

Developing Outcome Measures to Evaluate Health Care for the Homeless Services

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Editor

National Health Care for the
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Developing Outcome Measures to Evaluate HCH Services

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Table of Contents

EXECUTIVE SUMMARY	I
INTRODUCTION	2
Purpose of This Project	2
Background	3
Definition of Key Terms	4
I. CHALLENGES & OPPORTUNITIES	6
Challenges	6
Opportunities	13
II. HOW FAR WE'VE COME	16
National Initiatives	16
Local Efforts	17
III. WHERE DO WE WANT TO GO?	22
Comprehensive Assessment of HCH Services	22
Meaningful Data Collection & Interpretation	25
Outcomes-Driven Program Design & Service Provision	27
IV. WHAT HELP DO WE NEED TO GET THERE?	28
Standardization of Performance Measures	28
Targeted Funding for Outcomes-based Program Evaluation	28
Agency-Based Technical Assistance & Training	29
Multi-Site Pilot Project	30
BIBLIOGRAPHY	32
APPENDIX	35
1. Multi-Service Consumer Outcome Scales and Satisfaction Survey – Colorado Coalition for the Homeless, Denver	
2. Outreach & Service Continuum Tool – HCH Network, Seattle	
3. Levels of Service Measures – Region IX HCH projects (CA, AZ, NV)	
4. Outcomes Measurement Tool – HCH, Montana	
5. Service Utilization Graph – HCH, Baltimore	

EXECUTIVE SUMMARY

Health Care for the Homeless (HCH) grantees need to track measurable outcomes to determine whether their services are having a positive impact on clients and to provide an empirical basis for improving quality of care. They also need a means of ensuring accountability to funders. This report addresses difficulties and potential benefits that HCH projects can expect as they engage in systematic program evaluation and use that information to improve quality of care and demonstrate the value of their work.

The information and recommendations contained in this report were provided by members of the HCH Outcomes Work Group, convened in 2004–2005 by the National Health Care for the Homeless Council to assess the feasibility of measuring HCH service outcomes in a more comprehensive fashion than has been accomplished to date. Members of the Work Group and other consultants represented 17 HCH grantees in different regions of the United States.

The Work Group was especially interested in exploring the development of a continuum of outcome measures that could be effectively used by HCH grantees with diverse structural models and clinical settings to quantify the impact of their services, despite limited resources.

The report is divided into four main sections:

- **Section I** provides an overview of the *challenges* and *opportunities* that HCH projects encounter in establishing effective outcomes measurement systems for program evaluation.
- **Section II** describes *national initiatives* and *local efforts* during the past decade that have dramatically increased the number of HCH providers engaged in monitoring service outcomes and have enhanced their interest in using this information to improve quality of care.
- **Section III** contains recommendations for expanding and enhancing current HCH outcome measurement efforts to achieve three *primary goals*: comprehensive service assessment, meaningful data collection and interpretation, and outcomes-driven program design and service provision.
- **Section IV** specifies the *assistance* that HCH grantees need to accomplish outcomes monitoring and evaluation more efficiently and effectively: standardization of performance measures, targeted funding for outcomes-based program evaluation, agency-based technical assistance and training, and a multi-site pilot project to develop and test a continuum of HCH outcome measures that are appropriate for health centers with diverse structures, clinical settings, and resources.

The bibliography lists references where topics addressed in the report can be pursued in more detail. Examples of outcome measurement tools currently used by Health Care for the Homeless grantees are contained in the Appendix.

INTRODUCTION

Purpose of This Project

Health Care for the Homeless (HCH) clinicians and project administrators acknowledge the need for outcomes measurement to determine whether their services are having a positive impact on clients and to provide an empirical basis for improving quality of care. They also need a means of ensuring accountability to funders. Further, HCH outcomes measurement is needed to demonstrate the value of the diverse and innovative service models that have evolved since the Health Care for the Homeless program was established in 1987. But several factors complicate these tasks and make assessment of the comparative efficacy of HCH services and other service delivery systems virtually impossible:

- Standard clinical outcome measures are sometimes unrealistic for persons who are homeless.
- Outcome measures for many of the services provided by HCH grantees¹ have yet to be developed or validated.
- Standardized acuity or risk measures that take into account many of the external variables that affect the health of displaced persons are not yet available.
- Lack of information about the housing status of persons receiving mainstream health services is an obstacle to identifying appropriate comparison groups.

In November 2004, the National Health Care for the Homeless Council established a work group to assess the feasibility of measuring HCH service outcomes in a more comprehensive fashion than has been accomplished to date. The HCH Outcomes Work Group was comprised of Health Care for the Homeless service providers already engaged, to varying degrees, in outcomes measurement. Members represented a variety of homeless service models operating in urban and rural areas, in different regions of the country. They met by telephone conference call over a three-month period, November 2004 – January 2005. Information conveyed during these meetings was supplemented by interviews with individuals particularly knowledgeable about current HCH outcomes measurement efforts. This report summarizes the Work Group’s findings and recommendations.

Objectives of this project included identifying elements of HCH service models that should be assessed, specifying particular outcomes to be measured, determining levels of expertise required to develop effectiveness criteria and indicators, exploring data sources that might be used in tracking outcomes, suggesting data management processes and participants, and projecting the likely cost of meaningful outcomes measurement. The Work Group was especially interested in exploring the development of a continuum of outcome measures that could be effectively used by HCH grantees with diverse structural models and clinical settings to quantify the impact of their services, despite limited resources.

¹ Throughout this report, the terms “HCH grantees” and “HCH projects” are used interchangeably, denoting recipients of Federal funding under Section 330(h) of the Health Centers Consolidation Act of 1996. The term “HCH program” refers to the Federal program, administered by the Bureau of Primary Health Care/HRSA/DHHS, which provides this funding and oversees 330(h) grantees.

All members of the Work Group agreed that while satisfying funders is often the most pressing reason for HCH projects to engage in outcomes measurement, improving quality of care to enhance their clients' health, functional status, and quality of life is the most important reason. Outcomes measurement is no longer a choice, but an obligation – to clients, to funders, to policymakers and the public, who ultimately must assume responsibility for the care of disadvantaged populations.

Measuring outcomes to determine the impact of HCH services on homeless clients is not simple. Nevertheless, it is feasible, with the benefit of appropriate expertise and sufficient resources. This report is not intended to be prescriptive. Rather, it addresses difficulties and potential benefits that HCH projects can expect as they engage in systematic assessment of the impact of services they provide and use that information to improve quality of care and demonstrate the value of their work.

Background

Nearly ten years have passed since the Bureau of Primary Health Care (BPHC) convened the first Working Group on Homeless Health Outcomes. Forty health care professionals representing HCH grantees, researchers, and policymakers met for a day and a half in April 1996 to consider appropriate strategies to assess homeless health outcomes. Their explicit goal was to help the HCH Program improve patient care, identify effective interventions for homeless people, and demonstrate the value of these interventions to public policymakers and private managed care organizations.

That initiative was prompted by concerns that continuing devolution of Federal funding for health programs to State and local governments and privatization of public health services through contracts with private managed care organizations were placing safety-net providers (especially those serving homeless people) at increased financial risk. The hope was that by demonstrating positive, cost-effective outcomes, health programs could compete more effectively for public and private resources.

The Working Group articulated rationales for measuring homeless health outcomes, proposed general strategies for measuring systems-level and client-level outcomes that HCH providers can influence, and specified key questions to help them identify performance indicators of successful interventions (BPHC, 1996). They also addressed methodological and ethical concerns, recommended ways to overcome potential barriers to outcomes measurement, and sketched next steps in a multi-stage process of operationalizing the general strategies proposed.

In the fall of 1996, the BPHC provided supplemental funding to 20 HCH grantees in 16 states, to assist them in completing 18-month outcome studies related to homeless health care. Initially, the emphasis of these projects was to employ rigorous research methodologies. Two mentors, experienced in research studies on homeless individuals, provided technical assistance with study designs and implementation. Grantees chose a wide variety of study topics, reflecting their different program needs, interests, and data monitoring capacities. A report published by the BPHC in October 1998, *Health Care for the Homeless Outcome Measures – A Chronicle of Twenty Pilot Studies*, contains summaries of the 20 studies completed

Developing Outcome Measures to Evaluate HCH Services

and general lessons learned by participants about the planning process and particular research designs (BPHC, 1998).

Since then, most HCH grantees have implemented some sort of data collection to evaluate services, gaining experience and expertise in data management through outcomes monitoring required for JCAHO accreditation and/or through participation in a Health Disparities Collaborative or Homeless Management Information System (HMIS) with HUD Continuum of Care grantees. As a result, many homeless health care providers have moved beyond the general discussion of strategies for measuring HCH service outcomes, begun in 1996. A number of them have already developed and implemented outcomes measurement systems for their own purposes, not just to meet expectations of the myriad funders needed to keep their clinic doors open. Examples of these accomplishments are described in Section II of this report (“How Far We’ve Come”).

Definition of Key Terms

This report presupposes understanding of the following terms which are frequently used to describe key elements of HCH program evaluation:

- **Processes** are *things you do* – services provided by HCH programs and activities performed to deliver them. Some HCH processes function as intermediate outcomes, to the extent that they indicate progress toward a goal or desired outcome.
- **Outcomes** are *results of things you do* – objective evidence of the impact of HCH services on individual clients (client-level outcomes) or on the entire service delivery system utilized by homeless individuals (system-level outcomes).

Examples of *client-level outcomes* are engagement in care, improved health status, improved level of functioning, disease self-management, improved quality of life, client choice, and client satisfaction (BPHC, 1996).

