,[11] and recently the federal Bureau of Primary Health Care has funded pilot projects to develop and increase utilization of such services in 10 U.S. cities.[2]

With the premise of providing a safe refuge and appropriate acute illness aftercare for homeless patients, the Fourth Street Clinic Respite Program was created in Salt Lake City, Utah. This article describes a multidisciplinary model used to provide aftercare services to those experiencing homelessness.

The Fourth Street Clinic Respite Program

The Fourth Street Clinic. The Fourth Street Clinic is operated by Wasatch Homeless Health Care, Inc., a nonprofit organization based in Salt Lake City, Utah, whose mission is to provide comprehensive medical services to homeless individuals and families in the area. The clinic is a Federally Qualified Health Center and is the only exclusive Health Care for the Homeless site in Utah. The clinic provides primary care, preventive health care, specialty care, and social services to an average of 6,000 patients every year through 25,000 encounters.

A multidisciplinary approach to aftercare. *Multidisciplinary* generally refers to the coordinated efforts of several teams or members of different disciplines to achieve

a common goal; each team member develops and implements a plan to meet patient needs with a leader integrating the plans toward reaching the common goal.[12] The multidisciplinary nature of providing aftercare is noted at two levels: (1) between collaborative agencies that provide medical and social services to homeless individuals and the Fourth Street Clinic and (2) between various personnel within the Fourth Street Clinic with clearly delineated roles and responsibilities, all contributing to the functioning of the aftercare program (Table 1). The team leaders for the aftercare program are the physician and social services manager with joint decision-making responsibilities with regard to admission and discharge.

The staff of the Fourth Street Clinic first contacted local area hospitals, emergency shelters, motels, charitable organizations, county and state health departments, and skilled nursing facilities to identify patients in need of recuperation after an acute medical illness. Personal meetings were arranged with all key stakeholders to acquaint agencies with resources and to affirm the common goal of providing aftercare to homeless individuals. Once contacts were made, these relationships were sustained by periodic interactions by phone, written correspondence, and in person.

Components of the acute illness aftercare program. Because patients presented with varying acuities of illnesses and recuperative needs, aftercare was arranged in the following settings (Table 2).

Shelter-based day bed program. Emergency shelters provide a temporary bed for the night for homeless individuals, who are normally not allowed to remain in the shelter during the day. In cooperation with the staff at the local emergency shelter, a section of the shelter was set aside for recuperating individuals to stay in during the day, giving them daytime access to shelter amenities. There are a total of 20 beds for adult men and 4 for women in the day bed program. The shelter administers this program, monitors the number of beds available, and enforces the policies of the shelter.

There are no direct medical services available at the shelter. The patients typically receive care through the Fourth Street Clinic and providers from the clinic perform weekly rounds at the shelter to evaluate progress and continued need for the day bed.

Patients must satisfy the following criteria to be in the day bed program: they must be ambulatory (unassisted or using a cane, crutches, or a wheelchair), able to care for themselves, able to provide for their meals, and be continent of bowel and bladder. Those on supplemental oxygen, those receiving intravenous medications, and those who are actively abusing alcohol or other illicit substances are not eligible for this program.

Temporary emergency housing (motel) program. With the same criteria as the day bed program, patients are placed at local motels when the day bed program is full or the patient is accompanied by family members. Additionally, patients with an acute medical condition who do not meet the day bed program's continence, intravenous medication, or oxygen requirement are admitted to the motel program. This program is also used to temporarily house patients who are diagnosed with communicable diseases (confirmed or suspected) and require isolation while awaiting confirmation of the diagnosis or during recovery. There are no direct

Table 1.

