

Mobile Health Care for Homeless People: Using Vehicles to Extend Care

by

Patricia Post, MPA

This project was funded through a Cooperative Agreement
with the Bureau of Primary Health Care,
Health Resources and Services Administration,
U.S. Department of Health and Human Services.

National Health Care for the
Homeless Council
May 2007

Mobile Health Care for Homeless People

Mobile Health Care for Homeless People: Using Vehicles to Extend Care was developed with support from the Bureau of Primary Health Care, Health Resources and Services Administration, U.S. Department of Health and Human Services.

All material in this document is in the public domain and may be used and reprinted without special permission. Citation as to source, however, is appreciated. Suggested citation:

Post P. *Mobile Health Care for Homeless People: Using Vehicles to Extend Care* 81 pages (39 pages without Appendices). Nashville: National Health Care for the Homeless Council, Inc., 2007.

DISCLAIMER

The information and opinions expressed in this document are those of the authors, not necessarily the views of the U.S. Department of Health and Human Services, the Health Resources and Services Administration, or the National Health Care for the Homeless Council, Inc.

HCH Clinicians' Network • National Health Care for the Homeless Council, Inc.

P.O. Box 60427 • Nashville, TN 37206-0427

voice: 615/226-2292 • fax: 615/226-1656

E-mail: network@nhchc.org • Web site: <http://www.nhchc.org>

This document may be downloaded free of charge at <http://www.nhchc.org/mobilehealth.pdf>

To order print copies, go to: <http://www.nhchc.org/Publications/>

PREFACE

In 2005–2006, 82 Health Care for the Homeless (HCH) grantees or subcontractors took their health services on the road to reach displaced people with limited or no access to fixed-site clinics.¹ This report describes the experience of 33 of these HCH projects in 24 states, based on telephone interviews conducted between August 2006 and April 2007. It is primarily intended for program administrators and direct service providers currently involved in mobile health outreach and for those who are interested in developing or participating in such programs.

The report focuses on the use of outreach vehicles, ranging from passenger vans to custom-designed clinics on wheels, to provide a variety of health services to people without stable housing. This creative use of vehicles complements and often enables outreach conducted on foot by many Health Care for the Homeless programs. Topics discussed include the rationale for mobile health outreach to homeless populations, services provided and staffing models, types and designs of mobile units, financing and administration of mobile health programs, obstacles encountered and strategies used to address them, and factors to which HCH providers attribute the success of these mobile outreach efforts.

This report is not evaluative. It describes an innovative and dynamic service modality that has emerged in Health Care for the Homeless over the last 20 years, in the words of individuals who are actively engaged in delivering mobile health services. The use of mobile clinics to reduce financial, geographic, and psychological barriers to health care for people who are homeless is distinctive yet complementary to other HCH outreach methods, such as “street medicine” provided by walking teams. Those who wish to extend care to impoverished people through mobile outreach, with the ultimate goal of facilitating access to more comprehensive care, can learn from these examples.

This document and other resources for program administrators and practitioners working in homeless health care are available on the National Health Care for the Homeless Council’s website at <http://www.nhchc.org/>.

¹ Health Resources and Services Administration, U.S. Department of Health and Human Services. Health Care for the Homeless Grantee Profiles, 2005–2006. <http://www.bphc.hrsa.gov/hchirc/directory/default.htm>

ACKNOWLEDGEMENTS

The following Health Care for the Homeless grantees or subcontractors shared information about their mobile health programs upon which this report is based:

- Jonathan Dunning, MEd, CCS, Birmingham Health Care, Inc., Birmingham, Alabama
- Adele O’Sullivan, MD, Maricopa County Department of Public Health, Phoenix, Arizona
- Marie Aylward-Wall, MS, RN, Clinica Sierra Vista Homeless Mobile and Respite Services, Bakersfield, California
- Andrea DuBrow, MSW, MPH, Contra Costa County Health Services Department, Martinez, California
- G.G. Greenhouse, MSW, Alameda County Health Care for the Homeless Program, Oakland, California
- Antonio de los Santos, Family Health Center of San Diego, San Diego, California
- Kathy Proctor, MPH, and Michael Menchaca, MS, AHNP, RN, Northeast Valley Health Corporation, San Fernando, California
- Molly Kennedy, San Mateo County Health Services Agency, San Mateo, California
- Gregory Morris, PA-C, Peak Vista Community Health Homeless Health Center, Colorado Springs, Colorado
- Darcie Meierbachtol, ANP, FNP, Colorado Coalition for the Homeless–Stout Street Clinic, Denver, Colorado
- Michelle Madison, Unity Health Care, Inc., Washington, DC
- Michael Cochron, MPH, I.M. Sulzbacher Health Care for the Homeless, Jacksonville, Florida
- Rod Stuldivant, Saint Joseph’s Mercy Care Services, Inc., Atlanta, Georgia
- Darlene Hein, Waikiki Health Center, Honolulu, Hawaii
- Lisa Saldana, Aunt Martha’s Health Center, Aurora, Illinois
- Jody Brandenburg, Kentucky River Foothills Development Council, Inc., Clay City, Kentucky
- Cathy Dumal, RN, Coastal Family Health Center, Biloxi, Mississippi
- Villie Appoo, MA, MSW, and Fran White, DDS, Grace Hill Neighborhood Health Centers, Inc., St. Louis, Missouri
- Matias Vega, MD, Albuquerque Health Care for the Homeless, Inc., Albuquerque, New Mexico
- Vivian Hanson, Nevada Health Centers, Inc., HCH, Las Vegas, Nevada
- Marianne Savarese, BSN, Mobile Community Health Team at Catholic Medical Center, Manchester, New Hampshire
- Sandra Stephens, Unity Health–Urban and Rural Health Care Services for Homeless Men, Women and Children, Rochester, New York

- Michael Lambert, MBA, and Sharon Joseph, MD, Montefiore Mobile Health Program, New York, New York
- Sue Sutton, Goshen Medical Center–Eastpointe, Faison, North Carolina
- Robert Donovan, MD, Cincinnati Health Network, Inc., Cincinnati, Ohio
- Kim Tierney, MPH, HCH Program/Westside Health Center, Multnomah County Health Department, Portland, Oregon
- Wayne Centrone, MD, Outside In, Portland, Oregon
- Linda Sheets, MPM, Mercy Hospital/Operation Safety Net, Pittsburgh, Pennsylvania
- Jennifer Schanck-Bolwell and Gloria Rose, RN, BSN, Crossroads Rhode Island, Providence, Rhode Island
- Kimberly Rice, LBSW, New Horizon Family Health Services, Greenville, South Carolina
- John Gilvar, City of Austin Community Care Services Department, Austin, Texas
- Marion Scott, MSN, RN, Harris County Hospital District–Health Care for the Homeless, Houston, Texas
- Clyde Drury, Metropolitan Development Council, Tacoma, Washington

We also acknowledge the contributions of the Mobile Health Clinics Network (MHCN), whose officers and members provided valuable perspective on the use of mobile units to address the health needs of impoverished people. Special thanks to the following individuals:

- Darien DeLorenzo, CEO & Executive Director, The Mobile Health Clinics Network, San Francisco, California
- Jennifer Bennet, The Family Van, Harvard Medical School, Boston, Massachusetts
- Anthony Vavasis, MD, Clinical Director, Health Outreach To Teens, Callen-Lord Community Health Center, New York, New York
- Nancy Oriol, MD, Dean of Students and Associate Professor, Harvard Medical School, Boston, Massachusetts

Table of Contents

Executive Summary	viii-ix
Introduction	1-5
Health care access barriers for homeless people served by mobile outreach	
Rationale for mobile health care	
Distinctiveness of HCH mobile care	
Flexibility in outreach	
Targeted Populations & Environment	6-7
Age/gender	
High-risk populations	
Urban/suburban/rural	
Mobile Services	8-10
Types of services provided	
Services sites & service delivery models	
Staffing	
Community Partners	11-12
Public health departments & community health centers	
Hospitals & other health service providers	
Criminal justice system	
Health coalitions, churches & schools	
Types & Designs of Mobile Units	13-14
RV	
Truck	
Passenger van	
Bus	
Custom designed	
Financing & Administration of Mobile Units	15-16
Funding	
Ownership/operation	

Outreach & Marketing Strategies	17-19
Community outreach	
Consumer participation	
Word of mouth	
Publicity	
Appearance/visibility of mobile unit	
Program Obstacles	20-23
Lack of financial capacity	
Equipment breakdowns/technical problems	
Clinical information management	
Staffing challenges	
Community & service access barriers	
Parking & plug-ins	
Medications	
Reasons for Program Success	24-27
Service sites & community partners	
Staff effectiveness	
Outreach	
Program reputation	
Information technology/outcomes monitoring	
Continuity & consistency	
Recommendations from HCH mobile health care providers	
Bibliography & Other Resources	28-29
Appendices	30-72
A. Survey questionnaire	
B. Mobile health program description & marketing materials	
C. Mobile health vehicle: Equipment & inventories	
D. Mobile clinical encounter & referral forms	
E. Job descriptions for mobile health programs	

EXECUTIVE SUMMARY

This report describes the experience of 33 Health Care for the Homeless grantees and subcontractors in using mobile outreach to extend care to homeless people in 24 states. It is primarily intended for program administrators and direct service providers currently involved in mobile health outreach and for those who are interested in developing or participating in such programs. The report focuses on the use of outreach vehicles to provide a variety of health services to people without stable housing.

Information on which the report is based was derived primarily from telephone interviews conducted between September 2006 and April 2007. The mobile health programs surveyed have been in operation from 1 to 22 years. Representatives of these programs were asked to respond to a standard set of open-ended questions, which were developed in consultation with persons known to be experienced in the provision of mobile health services to underserved populations. Summaries of responses to the survey questions are illustrated with direct quotations from respondents.