Examples of *system-level outcomes* are increased service access for the target population, provision of comprehensive services, and the demonstration of continuity of care, systems integration, cost-effectiveness, use of preventive interventions, and client participation in treatment decisions (BPHC, 1996).

- **Outcome measures** describe observable, measurable characteristics or changes that represent achievement of a desired outcome. Outcome measures specify exactly what is going to be measured (indicators) and units of measurement used to determine the extent to which desired outcomes are attained – e.g., HbA1c level (<7.0%) as an indicator of diabetes control.
- **Outcomes monitoring** produces the information used to determine short- and long-term results of HCH services. This involves documenting outcomes observed over time.

Developing Outcome Measures to Evaluate HCH Services

- **Outcomes measurement** refers to techniques used to demonstrate progress toward a desired outcome or to determine the impact of HCH services on problems the program was designed to solve. This may involve showing improvement in one or more client-level or system-level conditions that are relevant to attaining pre-established goals (*simple* outcomes measurement), and/or demonstrating correlations or statistically significant relationships between services provided and results (*complex* outcomes measurement).
- **Performance evaluation** involves comparing actual outcomes (short- and long-term results) with desired outcomes (goals and objectives), as a step toward providing an empirical basis for improving the quality and effectiveness of HCH services.

CHALLENGES & OPPORTUNITIES

Whatever their level of experience or expertise in outcomes measurement, Work Group members were unanimous in their commitment to developing outcome measures for program evaluation and quality improvement. The group did not deny the importance of doing both service provision and program evaluation, despite concerns about their capacity to do so. Members also agreed that it is important for HCH grantees to describe the populations they serve well, so that any attempt to evaluate the efficacy of HCH services in comparison with other health care delivery models is meaningful. This section provides an overview of the challenges and opportunities that HCH projects encounter in establishing effective outcomes measurement systems for program evaluation.

Challenges

The following challenges, if not met, can complicate or even prevent the development and implementation of outcome measures to evaluate homeless health services:

- **Financial challenges** – finding resources for program evaluation despite already limited resources for service provision;
- **Technical challenges** – obtaining access to adequate computer hardware, software, and expertise required to design and/or maintain appropriate data management systems;
- **Administrative challenges** – addressing internal and external needs for outcomes data and tailoring outcomes information to the interests of different audiences, and protecting the privacy of clients whose personal health information is used in outcomes monitoring;
- **Methodological challenges** – measuring process variables that affect outcomes, accounting for the diversity of HCH service models, avoiding selection bias, obtaining follow-up data, identifying appropriate comparison groups, and controlling for external variables in interpreting outcomes.

1. Financial challenges:

- **Finding resources to establish and maintain infrastructure:** Perhaps the most daunting challenge for Health Care for the Homeless providers is affording the significant financial investment required to establish and maintain data collection processes and information systems that are needed to measure service outcomes, at a time when essential homeless assistance services are nonexistent in many places or severely under-funded, despite increasing numbers of homeless people. Operating deficits are common due to an expanding proportion of clients without health insurance and huge outlays for medications, despite the use of reduced-cost prescription drug programs. Although these challenges are experienced by all Federally Qualified Health Centers, the financial burden is disproportionately heavy for HCH grantees, which serve a higher proportion of uninsured clients and provide more intensive services than do other health centers.²

² 71.3 percent of HCH clients in FY 2003 had no health insurance, compared to 39.3 percent of clients served by all Federally Qualified Health Centers (BPHC, 2003). See Gray, 2003 for a description of HCH outreach, engagement, and case management services.

Even HCH projects with substantial funding for client services may have difficulty financing outcome evaluation. Most client visits do not generate revenue. Many HCH budgets depend primarily upon restricted dollars (grants) that can be used only for service provision. Consequently, it is especially difficult for grantees that are predominantly funded by restricted dollars to cover costs unrelated to services, such as data management staff, technology, and related activities. Unrestricted funding sources are scarce.

- **Meeting funders' expectations:** Outcomes monitoring required by funders can result in substantial expenditures. Many funders require that grantees utilize *their* database management systems, which do not always permit data migration to other systems used for outcomes monitoring. This results in double and triple data entry per encounter, in some cases, to meet multiple funders' requirements. Funders may also request specific outcome measures that are financially and/or clinically unrealistic. For example, Health Care for the Homeless grantees were recently asked if they could identify a mental health measure for all homeless populations served. In contrast, for health conditions not involving mental illness, HRSA expects grantees to focus on a specific disease, such as diabetes, and then screen only patients at risk for or already diagnosed with that condition. (Screening all HCH clients for "mental illness" is like screening all patients for "health problems" and then trying to develop one outcome indicator for improved health – an enterprise that is extremely resource intensive and of questionable usefulness.) HRSA's performance reviewers often concede the conundrum in which HCH projects find themselves.
- **Supporting administrative costs for data management:** Even when the number of clients is small, significant resources are required to support administrative costs for data management. The problem is especially acute for health centers in rural areas, which typically don't have enough patients or dollars to warrant hiring staff to focus on outcomes monitoring. HCH project administrators must often manage several other programs and are stretched too thin to oversee data management as well. Services performed by nurses, who could help with clinical outcomes monitoring, are not billable for many health centers. Per patient costs for monitoring health outcomes typically are not reimbursable by third-party payers or Federal funders. Despite these challenges, project administrators must evaluate the cost-effectiveness of outcomes measurement and find ways to integrate it with service provision.

Creative solutions: To meet some of these financial challenges, Montana's HCH grantee invested in a data coordinator to serve four project sites in Missoula, Billings, Helena, and Butte. HCH providers in Montana and elsewhere have used volunteers to help with outcomes monitoring (e.g., to track outreach encounters). But volunteers require training and careful supervision to ensure the quality and accuracy of outcomes measurement efforts and to protect patient confidentiality. This can be more difficult when the responsible party is not directly accountable to the agency or is providing these services as a means to develop personal skills.

Developing Outcome Measures to Evaluate HCH Services

2. Technical challenges:

- **Access to appropriate data management systems:** Insufficient infrastructure for outcomes measurement is one of the primary technical challenges for HCH grantees. Lack of appropriate computer hardware/software, limited Internet access, and incompatible computer systems are among the technical challenges that prevent efficient outcomes monitoring.

For example: Colorado Coalition for the Homeless (CCH) contracts with several rural agencies that have no computer access at all, limiting the HCH grantee's capacity to track homeless clients across components of its service system for comprehensive outcomes measurement. The HCH project in Rockford, Illinois, has a shared electronic information system for data collection, but lacks Internet access, which is required to participate in the Web-based homeless management information system developed by their local Continuum of Care. Most agency staff still use monitors connected to a mainframe computer. The Missoula City County Health Department Partnership Health Center has a computer system that is essentially a billing system, which makes tracking off-site work and non-billable services very cumbersome or impossible.

Creative solution: The HCH project manager in Missoula, Montana, developed her own Access database to facilitate monitoring of service outcomes. But she is limited to tracking clients by encounter, instead of by disease or health outcomes, due to limited time and expertise to set up a more sophisticated monitoring system.

- **Expertise required to measure and interpret service outcomes:** The level of expertise required for outcomes evaluation varies, depending on data use. Defining and demonstrating changes in measurable outcomes (such as blood pressure level) does not require special technical expertise, once access to appropriate data management systems is addressed. Interpreting data requires knowledge of factors besides program interventions that may have affected measured outcomes, but does not necessarily require special expertise in data analysis. More sophisticated analysis is needed only to show relationships between variables – for example, to determine whether and to what extent changes in a patient's health status are due to HCH services and/or to other factors (for which data may not be available for analysis).

Thus far, most funders have asked HCH projects only to show improvement in health status or other measures over time – not to demonstrate statistically significant relationships between services and outcomes. Nevertheless, implicit in requests of HCH grantees to report improvements in health or other outcomes are questions about the efficacy of HCH services in general. Answering such questions would involve coordinated measurement of outcomes in multiple programs, requiring more sophisticated analysis and even greater expertise. Work Group members agreed that HCH providers should contribute to any comprehensive evaluation of Health Care for the Homeless service models by describing the populations they serve well, so that efforts to evaluate HCH services globally are meaningful.

Optimally, data that are sufficient to meet the agency's needs could also be used for more sophisticated analyses of program effectiveness. Unfortunately, *few HCH projects can collect data at the level of detail required to measure efficacy, even if they had help from experts.* To require this would not be helpful to service providers or their clients. Work Group members agreed that the onus should *not* be on HCH clinics to conduct this level of program evaluation. They considered it more important for all HCH providers to participate in simple outcomes measurement.

Creative solution: If health programs measure a broad spectrum of service outcomes, they should be able to see potential correlations — for example, between time spent in transitional housing or access to treatment for substance use disorders and improved health status — even without sophisticated analyses. These correlations can generate hypotheses for further investigations to test. In this way, most HCH projects can provide important information that ultimately can be used to demonstrate the effectiveness of Health Care for the Homeless services generally.

2. Administrative challenges:

- **Addressing internal and external needs for outcomes data:** HCH grantees require outcomes information for many different purposes, both internal (e.g., to monitor and improve service quality) and external (e.g., to demonstrate accountability to funders and meet accreditation requirements). Optimally, an agency should be able to use the same outcome measures and the same database management system to meet both its internal and external needs. Practically, however, this is rarely a possibility, due to diverse reporting requirements of funders and accreditation agencies and lack of standardization in measures required to track similar outcomes. Some health programs have as many as 30–40 different funders, each requiring different performance measures, reporting forms, and data monitoring systems, which are often incompatible with each other. As a result, they must use different databases to track outcomes for different funders. In some HCH projects, triple data entry is not uncommon for clients with HIV infection and for those with multiple diagnoses (e.g., diabetes and substance use disorders).