THE FOURTH STREET CLINIC RESPITE PROGRAM PERSONNEL

Team Member	Professional Background	Duties	Time Allocated (Hours per week)
Licensed medical providers[a]			
1. Physician (MD)	Professional degree	1. Medical triage: review requests	1. MD: 8 hrs
2. Physician Assistant (PA)	Professional degree	2. Perform admission history/physical	2. PA/NP: 8 hrs
3. Nurse practitioner (NP)	Professional degree	3. Weekly medical rounds	
		4. On-call	
		5. Assist with discharge disposition	
Social Services			
1. Manager	Social work training degree	1. Receive/review requests/for aftercare	15 each
2. One staff member		2. Verify program eligibility of patients	
		3. Liaison with collaborative agencies	
		4. Coordinate patient admission/discharge	
		5. Weekly rounds/case management	
		6. Coordinate specialty care referrals	
		7. Referral to substance abuse services	
		8. Arrange delivery of medications/supplies	
Support staff			
1. Medical assistant (MA)	MA certification education/training	1. Weekly rounds at aftercare locations	1. MA: 3
2. Medical records staff		2. Maintain medical records	2. Records: 2

Behavioral health			
Clinical social worker	Masters in Social Work	1. Perform behavioral health assessment 2. Provide counseling and therapy services	2
Pharmacy staff			
1. Pharmacist 2. Technician	Pharmacy degree Certificate	1. Dispense medications	2 each
Administrative staff	Accounting degree/training	1. Grant administration and accounts	5

[a]The nursing home and shelter day bed program are the responsibility of one medical provider each, with coverage by other providers during staff vacations.

Table 2.

COMPONENTS OF THE FOURTH STREET CLINIC RESPITE PROGRAM

Component	Location	Beds (n)	Referral Source	Patient Criteria for Admission	Funding Source	Common Diagnoses
1. Shelter Day Bed Program	At The Road Home (Shelter)	Men: 20 Woman: 4 Home, local hospitals	Patient self-referral, clinic staff, The Road	Ambulatory, self-care, no IV medications, not on oxygen, no active communicable disease	Shelter, clinic	Musculoskeletal condition infections (upper respiratory and skin), postoperative recovery
2. Temporary Housing (Motel) Program	Local area motels	Variable	Patient self-referral, clinic staff, The Road Home, local hospitals	Ambulatory, self-care, oxygen acceptable, may have communicable disease (suspected or confirmed)	FEMA, clinic	Similar to Day Bed Program, Rule-out TB and respiratory conditions

3. TB Housing Program	Low income apartments	8 beds in 4 apartments	Local area hospitals, local and state health departments	Receiving treatment for active TB, no longer infectious, ambulatory, and able to care for themselves	Local and State health departments, Housing Authority, local banks, clinics	Pulmonary TB
4. Nursing Home Program	Local area nursing homes	Variable	Local area hospitals, clinic staff, The Road Home	No fixed criteria; those requiring intermediate or skilled nursing facilities	BPHC Respite Pilot Initiative supplies from referring agency, clinic	Musculoskeletal conditions (including injuries), infections (upper respiratory, skin, bone), postoperative recovery

medical services available at the motels. The patients receive care through the Fourth Street Clinic.

Tuberculosis housing program. Homeless individuals with active tuberculosis (TB) (for which the homeless are at increased risk) who are under treatment and are no longer infectious are referred to low-income apartments that are jointly managed by staff of the Fourth Street Clinic, the Salt Lake Valley Health Department, and the Housing Authority of the County of Salt Lake. The criteria for admission to this program are that the patient be able to care for him- or herself and be compliant with directly observed TB therapy. The patient is offered rent-free housing for the duration of his or her therapy and is offered incentives to see his or her medical provider and continue treatment.

If the demand for TB housing decreases over time (due to decreased numbers of patients with active TB), it is expected that the TB housing will evolve to accommodate other aftercare needs of clinic patients.

Nursing home program. Patients requiring intermediate or skilled nursing facilities for the aftercare of complicated medical and surgical illnesses are admitted to local area nursing homes. The referring hospitals provide the medications and supplies required for the aftercare, the nursing home provides the skilled nursing staff, and the medical staff of the Fourth Street Clinic provide on-site and on-call medical care. There are no fixed criteria for this program and the patients are evaluated according to their medical conditions and services required.