The report is divided into nine sections in addition to a bibliography and appendices:

1. Introduction
2. Targeted Populations & Environment
3. Mobile Services
4. Community Partners
5. Types & Designs of Mobile Units
6. Financing & Administration of Mobile Programs
7. Outreach & Marketing Strategies
8. Program Obstacles
9. Reasons for Program Success

The bibliography lists publications on mobile health outreach to homeless populations. Appendices include the survey instrument used to structure interviews and a variety of resources which mobile health programs may find useful:

- Mobile medical outreach program descriptions and marketing materials
- Vehicle operations check lists & forms
- Targeted populations
- Equipment & inventories
- Clinical encounter & referral forms
- Job descriptions
- A list of mobile outreach programs offering technical assistance

Summary of Findings:

- **Barriers to health care for populations served:** Surveyed programs identified lack of health insurance and lack of transportation as the primary reasons why health services are inaccessible to the homeless people they serve – especially behavioral health care, specialty services, medications, ongoing primary care, and oral health care.
- **Rationale for mobile health outreach:** The main reason for mobile health care identified by respondents is the need for accessible services that are welcoming to homeless people who can't or won't go to fixed-site clinics.
- **Populations served:** Of surveyed programs, 70 percent serve both adults and children; 27 percent serve mainly adults; and 3 percent serve only children. 88 percent serve urban areas (over half of which serve suburban or rural areas as well), 39 percent provide services in rural areas, and 24 percent serve suburban areas.
- **Services provided:** 76 percent of mobile programs surveyed provide primary care services, 33 percent provide dental care, and only 18 percent offer behavioral health services on the mobile unit.
- **Service delivery:** 82 percent of all surveyed programs provide health services on their mobile units; 12 percent transport clients to services; and 9 percent provide services at remote service sites but not on the mobile unit. 52 percent schedule visits to particular sites and 18 percent do roving outreach.
- **Community partners:** Agencies with which HCH mobile outreach programs most frequently partner are emergency shelters, social service providers, and Community Health Centers. Other community partners include public health departments, hospitals, other local health service providers, drop-in centers, police, churches, and schools.
- **Type & design of vehicles:** Mobile health units include remodeled recreational vehicles, trucks, passenger vans or buses, as well as custom-designed vans with one or more exam rooms and a variety of other features. Environment and cost are among the variables dictating the size of vehicles used.
- **Funding sources:** Major sources of funding for these mobile health programs include Federal grants, city and county governments, and corporations.
- **Outreach & marketing:** Mobile programs use a variety of innovative outreach and marketing strategies; as they become better known in their communities, they tend to rely more on program reputation and word of mouth than on publicity efforts.
- **Program obstacles:** 58 percent of mobile service providers identified lack of financial capacity as the most significant obstacle they encounter; 48 percent identified vehicle or equipment problems as a serious obstacle; 39 percent said they struggle with clinical information management; and 33 percent mentioned staffing issues.
- **Strategies to address these obstacles:** Programs report using cross-training of staff, regular maintenance and repair schedules, electronic medical records and broadband Internet access, and regular opportunities for staff communication and professional growth to promote retention and prevent burnout.
- **Program success:** 82 percent of respondents attributed program success to service site selection and collaboration with community partners; 79 percent said staff rapport with homeless clients was key.

INTRODUCTION

Research on the use of medical outreach vehicles is scarce, although a number of program descriptions have been published since the mid-1990's (see Bibliography). Continued interest in the use of mobile units to extend health care to homeless people who cannot or will not obtain it at fixed-site clinics prompted this empirical investigation of Health Care for the Homeless (HCH) mobile health programs.

This report is based on information provided by 33 HCH grantees or subcontractors (approximately 40 percent of those reported to operate mobile health units in 2005–2006), selected for their geographic and service diversity. The mobile health programs surveyed have been in operation from 1 to 22 years. Representatives of these programs were asked to respond to a standard set of questions (see Appendix A), developed in consultation with persons known to be experienced in the provision of mobile health services to underserved populations, including members of the Mobile Health Clinics Network, some of whom work in HCH projects. Respondents included program administrators and/or direct service providers, most of whom answered the questions during telephone interviews conducted between September 2006 and April 2007; two individuals sent written responses. A summary of responses to the survey questions follows, not necessarily in the order in which they were asked, together with comments that are illustrative of the main points in each section.

Health Care Access Barriers for Homeless People Served by Mobile Outreach

The mobile health programs surveyed identified **lack of health insurance** and **lack of transportation** as the primary reasons why other health services are inaccessible to the homeless people they serve – especially behavioral health care, specialty services, medications, ongoing primary care, and oral health care. Difficulty obtaining documentation required for public health insurance (proof of identity and citizenship) and ineligibility due to a drug or alcohol problem or undocumented status were among the barriers to health insurance specified.

Other health care access barriers mentioned, in order of frequency, were: lack of trust in/feeling intimidated by the traditional health care system; a history of abuse, mental illness, and/or a substance use disorder; having other priorities that conflict with seeking health care; stigmatization; not knowing where clinics for uninsured people are; language barriers; chronic homelessness; and managed care (services available only at a single location that is inaccessible).

Barriers to Health care	% respondents
Inaccessible/ unavailable services: specialty/ behavioral/ meds/ primary care/ oral health	45%
Lack of health insurance	45%
ineligible: undocumented, Drug Addiction & Alcoholism exclusion	9%
should qualify: unaware of/ unable to get benefits	6%
enrollment barriers: required proof of ID, citizenship	6%
Lack of transportation/ geographical barrier	45%
Intimidated by traditional health system/ lack of trust	18%
Lack of resources/ financial barriers	12%
Healthcare not a priority (basic needs)	12%
History of abuse/ mental illness/ substance use disorder	12%
Stigmatization	6%
Lack of service coordination/ reliability	6%
Not knowing where clinics for uninsured are, what they do	6%
Language barriers	3%
Chronic homelessness	3%
Managed care	3%

Percentages do not add up to 100%; respondents mentioned more than one barrier.

n=33

“The number of **uninsured** people experiencing homelessness has increased and overwhelmed the health care system. Required documentation of identity to apply for benefits is a serious impediment. The number of undocumented workers has increased. The number of homeless people in suburbs has increased and suburbs haven’t developed a way to address this service access problem. Demand is greater than the supply of health care services [for uninsured people] in the communities where homeless people live. All of these factors limit health care access for the people we serve on mobile outreach.” – *Darcie Meierbachtol, ANP, FNP, Colorado Coalition for the Homeless–Stout Street Clinic, Denver, CO*

“Even in urban areas, there is very **little public transportation**; only those who own cars can get to health services. Busing is scarce; it stops at 5:00 p.m. and there are no suburban routes. In rural areas, there is no busing at all; people must walk miles to services. **Trust** is also a problem in a state where experiments were done on poor black people without their knowledge (at Tuskegee).” – *Jonathan Dunning, MEd, CCS, Birmingham Health Care, Inc., Birmingham, AL*

“A large portion of outreach **clients don’t know about our fixed-site services** or where they are located, even in areas pretty close to them. There’s constant turnover in the homeless community.” – *Matias Vega, MD, Albuquerque Health Care for the Homeless, Inc., Albuquerque, NM*

“Thousands of people lost jobs and health insurance as a result of the **hurricanes** last year. Those with access to insurance can’t afford premiums. Lots of physicians whose practices were destroyed left the state or had to relocate. Getting health care here is difficult even if you have insurance. We lost major bridges connecting two cities in Hancock and Jackson counties. Driving is very difficult. People have to go many miles out of their way to get to a clinic.” – *Cathy Dumas, RN, Coastal Family Health Center, Biloxi, MS*

“We see medically indigent adults at risk for long-term disability just because they **can’t get the specialty care** they need. It can take up to six months to get an appointment with an orthopaedist.” – *Marie Aylward-Wall, MS, RN, Clinica Sierra Vista Homeless Mobile and Respite Services, Bakersfield, CA*

“Accessing the mainstream **primary care** system is difficult. We are a county-based system. Our clinics have more clients than they can handle already. Homeless patients need more than 15-minute appointments. It’s a struggle to integrate two different primary care cultures. It’s even harder to get **behavioral health care** than primary care; clients need Medicaid to qualify. Lots of homeless people aren’t sufficiently impaired to qualify but do have mental health issues. Clients won’t keep an appointment after a referral; they may be in jail or leave town. Health care isn’t their number one issue most of the time; their number one issue is survival.” — *Molly Kennedy, San Mateo County Health Services Agency, San Mateo, CA*

Rationale for Mobile Health Care

According to the HCH providers interviewed, mobile health outreach is warranted by its success in reducing some of the health care access barriers just mentioned. The main reason for mobile health care is **provision of accessible services that are welcoming to homeless people who can't or won't go to fixed-site clinics**. Mobile units are the sole source of health care in some rural communities and have also demonstrated their value in areas devastated by hurricanes, floods, and other disasters. Another justification given for mobile health outreach is **cost containment** – providing less expensive primary care alternatives than emergency rooms, and keeping homeless people with behavioral health disorders out of jail.

“Mobile units serve individuals who would not have any other way of obtaining health care unless their condition becomes so intolerable that the emergency room is utilized. Approximately 80 percent of the people served **do not have health insurance**; other clients are **unaware of their health care benefits** or **unable to reach their primary care physician**.” — *Linda Sheets, MPM, Operation Safety Net, Pittsburgh, PA*

“The most marginalized of patients tend to be isolated. A goal of our mobile program is to reach out to them to **prevent use of ERs to meet primary care needs**.” — *Wayne Centrone, MD, Outside In, Portland, OR*

“The mobile program allows people without health insurance to get care – who don't or can't go to regular health care facilities and typically wait to seek care until they are really sick. Providing services on demand and going where clients are makes sense; it **promotes earlier access to care, at less expense**.” — *Darlene Hein, Waikiki Health Center, Honolulu, HI*

“Our HCH program went mobile because we couldn't get people to come to the clinic on their own. Mobile health care is a **good way to reach people who work during the day**. Homeless people are one of the hardest working segments of the population; they work 10 to 14 hrs a day, to NOT make ends meet. Mobile health outreach is a good way to engage people in taking an interest in their own health and bringing them back into traditional clinic settings.” — *Greg Morris, PA-C, Peak Vista Community Health Homeless Health Center, Colorado Springs, CO*

“Mobile units are **a must in disasters**; clinicians can provide services in areas devastated by floods, hurricanes, and other emergencies. People in disaster areas don't have cars to get to a medical clinic or mental health services. We take services to them via our mobile units. We took these units into the Astrodome during the Katrina disaster.” — *Marion Scott, MSN, RN, Harris County Hospital District – Health Care for the Homeless, Houston, TX*

“There's a reason why a person is more comfortable going behind the Safeway to a mobile clinic than going a block away to a pretty, stationary clinic. These **clients will not go anywhere else**; if they did, you wouldn't need a mobile clinic.” — *Molly Kennedy, San Mateo County Health Services Agency, San Mateo, CA*

There is general agreement, however, that mobile programs are insufficient to meet the complex health care needs of many homeless people who require “a medical home” and comprehensive services which can be delivered more efficiently in fixed-site clinics. Reported strategies used by mobile health programs to improve access to ongoing care include: compassionate, culturally competent outreach; help with transportation to clinics and other incentives to promote engagement in a therapeutic relationship (food vouchers, hygiene kits, clothing); a consistent mobile service schedule; and assistance in applying for public benefits including health insurance.