Even Federal agencies within the same division require different measures of similar variables and have different reporting schedules. For example, HRSA's Bureau of Primary Health Care and HIV/AIDS Bureau require grantees to collect demographic information related to age, gender, race and ethnicity differently for the BPHC's Uniform Data Systems (UDS) report and the Cross-Act Data Report (CADR) for Ryan White (HIV services). Outcome measures required of 330(h) grantees for HRSA's performance reviews vary, depending on the HCH project's target population and the services it provides, underscoring the diversity of HCH service models.³ The Health Disparities

³ HRSA grantees receive comprehensive program reviews on a regular basis from the Office of Performance Review (OPR) and its ten regional divisions. Through systematic pre-site and on-site analysis, OPR works collaboratively with each grantee to select a set of Performance Review Measures from established HRSA program performance measures and measured based on the grantee's program goals and objectives, as identified in their grant application(s) (HRSA Performance Review Protocol Guide, 2004).

Developing Outcome Measures to Evaluate HCH Services

Collaborative PECs system requires additional data entry and reporting of key measures that are not on the UDS (January – December reporting year). Reporting requirements for Ryan White Title I (monthly reporting, March – February) differ from reporting schedules for both Ryan White Title II (quarterly reporting, July – June) and the CADR (annual reporting, January – December). Work Group members observed that none of these data sets is sufficient to meet reporting requirements for the Joint Committee on Accreditation of Healthcare Organizations (JCAHO).

Many grantees must report to all of these entities on a regular basis and scores of others as well. Standardization of data requirements by Federal grantors, in keeping with criteria used by agencies responsible for standard-setting and accreditation of health care organizations, would help to address this problem. Work group members contend that this can be achieved without requiring a one-size-fits-all approach for all HCH service models. (See further discussion of this recommendation in Section IV of this report.)

Creative solution: The Health Care for the Homeless Network in Seattle-King County, Washington, has demonstrated that encounter data can be used for UDS reporting as well as to track clinical information for outcomes measurement. In 2000, three hypotheses were posited to determine whether analysis of the data could serve to answer questions beyond demographic information. The analysis demonstrated that their data collection system for the UDS can be used to answer clinical outcome questions as well as to monitor trends.

For some HCH sites that are affiliated with Community Health Centers, using encounter data collected for UDS reports to assess outcomes can be problematic because HCH data are typically bundled with CHC data and extracting it may be difficult. Moreover, comparative outcomes for homeless CHC clients may be impossible to determine if housing status has not been noted at each encounter.

- **Tailoring outcomes information to different audiences:** Just as important as developing outcome measures for program evaluation is communicating outcomes effectively to intended audiences. Information collected by HCH projects must be meaningful and perceived as useful by many different audiences – clients, the Board, front-line staff, funders, and policymakers. Part of the challenge for administrators is obtaining sufficient outcomes information to address all of these interests and presenting it in ways that are appropriate for particular audiences.

Guidance: HRSA's Office of Performance Review recommends that grantees use the following criteria for selecting performance review measures: *good communication power* (whether the measure clearly communicates to others what you are trying to achieve), *data power* (whether the data required to measure outcomes of interest to the organization are available and reliable), and *proxy power* (whether the measure describes something central to the agency's mission (*Performance Review Protocol Guide*: <http://www.hrsa.gov/performance-review/protocolguide.htm>)). Employing these criteria in developing outcomes measures can help HCH projects assure that the data their agencies collect are meaningful to intended audiences.

- **Protecting patient confidentiality:** In collecting and reporting data from patient encounter forms or other clinical databases, health centers must protect the privacy and security of their clients' personally identifiable health information, in compliance with the Health Insurance Portability and Accountability Act (HIPAA). Although most outcomes measurement ultimately involves interpretation of aggregated data, personnel involved in the collection, entry or analysis of individual client data must be cautioned about protecting patient confidentiality. HCH projects using volunteers to perform such functions must assure proper training of these individuals and careful oversight of their activities.

4. Methodological challenges:

- **Measuring process variables that affect outcomes:** Measuring intermediate outcomes enables HCH projects to document progress toward desired outcomes that may take homeless clients longer than the average primary care recipient to attain. For example, part of demonstrating the impact of HCH services is documenting *service access* (such receipt of HIV testing) following outreach and engagement, as a step toward improved health status. *Collecting both process and outcomes data is the best approach to HCH service evaluation; one without the other can result in misinterpretation.*

But defining and quantifying process variables and interpreting intermediate outcomes can be complicated. While measuring access to medical or psychosocial services provided by HCH grantees or their subcontractors is fairly straightforward, measuring access to services provided by other agencies is more problematic, due to the lack of standard client identifiers across service systems and patient privacy constraints. Aggregating data from several service systems is also problematic for the same reasons. Lack of evidence that HCH clients are using mainstream services may not be a sign of failure, however. Successful HCH services can reduce the need for mainstream services. Moreover, if clients remain with HCH services because they prefer them to mainstream services, this can be an indicator of success.

- **Accounting for the diversity of HCH service models:** HCH grantees are diverse, having adapted to the geographic and demographic needs of homeless people in their communities. *Any systematic attempt to develop and implement standard outcome measures in more than one HCH project must take into account the diversity of HCH service models and organizational structures.* Like other health centers that receive funding under section 330 of the Public Health Service Act, HCH grantees are obligated to provide certain services, either directly or indirectly.⁴ But the range of mandatory and optional services provided by HCH projects is extensive. Some offer comprehensive primary care and behavioral

⁴ Comprehensive services required of all HCH grantees are: primary health care, outreach to inform homeless individuals of the availability of services, substance abuse services, emergency services, mental health services (direct provision or referral), case management, referral for inpatient hospitalization, and assistance in obtaining housing and establishing eligibility for other public benefits. Optional services include: restorative dental care, vision and eyeglasses, specialty care, complementary and alternative medicine, employment/job training, and respite care. (BPHC, Health Care for the Homeless Program: <http://www.bphc.hrsa.gov/Homeless/default.htm>)

Developing Outcome Measures to Evaluate HCH Services

health services on site; others refer clients elsewhere for mental health care and other specialty services; still others provide only outreach services.

What's more, HCH grantees exemplify a variety of structural models. Some are free-standing facilities, such as clinics, respite units, drop-in centers, or residential units. Others provide services in hospital-based clinics, shelters, and/or outreach locations, sometimes employing mobile units. HCH projects are linked with Migrant Health agencies, Title III-HIV grantees, and Community Health Centers. They receive oversight from various government entities, hospital systems, and solitary community-based organizations.

- **Avoiding selection bias:** It is important to differentiate service users who are chronically homeless from those who are intermittently or temporarily homeless. Some chronically homeless individuals do not avail themselves of HCH services until they get very sick. Persons who are temporarily homeless tend to have the best outcomes, report HCH providers. *Measuring service access or health status without including duration of homelessness as an explicit variable can result in misleading interpretations of outcomes data.* (See Sosin, 2002 for ways of correcting for sample selection bias when clients refuse assignment into treatment, in the case of a homelessness and substance abuse intervention.)
- **Obtaining follow-up data:** Limited opportunities for follow-up assessment are inherent in any effort to evaluate HCH services, due to the transience of homeless people. Because homelessness is a state that may change from one day to the next, monitoring outcomes for displaced individuals and families is particularly challenging. Although many HCH providers are able to establish long-term relationships with some homeless clients, a number of clients leave the area permanently or cease using services and are lost to follow-up. “The major challenge in collecting outcomes information is finding former consumers” (Culhane, 1998). Successes are more likely to be lost to follow-up than failures.

Another challenge is the impermanent nature of outcomes measured. For example, improved hemoglobin A1C or blood pressure levels at 6-month and one-year intervals may not predict continued improvement in health status, regardless of housing status. Studies suggest that formerly homeless adults who retain stable housing for as long as one year are at higher risk of becoming homeless than adults who have never experienced homelessness; but the average duration of residence in stable housing by formerly homeless individuals and families has yet to be ascertained. Thus *determining how long the follow-up period should be to indicate successful client-level or system-level outcomes can be especially problematic for HCH providers, who have difficulty obtaining even short-term follow-up assessments.*

Creative solutions: Client incentives, such as transportation assistance, snacks, clean socks, hygiene items, and meal vouchers, are recommended by HCH providers to encourage return for follow-up assessments (see HCH Clinicians' Network's *Adapting Your Practice* series: <http://www.nhchc.org/clinicalpracticeguidelines.html>). However, clients most likely to respond to such incentives are often those with fewer individual and/or structural impediments, which can result in another kind of selection bias.

- **Identifying appropriate comparison groups:** Another methodological challenge for HCH projects that are affiliated with larger agencies, such as Community Health Centers (CHCs), is extracting homeless data from mainstream data management systems for outcomes measurement. Because homeless individuals comprise a small subset of clients served by CHCs, there is little incentive for these or other mainstream providers to identify all clients' housing status consistently in collecting outcomes data. This poses an obstacle to comparing outcomes of HCH services with those of other health services received by homeless people.
- **Controlling for external variables in interpreting outcomes:** Identifying meaningful outcome measures for populations that are influenced by multiple factors is always challenging. A number of factors unrelated to program services may explain failure to attain desired health outcomes. Among them are *structural issues* – such as lack of affordable housing, limited access to nutritious food and clean water, financial barriers to medically necessary services, and no place to store or refrigerate medication. Conversely, because HCH clients are transient across service systems, interventions by unrelated agencies may positively affect clients' health outcomes (e.g., a permanent housing placement may result in better dietary control and improved hemoglobin A1C measures).