Historically, the first component of the program was the shelter day bed program instituted in 1989. The TB housing and nursing home program were created in 1996; the motel program was added in 1999. The complete program has been actively serving patients since 2000.

Patient flow

Referral and triage. To place the patients in an appropriate setting, a referral and triage process was implemented (Figure 1). Various clinic personnel carried out specific duties and responsibilities that contributed to the aftercare program (see Table 1).

Any homeless service provider is eligible to make a referral to the program. Referrals for the aftercare program were received from the social workers and discharge planners at local area hospitals (emergency rooms and in-patient services), emergency shelters, street outreach programs, and the local health department and from local ambulatory care clinics that occasionally provide services to homeless individuals. Patients often requested services while presenting to the Fourth Street Clinic and providers at the clinic routinely referred patients to the program.

The referral source was requested to provide basic medical and demographic information to the social services staff of the Fourth Street Clinic. The first step was to confirm the homeless status of the patient using clinic eligibility guidelines. The patients were either (1) uninsured and without any funding source; (2) existing patients of the clinic or new to the clinic and were confirmed to be residing in the shelter, in campsites, on the streets, or in vehicles, on county assistance in detoxification centers or halfway houses; (3) temporarily residing in and without

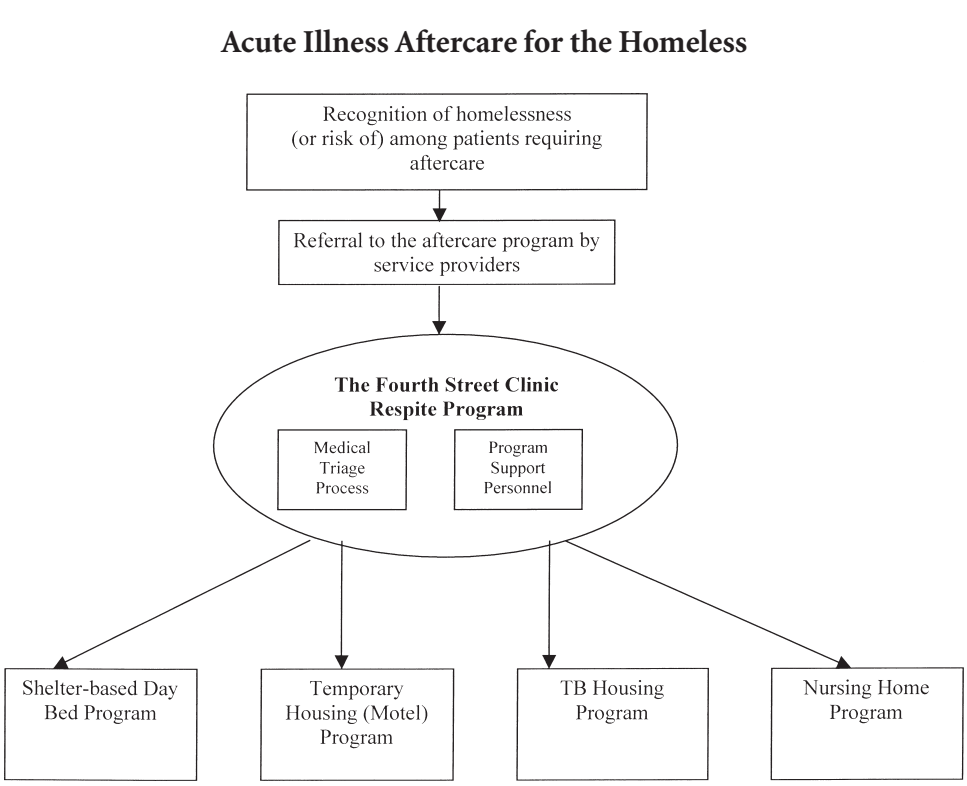

Figure 1. Overview of the Aftercare Program.

resources in Salt Lake City; or (4) at risk of being homeless due to lack of insurance and funds, recent illness, or loss of income or residence.