Mobile Outreach Interventions to Reduce Health Care Access Barriers	% respondents
no-cost services welcoming to homeless who can't/won't go to clinics	30%
compassionate, culturally competent care	15%
provide/pay for transportation, other incentives	15%
food vouchers, hygiene kits, clothing etc.	12%
consistent service schedule	6%
entitlement/benefits/housing assistance	6%
pay for/help get documentation	6%
holistic health care with interdisciplinary team	3%
mobile services provided onsite at detox programs	3%
service directory	3%

Percentages do not add up to 100%; respondents mentioned more than one barrier.

n=33

“Although we can take mobile services out to clients, the level of care provided in the field is never as high as the level of care provided at the hub. Our plan is to **engage clients during outreach and, over time, bring them in to the fixed-site clinic.**” — Adele O’Sullivan, MD, Maricopa County Department of Public Health, Phoenix, AZ

Distinctiveness of HCH Mobile Care

Mobile health programs sponsored or staffed by Health Care for the Homeless projects are distinctive from other mobile outreach programs in the following ways:

1. Like HCH fixed-site clinics, they employ a model of care characterized by integrated services provided by a multidisciplinary clinical team; use a holistic approach to health care that addresses psychosocial as well as medical issues; and emphasize building nonjudgmental therapeutic relationships based on trust.
2. Health care access barriers experienced by HCH clients are especially severe due to their extreme level of impoverishment and lack of social supports. Lack of health insurance and preoccupation with meeting basic survival needs partially explain why they tend to seek health care only in emergencies.
3. The multiple and complex health problems characteristic of many homeless people seen by HCH programs stretch the capacity of outreach clinicians to ensure needed follow-up care. In particular:
 - Homeless people are at higher risk for chronic, uncontrolled medical conditions (asthma, COPD, diabetes, hypertension, peripheral vascular disease, chronic liver/renal disease) than are domiciled people.
 - Transience and congregate living increase their risk for contracting and transmitting communicable diseases such as tuberculosis and HIV/AIDS.
 - Homeless people may resist treatment or have extreme difficulty adhering to a medical regimen — particularly if they suffer from psychiatric illnesses, mental retardation, and/or substance use disorders, which are common among those served by HCH mobile health programs.

(Bonin et al., 2004)

Flexibility in Outreach

Outreach, a hallmark of Health Care for the Homeless, is accomplished in many different ways. The use of mobile clinics and other vehicles is part of a continuum of outreach services that also includes outreach on foot and operation of clinics in nontraditional settings. A number of people interviewed for this report stressed the importance of program flexibility to respond to the changing faces of homelessness and the mobility of homeless people.

“When we look at the growing population of homeless people and all the strategies we have designed to serve them, the most important thing is to **stay flexible**. The population changes — it used to be single men living in the downtown area; now we have lots of families, children, and unattached adolescents. There have been changes even during the last 5 years. Housing is so expensive in the metropolitan area that people who were marginally housed 5 yrs ago are now homeless. Lots of adults are living doubled up, in cars, or camping out. The need for verification of ID was directly related to 9/11 and the debate about immigrant rights. We couldn’t have anticipated these things. We have to continue to look at what we are doing now and whom we are serving, and **evolve with the population**. We can’t be static or say we know how best to serve these people. We must stay open to the likelihood that what we do today won’t meet the needs of people tomorrow.” — *Darcie Meierbachtol, ANP, FNP, Colorado Coalition for the Homeless—Stout Street Clinic, Denver, CO*

“Mobile clinics are the first and sometimes only medical provider that a homeless person sees. We are able to **build trust** with and commitment to homeless people that clinics serving general populations cannot develop. We have more **flexibility** than fixed-site clinics and can change more quickly in response to client needs. Our philosophy is to **serve clients where they are**, not where you want them to be.” — *Molly Kennedy, San Mateo County Health Services Agency, San Mateo, CA*

Mobile health programs are but one response to the phenomenon of modern homelessness in the United States, which extends far beyond our cities and their suburban rims to sparsely populated areas in rural areas. This report is an attempt to capture the variety of programs that employ mobile medical units and other vehicles to extend health care to homeless people. It relies on the perceptions of direct service providers in assessing the utility of these outreach efforts.

TARGETED POPULATIONS & ENVIRONMENT

Of the 33 surveyed programs, 70 percent serve both adults and children by means of mobile outreach vehicles, 27 percent mainly serve adults, and 3 percent serve only children. Three programs provide health services for women (ob-gyn and mammography) on mobile units, and several target subpopulations with special health risks, including sex workers, homeless youth, undocumented day laborers, street dwellers, and people with HIV or hepatitis.

The vast majority (88 percent) of respondents serve urban areas – 16 of these programs serve only urban areas; 10 serve both urban and rural areas; 3 serve urban and suburban areas; and 3 serve urban, suburban, and rural areas. A total of 13 programs (39 percent) provide services in rural areas, and 8 programs (24 percent) serve suburban areas; 2 programs serve only rural areas, and 1 program serves a suburban area exclusively. Although health services for indigent populations in rural areas are scarce, mobile services are expensive to provide there due to greater distances traveled, higher fuel costs, and more wear and tear on vehicles traversing rough terrain.

Populations served	% respondents
both adults and children	70%
mainly adults	27%
children only	3%
Environment	
urban (U=16 UR=10 US=3 URS=3)	88%
rural (R only=2)	39%
suburban (S only=1)	24%

n=33

Age/gender

Most of these mobile health programs provide services to both adults and children; populations served at particular sites may vary by age or gender, as the following comments explain:

“Our mobile program, which has been operational for 20 years, began as a pediatric service; now we take care of the whole family, from **birth to geriatrics**. Up to 250 families are seen at some sites. The mobile unit serves as a medical home during homelessness. Anything that can be done in an upscale doctor’s office can be done in a mobile medical unit—a comprehensive medical service on wheels.” — *Sharon Joseph, MD, Montefiore Mobile Health Program, New York, NY*

“We provide primary health care services for homeless men, women, and children. We see **mainly men on the mobile unit** and serve **women and children primarily in shelters**. We provide HIV testing, acute care, medications and prescriptions on the unit, but don’t provide ob-gyn services there.” — *Sandra Stephens, Unity Health—Urban and Rural Health Care Services for Homeless Men, Women and Children, Rochester, NY*

“The Maricopa County Public Health Department’s HCH program contracts with a pediatric van out of Phoenix Children’s Hospital, a new service access point. A pediatrician staffs the van with resident physicians. The van goes specifically to youth drop-in centers in Tempe used by runaway teens; services are provided only to **young people ages 18 and under**.” — *Adele O’Sullivan, MD, Maricopa County Department of Public Health, Phoenix, AZ*

High-risk populations

Some mobile programs target homeless populations known to be at especially high risk for serious health problems, including communicable diseases:

“Our mobile medical program provides broad primary care services with a focus on 3 populations:

1) **commercial sex workers**, who require treatment for soft tissue injuries, infection, general cough and cold care, and STDs; 2) hard-to-serve, **homeless young adults** with chronic, poorly controlled mental illness and active intravenous drug use who require mental health care and substance abuse services; and 3) **undocumented Latino day laborers**.” — *Wayne Centrone, MD, Outside In, Portland, OR*

“Our clientele includes a large farmworker population and undocumented migrants – primarily **young, single men** with untreated diabetes and hypertension. We are a major source of care for this population. There has been a huge influx of homeless people into Bakersfield because of allegedly cheap housing; the population we serve there has tripled in the last decade.” — *Marie Aylward-Wall, MS, RN, Clinica Sierra Vista Homeless Mobile and Respite Services, Bakersfield, CA*

“Our mobile health program has two target populations: **homeless street dwellers** and **persons with HIV or hepatitis**. The HCH mobile unit visits places in the city where homeless people congregate. A second vehicle, which provides HIV and hepatitis screening, returns to hot spots previously identified by the District of Columbia where there is a high crime rate or high prevalence of HIV cases, drug trafficking/use, and drug/crack houses. This unit serves all populations including homeless people.” — *Michelle Madison, Unity Health Care, Inc., Washington, DC*

Urban/suburban/rural

All but three programs surveyed are based in cities, yet half of these urban programs also serve displaced people living in suburban, semi-rural or rural areas.

“The mobile unit is one of 2 methods used by Operation Safety Net to provide direct care to street dwellers in **3 urban** areas of Pittsburgh: van teams and walking teams, which work closely together. The mobile health program serves a unique population of chronically homeless individuals at each site: a large group of intravenous drug users requiring wound care and assistance connecting with drug and alcohol treatment services; a large number of homeless people who gather in the central city for primary care, dental care, and social interaction; and a group of young adults who move in and out of shelters.” — *Linda Sheets, MPM, Operation Safety Net, Pittsburgh, PA*

“We provide nontraditional primary medical care in a **suburb** of Los Angeles County. We use the mobile unit as a gateway to the HCH clinic. Linkage to a fixed-site medical home is optimal; but when that’s not possible, we have to meet people where they are.” — *Kathy Proctor, MPH, Northeast Valley Health Corporation, San Fernando, CA*

“The environment we serve is very **rural**—a flat, agricultural area where corn, wheat, tobacco, and cotton are grown. We go out to migrant camps, often on roads that aren’t paved. Our mobile units currently provide mammography and dental care. We expect to have a medical unit operational within the next 6 months.” — *Sue Sutton, Goshen Medical Center–Eastpointe, Faison, NC*

MOBILE SERVICES

Types of services provided

Most of the HCH grantees surveyed (76 percent) provide primary care services, including acute, episodic, and preventive care. Ten mobile programs reported that they dispense medications; 3 give patients prescriptions to fill at fixed-site HCH clinics; and 2 programs order medications from pharmaceutical companies’ patient assistance programs. Of the 16 programs (48 percent) that provide diagnostic screening, two provide only mammography, and one program provides only HIV/hepatitis testing and immunization. Thirty-three percent of surveyed mobile health programs provide dental care, 2 of which provide only dental care. Only 6 programs (18 percent) offer behavioral health services (mental health services and/or addiction counseling) on the mobile unit; others refer clients or transport them elsewhere to receive these and other services. Clients are referred for X rays/diagnostic tests and follow-up care to primary care clinics, behavioral health services, specialists, hospitals, and nutrition services.

Mobile Health Services	% respondents
primary care	76%
screenings	48%
dental care	33%
medications	30%
behavioral health care	18%
immunizations	18%
lab tests	18%
case management	15%
benefits assistance/assessment	9%
triage	6%

n=33

“The public health department operates 2 mobile units: One provides outreach, **HIV and hepatitis testing, and immunizations**. The HCH project sends clients who need these services to the van, which parks outside the shelter once a month. The other unit is a dental van for needy children, including homeless children, which goes to local schools.” — *Marianne Savarese, BSN, Mobile Community Health Team at Catholic Medical Center, Manchester, New Hampshire*

“The HOPE team provides **behavioral health outreach and medications** to people living on the street and transports them to the HCH clinic or detox centers. Many are severely mentally ill and/or recently discharged from jail. The team coordinator is an addictions counselor. A psychiatrist goes out on the van one day a week, and a psychiatric nurse practitioner goes out another day.” — *Michael Cochran, I.M. Sulzbacher Health Care for the Homeless, Jacksonville, Florida*

“The Mammovan travels the entire state, providing **mammograms and breast and pelvic exams** at community centers, shopping centers, churches, and clinics.” — *Vivian Hanson, Nevada Health Centers, Inc., HCH, Las Vegas, Nevada*

“We do a **syringe exchange program** through our harm reduction outreach that provides education on HIV, Hepatitis C, STDs, and safe practices. This State-funded program is the largest syringe exchange program in the Southwest. Medical services are also provided along with that outreach – direct primary care and urgent care.” — *Matias Vega, MD, Albuquerque Health Care for the Homeless, Inc., Albuquerque, NM*

Service sites & service delivery models

Most mobile health programs surveyed provide services where homeless people congregate – at shelters and social service agencies, soup kitchens, campgrounds, or parks. Fifty-two percent reported that they **schedule visits to particular sites**, and 18 percent do **roving outreach** to find reclusive clients. These programs employ a variety of service delivery models: 82 percent **provide health services on their mobile units**; some of these also provide services in shelters and community service agencies. Twelve percent of surveyed programs **transport clients to services**; and 9 percent transport clinicians to and from remote sites but do not **provide services on the mobile unit** (“suitcase clinics”). Two programs were not operational when interviews were conducted, but were expected to be up and running again within a few months.