There are also a number of *individual factors* associated with homelessness – e.g., higher prevalence of cognitive impairments and behavioral health disorders – that may complicate adherence to treatment, resulting in less successful health outcomes. *External variables that are known to influence outcomes measured should be documented and factored into interpretations of outcomes data.*

Opportunities

Funders are asking for outcomes information, and HCH providers want to provide it. Despite the challenges listed above, many of them are succeeding. Methodologies used include chart reviews, patient satisfaction surveys, use of existing databases designed primarily for financial management, modification of UDS reporting tools, and off-the-shelf or custom-designed database management systems specifically intended for clinical and other outcomes monitoring. Each of these opportunities for outcomes measurement has advantages and disadvantages, briefly noted in the following summaries:

- **Chart Reviews:** One low-tech option is to conduct periodic chart reviews, selecting a random sample of HCH cases.
Advantage: Chart reviews are simpler than other kinds of outcome evaluation.
Disadvantages: Chart reviews have a higher error rate (they are very subjective) and require more staff time. Thus, they may be less meaningful and more expensive in the long-run.
- **Customer Satisfaction Surveys:** A number of HCH projects use customer satisfaction surveys as one aspect of outcomes monitoring.
Advantage: This can be a fairly straightforward way of identifying aspects of services that need improvement. Some grantees require all of their programs to respond to negative survey results by looking for ways improve them (and funding for efforts that require additional resources).

Developing Outcome Measures to Evaluate HCH Services

Disadvantages: Customer satisfaction survey results can be misleading, depending on client motives, and may not accurately reflect program strengths and weaknesses. In general, client satisfaction surveys are biased to positive results. Other measurement tools are usually needed to supplement them. In addition, many funders require that grantees administer annual customer satisfaction surveys that are specific to *their* funded service. As a result, HCH programs with multiple funding streams inundate their clientele with surveys. “Survey fatigue” can dramatically impact the reliability/accuracy of the survey results.

- **Existing databases:** Some HCH projects employ existing databases belonging to other human service agencies and non-profit organizations because of limited resources to develop their own. Other health programs must rely on databases designed primarily for billing and financial management.

Advantages: An existing database that was not designed for outcomes monitoring is the only option that some HCH projects can afford. The main advantages of this option are short-term cost savings and the opportunity to begin rudimentary tracking of client-level data (e.g., demographics, services received, diagnoses) immediately, while plans for developing more appropriate data management systems are underway.

Disadvantages: Technical problems are often encountered in using databases developed by other agencies which can't be solved without help from persons outside the agency. What's more, using database management systems that were not designed to collect information HCH providers need for outcomes measurement is cumbersome and may not sufficiently address relevant service outcomes. For example, data systems designed for UDS reporting may have limited capacity to generate individual-level data required to determine ethnic/racial disparities in particular health outcomes.

- **Off-the-Shelf Database Management Systems:** The Diabetes Electronic Management System (DEMS) and the Patient Electronic Care System (PECS) are database management systems used by participants in the Health Disparities Collaborative to track outcomes for patients with diabetes, asthma, cardiovascular diseases, depression, and cancer.

Advantages: This software is free to Collaborative participants, saving them the time and expense of developing their own database management system, and enables tracking of standardized outcome measures by multiple agencies.

Disadvantages: These database management systems require a compatible computer, which some agencies can't afford, and they consume a tremendous amount of space on the agency's information network. Moreover, some HCH projects have found the DEMS and PECS data collection systems difficult to use. Several projects discontinued participation in a Collaborative for this reason. Some projects eventually decided to use a simple spreadsheet instead, or negotiated with the Collaborative to identify measures that were more realistic and meaningful for them to track.⁵

⁵ Whether or not health programs use these data collection systems or suggested outcome measures, many have found the PDSA (plan, do, study, act) cycle promoted by the Health Disparities Collaborative to be a helpful model for using outcomes data to improve quality of care at an accelerated pace by stimulating rapid change in service delivery systems. (For a description of this Improvement Model, see: http://www.healthdisparities.net/about_models.html)

- **HCH information systems:** Several HCH grantees have developed their own databases to compare units of service provided to different homeless subpopulations (CN, 2002). Some use commercial electronic medical records (EMRs) with wireless connections to hand-held devices used for data entry in the field (e.g., HCH Boston Program, the New York Children's Health Project, and Health Care for the Homeless - Houston).

Advantages: Electronic records enable HCH providers to generate more and better individual and aggregate data about homeless patients. Comprehensive EMRs are among the most effective tools for accomplishing this. They also facilitate care coordination among multiple services and tracking of patient referrals. (If a client doesn't show up for an appointment, clinicians record this in the EMR, which triggers further outreach efforts.)

Disadvantages: EMRs have large start-up costs, in both time and money, and special expertise is required to design and implement them. They may be too expensive for homeless health care agencies to develop on their own, and can slow down service provision during the implementation phase. Nevertheless, EMRs are more cost-effective over the long term than other outcomes measurement options, users say. A number of HCH projects have benefited from both financial and technical assistance through partnerships with academic medical centers.

- **Interagency homeless information systems:** Homeless Management Information Systems (HMIS) make comparisons of units of service provided to different populations of homeless clients possible. These community databases involve non-clinical service providers and multiple agencies in collecting data about homeless clients. While the primary purpose of EMRs is to optimize the care of individual patients (by tracking client-level outcomes), the primary purpose of HMIS is to maximize the cost-effectiveness of homeless assistance services (by tracking system-level outcomes).

Advantages: Interagency databases enable tracking of homeless clients across service systems. They can be used to facilitate referrals, coordinate care, and monitor service utilization. The most sophisticated interagency database management systems feature Web-based data entry and retrieval (used by a number of HMIS). A low-tech alternative is the use of a file transfer program (FTP) to convey data contained in simple spreadsheets among agencies or service sites.

Disadvantages: HMIS may not track outcome measures that are useful to Health Care for the Homeless providers, particularly when they have not contributed to the development of locally-designed systems. Moreover, the adequacy of HMIS for complex outcomes measurement (e.g., determination of program efficacy) has yet to be demonstrated. Limited Internet access or incompatible data systems may prevent some health programs from using Web-based systems. An informal survey of HCH grantees conducted in 2003 indicated that local HMIS are often incompatible with existing HCH data systems, and that participation in HMIS requires, at a minimum, double entry of data into parallel data systems. Even if HCH projects have the opportunity to participate in a HMIS, some choose not to do so, preferring the security of electronic medical records, particularly in measuring clinical outcomes.

HOW FAR WE'VE COME

Much has happened since the Working Group on Homeless Health Outcomes articulated general strategies for the development of outcome measures to assure accountability and comparability of HCH services in 1996, and 20 HCH grantees launched 18-month pilot studies that demonstrated the capacity of homeless health programs to monitor outcomes of their own choosing. This section of the report describes national initiatives and local efforts during the past decade that have dramatically increased the number of HCH projects engaged in monitoring service outcomes and have enhanced the interest of homeless service providers in using this information to improve quality of care.

National Initiatives

Two national initiatives in particular have stimulated HCH projects to increase data collection and outcomes monitoring activities during the past decade:

- **Health Disparities Collaborative:** In 1998, the Health Resources and Services Administration initiated the Health Disparities Collaborative, which began to standardize outcome measures as part of an effort to eliminate health discrepancies between medically underserved populations and the general population. The Collaborative focused on promoting rapid change in health centers, including HCH projects, and on demonstrating improvements in health outcomes for patients with chronic diseases. Outcome measures used were derived from evidence-based medicine by panels of clinical experts in chronic disease management.

The first Collaborative focused on diabetes management (1998). Additional Collaboratives were developed to improve care management for individuals with asthma and depression (2000), cardiovascular diseases (2001), and cancer (2004). All five of these Collaboratives now operate concurrently; some health centers participate in more than one. Although outcomes data collected by participating health centers was not initially intended or used for research-level analysis, simple outcomes measurement (showing improvement in client-level outcomes over time) was encouraged. HRSA expects each health center grantee to participate in at least one Collaborative.

Between 1998 and 2005, 107 Health Care for the Homeless projects (62 percent of all HCH grantees) participated in a Health Disparities Collaborative, monitoring clinical interventions and health outcomes for homeless clients with diabetes (89 projects), cardiovascular diseases (26 projects), depression (24 projects), asthma (16 projects), and cancer (5 projects). A number of these health centers have participated in more than one of the chronic disease Collaboratives.

- **Chronic Homelessness Initiative:** The Department of Housing and Urban Development (HUD) requires participation in a community-based Homeless Management Information System (HMIS) as a condition for funding under the HUD-McKinney-Vento programs, as part of the Federal initiative to

end chronic homelessness.⁶ This initiative was the result of a Congressional directive in the FY 2001 Appropriations Act, requiring HUD to “...collect data on the extent of homelessness in America as well as the effectiveness of the McKinney homeless assistance programs ...” (CN, 2002). As a result, HUD Continuum-of-Care participants around the country, including Federally Qualified Health Centers, created databases to measure systems-level outcomes, primarily to demonstrate the cost-effectiveness of homeless services provided (in part) with Federal dollars.