The second step was to determine the acuity of illness and the need for aftercare services. The medical staff of the clinic did this after reviewing available medical records, often communicating directly with the referring service provider to discuss details and the need for aftercare services. Hospital requests for aftercare included a social assessment of the patient at the referring hospital. Based on the clinical stability of the patient, his or her ability to care for him- or herself, and availability of aftercare program beds, the patient was admitted to the appropriate program. A very important component of the triage process is to ensure knowledge of the current Purified Protein Derivative TB skin test status of the patient (except for those patients with active TB).

In most instances, the patient was evaluated in the clinic prior to admission to the program to confirm his or her clinical status and his or her ability to care for him- or herself.

Follow-up procedures and staff communication. Once the patient was admitted to the appropriate program, formal weekly rounds (by medical and social services staff) were performed to determine progress and continued need for the aftercare program. The medical and social services staff communicated on a daily basis concerning the medical status of the patient, the need for ancillary or referral services, and discharge disposition. The licensed medical providers were in charge of decisions

with respect to achieving stability or improvement in the condition that prompted aftercare, continuing medications prescribed for current illness, and readiness for discharge. The social services staff provided case management and discharge planning. All final decisions regarding discharge were made in conjunction with the team leaders (the physician and social services manager). Other clinic staff provided support services for the program (see Table 1). Apart from formal weekly rounds, the medical providers were available on call (by pager) for medical emergencies and other relevant concerns.

Services offered in the aftercare program. Patients were offered medical, social (case management), and behavioral health services from providers in the clinic. The clinic provided laboratory and pharmacy services as needed to the patients. They were also referred to state agencies for benefits, local substance abuse services, and specialists as needed. In most instances, these referrals were arranged and case managed through the social services staff of the clinic.

Funding sources for the aftercare program for the uninsured

Fourth Street Clinic resources. The medical and social services personnel were provided salary and benefits from the federal grant (Bureau of Primary Health Care, Health Resources and Service Administration) awarded annually to the clinic as a Federally Qualified Health Center.

Specific resources. The day bed program was administered from the operating budget of the emergency shelter, The Road Home (Salt Lake City, Utah). The temporary emergency shelter program (motel) was funded by grants from the Federal Emergency Management Agency (FEMA). The TB housing program was funded with a combination of resources from the Utah Department of Health, the Salt Lake Valley Health Department, the Housing Authority of the County of Salt Lake, and two local banks.

The main funding for the nursing home program was provided through a grant from the federal government (Health Care for the Homeless Respite Pilot Initiative Grant, Health Resources and Service Administration, 2000). The referring hospitals were asked to provide medications and essential supplies for the duration of the aftercare stay.

Results

Since its inception in 2000 through the end of 2004, the aftercare program has served 1,686 individuals experiencing homelessness and requiring medical care (Table 3). During this period, the day bed program accounted for a majority of the services (82%, 1,377 patients) mainly due to the relatively low acuity of illness and high turnover (average utilization of 7 nights per patient). The most common diagnoses encountered in the day bed program were musculoskeletal conditions (including injuries), upper respiratory and skin infections, and recovery from minor surgical procedures. Nearly all the patients completing their stay in the day bed program were subsequently moved to regular shelter beds.

Table 3.