Service sites	% respondents
shelters	30%
social service agencies	30%
Community Health Centers	27%
public health departments/ hospitals	21%
drop-in centers	15%
churches	12%
schools	9%
Service delivery	
services provided on mobile unit	82%
mobile units used to transport clients to services	12%
services provided at remote sites, not on mobile unit	9%
scheduled visits to particular sites	52%
roving	18%

n=33

“We park the dental van outside 2 downtown **homeless shelters** 12 hours per week; outside a **street outreach center** for teens 4 hours per week; and at a **domestic violence shelter** 8 hours per week. The HCH Project provides primary care within each of these facilities. We make sure to overlap the dental van hours with primary care hours, so we can refer directly from the clinic inside the building to the van outside.” – *John Gilvar, City of Austin Community Care Services Department, Austin, TX*

“The mobile program provides complete medical services and case management at 4 mobile service sites in **public housing** and 1 site downtown, linking clients to a variety of **health and social services** including job training, childcare, food services, and a garden where homeless people are taught how to grow their own food. (The HCH purchases the food they grow to prepare in their kitchen.) The mobile health unit is an extension of fixed-site services – a means of marketing those services and a way to bring people back to more comprehensive care.” – *Jonathan Dunning, MEd, CCS, Birmingham Health Care, Inc., Birmingham, AL*

“Our mobile van provides medical care at 4 shelters. **No services are provided on the mobile unit.** Nursing staff, a receptionist, and a medical provider (physician or nurse practitioner) travel to homeless shelters with 3 suitcases of medical equipment. The HCH project also has a fixed-site clinic where shelter residents are seen.” — *Lisa Seldana, Aunt Martha’s Health Center, Aurora, Illinois*

“We do **2 types of outreach**: We visit the same parks every 2 weeks, at same the time on a specific day; and we use roving outreach to look for homeless people who are more severely and persistently mentally ill.” – *Darlene Hein, Waikiki Health Center, Honolulu, HI*

Staffing

The number of personnel who ride on mobile health units is limited by the size and type of vehicle used (discussed in the next section). Of the programs surveyed, 28 percent carry 1 or 2 staff on each vehicle; 25 percent carry 3 to 5 staff; and 13 percent can accommodate as many as 6 or 7 personnel per mobile unit. Service providers include employees of the HCH program, its parent agency, or subcontractors. Nine respondents (27 percent) said their programs use volunteer clinicians; 2 of these programs depend entirely on clinician volunteers. Nearly two-thirds of surveyed programs send physicians, physician assistants, and/or advanced practice nurses out on mobile units, usually paying or contracting for a portion of their time; 45 percent employ outreach workers; 30 percent use other nurses; and 30 percent use social workers, case managers, or eligibility workers (to help clients with referrals and applications for public benefits). Fifteen percent have staff that fill multiple roles (e.g., drivers who double as outreach workers).

Staffing	% respondents
medical providers on staff (MD, PA, NP)	64%
outreach worker	45%
other nurses	30%
social worker/case manager/ community health/eligibility worker	30%
volunteer clinicians/students	27%
certified medical assistant (CMA)	27%
dentist	18%
dental assistant/hygienist	15%
admin assistant/office manager	15%
driver dual role	15%
mental health provider	9%
registration clerk/patient care technician	9%
addictions counselor	6%
employment worker	3%
nutritionist	3%

1-2 staff/mobile unit: 27%; 3-5 staff/unit: 24%; 6-7 staff/unit: 12%

n=33

“Our mobile unit can accommodate only one patient at a time. The sole medical provider on the unit is a **physician assistant** (myself), who is also the HCH program director and van driver. I am accompanied by a **medical assistant** who does intake.” — *Greg Morris, PA-C, Colorado Springs, CO*

“Three clinicians ride the van at any one time: a **nurse practitioner**, a **RN**, and a **LPN or CMA** who works on labs.” — *Jody Brandenburg, Kentucky River Foothills Development Council, Inc., Clay City, Kentucky*

“The dental van is staffed by one **dentist**, one **dental assistant**, and one **administrative assistant**.” — *John Gilvar, City of Austin Community Care Services Department, Austin, TX*

“A **physician** and **2 outreach/triage nurses**, who see clients separately from the provider, ride on the van with a **certified medical assistant**, a **social worker** who provides entitlement assistance and A&D case management, and a **driver** who also registers clients and helps with Oregon Health Plan applications and referrals. The whole team is bilingual (English and Spanish).” — *Kim Tierney, MPH, HCH Program, Multnomah County Health Department, Portland, OR*

“Seven people ride the medical van at the same time: a **nurse practitioner**, **2 medical office assistants** who work at the front desk, **1 LPN**, **1 RN** (outreach nurse), an **outreach specialist** (not a social worker) who goes out in field to find homeless clients, and a care advocate (**social worker**) who is responsible for referrals and benefits assistance.” — *Kimberly Rice, LBSW, New Horizon Family Health Services, Greenville, SC*

“The mobile van service is mostly provided by **clinical volunteers** from the Pittsburgh area with **medical and nursing school students** participating in the education service.” — *Linda Sheets, MPM, Operation Safety Net, Pittsburgh, PA*

COMMUNITY PARTNERS

Respondents agreed that close working relationships with community partners are one of the prerequisites of a successful mobile health program. Agencies with which HCH mobile outreach programs most frequently partner are emergency shelters (mentioned by 33 percent of respondents), social service providers (30 percent), and Community Health Centers (27 percent). These agencies often refer their clients to mobile programs, as well as providing space outside or inside their facilities where mobile services can be delivered. A number of programs are affiliated with public health departments which provide one or more of their mobile medical units. Only 5 respondents said their program shares use of the mobile unit with another agency. Programs that deliver primary care develop referral relationships with community hospitals (including academic medical centers), and other medical and behavioral health service providers. Partnerships with local health coalitions, drop-in centers, police, crisis centers, faith communities, and schools help mobile programs reach their target populations.

Community Partners	% respondents
shelters	33%
social service providers/ homeless service agencies	30%
CHCs	27%
public health dept(s)/hospital	21%
veterans groups	21%
substance abuse treatment services	18%
community health network/coalition	15%
medical service providers	15%
drop-in center	15%
mental health services	15%
churches	12%
university medical center/hospital	12%
police/sheriff/dept corrections	12%
crisis center	9%
schools	9%
Indian reservations	6%
private organization	6%
Walking outreach teams	6%
consumers	3%
dental providers	3%
mailman	3%

n=33

Public health departments & community health centers

“Our Project Orion vehicle, which provides HIV and hepatitis screening, is a collaborative effort with the District of Columbia’s Department of Health, the HIV/AIDS Administration, and the Addiction Prevention and Recovery Administration. The HCH unit partners with Christ House, which provides medical respite services to homeless people.” — *Michelle Madison, Unity Health Care, Inc., Washington, DC*

“We partner with the WATCH (Wayne Action Team for Community Health) unit, a collaborative effort with 3 other CHCs to provide mobile medical and dental care to homeless shelters and migrant camps in Goldsboro and Wayne counties.” — *Sue, Goshen Medical Center–Eastpointe, Faison, NC*

Hospitals & other health service providers

“The mobile program is an extension of the Montefiore outpatient clinic and operates under the auspices of the hospital. We also partner with other area hospitals, mental health providers, dental providers, food pantries, shelters.” — *Michael Lambert, MBA, Montefiore Mobile Health Program, New York, NY*

“Our partners are all of the community nonprofits that provide homeless services in the continuum of care, and all of the county departments that provide primary, specialty, emergency department, inpatient, ancillary, mental health and substance abuse services. The agencies where we provide our mobile clinic services are our other significant partners, including shelters, soup kitchens, and community centers that serve homeless people.” — *Andrea DuBrow, MSW, MPH, Contra Costa Health Services Dept., Martinez, CA*

Criminal justice system

“In collaboration with Albuquerque HCH and the Albuquerque police department, we initiated an effort to decriminalize homelessness by referring homeless people to treatment and services and help them with entitlements instead of arresting them. At least two police officers go on outreach with the HCH team weekly. Although the official name is Strategic Outreach, we call it “cop-reach.” — *Matias Vega, MD, Albuquerque Health Care for the Homeless, Inc., Albuquerque, NM*

“We work closely with the crisis unit, detox centers, and the sheriff’s office, which established a protocol for the downtown area: Instead of arresting homeless people for public drinking or trespassing, police will call the mobile unit to take them to detox or the HCH center. We attend weekly staff meetings at the Sheriff’s office.” — *Michael Cochran, I.M. Sulzbacher Health Care for the Homeless, Jacksonville, FL*

“Mobile medical staff go out every other week in an unmarked police department vehicle with behavioral health outreach workers and members of the Native Americans Connection, Veterans Outreach, and Chamber of Commerce, as part of the Connection to Care program. Plainclothes police (in t-shirts and jeans) have good rapport with chronically homeless people and know who has a medical issue. Every 3 months, police do a sweep and bring homeless individuals to a central location where service providers are and make a contract with them: if they will get their health care needs taken care of, the police will drop charges. It works well.” — *Adele O’Sullivan, MD, Maricopa County Dept. of Public Health, Phoenix, AZ*

Health coalitions, churches & schools

“The HCH project is part of a larger nonprofit Health Community Action Partnership which includes Head Start, adult daycare, rental properties, and a rehabilitation center. One mobile service site is adjacent to an adult daycare center across from a center for homeless families with disabilities. We also have church partners and provide blood pressure and glucose monitoring every 2 months for a local veterans group.” — *Jody Brandenburg, Kentucky River Foothills Development Council, Inc., Clay City, KY*

“We partner with other agencies that serve homeless people in planning where to take the mobile unit and visit places where homeless people actually gather. We work with mental health, substance abuse and housing services, with churches and feeding programs. A group of church women who knit were encouraged to make knitted items for homeless clients to distribute via the mobile unit as incentives to seek ongoing care.” — *Michael Menchaca, MS, AHNP, RN, San Fernando, CA*

“Many elementary schools wishing to teach students about homeless people have asked us to give presentations to their classes and have bought hygiene kits or items to go in them (plastic baggies filled with toothpaste, toothbrush, comb, shampoo, hand wash, HIV prevention information, condoms, etc.) which the mobile unit distributes to homeless clients.” — *G.G. Greenhouse, MSW, Alameda County Health Care for the Homeless Program, Oakland, CA*

For guidance in identifying community partners for your mobile health program, contact the Mobile Health Clinics Network (mobilehealthcare@aol.com) or go to: <http://www.mobilehealthclinicsnetwork.org/partners.html>

TYPES & DESIGNS OF MOBILE UNITS

There’s quite a bit of variability in the types, sizes, and designs of mobile units that are used to extend health care to homeless people. Of 33 HCH programs surveyed, 39 percent use mobile health units built on a recreational vehicle (RV) chassis, ranging from 26 to 38 feet in length; 30 percent use medical vans built on a 39–40 foot truck chassis; 24 percent use 15-passenger vans with or without a seat removed; and 9 percent use a remodeled (40-foot) bus. Several programs hope to purchase a larger unit with two exam rooms instead of one and more space for storage and ancillary staff. One program would prefer a smaller unit that is easier to park in the city. Another respondent dislikes the claustrophobic feel of campervans and prefers “tailgate” vans with services provided outside the back of the van, particularly for clients with severe mental illness who fear any enclosed space.