A number of HCH grantees include HUD-McKinney-Vento among their funding sources. Current information about the total number and percentage of HCH grantees participating in a HUD Continuum-of-Care HMIS is not available. Concerns about patient confidentiality, incompatible data systems, and the extent to which outcomes could be attributable to HCH services have made a number of Health Care for the Homeless providers reluctant to devote the time and resources necessary to participate in their community’s HMIS. Nevertheless, some HCH projects (e.g., in Chattanooga, Des Moines, Denver, and Seattle) are contributing to these efforts, as partners in community and state initiatives to end chronic homelessness by increasing access to permanent supportive housing.⁷

Local Efforts

Over two-thirds of health centers serving homeless people are already participating in data collection and outcomes monitoring to meet requirements for JCAHO accreditation or participation in a Health Disparities Collaborative.⁸ Many of these health programs are tracking client-level and system-level outcomes in creative ways with few resources. Because they may not employ the same outcome measures or standardized data collection tools, however, it is hard to compare or aggregate data collected by the various projects. HCH grantees could do an even better job and more programs could participate in similar efforts with technical and financial help (specified in Section IV of this report). Promising examples of these local efforts are described below:

Measuring client-level outcomes

- **Outreach:** Health Care for the Homeless–Houston (HHH) developed an EMR with assistance from Baylor College of Medicine and the University of Texas Medical School at Houston to improve outreach and engagement with homeless people who do not seek care in clinics or emergency rooms.

⁶ According to the Federal definition, a chronically homeless person is “an unaccompanied homeless individual with a disabling condition who has either been continuously homeless for a year or more OR has had at least four (4) episodes of homelessness in the past three (3) years” (Collaborative Initiative to Help End Chronic Homelessness, notice of funding announcement (NOFA), 2000).

⁷ In the summer of 2003, the National Health Care for the Homeless Council conducted a survey of HCH grantees or sub-contractors among its organizational members to which one-third of them responded. 95% of respondents said they received HUD funding through their local Continuum of Care. Only 14% were actually participating in a HMIS at that time, although 59% said they were involved in planning one.

⁸ Over 70 percent of HCH projects that are affiliated with Community Health Centers (70 out of 97) had JCAHO accreditation, and 62 percent of HCH grantees (107 out of 172) had participated in at least one Health Disparities Collaborative, as of April 2005.

Developing Outcome Measures to Evaluate HCH Services

HHH currently uses an Internet-based EMR that links 3 clinics with a single patient record, which enables tracking of services provided to individual clients across service sites. They also use a “mini-EMR,” specially designed for outreach clinicians, who use IPAQs (PDAs) to collect client information that is downloaded periodically onto an Access spreadsheet. The EMR is used to document patient goals, evaluate client involvement in goal setting, monitor progress toward meeting goals, and identify barriers to goal achievement. HHH is part of a collaborative research program with HCH projects in Pittsburgh and Boston to evaluate the efficacy of Goal-Negotiated Care. (See CN, April 2002 for more information.)

- **Engagement:** Seattle-King County Public Health Department’s Health Care for the Homeless Network developed an outreach and service continuum tool in 1999, which they have used to measure the impact of relationship building (the Relational Outreach and Engagement model of care) on client stability and independence. Outcome measures (relationship, financial, health/treatment, social support network, and residential) are rated on a 6-point scale. The tool specifies a continuum of client-based outcomes related to relationship building (approach, companionship, partnership, mutuality, stability, and independence) within each domain. Service Continuum assessments are conducted at the initial encounter and at 3-month and 6-month follow-up encounters, where possible. The tool is also useful in measuring service-level outcomes for long-term clients. (The Health Care for the Homeless Network’s Service Continuum tool and guidance for using it are included in Appendix 2. For more information, see CN, June 1999 and Kraybill, 2002.)
- **Chronic disease management:** The Crusaders Central Clinic Association HCH project in Rockford, Illinois, developed a chronic disease model of care based on a simplified version of the Health Disparities Collaborative, selecting outcome measures for hypertension, diabetes, hepatitis C, substance abuse, and asthma. A nurse and a case manager are assigned to each disease management program to provide outreach services, identify clients, eliminate barriers to care, and monitor clients’ progress. Contracts are used to promote collaboration between providers and clients in designing and maximizing adherence to the plan of care. Client progress is discussed and clients requiring extra attention to improve adherence are identified at monthly staff meetings. Chart audits are conducted 3 times annually to assess clinical outcomes in each disease management program.

Outcome Measures used by Crusaders Central Clinic Association HCH program, Rockford, Illinois

Hypertension	Diabetes	Hepatitis C	Substance Abuse	Asthma
<ul style="list-style-type: none"> • Blood pressure level 	<ul style="list-style-type: none"> • HbA1c level • Eye exams • Foot exams 	<ul style="list-style-type: none"> • Liver function tests • HIV testing • Hepatitis A & B vaccines 	<ul style="list-style-type: none"> • Liver function tests • Testing for hepatitis B & C; • Vitamin regimen • Patient education • Referral for treatment/therapy 	<ul style="list-style-type: none"> • Severity assessment • anti-inflammatory medication for persistent asthma; • Influenza & pneumococcal vaccines • Patient education

- **Behavioral change:** Health Care for the Homeless, Inc. in Baltimore, Maryland (HCHMD), has an HIV prevention project – the Prevention Outreach Education Team (POET) – which educates homeless clients (including persons with addictions) about HIV risks and how to reduce them. The

State AIDS administration worked with this free-standing HCH project to develop realistic outcome measures for homeless people and track behavioral change resulting from this intervention. Service utilization, viral load, CD4 count, and access to highly active antiretroviral therapy (HAART) are outcome measures used for clients with HIV. This information is obtained from an HIV testing database and encounter data (see outcomes graph of service utilization by an HIV+ client in Appendix 5). Other HCH outcomes data are derived from a general encounter form and entered into a database. Data fields include: service utilization, interventions received, diagnosis, housing status, insurance status, and emergency room usage. The automated Addiction Severity Index (ASI) is used for clients with addictions.⁹ HCHMD clinicians stress the importance of using a “continuum” of outcomes and measuring intermediate outcomes, such as engagement of homeless people in primary care (see CN, February 2001 for more information about measuring intermediate outcomes).

- **Treatment efficacy:** Boston Health Care for the Homeless Program (BHCHP) uses an electronic medical record (EMR) established by Boston Medical Center that links eight neighborhood health centers. BHCHP analyzed EMR data to investigate whether highly-active antiretroviral therapy (HAART) for HIV infection is as effective for persons who are homeless as for those who are housed, and found that it was (CN, April 2002).

Measuring system-level outcomes

- **Quality of homeless services:** Colorado Coalition for the Homeless (CCH) in Denver is developing a systematic outcomes measurement process, to be implemented in 28 different programs directed by the HCH project. As the first component of a three-year action plan for outcome evaluation and quality improvement (2003–2005), they developed a series of *multi-service consumer outcome scales* to be used as tools for case management and quality improvement (see Appendix 1). The scales indicate level of client functioning in each of 14 domains: activities of daily living, legal status, quality of life, housing status, employment/school enrollment, access to benefits and entitlements, physical health, mental health, substance use, social resources, basic needs, family communication, youth risk, and child care. Poor functioning in each of these areas correlates with risk for chronic homelessness.

The CCH outcomes monitoring system was designed to track changes in client functioning in each of these domains, before and after receiving HCH services, which are expected to improve client functioning and reduce risk for chronic homelessness. They also monitor clinical outcomes related to diabetes care, asthma care, smoking cessation, and client satisfaction as elements of their quality improvement program. Obtaining follow-up assessments and determining the impact of services on clients for whom a baseline assessment was never done are among the challenges that HCH providers encounter in implementing this system.

⁹ The automated ASI provides a semi-structured format for gathering client information in seven life areas: medical, employment, drug/alcohol, legal, family history, family/social relationships and psychiatric. (For more information, go to: <http://www.accurateassessments.com/addictions.htm>)

Developing Outcome Measures to Evaluate HCH Services

Four HCH sub-grantees in Missoula, Helena, Boise, and Butte, Montana, are planning an *inter-agency data tracking system* for HCH outcomes measurement. Each of these HCH projects is connected to a community health center. Currently, all HCH data collected for quality studies are integrated with CHC data, making it difficult, if not impossible, to monitor homeless-specific outcomes. The HCH project directors met recently with the statewide HCH coordinator to develop plans for outcomes measurement. They plan to develop measures to track financial, social, and health service outcomes, and have developed an outcomes measurement scale to be field tested by these HCH projects (see Appendix 4.) They have submitted a grant proposal to fund a shared information system, which could be expanded to include other communities in Montana and might be replicable in other geographic areas as well.

- **Cost-effectiveness of homeless services:**

CCH also participates in Denver's Housing First Collaborative, funded by a Chronic Homelessness Initiative grant. Their local Continuum of Care is currently tracking costs associated with days spent in jail, utilization of homeless assistance services, and client outcomes, to determine whether there is a relationship between service use and decreased incarceration.¹⁰ This entails *monitoring the number of days that clients spend in prison or jail before and after receiving HCH services*. The ultimate goal is to determine the cost-effectiveness of homeless services.

The largest obstacle is financial – finding sufficient resources to support data collection (e.g., contacting all local jails and prisons, faxing consent forms and releases of information back and forth). Another challenge is methodological – interpreting data collected to determine the impact of homeless services (including permanent supportive housing) on incarceration. For example, they found that clients living on the street are more vulnerable to arrest than those living in shelters or permanent housing. But having a permanent address can also make them easier to locate for outstanding warrants. Moreover, living in permanent housing increases the likelihood that persons with uncontrolled mental illness or substance use disorders will be reported by neighbors to police, often resulting in hospitalization or incarceration.