THE FOURTH STREET CLINIC RESPITE PROGRAM 2000-2004

	Average Number of Nights per Patient	2000 Number of Patients (Nights)	2001 Number of Patients (Nights)	2002 Number of Patients (Nights)	2003 Number of Patients (Nights)	2004 Number of Patients (Nights)
Shelter Day Bed Program	7.1	256	272	232	232	385
		(1,792)	(1,904)	(1,743)	(1,624)	(2,387)
Motel Program	14	13 (60)	25 (487)	36 (469)	39 (571)	18 (461)
TB Housing	6 months	9	9	9	9	6
Nursing Home Program	16.4	17 (374)	49 (712)	31 (469)	23 (417)	16 (278)

The motel program served similar patients and accounted for 8% of the total number of patients. The average length of stay in this group was 14 nights. The patients placed in motels were either recovering from acute illnesses, were being ruled out for communicable diseases, or were awaiting admission to the TB housing program. Other than those awaiting TB housing, all patients were discharged to a shelter bed.

The TB housing program is unique in that the patients were undergoing treatment for active TB. This accounted for a longer length of stay (average of 6 months) and the low turnover rate seen in this program. Upon completion of treatment, the patients were either discharged to transitional housing or to the shelter.

The nursing home program catered to the most ill patients seen in our program (8% of total patients, $n = 136$). Of the patients admitted to this program, 90% were referred from local area acute hospitals. The most common diagnoses noted in this population were musculoskeletal conditions (including injuries from major trauma); complicated infections of upper respiratory tract, skin, and bone; and recovery from major surgical procedures. The average length of stay was 16.4 days. At the end of their nursing home stay, 50% of the patients were discharged to the shelter and 25% to transitional housing; the rest were discharged to a family member or friend.

Based on costs incurred from 2000 to 2004, the estimated direct annual costs to the clinic for operating the aftercare program were in the range of $200,000 (Table 4). This included personnel costs ($94,500), bed charges ($85,000), and other supplies and costs for the patients ($20,000). This represents nearly 7% of the clinic's annual budget. This does not include the in-kind donations of intravenous medications (mostly antibiotics), oral medications, oxygen tanks, and charity specialty care provided by local hospitals and providers, which is estimated to be in the range of $100,000 per year.

Discussion

Individuals experiencing homelessness are less likely than others to get routine medical care, resulting in increased rates of utilization of acute hospital care.[4–6] Once they do get hospital care, these individuals experience longer hospitalizations resulting in increased costs to the medical system, as reported by Salit and colleagues.[7] In their 1998 study, these authors discuss several "unmeasurable" differences noted among homeless and housed patients, the main ones being that in the case of the homeless but not the housed (1) the hospital staff had no place to discharge the patients to (due to overcrowding of shelters) and (2) those requiring follow-up care were held in the hospital longer because the medical staff were concerned about availability of a clean environment for recovery, patient compliance, and access to continued care.

In this setting, The Fourth Street Clinic Respite Program (where the respite is temporary and from homelessness) was created to (1) offer a safe refuge for recovery from acute physical illness, (2) offer a continuum of medical care for the homeless patient, and (3) decrease the burden on acute care hospitals in caring for the uninsured homeless.

Table 4.

THE FOURTH STREET CLINIC RESPITE PROGRAM OPERATING COSTS PER ANNUM[A]

Salary Support (With Benefits)	Bed Charges	Other Costs
1. Medical providers: $40,000 2. Social services: $33,000 3. Support staff: $3,500 4. Behavioral health: $2,000 5. Pharmacy staff: $8,000 6. Administration: $8,000 Total: $94,500 Grand Total: $199,500	1. Shelter Day Bed: no cost to the clinic 2. Temporary housing (motel): $15,000 3. TB housing (rent and utilities): $15,000 4. Nursing home: $55,000 Total: $85,000	$20,000 (includes pharmaceuticals laboratory, other supplies, communication, and transportation costs) Total: $20,000

[a] Based on average for 2000–2004.

In this paper, we offer the first full description of such a program for the aftercare of those experiencing homelessness and an acute medical illness. The program was created out of a community need to deliver reliable and sustainable aftercare to the acutely ill homeless patient and is the culmination of several years of efforts by key stakeholders and a multidisciplinary team of clinic personnel. The administration and funding of this program depend on continued communication and cooperation between several agencies that provide medical care for the homeless in the Salt Lake City area.