Type/ design of mobile unit		% respondents
RV/camper chassis	13	39%
truck chassis/commercial driver’s license required	10	30%
passenger van	8	24%
bus	3	9%
exam rooms: 0=5, 1room=12, 2rooms=15	27	82%
waiting area/intake/triage inside unit	11	33%
bathroom	10	30%
supply/records storage/autoclave	10	30%
lab	9	27%
wheelchair lift	6	18%
wired for telemedicine/wireless Internet	5	15%
case management room/conference room	4	12%
refrigeration	3	9%
registration outside mobile unit	3	9%
X ray	2	6%
kitchen	1	3%
mobile dental equipment	1	3%
office space	1	3%
patient education space	1	3%
pharmacy/dispensary	1	3%

n=33

In general, as one program administrator noted, shorter units are preferable in urban environments where there is limited space to navigate and park along city streets; longer units are easier to maneuver in rural areas. But there’s a trade-off with respect to size, maneuverability, durability, and cost: Larger primary care units can accommodate more patients and services but are heavier and more expensive to drive long distances, more difficult to park, and require a commercial driver’s license to operate. Passenger vans are preferred by programs that mainly transport clients to services or clinicians and medical/dental equipment to remote service sites (“suitcase clinics”).

(Recommendations about the pros and cons of various types and designs of mobile medical units are beyond the scope of this report. Technical assistance is available from the Mobile Health Clinics Network: <http://www.mobilehealthclinicsnetwork.org/> and The Children’s Health Fund: <http://www.childrenshealthfund.org/#>.) HCH projects tend to make creative use of whatever vehicles they can afford, as the comments below vividly illustrate.

RV

“The mobile unit is a **renovated 2001 34 foot recreational vehicle**. The back bedroom was made into a physician’s treatment room. The front portion of the van is a waiting area with comfortable chairs, a couch, and a mini-kitchen to provide coffee and food. The RV has nice cabinets that are used to store hygiene supplies for clients. The middle area had a built-in dresser, which was converted to store medications. The shower and bath were removed for additional storage of sleeping bags and blankets.” — *Linda Sheets, MPM, Mercy Hospital/Operation Safety Net, Pittsburgh, PA*

“Our medical van, which serves both urban and rural areas, is a **36 foot Airstream** with no slides [hydraulic slide-outs that expand the space of van]. It has a waiting area that seats 3 people, a 12-foot-long countertop for outreach, a sink and work area for the nurse, storage spaces, 2 refrigerators for immunizations, and a back area with an 8 x 8 foot exam room, sink and bathroom. The single exam room limits the number of patients who can be seen at one time. If we could afford a new unit, we would get a 40 foot unit with 3 slides and 2 operational rooms instead of one.” — *Clyde Drury, Metropolitan Development Council, Tacoma, WA*

Truck

“Built on a **GMC 6500 truck chassis**, our mobile unit is limited to 2 exam rooms; we could use 10. There’s no other source of health care in our county for people who don’t have health insurance, and we’re 45 minutes away from any major medical center.” — *Jody Brandenburg, Kentucky River Foothills Development Council, Inc., Clay City, KY*

“We are getting a new medical van, similar to the last one: a 40 foot truck with 2 exam rooms and a central office area. It’s somewhat cramped but spacious enough to do what can be done in a regular primary care office. The cab is up front and the generator in back.” — *Robert Donovan, MD, Cincinnati Health Network, Inc., Cincinnati, OH*

Passenger van

“With a fairly small grant, we were able to purchase a regular, **15-passenger van with a raised roof and a wheelchair lift** that has been modified to convey a mobile X-ray unit and a folding dental chair. Our dentist built trolleys to transport the equipment into shelters.” — *Villie Appoo, MA, MSW, Grace Hill Neighborhood Health Centers, Inc, St. Louis, MO*

“We use two **passenger Chevrolet caravans** with the middle seat removed. We have space for equipment and people—a nurse practitioner, an outreach worker, an employment worker, and a mental health worker. It works, but a vehicle with an exam room would help us provide services better.” — *Darlene Hein, Waikiki Health Center, Honolulu, HI*

Bus

“We have 3 mobile units that provide some primary care — physical exams, some family planning, services, immunizations, a limited number of onsite laboratory tests, and treatment for STDS and asthma. All are 40 x 8 feet Bluebirds (**converted school buses**). The size and weight of the vans require a Class B driving license. All 3 units have 2 exam rooms separated by staff office space: an assigned nursing area and an assigned provider area. There is a restroom onboard and 3 functioning sinks—one in each exam room and one in the nursing area. There is space for supplies (bandages, syringes, meds), but we could use more storage space. It would also be good to have space to register patients onboard. We have awnings outside the van, where there’s plenty of space for tables and chairs, but it’s difficult to register patients there in inclement weather.” — *Antonio de los Santos, Family Health Center of San Diego, San Diego, CA*

Custom Designed

“Four different models of mobile units are used by Montefiore, ranging in size from **33 to 35 feet in length**. Some are better equipped to provide service to adults, with a larger exam room and full-sized exam table; others are designed primarily for children. An interactive animation on the Children’s Health Fund website shows different parts of the mobile unit: <http://www.childrenshealthfund.org/#> [click on the blue mobile unit and follow links].” — *Michael Lambert, MBA, Montefiore Mobile Health Program, New York, NY*

FINANCING & ADMINISTRATION OF MOBILE PROGRAMS

Funding

Grants from the Health Resources and Services Administration are a central source of financing for some of these mobile health programs – particularly Expanded Medical Capacity and New Access Points grants, which have enabled HCH projects to staff or purchase mobile units. In many cases, mobile programs have enabled HCH providers to enhance their productivity by serving larger numbers of homeless people than they would otherwise have served in fixed-site clinics alone. Their vehicles were purchased by HCH projects, their parent agencies or contractors, using a variety of other funding sources, including city and county governments, private foundations and corporations, Medicaid/Medicare reimbursements for mobile services, Federal money distributed to states for disaster preparedness, and State money from the tobacco litigation settlement.

Funding	% respondents
HRSA	45%
city/county	21%
private funding	18%
Medicaid, Medicare, other Federal	9%
State	9%
pro bono/in kind services	6%

n=33

“We have a great **grant-writing team** and over 20 different funding sources, including Bureau of Primary Health Care/**HRSA grants** (CHC, HCH, Public Housing, Black Lung Clinics Program). The van has paid for itself many times over by increasing the HCH project’s productivity (number of clients served). We also receive funding from the **city and county**. — *Jonathan Dunning, MEd, CCS, Birmingham Health Care, Inc., Birmingham, AL*

“Funding has been adequate throughout the 18 years during which the mobile program has been operational. The HCH program is a network of agencies that administers the **McKinney grant**, which supports staffing for the MedVan. In addition to Federal funding, we use the **metropolitan health department’s** 5 primary care clinics for labs and pharmaceuticals.” — *Robert Donovan, MD, Cincinnati Health Network, Inc., Cincinnati, OH*

“Funders understand what we do; we have established a pretty good tracking system for our mobile services, including how many clients are linked to medical, dental, and shelter services; how many people are given medications; and interventions to keep people out of jail. We receive funding from the **City of Jacksonville**, which also funds the Sheriff’s office. Keeping someone out of jail saves a minimum of \$800 per person (just to book them).” — *Michael Cochran, I.M. Sulzbacher Health Care for the Homeless, Jacksonville, FL*

“We just developed a fundraising plan targeting a variety of **private foundations** that support health services and want to improve the community. We initiated a plan to get **corporate sponsorship** of our mobile units by agreeing to place stickers with the company name and logo onboard in exchange for donations. Several banks provided money for one unit.” — *Antonio de los Santos, Family Health Center of San Diego, San Diego, CA*

“The **Children’s Health Fund** does fundraising to provide support for our program in addition to billing, which is primarily through **Medicaid** or self-pay. — *Michael Lambert, MBA, Montefiore Mobile Health Program, New York, NY*

“The new van was bought by the health department with **money earmarked for disaster preparedness**, but is used on an ongoing basis for the homeless program.” — *Molly Kennedy, San Mateo County Health Services Agency, San Mateo, CA*

“A grant from the state’s Comprehensive Primary and Preventive Care Fund, established with **money from the tobacco settlement**, allowed us to start the mobile clinic in 2001. In the first calendar year of operation, over 75 percent of our mobile health clients had never been seen before by the HCH project. In 2006, we received an [EMC] expansion grant from the **Bureau of Primary Health Care** to buy a new mobile unit, based on our ability to demonstrate that we were filling a large, unmet need.” — *Darcie Meierbachtol, ANP, FNP, Colorado Coalition for the Homeless–Stout Street Clinic, Denver, CO*

Ownership/operation

Two-thirds of respondents said their agency either owns their mobile health unit(s) or contracts with another agency to operate one or more units. Two other programs (6 percent) that own their units were not currently operational due to staff turnover or replacement of their vehicle, but expected to resume services as soon as these matters were resolved. Nine percent said they staff a mobile unit which another agency provides.

Ownership/Operation	% respondents
own van/contractor	67%
staff but do not own	9%
own but not currently operational	6%

n=33

“San Mateo Medical Center **contracts** with the public health department for a mobile health unit that provides primary care at homeless shelters, and contracts with a private dental van that provides full dental care at the shelters every Saturday. The dental van primarily serves employees of the large corporation that owns it. Initially, arrangements were made for the van to visit one shelter every other week. A HRSA New Access Points grant enabled the HCH project to extend this service to all shelters in the county.” — *Molly Kennedy, San Mateo County Health Services Agency, San Mateo, CA*

“John Muir Health, Inc. provides a mobile clinic vehicle which the HCH Medical Team **staffs** 3 days a week. On the other days of the week, we use our **own mobile clinic** and/or operate a ‘suitcase clinic’ (bring medical supplies into the shelters and community centers where we provide services).” — *Andrea DuBrow MSW, MPH, Contra Costa County Health Services Department, Martinez, CA*

“We **own** the medical van, but it **hasn’t been operational** since Jan 2006; we are trying to get it back on the road within the next several months. The whole structure of our mobile program changed when management of the HCH project shifted from our agency, which owns the medical van, to the Providence CHC. The van was not part of the merger. Our longtime van driver resigned and we had difficulty finding someone to fill that position who had a commercial driver’s license and could do outreach. When the van is up and running again, the CHC has agreed to work closely with our mobile program.” — *Jennifer Schanck-Bolwell, Providence, Rhode Island*

OUTREACH & MARKETING STRATEGIES

HCH grantees advertise their mobile services to potential clients and community partners more or less aggressively, depending upon the longevity of their program and its capacity to serve more people. They initially spend a good deal of time on outreach to identify regular service sites, set up memoranda of agreement, arrange for referrals by community partners, and publicize mobile services and service schedules. As they become better known among homeless people and the agencies that serve them, mobile health care providers rely more on their reputation to market services; 42 percent of those surveyed said word of mouth is their primary marketing strategy. Nevertheless, outreach remains a necessity for all of them, given the transience and isolation of the populations they serve. Outreach strategies most often reported include advance visits to regular service sites (by 30 percent of respondents), participation in community meetings and trainings (18 percent) or health fairs (15 percent) and the use of currently or formerly homeless people (15 percent) or police (9 percent) to help engage targeted populations. Business groups and hospital case managers were also specified as outreach partners. In addition to word of mouth, a number of programs market their services by means of flyers, pamphlets, posters and signs (39 percent); the appearance of their mobile units (12 percent); and publicity through the media (9 percent), newsletters (6 percent), or service directories and brochures (6 percent).