The Harris County Hospital District in Houston is assessing the financial impact of services provided to homeless individuals, including projected loss of income and *cost to the county secondary to days spent in the hospital, and number of emergency room visits versus outpatient visits*. This information is useful both clinically and for UDS reports. They have found that the cost per outpatient visit is almost always higher for HCH projects than for CHCs because of the greater complexity and acuity of health problems experienced by homeless individuals. HCH providers recommend that outcome measures be selected to reflect this complexity and to highlight the more extensive health care needs of their clients. This requires a clear understanding of intermediate (process) measures to document progress toward desired outcomes, and making sure that outcomes data are interpreted correctly.

¹⁰ This effort was inspired by research conducted in New York City, which found that people with severe mental illnesses used over \$40,000 per person per year in public services, including shelters, hospitals, and jails. In contrast, permanent supportive housing reduced shelter use, hospitalization, and incarceration, at a net cost \$20,000 per person per year, including rent and clinical services provided by an intensive case management team. (Culhane, et al., 2002, as cited in CN, December 2003)

Some advocates are anxious about possible unintended consequences of conducting cost analyses of service use by homeless people, fearing that the cost of effective services may turn out to be more than funders want to support (O’Connell, 1999). However, recent research findings show that supportive services provided in conjunction with permanent housing improve residential stability for formerly homeless individuals and reduce their utilization of the most expensive public services (shelters, hospitals, jails, prisons), resulting in an overall reduction of public outlays (CN, December 2003). Work group members acknowledged that the Housing First movement is evidence that HCH providers should look at more than measuring outcomes of health services.¹¹

- **Productivity of HCH providers:** In 2001–2002, the Region IX Health Care for the Homeless Advisory Committee conducted an HCH Pilot Project to increase the capacity of the Bureau of Primary Health Care’s Uniform Data Systems (UDS) to reflect the complexity and intensity of HCH services delivered to homeless people, to improve the accuracy of productivity measures required of 330 grantees. The Committee contended that UDS reports do not reflect the depth or breadth of services or the intensity of care provided by HCH programs, and recommended that data elements be added to the UDS report to represent more completely the services provided by HCH grantees. The goals of this initiative were “to enable more realistic assessments of HCH project productivity, staff accountability and client needs, and to provide more accurate measures of national HCH program effectiveness” (Gray, 2003).

The HCH Pilot Project developed *UDS add-on tables* – data collection tools which include measures to assess different levels of care (similar to the Relative Value Units (RVU) system employed by the Medicare program), in 7 categories of service considered intrinsic to the HCH model of care: case management, mental health, substance abuse, and health education, medical services, nursing services, and outreach. The proposed data collection tools and process were field tested by 12 HCH projects in California, Arizona, and Nevada, which are now using them routinely. (Some of these tools and measures are included in Appendix 3.)

¹¹ Housing First is an intervention to end chronic homelessness by assuring access to permanent housing with supportive health and social services (CN, December 2003). Outcome studies examining the cost-effectiveness of Housing First initiatives have demonstrated declines in both hospitalization and homelessness of individuals with psychiatric disabilities following immediate access to independent housing that did not require psychiatric treatment or sobriety (see also Gulcur et al., 2003).

WHERE DO WE WANT TO GO?

The Work Group articulated a clear vision of the next steps HCH service providers should take to expand and enhance current outcome measurement efforts. While reaffirming a number of the broad strategic goals proposed in 1996, they focused on specific interventions, grounded in the experience of programs that have been developing and implementing outcome measures since then. Their recommendations are summarized in this section.

Comprehensive Assessment of HCH Services

A more systematic approach to outcomes measurement by HCH projects is needed than has been accomplished to date. HCH providers should track access to health services and measure the effectiveness of services received. A continuum of standardized HCH outcome measures should be developed to accomplish this, from which health centers could select one or more client-level and system-level measures that are appropriate to their service structure and data management capacity.

1. **Client-level outcomes:** Measure health outcomes and service access of clients with chronic health problems and mental/behavioral health disorders.

A good place to start is to use outcome measures already developed by health professionals for five chronic conditions selected by the Health Disparities Collaborative: diabetes, asthma, cardiovascular disease, depression, and cancer. The primary advantages of using these measures are that they have been validated and most HCH grantees are already using one or more of them to monitor health outcomes of clients with these conditions.

- **Population-based outcomes:** Stratify outcome measures for ethnic/racial minorities and different age cohorts (e.g., single adults, adults with families, dependent children, unattached youth) across all HCH services, not just clinical services. Consideration should also be given to the type of site in which the service was delivered. For instance, Care for the Homeless (New York City) has found through analyses of its data that single adults seen in sites that serve people who live on the streets (e.g., soup kitchens, drop-in centers) have higher rates of morbidity than do single adults residing in shelters.
- **Intermediate outcomes:** HCH providers should look at process variables that ultimately lead to desired health outcomes, including service access. (Measures recommended by the HCH UDS Pilot Project (Gray, 2003) may be useful to show comparative outcomes with variable service provision.)

Intermediate outcome measures might include:

- applied/qualified for Medicaid/SSI/SSDI/WIC/food stamps;
- receipt of outreach/case management services;
- connection with a primary care provider;
- receipt of relevant examinations/laboratory tests;

- client participation in goal setting/development of the plan of care;
- referral to/receipt of specialty services;
- on waiting list for Section 8 housing or Shelter Plus Care;
- receipt of respite care/supportive housing.

Additional intermediate outcome measures recommended for clients with behavioral health disorders might include:

- involvement with a PATH program;
 - connection with a psychiatrist or case manager or therapist;
 - receipt of appropriate psychotropic medication(s)/stabilization;
 - receipt of detoxification/treatment and/or clean and sober at 1-year follow-up.
- **Long-term outcomes:** Recognize that long-term outcomes of HCH services (such as improved health status or quality of life, stable housing or employment) are more difficult to measure than short-term outcomes. Although these variables fluctuate for all populations, they are less permanent for individuals who have experienced homelessness than for those who have not. Thus it is important to determine at what intervals such outcomes should be measured and to think carefully about how that can be accomplished.

Long-term outcome measures might include:

- residing in transitional/permanent supportive housing for >6 months;
- residing in rental housing for >6 months;
- employment for >6 months;
- improvement in health status from baseline to 6 months;
- improvement in quality of life from baseline to 6 months.

Several strategies have been used to measure the impact of HCH services on *quality of life*. Global functioning scales that may be used for this purpose include:

- The **SF-36** and abbreviated versions of this 36-item survey of health status (the SF-12 and the SF-8) assess patients' perceptions of their general health and well-being (see <http://www.sf36.org/tools/sf8.shtml> for more information).¹² The SF-36 or shorter forms of this survey have been used in several studies assessing health status of homeless populations (see Riley et al, 2003; Sullivan et al, 2001; and Weinreb et al, 1998). The SF-12 was also used in the SAMHSA Homeless Families Initiative cross-site evaluation of eight model interventions to assist homeless mothers with substance abuse and/or mental health disorders.
- The **Global Assessment of Functioning (GAF) Scale** is a broad, subjective/observational tool that measures functional status based on client self-report, using criteria from the Diagnostic and

¹² The SF-36, originally developed for the 1989 Medical Outcomes Study, uses a multi-item scale to assess 8 health concepts: 1) limitations in physical activities because of health problems; 2) limitations in social activities because of physical or emotional problems; 3) limitations in usual role activities because of physical health problems; 4) bodily pain; 5) general mental health (psychological distress and well-being); 6) limitations in usual role activities because of emotional problems; 7) vitality (energy and fatigue); and 8) general health perceptions. The survey was designed for self-administration by persons aged 14 years and older, and for administration by a trained interviewer, in person or by telephone.

Developing Outcome Measures to Evaluate HCH Services

Statistical Manual of Mental Illness (DSM-TR).¹³ The GAF is designed for clinician raters and requires knowledge of the patient's clinical status over substantial periods (Sullivan et al, 2001). Health Care for the Homeless-Houston implemented this instrument 18 months ago and found that it was not useful to track functional status in their homeless clients because it didn't provide sufficient detail about the reasons for their low functionality (80 percent of their clients automatically fell within the 50 percent-or-below range) and how to improve it (e.g., by determining appropriate referrals). Subsequently, HHH clinicians created a more sensitive instrument, the Health Home Assessment Tool (HHAT), which measures levels of functionality in health status, employment, housing, and extent of substance use in homeless adults. The instrument is currently being pilot-tested with the HHH client population.

2. **System-level outcomes:** Evaluate the impact of each HCH service utilized on access to other health services, housing, and employment.

Focus especially on aspects of services that are unique to or characteristic of Health Care for the Homeless, such as:

- **Outreach & engagement:** Track access to primary care and behavioral health care following outreach. (See Cunningham, 2005 for an example of outcomes measurement to evaluate a medical outreach program for homeless people with HIV infection.)
- **Comprehensive services:** Document access to appropriate treatment, housing, income support, employment, education, etc., for clients receiving HCH services. Track utilization of emergency, in-patient, and out-patient hospital services by HCH clients.
- **Client involvement:** Establish goals on an individual basis with clients. Look at how successful they were at accomplishing their goals. This requires ongoing measurement of task accomplishment following task identification by the client, in collaboration with clinicians. (HCH projects in Boston, Pittsburgh, and Houston are using outcomes measurement to evaluate the effectiveness of Goal-Negotiated Care, as described in CN, 2002.)