From 2000 to 2004, the program served 1,686 patients with illnesses ranging from those requiring a place to rest to those requiring skilled nursing facilities and active medical care. This represents a small proportion of the patients seen at the clinic annually (6%); with continued growth, it is expected that this program will serve more patients. The patients were cared for in various settings depending on the acuity of illness, ability to care for oneself, and need for skilled nursing. In all instances, the patients were discharged from the aftercare program in a reasonably stable medical condition. Some patients received care in more than one aftercare location during the year and some patients received care multiple times in the same location. The number of patients availing of multiple services is not ascertainable from currently used tracking systems.

There are several limitations noted in the administration of this program. Although it is felt intuitively that the program is beneficial to the patients and to the community by reducing the burden on acute care hospitals and improving the health of homeless people, it is difficult to estimate the true benefit of the aftercare program in terms of costs (and money saved) to the medical establishment. The availability of beds for the aftercare program is linked to the general availability of open beds and continued funding. This requires a certain gatekeeping function wherein the program is unable to provide aftercare services to all patients requesting those services. A more detailed analysis of the patients served by the aftercare program is planned. A majority of our patients suffer from alcohol and substance abuse and psychiatric problems. A behavioral health consultant was available to assist in addressing these problems, although not consistently, mainly because of time constraints and rapid turnover in some settings. A more consistent evaluation of these matters and appropriate referrals would benefit both the patients and the program.

An ideal discharge disposition for all patients admitted to the program would be to have them break the cycle of homelessness and apply for government benefits (including insurance), move into low-income housing, and obtain assistance for substance abuse services. Although an attempt is made to actively assist all patients in these endeavors, few patients truly leave homelessness. It is felt that this may represent a missed opportunity for homeless service providers.

Each community and the resources available to it are unique and so it may be difficult to immediately and directly reproduce this model in other cities. Cities wishing to provide acute illness aftercare for homeless individuals will likely have to explore different models of care and choose those that are sustainable for that community. The direct costs incurred by the Fourth Street Clinic are significant

and are required to operate a large program with various components. Based on the availability of local clinic resources and community support, homeless service providers in other regions may choose to implement smaller programs with limited and defined services.

Finally, with the federal government providing grant funding to 10 pilot respite programs in various parts of the country and service providers realizing the importance and benefits of these programs, it is hoped that awareness of aftercare programs for patients experiencing homelessness is on the rise. Homeless service providers must be creative in crafting their own programs and must advocate for more funding from federal and other sources. As more programs are implemented, it is imperative to conduct more detailed analyses and carefully planned studies to show the cost benefit of such programs.

Acknowledgments

In keeping with the aphorism that it takes a village to accomplish many things, we wish to recognize with gratitude all local hospitals, clinics, homeless services providers, charitable organizations, and community activists in the Salt Lake City area for supporting the aftercare program. All our clinic staff members have provided enthusiasm and support in creating and fostering this program. In particular, we would like to mention the contributions of Jane Cumberland, FNP, Peter Chapa, PA-C, and Ms. Sundie Gomez.

We are also indebted to the following for their support and guidance: IHC Corporation, Mr. Walter Matjasich (Murray Care Center and Friendship Villa), Mr. Kyle Cannon and his team at the Salt Lake Valley Health Department, Ms. Louise Eutropius (University of Utah Hospitals and Clinics), Ms. Teresa Garrett, Ms. Cristie Chesler and Ms. June Oliverson (Utah Department of Health TB Program), the staff of The Road Home, staff of the Housing Authority of the County of Salt Lake, Ms. Pamela Atkinson (Board Member, Wasatch Homeless Health Care, Inc.), the staff of the Volunteers of America-Utah Homeless Outreach Program, Members of Welfare Square (LDS Church and Bishop's Storehouse), and the Salt Lake Olympic Committee (all in Salt Lake City), and The National Health Care for the Homeless Council (Nashville, TN).

Notes

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