In cities with numerous services for homeless people, mobile health programs may be challenged to distinguish themselves from complementary programs, while endeavoring to partner with them to facilitate clients' access to more comprehensive services. One respondent called for "stronger collaboration" among local agencies providing mobile services to homeless people. In rural areas where mobile services are the only source of health care, dissemination of service schedules is especially important. A primarily urban program that also visits remote rural areas relies on local community members who know where homeless people are: police, clergy, even mail carriers.

Outreach	% respondents
outreach to service sites prior to visits	30%
community meetings, trainings/presentations	18%
health fairs	15%
client input/outreach	15%
police/sheriff's office	9%
business groups	6%
hospital case managers	3%
Marketing	
word of mouth, reputation of program or staff	42%
flyers/ service schedules, pamphlets, posters, signs	39%
appearance/visibility of mobile unit	12%
media: radio, TV, billboards	9%
newsletter	6%
service directory/brochure	6%
marketing department	3%
restrict marketing due to limited capacity	3%

n=33

Community outreach

“We convened several countywide meetings before got our van and asked what community members’ concept of a mobile program was. Participants in meetings became part of our marketing structure. They had to buy into service delivery and agree to provide parking space. Each community health worker assigned to a region conducts a **community meeting**. The case manager gets input from clients and does trainings on any issue of interest to the community—e.g., **presentations** in schools about services available to homeless children, **trainings** on television about communicable diseases—so services providers will know who we are.”

— G.G. Greenhouse, MSW, Alameda County Public Health Department HCH Program, Oakland, CA

“When our mobile program began in 2005, we did outreach, met with shelter staff, got Memoranda of Agreement approved and secured permission to park our vans at service sites. As time went on, all **MOAs** were in place and not as much marketing was required. We continue to attend regular **meetings of the homeless coalition** and **visit shelters** in different counties, and we **send our mobile health schedule** to all service sites every 3 months.” — Kimberly Rice, LBSW, New Horizon Family Health Services, Greenville, SC

“Mobile clinic staff do most of the marketing and outreach themselves. We recently participated in the county’s first **Project Homeless Connect Day** (modeled after San Francisco’s program), which brought about 500 homeless people under one roof in the Richmond auditorium. We provided services all day outside the auditorium on the mobile clinic and inside at a flu shot clinic, serving homeless people who previously did not know we existed.” — Andrea DuBrow, MSW, MPH, Contra Costa County Health Services Department, Martinez, CA

“We make presentations at **drop-in centers** and other agencies that serve the same population. We also meet with the **sheriff’s office** and a downtown **business group** to educate them about the benefits of our services and try to avoid an adversarial relationship. They want the mobile unit to remove homeless people from the area; we explain the need for housing and health services.” — Michael Cochran, MPH, I.M. Sulzbacher Health Care for the Homeless, Jacksonville, FL

Consumer participation

“We are developing a strategy to reach more people with input from consumers and former consumers via our **Consumer Advisory Board and focus groups**, which provide input about the whole program, including the mobile unit and shelter-based services.” — Sandra Stephens, Unity Health—Urban and Rural Health Care Services for Homeless Men, Women and Children, Rochester, NY

“We use **formerly homeless youth** to engage currently homeless youth and let them know where the van will be. We use a group of **volunteer sex workers** who go into lingerie modeling shops and nightclubs to engage other sex workers and hand out flyers. We use community partners to do marketing for us.

— Wayne Centrone, MD, Outside In, Portland, OR

Word of mouth

“We transport mobile dental equipment (an X-ray unit and a folding dental chair) in a van. When the program started, we called it “**theatre dentistry**” and set up the equipment in shelter waiting rooms where folks could watch others receiving care. This encouraged people to seek care themselves. Now we have a waiting list at area shelters; people don’t avoid dental care any more. Former clients are our best advertisement.” — Fran White, DDS, Grace Hill Neighborhood Health Centers, Inc., St. Louis, MO

“Our services are advertised primarily by word of mouth, based on the **reliability and safety of the program**. It’s about trust; this is not a group of people who trust easily.” — Molly Kennedy, San Mateo County Health Services Agency, San Mateo, CA

Publicity

“At the very beginning, we did **leaflets and brochures** to advertise the mobile program. After a year or two, when we were established and able to maintain a stable schedule, we shifted to using patients as our most effective source of advertising. Today, about 50 percent of our clients come to us through word of mouth and 50 percent through referrals from other programs (mainly other homeless service providers, hospitals, and CHCs). We still distribute the “**quad-fold**,” a wallet-sized packet of phone numbers and addresses of service sites and agencies that are of importance to folks living on the street. We print and distribute these cards on outreach, in the clinic, to other agencies, ERs, volunteers, and medical students. They are still in great demand.”
— *Matias Vega, MD, Albuquerque Health Care for the Homeless, Inc., Albuquerque, NM*

“We use **radio, flyers, and billboards** as well as word of mouth. **Outreach workers** help to publicize our program: a homeless outreach team and a Latino outreach team. (Alabama has one of the fastest growing Latino populations due to farming and chicken plants.) We participate in one **health fair** each quarter, and distribute a **newsletter** to hospitals, substance abuse treatment providers, and a group of clergy who meet at the HCH center. The Chair of this group has had a radio show for 50 years; he advertises our mobile health services every Sunday and Wednesday. We received a grant from the University of Alabama-Birmingham School of Public Health to provide advertising and outreach through that ministry.” — *Jonathan Dunning, MEd, CCS, Birmingham Health Care, Inc., Birmingham, AL*

“We put out **flyers** after identifying and assessing a service site. We post signs and a picture of the van to announce its coming. The dental van coordinator does **dental education and applications** before the van even goes there (collects medical histories).” — *Marion Scott, MSN, RN, Harris County Hospital District–Health Care for the Homeless, Houston, TX*

“We use our HCH Program service directory (**Yellow Pages**) as a marketing strategy. **Hygiene kits** distributed on the van have the HCH phone number and logo on them. The design for our **brochure** was reviewed by homeless people living in parks and shelters, who provided input on the graphics.”
— *G.G. Greenhouse, MSW, MSW, Alameda County Health Care for the Homeless Program, Oakland, CA*

“Our biggest challenge is **media coverage** – getting the word out there, since Las Vegas is such a transitional community. Outreach workers go to **health fairs**. The Mammovan travels to many different locations; we try to keep the same schedule each year. The dental van goes regularly to schools.” — *Vivian Hanson, Nevada Health Centers, Inc., HCH, Las Vegas, NV*

Appearance/visibility of mobile unit

“The van itself is a marketing device; we put the logo for Alameda County on it and **avoided using the word ‘homeless’**. We didn’t want clients to shy away from the van for fear of being identified as homeless.”
— *G.G. Greenhouse, MSW, Alameda County Public Health Department HCH Program, Oakland, CA*

“The mobile units are kid friendly, with soft colors and happy scenes. All units have different **graphic designs** on them: a picture of parade, outdoor scenes in the city or beach, underwater graphics. They are designed to be attractive to the public and look clean. Generally, we have had no negative reactions from the public; the vans also provide services to young people who are not homeless.” — *Antonio de los Santos, Family Health Center of San Diego, San Diego, CA*

PROGRAM OBSTACLES

Mobile health programs are not easy to initiate or maintain, and a number of them fold after a few or even many years. A majority of mobile service providers interviewed for this report (58 percent) identified **lack of financial capacity** as the most significant obstacle they encounter. With more resources, these programs would: purchase, maintain, or upgrade their mobile unit(s); pay for more clinician hours or employ additional staff to provide more needed services; dispense more medications to indigent patients; and/or invest in more efficient information technology. Nearly half (48 percent) of respondents identified **vehicle or equipment problems** as a serious obstacle; 39 percent said they struggle with data collection and **clinical information management** (charting, medical records, tracking clinical outcomes); and 33 percent mentioned **staffing** issues (recruitment and retention, balancing clinic and outreach staff). Other obstacles noted were: **insufficient space** (by 21 percent of respondents), **patient follow-up** (18 percent), problems with **parking or plug-ins** (12 percent), **community access barriers** (9 percent), and difficulties obtaining, storing or dispensing **medications** (9 percent).

Mobile health programs use the following strategies to address the obstacles most frequently mentioned: cross-training of staff (e.g., drivers who double as outreach workers) and collaboration with community partners (public health departments, academic medical centers, corporate sponsors) to *increase service capacity*; regular maintenance and repair schedules to *prevent breakdowns* (often futile for 10–15-year-old vehicles); electronic medical records, database management systems, and wireless Internet connections (not always reliable in the field) to *facilitate information management*; and regular opportunities for staff communications and professional growth to *promote staff retention and help prevent burnout*. Strategies to overcome other obstacles mentioned are listed below and described in respondents’ own words:

Program obstacles		Strategies to overcome obstacles	
lack of financial capacity	58%	multi-tasking/cross-training staff, corporate sponsorship, collaboration with community partners	45%
breakdowns, equipment problems, technical issues	48%	maintenance/repair schedule, fuel plan	6%
data collection/info management: charting/med records, tracking	39%	laptop, DBMS, EMR, broadband, wireless, VPN	33%
Staffing: clinic versus outreach, recruitment/retention, expertise	33%	regular staff meetings, training, burnout prevention	3%
insufficient space	21%	purchasing larger mobile unit	12%
patient follow up/tracking, outcomes assessment	18%	cell phones to coordinate follow-up appointments	3%
parking/plug-in	12%	Preview/assess service sites.	3%
community access/NIMBY, police run clients out of area	9%	Inform community partners; work with police.	9%
medication storage, refrigeration, limits on dispensing	9%	Be aware of state regulations; use pre-packaged meds.	6%
rugged terrain	6%	Assure adequate undercarriage clearance.	3%
rural areas more expensive to serve	3%	providing more urban/suburban care	3%
inconsistent procedures	3%	population-based protocols, policies & procedures	3%
part-time clinical licensure of providers (60 day limit)	3%	license mobile units to extend time spent in the field	3%

n=33

Lack of financial capacity

“Our dedicated homeless health van died in Hurricane Katrina. Since then, we have received 2 pediatric units provided by the Children’s Health Fund that serve all children, including homeless children; but there are **no mobile services for adults**. We’re serving a new set of homeless people now on Tuesday nights at a fixed site close to the former HCH clinic – workers rebuilding the city who have no health insurance due to day labor and no place to live. These individuals often have co-occurring mental health and substance use disorders, lose their job, and become homeless.” — *Cathy Dumas, RN, Coastal Family Health Center, Biloxi, MS*