3. **Evaluating service efficacy:** For many grantees, a convenient comparison group would be clients served by Community Health Centers who are homeless but not receiving HCH services, if distinct populations with comparable housing status can be identified. *The Health Disparities Collaborative could be a valuable resource for comparison studies of homeless service recipients, if all participating health centers consistently reported the housing status of clients included in outcomes monitoring.* HRSA grantees participating in the Health Disparities Collaborative are not yet distinguishing outcomes of homeless clients from those of other clients. They should be encouraged to do so. Moreover, outcomes data submitted by HCH grantees are aggregated with and cannot be distinguished from data submitted by other 330 grantees. *Routine specification of housing status by all 330 grantees would enable evaluation of the efficacy of services provided to homeless individuals as a basis for quality improvement efforts.*

¹³ Developed by the American Psychiatric Association, the GAF is used by social workers, LCSW, Psychologists, Psychiatrists and Licensed Professional Counselors. This tool is not appropriate for children 3 years of age or younger.

Meaningful Data Collection & Interpretation

For outcomes measurement to be given a high priority by Health Care for the Homeless practitioners, the outcomes measured must be perceived as meaningful and useful. Otherwise, data collection and interpretation are considered “busywork” and given a lower priority. The Work Group recommended the following elements of a successful outcomes measurement program:

- **Staff participation:** The entire agency should be involved in data collection for outcomes measurement. To ensure that all staff understand what outcomes mean, they should also be involved in interpreting and explaining data related to the services they provide. For example, all clinical teams participate in revising the encounter form at Health Care for the Homeless, Baltimore. Each team is asked, “What do you *have* to track?” and “What do you *want* to track?”
- **Client participation:** Involvement of clients in selecting outcomes to be measured and in identifying issues that are likely to interfere with attaining desired outcomes can reinforce their interest in working with staff to develop a plan of care to which they can adhere. Economical use of customer satisfaction surveys (i.e., taking care to avoid “survey fatigue”) can provide an opportunity for clients to participate in quality improvement activities. Responding to negative survey results by making tangible improvements in HCH services can reinforce therapeutic relationships and provide incentive to return for follow-up, which is important for outcomes monitoring.
- **Data collection methodologies:** In designing data collection methods, agencies should consider the most effective way(s) to get information and document change in outcomes over time – e.g., point-in-time versus longitudinal data collection (at baseline and a specified number of days/ months following treatment). It’s usually harder to capture longitudinal data with homeless clients than with domiciled clients because follow-up is so unpredictable. HCH projects must enter data at almost every encounter, rather than at predictable intervals. Information gathering that does not involve face-to-face encounters (if feasible) may be useful – e.g., communication by telephone and/or e-mail with clinicians who provided follow-up care and with clients who have access to a telephone or electronic communications. Whatever data sources and information management systems a health program selects, the process used to monitor service outcomes should be as simple as possible, advise Health Care for the Homeless providers (CN, Feb. 2001).
- **Differentiating clients by severity level:** HCH projects should look at service utilization by clients with different levels of problem severity (e.g., by chronicity of homelessness, acuity/complexity of illness, and/or other severity criteria). The Consumer Outcome Scales developed by Colorado Coalition for the Homeless provide a useful model (see Appendix 1). Agencies that only provide outreach might need different measures. To control for the fact that outcome expectations are different for different clients, the CCH scales could be used to create a *problem severity index* (e.g., scores of 5 and above on all scales would indicate significant severity). Another alternative would be to use a *point-in-*

Developing Outcome Measures to Evaluate HCH Services

time survey specifying severity indicators, such as number of years homeless, trauma history, substance abuse history, history of mental illness, etc. Standard clinical acuity scales would have to be adapted for this purpose so that homeless clients wouldn't consistently score extremely low (in comparison to the average patient, for whom such scales were designed), regardless of progress made toward desired outcomes.

- **Differentiating HCH service models:** In tracking HCH outcomes across service sites, agencies should also distinguish types of HCH service models used – e.g., urban versus rural, resource rich or poor, new start versus well established; by staff size, stand-alone or connected to a CHC; and by percentage of clients with health insurance. All of these factors are significant in determining the feasibility of collecting outcomes data. Work Group members recommended validating an outcome scale (such as the CCH Consumer Outcome Scales) to develop a uniform outcome scale that could be used for all homeless clients across HCH sites, perhaps adding a scale to measure project resources, so that relationships between HCH resources and outcomes could be measured. *Standard outcome measures should not be used for all health centers serving homeless persons unless outcomes are explicitly linked to resources*, they warned. Projects offering only outreach services might use different increments to measure engagement. For example, the Seattle-King County Health Care for the Homeless Network's Service Continuum tool specifies different levels of relationship building (a proxy for engagement), related to a continuum of client-based outcomes (see Appendix 2).
- **Measuring productivity:** Process measures enable HCH providers to assess productivity. Specifying a *universal service unit* for HCH projects would be complicated but not impossible. Colorado Coalition for the Homeless uses the number and duration of encounters to measure productivity (0–30 min, 30–60 min, 60 min+). This is also the approach used by the Region IX UDS Pilot Project (See Gray, 2003). But *productivity measures are meaningful only if they are linked to quality improvements*. Failure to distinguish processes (services provided) from outcomes (results of services) is “like confusing distance flown for the number of times a bird flaps its wings.” Ideally, health programs would like to have “less wing flapping and more flying.”
- **Evaluating service quality:** Outcome measurement is critical to evaluating and demonstrating the quality of HCH services. Health centers should be able to describe different types of project capacities, however, so that even small agencies with few services can demonstrate their value and won't be inappropriately compared to more comprehensive services by larger agencies with richer resources. *Health Care for the Homeless projects should be able to demonstrate what they do well, regardless of how many services they provide*. Collecting both process and outcomes data may be the best approach to comparative evaluation of HCH services. One without the other leads to misinterpretation.

Work group members recommended defining the service continuum both *horizontally* (the range of services available within a given program, such as outreach, primary care, mental health, etc.) and *vertically*, in relation to the range of services available in the larger community (e.g., affordable housing, insurance options, shelters, soup kitchens, specialty care, etc.). A Health Care for the Homeless project within a service-poor community may have a different capacity to attain desired outcomes than a

similar HCH project seated in a service-rich community. Further, the levels of problem severity experienced by clients should be a part of the equation. Outcomes for chronically homeless, mentally ill clients are likely to look different from outcomes of clients with histories of brief, episodic periods of homelessness.

Outcomes-Driven Program Design & Service Provision

Using outcomes evaluation to drive service provision requires an organizational “culture shift” from practices based on individual experience to evidence-based practices informed by the experience of many clinicians and clients over time. The database is the tool that makes this possible. It is most important that staff see the value in collecting outcomes data and utilize data appropriately. This entails proper staff training and reporting outcomes not just to funders, but to staff, so that service providers can see what they did, what worked, and what did not.

For example, Health Care for the Homeless, Baltimore, issues monthly performance improvement reports to all staff, who participate in discussions about other data that should be collected. These discussions are being used as a catalyst for the development of an electronic medical record. Information sharing and discussion reinforces the culture shift, from top to bottom and from bottom to top. Board members with expertise in outcomes evaluation can also reinforce this process.

WHAT HELP DO WE NEED TO GET THERE?

HCH projects need help with both funding and expertise to support the infrastructure, database development, and data management required to realize goals specified in the previous section – comprehensive assessment of HCH services, meaningful data collection & interpretation, and outcomes-driven program design & service provision. This section specifies the assistance that HCH grantees need to accomplish outcomes measurement and program evaluation more efficiently and effectively.

Standardization of Performance Measures

HCH providers report a growing need to minimize administrative complexity by standardizing outcome measures, without requiring a one-size-fits-all approach for all HCH service models. Standardization of data requirements by all Federal grantors, in keeping with criteria used by agencies responsible for standard-setting and accreditation of health care organizations, would be an important first step in achieving this.

Because it is critical to monitor service outcomes, not only to demonstrate accountability to funders, but as a basis for program improvement, the Work Group recommended developing *a standard “menu” of performance measures, validated by homeless service providers, from which each Health Care for the Homeless project could select one or more to implement* (similar to the strategy used by the Health Disparities Collaborative and HRSA’s OPR process). This could potentially enable outcomes data from various HCH projects to be aggregated in a meaningful way. Data fields should be standard, even if information systems are not.

Targeted Funding for Outcomes-based Program Evaluation

- **Meeting infrastructure needs:** Computer hardware and software remain basic needs that some agencies find difficult to meet. Some HCH sites are using “closed systems” (computer systems that aren’t linked to others), which can limit data sharing among multiple service sites within one agency and with other agencies that provide homeless assistance services provided in the same community. Expenditures for adequate database management systems in addition to services are beyond the financial capacity of many smaller health programs.

Optimally, *there should be a targeted source of Federal funding to help grantees with the cost of infrastructure* – computers, hardware, software, creation of a database, and personnel to maintain it. Even small funding opportunities are welcomed by HCH providers, many of which are struggling to balance outcomes measurement with service provision, in order to enhance program evaluation and quality improvement. Although some HCH projects have succeeded in obtaining funding that provided “seed money” for their outcome improvement program, sustaining it can be very challenging. For that reason, an ongoing source of public funding for program evaluation is needed.

- **Projecting the likely cost of outcomes monitoring and evaluation:** Estimating the cost of creating and maintaining outcome measurement systems is challenging. HCH budgets typically have no line item for evaluation, and program administrators don't write actual evaluation costs into their grant proposals because allowable expenditures for evaluation under most grants are unrealistically low. (For example, HCH, Baltimore received a three-year, \$1.3 million HUD grant that allowed only \$50,000 for evaluation during the entire 3 yrs. Actual expenditures for evaluation to meet project requirements far exceeded that amount.) Work Group members proposed the following strategies for estimating evaluation costs:

Assessing intake process costs: Perhaps the most expensive aspect of outcomes measurement is the “person power” needed to accomplish it. Data collection is a regular part of the client interview process in many HCH projects. Providers are asked to collect information they wouldn't normally collect. Clinical time, documentation time, data entry time, data crunching time, report generation time – all are parts of staff time that should be assessed to arrive at a cost estimate for labor alone.