“**Funding for outreach** is the biggest problem. Our HRSA grant hasn’t been cut, but there have been cuts in the other grants that help fund our mobile outreaches, which makes it hard to maintain enough personnel to have the flexibility to continue to provide outreach. — *Matias Vega, MD, Albuquerque Health Care for the Homeless, Inc., Albuquerque, NM*

“If we had more resources, we could provide more needed services: **dental care**, more **mental health services** for clients who don’t have a severe and persistent mental illness, more **substance abuse recovery programs**, and more direct care for chronically homeless persons who live outside in encampments or on the street. — *Andrea DuBrow, MSW, MPH, Contra Costa County Health Services Department, Martinez, CA*

Equipment breakdowns/technical problems

“Our biggest obstacle is the vehicle, a 27-foot retrofitted RV that was used when we got it, 5 years ago. We have **continual breakdowns and power problems**. The generator wasn’t working for 5 months; we provided services without heat and power at some sites for most of the winter, one of the worst in memory. We don’t have a refrigerator that meets temperature requirements to carry vaccines. We are having a 40 foot mobile unit manufactured that will enable us to do more prenatal care exams and STD screening.” — *Darcie Meierbachtol, ANP, FNP, Colorado Coalition for the Homeless–Stout Street Clinic, Denver, CO*

“Our van was out of commission 22 days during the first 9 months of operation, despite the fact that it is a fairly new vehicle. We had problems with electrical systems: difficulty getting **shore plugs** installed so we don’t have to run off generator.” — *Kim Tierney, MPH, Multnomah County Health Dept., Portland, OR*

“Our **generator** is a big problem; it is so loud that it interferes with auscultation [listening to the heart and lungs using a stethoscope]. We got an electric blood pressure monitor so that we don’t have to listen as carefully.” — *Marie Aylward-Wall, MS, RN, Clinica Sierra Vista Homeless Mobile and Respite Services, Bakersfield, CA*

“Patient registration is difficult because we can’t get an **Internet connection** in the field; we have to do registration by hand.” — *Molly Kennedy, San Mateo County Health Services Agency, San Mateo, CA*

Clinical information management

“**Storage of medical records** is a huge problem. Our number one need is an electronic medical record. We talked about retrofitting the [11-year-old] van to enable an EMR, but the cost would be prohibitive (\$90,000) and the generator would create an energy field that would interfere with wireless communications. So we do **data entry** on a laptop, download it into the clinic server, then input data into a homeless management information system (a triple data entry process).” — *Marie Aylward-Wall, MS, RN, Clinica Sierra Vista Homeless Mobile and Respite Services, Bakersfield, CA*

“We’ve had challenges **managing medical records**; currently we keep records in the conference room. We have a modern database management system and a .4 FTE data evaluator. But an electronic medical record would facilitate **data collection and access** in the field; we hope to get an EMR by October 2007.” — *Kim Tierney, MPH, Multnomah County Health Department, Portland, OR*

“Grace Hill has an electronic medical record, but **no electronic dental record** yet; we are working on that to overcome paperwork obstacles. Recording encounters online from various sites would be a real help.” — *Villie Appoo, MA, MSW, Grace Hill Neighborhood Health Centers, Inc, St. Louis, MO*

Staffing challenges

“Staffing is tough; **balancing geography with acuity** while trying to expand hours for availability with only 3 providers is challenging. We try to balance coverage of a huge geographic area with the fact that the sickest people come to our clinic. Two providers are in the clinic and one is on outreach all the time. The outreach provider covers soup lines in the evenings, serving large numbers of people not seen in the clinic. We could put all 3 providers in clinic and be busy all the time; but we wouldn’t engage new people who also need our services.” — Adele O’Sullivan, MD, Maricopa County Dept. of Public Health, Phoenix, AZ

“Nurse practitioners are our primary providers; it’s difficult to hire FNPs with the **nursing shortage**. Moreover, our county program can only hire when somebody leaves. One thing we do to retain personnel and prevent burnout is to make sure there are lots of **opportunities for communication** (staff meetings, sufficient “down time” so staff can be supportive of each other) and **professional growth** (training for all staff, encouraging them to attend conferences).” — G.G. Greenhouse, MSW, Alameda County Health Care for the Homeless Program, Oakland, CA

“It takes a unique medical provider to be able to work on a mobile unit. **Providers must be autonomous** because they have less opportunity to collaborate with peers. Areas they serve may be threatening; it’s not as comfortable as working in a fixed-site clinic. Every day is different on a mobile clinic; there is little consistency. They may see 20 patients or 2, depending on the weather and the time of day. **Culturally competent staff** are key in convincing homeless clients that the mobile clinic is a safe place to go.” — Molly Kennedy, San Mateo County Health Services Agency, San Mateo, CA

Community & service access barriers

“We have encountered community obstacles (**NIMBY**) — for example, in trying to set up a syringe exchange program that is separately funded from the HCH project. The community was initially very resistant to this idea. We sent e-mails, joined discussions, went to a **community forum** to meet with neighborhood association leaders, and were eventually able to set up the program.” — Wayne Centrone, MD, Outside In, Portland, OR

“In response to complaints from people living or working in locations where homeless people gather, police come and tell them to leave. As a result, our clients get pushed from area to area. Care-a-van staff try to find them, but inevitably lose clients for a certain period, which interferes with **continuity of care**. To address this problem, we are **working with city and county police**. We asked police to let us know when they will be moving homeless people out of a given area. The mobile team tries to alert clients to service options elsewhere before they are moved out. We also talk to service providers in surrounding communities to find out what services are available there.” — Darlene Hein, Waikiki Health Center, Honolulu, HI

Parking & plug-ins

“Our 40 foot vehicle is getting old, and we’re looking at ways to replace it. We’ll probably get a smaller unit that is more accessible and easier to park, especially in winter. The current unit has good visibility, but is sometimes **too large to park** on the street or in parking lots. The environment we serve is urban now; we discontinued our rural service sites, which required too much gas.” — Sandra Stephens, Unity Health—Urban and Rural Health Care Services for Homeless Men, Women and Children, Rochester, NY

“**Shore plugs** require 50 amps and must not be more than 50 feet away from the van. Some service sites are moving their location and can’t install shore plugs. Another site in an unsafe area required parking closer to the facility so they can keep an eye on the van. Finding a place to park a 40 foot van in a safe and **secure area** is a challenge.” — Kim Tierney, MPH, Multnomah County Health Department, Portland, OR

Medications

“Pharmaceuticals are a major financial barrier. **Obtaining medications** from outside pharmacies at regular prices posed a problem for us last year. We decided to refer clients back to the HCH clinic to get prescriptions filled. We don’t dispense medications from the mobile unit; we set up clinic appointments for clients to get meds there. This was required to get the reduced rate [available to FQHCs through the 340B drug program].”
— *Kimberly Rice, LBSW, New Horizon Family Health Services, Greenville, SC*

“State Board of Pharmacy laws differ; the California Board “black bags” **dispensing medications** inside buildings at some of our mobile service sites; rules are more lenient in rural areas. It’s very important for mobile health programs to completely understand their state’s laws and policies, and how they affect what is going to be done on the mobile unit.” — *Kathy Proctor, MPH, Northeast Valley Health Corporation, San Fernando, CA*

“According to Arizona’s pharmacy regulations, physician assistants may dispense but not break and re-label a package of medications; so we **buy medications pre-packaged** with a prescription label and just fill in the patient’s name, date, and directions – which is convenient in the field. Our mobile OTC formulary includes cold meds, ointments, stomach & diarrhea meds, and lice shampoo. We dispense 20 prescription medications, 1 drug from each basic category, all pre-packaged. We take vaccines (tetanus, flu) in an ice chest when needed; we’re out only a short time. We transport medications from the passenger van to service sites in backpacks or a large suitcase with a pull-up handle and wheels.” — *Adele O’Sullivan, MD, Maricopa County Department of Public Health, Phoenix, AZ*

“We can’t keep the temperature on our van within a safe range to **keep vaccines refrigerated** at required levels. — *Kim Tierney, MPH, Multnomah County Health Department, Portland, OR*

REASONS FOR PROGRAM SUCCESS

Health Care for the Homeless providers interviewed had several opportunities to explain how and why their mobile outreach efforts work or do not, in response to a number of open-ended questions. “To what do you attribute the success of your mobile health program?” was asked at the outset, and most respondents gave explicit answers. Yet they came back to this question again and again in their responses to subsequent questions. The reasons they specified for program success are listed in the table below in order of frequency. Most respondents gave more than one reason. Several attribute success to elements of the HCH model of care which are common to both fixed-site and mobile clinics.

Two factors identified as fundamental to the success of mobile health outreach by 82 percent of persons interviewed were: **selection of service sites** where homeless people congregate and **collaboration with community partners** (for referrals, space to park the mobile unit or provide services inside, help reaching targeted populations, and/or funding). **Staff effectiveness** at building trusting relationships with homeless clients was a close second (79 percent). Several respondents emphasized the importance of an individual clinician or outreach worker who had worked with their mobile program for many years. Nearly half (45 percent) thought **outreach** (“going where homeless people are”) and the **appearance of the mobile unit** (attractive and easily identifiable) were key in making health services more accessible to underserved populations; and 39 percent attributed success to their **program’s strong reputation** among homeless people and other community service providers, over many years. **Information technology** to facilitate outcomes monitoring, **consistency and continuity of care**, and **linkage to comprehensive services** were also stressed as important elements of program success by a number of respondents.

Reasons for program success	% respondents
Selection of service sites/ collaboration with community partners	82%
Staff rapport with homeless clients, responsiveness to needs, length of service	79%
Outreach – increase in service availability and accessibility	45%
Appearance/ visibility of mobile unit	45%
Program reputation and longevity (yrs): 15-22(7), 9-10(2), 5-7(3), 1-2(2)	39%
Information technology/ outcomes monitoring	27%
Continuity and consistency	21%
Linkage to comprehensive services	21%
Only source of care	12%
Gateway to clinic/ medical home	9%
Better service delivery to severely mentally ill	9%
Flexibility	9%
Interdisciplinary team	9%
Cost-effective service model	9%
Security/ safety	9%
Incentives for engagement (snacks, supplies)	9%
Integration of services	6%
Harm reduction	6%

n=33

Service sites & community partners

“We **go where homeless people are**. That is the main reason why we are successful at reaching our target population. We have many significant **partners**, both within CCHS and in the community, which makes it easier for our clients to gain access to comprehensive services.” — *Andrea DuBrow, MSW, MPH, Contra Costa County Health Services Department, Martinez, CA*

Staff effectiveness

“Three main factors contribute to the success of our mobile health program: providing a **hospitable, accepting environment** in and around the van; delivering **professional, high quality services**; and placing **outreach workers** in the field who encourage reclusive, chronically homeless individuals to visit the van for care.” — *Linda Sheets, MPM, Mercy Hospital/Operation Safety Net, Pittsburgh, PA*

“Unsheltered homeless people don’t have many places that welcome them. Program staff feel comfortable with these clients and know them personally, see them regularly and remember them. We send the same team to the same site, so staff and clients can get to know each other. We attribute our success to the fact that **services are consistent**, the van is there reliably, **service providers are competent**, and **treat clients in a professional manner**.” — *Darlene Hein, Waikiki Health Center, Honolulu, HI*

“We try to **match the needs of the community with the skills and talents of the providers** by assigning them to sites where clients with whom they are most comfortable tend to seek services. Every provider has a different skill set and a subset of the homeless population he or she particularly enjoys and is good working with — e.g., youth, individuals with substance use disorders.” — *Darcie Meierbachtol, ANP, FNP, Colorado Coalition for the Homeless–Stout Street Clinic, Denver, CO*

“Focus groups comment on the fact that unlike other providers, our **staff don’t stigmatize or judge** clients. We **send the same team to particular areas on a regular basis** to promote continuity of care and increase clients’ comfort level.” — *Sharon Joseph, MD, New York, NY*

“Staff **dress casually** to avoid “white coat syndrome”: in jeans and smocks. If going to a site with a large immigrant population, they bring someone with them who **speaks the language** to help with translation.” — *Michelle Madison, Unity Health Care, Inc., Washington, DC*

“Our program’s most compelling feature is the **support staff** — the medical assistant, driver, and office manager work well as a team. It’s a close unit, which makes patients feel safer, particularly in rough areas. Staff are “street wise” and nonjudgmental (not “preachy”). They **do what people want at the time** and don’t lecture or expect change — just do what they can to help that day.” — *Marie Aylward-Wall, MS, RN, Clinica Sierra Vista Homeless Mobile and Respite Services, Bakersfield, CA*

Outreach

“We **provide outreach and help in austere environments**, primarily in rural areas that are mountainous and heavily wooded, with very scattered populations. There are lots of homeless people living in the woods. We are recognized and welcomed in any encampment; word is out that we are there to help. — *Clyde Drury, Metropolitan Development Council, Tacoma, WA*

“Our HCH project began in 1985 as a mobile program using an Airstream RV. In 1991, we finally got a fixed-site clinic and let go of the RV. The organization has evolved through different phases, but still understands that outreach is a critical component. We can be very efficient and medically sophisticated in our fixed-site clinic, but we need to be even more concerned about those who don’t reach our clinic doors. The acuity of health problems seen in our homeless patients, both in the clinic and on outreach, has increased dramatically over last 20 years. Some of the sickest people can’t get to the clinic. **Outreach and case management** are the heart and soul of Health Care for the Homeless.” — *Matias Vega, MD, Albuquerque Health Care for the Homeless, Inc., Albuquerque, NM*

Program reputation

“The success of our mobile homeless unit is associated with the name of our HCH project, which is **well-known in the community**. We’re the only organization that specifically serves homeless people in DC. Homeless people flag down the vehicle.” — *Michelle Madison, Unity Health Care, Inc., Washington, DC*

“Our program’s success is attributable to 2 things: The agency has a significant amount of **name recognition** in the community; and we **work closely with community partners**.” — *Wayne Centrone, MD, Outside In, Portland, OR*

Information technology/ outcomes monitoring

“We use **wireless Internet access** via HealthPro to download medical information or enter intake data on laptop computers that are carried on the van. We’re working toward developing an EMR.” — *Kimberly Rice, LBSW, New Horizon Family Health Services, Greenville, SC*

“We use an **electronic practice management system** that enables us to check patient information in real time; we can see who is being checked in at various sites. We use **wireless devices** on the mobile unit that don’t always work as well as we would like, but they enable us to monitor medication use and misuse by clients at different sites.” — *Rod Stuldivant, Saint Joseph’s Mercy Care Services, Inc., Atlanta, GA*

“Our **EMR** makes data collection and tracking easier. We use a **virtual private network (VPN)** to collect data via a cellular modem and transmit data from a laptop computer. We can get lab results and X rays this way from the HCH clinic. An IT team helps us run data queries using a number of variables.”
— *Wayne Centrone, MD, Outside In, Portland, OR*

Continuity & consistency

“The most important thing about mobile services is continuity and consistency — when you will show up and where.” — *G.G. Greenhouse, MSW, Alameda County Public Health Department HCH Program, Oakland, CA*

“Be at a certain place at the same time. Folks stop looking for you if you don’t have that consistency, and it’s harder to find them.” — *Matias Vega, MD, Albuquerque Health Care for the Homeless, Inc., Albuquerque, NM*

Recommendations from HCH Mobile Health Care Providers

The individuals interviewed for this project were given the opportunity to specify any other information which they considered important for health centers that are involved in or seeking to initiate mobile health programs for homeless people. Here are their recommendations:

- Assess the need for a mobile health program and specify target populations.
- Assess your financial and service capacity and space requirements before selecting a mobile unit; be aware of the variety of mobile units in use.
- Capitalize the mobile program prior to implementation; identify funding sources and in-kind services. Recognize that a long-term investment is necessary.
- Choose providers who can work independently and enjoy working with homeless people.
- Identify and build strong relationships with community partners to meet service needs that you can't – seek affiliations with medical teaching programs; develop referral contracts with specialty services.
- Understand state laws and regulations regarding service provision. Notify police about services to be provided and service sites.
- Select service sites where homeless people congregate.
- Plan where to park the mobile unit; consider road surface, space to turn around, access to plug-ins, distance from power lines, traffic patterns, and safe exit from the vehicle for patients.
- Communicate with potential clients; seek client input in developing and evaluating the mobile program.
- Establish and adhere to a reliable service schedule; be where you say you are going to be when you say you'll be there.
- Schedule sufficient preparation time before and after mobile outreach.
- Make a plan to ensure client and staff safety and security of the mobile unit.
- Let the program evolve; be flexible and adapt to change.
- Share knowledge; learn from programs working in similar environments, geographical and political.
- Groom younger people to replace yourself.

BIBLIOGRAPHY

- Bonin E, Brehove T, Kline S, Misgen M, Post P, Strehlow AJ, Yungman J. *Adapting Your Practice: General Recommendations for the Care of Homeless Patients*. Nashville: Health Care for the Homeless Clinicians' Network, National Health Care for the Homeless Council, Inc., 2004.
<http://www.nhchc.org/practiceadaptations.html>
- Brocht DF, Abbott PA, Smith CA, Valus KA, Berry SJ. A clinic on wheels: A paradigm shift in the provision of care and the challenges of information infrastructure. *Computers in Nursing* 7(3): 109-113, 1999.
- Centrone WA. Looking for model health care systems: Mobile medical outreach- Effective outreach and engagement to persons on the street. (unpublished article)
- Clinica Sierra Vista Mobile Health Service. Mobile Health Service. Bakersfield, CA, Video Magic. Videotape: 9 min. Available through the Health Care for the Homeless Information Resource Center: (888) 439-3300; hch@prainc.com
- Cunningham CO, Shapiro S, Berg KM, Sacajiu G, Paccione G, Goulet JL. An evaluation of a medical outreach program targeting unstably housed HIV-infected individuals. *Journal of Health Care for the Poor & Underserved* 16(1): 127-138, 2005.
- Ebberwein AM. Mercy Mobile Health Care. *Journal of the Medical Association of Georgia* 88(1):34-36, 1999.
- Frelix GD, Rosenblatt R, Solomon M, Vikram B. Breast cancer screening in underserved women in the Bronx. *Journal of National Medical Associations* 91(4): 195-200, 1999.
- Giu S, Beigel DE, Johnsen JA, Dyches H. Assessing the impact of community-based mobile crisis services on preventing hospitalization. *Psychiatric Services (Special Issue)* 52(2): 223-228, 2001.
- Inman M. Mobile contract services: What you need to know. [Re: outsourcing mobile imaging services] *Radiology Management* 22(5) 38-42, 2000.
- Los Angeles Family Housing Corporation. San Fernando Valley Mobile Homeless Center. Videotape: 4 minutes. Available from Los Angeles Family Housing Corporation (818) 982-4091.
- Meyer RD, Eikenberg S. Portable dentistry in an austere environment. *General Dentistry* 50(5): 416-419, 2002.
- McGee D, Morgan M, McNamee MJ, Bartek JK. Use of a mobile health van by a vulnerable population: Homeless sheltered women. *Health Care Women International* 16: 451-461, 1995.
- Mobile Health Clinics Network (MHCN). Mobile Health Program Manual: A Paradigm for Program Development & Sustainability (in progress).
- Moulavi D, Bushy A, Peterson J, Stullenbarger E. Factors to consider when buying a mobile health unit. *Journal of Nursing Administration* 29(2): 34-41, 1999.

- Nuttbrock L, Rosenblum A, Magura S, McQuiston H. Broadening Perspectives on mobile medical outreach to homeless people. *Journal of Health Care for the Poor & Underserved* 14(1): 5-16, 2003.
- Redlener I. Access denied: Taking action for medically underserved children. *Journal of Urban Health* 75(4): 724-731, 1998.
- Rosenblum A, Nuttbrock L, McQuiston H, Magura S, Joseph H. Medical outreach to homeless substance users in New York City: Preliminary results. *Substance Use & Misuse* 37(8-10): 1269-1273, 2002.
- Spanowicz MJ, Millsap G, McNamee MJ, Bartek JK. Health problems of sheltered homeless men using a mobile health van: A 4-year study. *Clinical Excellence for Nurse Practitioners* 2(5): 279-285, 1998.
- Zabos GP, Trinh C. Bringing the mountain to Mohammed: A mobile dental team serving a community-based program from people with HIV/AIDS. *American Journal of Public Health* 91(8): 1187-1189, 2001.

OTHER RESOURCES ON MOBILE HEALTH CARE:

- Mobile Health Clinics Network (MHCN): <http://www.mobilehealthclinicsnetwork.org>
- Nuts & Bolts of Mobile Medical Service Delivery. PowerPoint presentation by G.G. Greenhouse, MSW, Alameda County Public Health Department HCH Program: gg.greenhouse@acgov.org
- Service Directory (“Yellow Pages”) for the Alameda County Health Care for the Homeless Program: gg.greenhouse@acgov.org
- Strategic Plan for a Mobile Medical Program – San Mateo County Health Services Agency, San Mateo, California, available from Molly Kennedy: mkennedy@co.sanmateo.ca.us

APPENDICES

- A. Survey questionnaire
- B. Mobile health program description & marketing materials
- C. Mobile health vehicle: equipment & inventories
- D. Mobile clinical encounter & referral forms
- E. Job descriptions for mobile health programs