Estimating percentage of budget: Grantors ask for the percentage of funding to be used for evaluation. Some HCH projects estimate that minimally, five percent of the agency's budget should be devoted to outcomes evaluation, not including hardware and software – only person power (i.e., all staff time required for the evaluation effort).

Agency-Based Technical Assistance & Training

- **Expertise needed:** HCH projects need technical assistance in developing and maintaining database management systems, provided directly or made available through funds to collaborate with universities or other partners. Many projects need to borrow expertise. Database developers are critical. The HCH Respite Pilot Project¹⁴ found that there is also a need for onsite technical expertise to help HCH providers utilize the database, once it is developed. But using outside experts to do it is not optimal, they warn.
- **Federal partnerships:** Technical assistance might be provided through train-the-trainer sessions sponsored by Federal agencies or Web-based training opportunities.

Train-the-trainer model: HRSA agencies could work collaboratively to provide technical assistance to HCH projects to facilitate outcomes measurement. Technical assistance is needed to enable existing HCH staff to provide leadership and training for other staff, thereby increasing the capacity of their workforce.

Web-based training: The HIV-AIDS Bureau has created a large training collaborative for Ryan White grantees. Training is available through a Web-based center of excellence that busy clinicians can use at their convenience. This might be a useful model for HCH projects engaged in outcomes measurement.

¹⁴ In May 2000, the Bureau of Primary Health Care provided grants to 10 HCH grantees to support development and expansion of medical recuperative care services (“respite care”) for homeless people. Evaluation of the HCH Respite Pilot Project is being conducted by the National HCH Council, which monitors and analyzes data collected from the programs.

Multi-Site Pilot Project

The HCH Outcomes Work Group recommends a pilot program in 10–16 sites to replicate successful outcome measures currently used by HCH projects. A multi-site pilot project would be more informative than a single-site project, allowing for a representative sample of HCH grantees and the various conditions under which they conduct outcomes measurement.

Despite the challenges noted in the first section of this report, the Work Group believes it is possible to conduct a fruitful multi-site project if the following pre-requisites are met:

- Comparison of similar homeless populations with respect to duration of homelessness, prevalence of disease, and other relevant demographic variables;
- Comparison of similar service sites and types of services received;
- Documentation of external variables likely to affect measured outcomes, to preclude misinterpretation of outcomes data;
- Clear specification of well-defined intermediate and long-term outcomes to be measured;
- Use of valid and reliable scales by all sites and clinicians involved in the pilot project;
- Development of systematic ways in which all data are collected, aggregated, and analyzed.

Here some general guidelines for such a pilot project:

- **Pilot sites would agree to use the same outcome measures and data collection forms for a specified period of time** (e.g., 18 months). This would ensure that participants use the same definitions, common data fields, and common or compatible databases. Different sets of outcome measures might be specified that could be used by HCH projects with similar characteristics – e.g., rural or urban, large or small, stand-alone or CHC-affiliated. Participants would be required to track a core set of outcomes, but should be encouraged to track additional outcomes using standardized measures (similar to the Health Disparities Collaboratives).
- **Client-level and system-level measures would be selected to track both intermediate (process) and long-term outcomes.** Process measures might include the number and type of outreach encounters, number of client visits, and services delivered. Demographic information would be collected, similar to that required for UDS reporting, supplemented by the type of service delivery site and the size, structure, and resources of each participating agency.
- **An individual or agency would be designated to aggregate data collected by the pilot sites and evaluate outcomes.** *Caveat:* Although it might be optimal to employ a single set of valid and reliable instruments to measure outcomes and require data entry into a single, flexible, password-protected, online management information system, this might be impractical for many HCH grantees. Requiring that level of standardization and technical sophistication would be likely to result in a less representative sample of Health Care for the Homeless services.

Conclusion

In conclusion, the HCH Outcomes Work Group reiterates the importance of tracking measurable outcomes in a more systematic and comprehensive way than has yet been accomplished, to evaluate the impact of services provided by Health Care for the Homeless grantees and to improve their homeless assistance programs. After carefully examining the challenges and opportunities that homeless service providers have encountered in their efforts to engage in systematic outcomes monitoring, we affirm the feasibility of developing a continuum of standardized HCH outcome measures which could be effectively used by health centers with diverse structures, services, clinical settings, and resources – with appropriate technical and financial assistance and the participation of a representative group of HCH grantees.

The ultimate purpose of this endeavor would be to engage all HCH grantees in meaningful program evaluation to improve the quality of homeless assistance services, and to demonstrate more effectively the value of their work to funders, public policymakers, and the general public. Without the means to evaluate the impact of their services more systematically, HCH practices will continue to be based primarily on the experiences of individual clinicians and clients, limiting quality improvement based on more objective information. *Appropriate outcomes measurement by all grantees would enable the development of evidence-based practices that are informed by the experience of many HCH clinicians and clients over time.*

We invite our Federal partners and other knowledgeable parties to contribute their insights into the best ways to accomplish this goal.

Bibliography

1. Abravanel M. *Surveying Clients About Outcomes*. Washington, DC: The Urban Institute, 2003; 58 pages: http://www.urban.org/UploadedPDF/310840_surveying_clients.pdf
2. Bureau of Primary Health Care (BPHC). The Working Group on Homeless Health Outcomes Meeting Proceedings, June 1996 (Conference summary: 30 pages). Available from: National Clearinghouse for Primary Care Information, 2070 Chain Bridge Rd., Suite 450, Vienna, VA 22182; (800) 400-2742.
3. BPHC. PAL 99-07: *Health Care for the Homeless Outcome Measures – A Chronicle of Twenty Pilot Studies*, October 1998; 146 pages: <http://www.bphc.hrsa.gov/pinspals/pals.htm>
4. BPHC. Section 330 Grantees, Uniform Data System (UDS): Calendar Year 2003 National Rollup Report: <http://www.bphc.hrsa.gov/uds/data.htm>
5. Clark C, Rich A. Outcomes of homeless adults with mental illness in a housing program and in case management only; *Psychiatric Services* 54(1): 78-83, 2003.
6. CN. (See HCH Clinicians' Network citations, below.)
7. Culhane D, Eldridge D, Rosenheck R, Wilkins C. Making homeless programs accountable to consumers, funders and the public. 1998 National Symposium on Homelessness Research: <http://aspe.os.dhhs.gov/progsys/homeless/symposium/4-Account.htm>
8. Culhane DP, Metraux S, Hadley T. Public service reductions associated with placement of homeless persons with severe mental illness in supportive housing. *Housing Policy Debate*, 13(1), 107-163.
9. 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 and Underserved*: 16(1), February 2005, 127-138.
10. Gray, Eleanor, for the Region IX Health Care for the Homeless Advisory Committee. *HCH UDS Pilot Project 2001-2002: A Technical Assistance Publication*. National Health Care for the Homeless Council, January 2003; 36 pages: <http://www.nhchc.org/Publications/HCHUDSPilotProjectFINAL.pdf>
11. Gulcur L, Stefancic A, Shinn M, Tsemberis S, Fischer S. Housing, hospitalization, and cost outcomes for homeless individuals with psychiatric disabilities participating in Continuum of Care and Housing First programs; *Journal of Community and Applied Social Psychology*, 13(2): 171-186, 2003.

12. Hatry HP, Cowan J, Hendricks M. *Analyzing Outcome Information: Getting the Most from Data*. Washington, DC: The Urban Institute, 2004; 50 pages:
http://www.urban.org/UploadedPDF/310973_OutcomeInformation.pdf
13. Health Care for the Homeless (HCH) Clinicians' Network (CN). Measuring outcomes step by step, *Healing Hands*; 3(4), June 1999:
http://www.nhchc.org/Network/HealingHands/1999/hh.06_99.pdf
14. HCH Clinicians' Network (CN). Are we making a difference? *Healing Hands*; 5(1), Feb 2001:
<http://www.nhchc.org/Network/HealingHands/2001/February2001HealingHands.pdf>
15. HCH Clinicians' Network (CN). Electronic information systems in homeless health care, *Healing Hands*; 6(3), April 2002:
<http://www.nhchc.org/Network/HealingHands/2002/April2002HealingHands.pdf>
16. HCH Clinicians' Network (CN). Supportive housing helps break the cycle of homelessness, *Healing Hands*; 7(6), December 2003:
http://www.nhchc.org/Network/HealingHands/2003/Final_Healing_Hands_1_04.pdf
17. HCH Information Resource Center. Bibliography #16: Outcomes for Primary Health Care Programs Serving People Who Are Homeless, November 2004:
<http://www.bphc.hrsa.gov/hchirc/pdfs/bibs/16%20outcomes.pdf>
18. Health Disparities Collaborative. Models for Changing Practice:
http://www.healthdisparities.net/about_models.html
19. Health Resources and Services Administration (HRSA), Office of Performance Review. *Performance Review Protocol Guide*, 2004: <http://www.hrsa.gov/performance/protocolguide.htm>
20. Krautschied L, Moos P, Zeller J. Patient and staff satisfaction with integrated services at Old Town Clinic: A descriptive analysis; *Journal of Psychosocial Nursing and Mental Health Services*, 42(11): 32-41, November 2004.
21. Kraybill, Ken. Outreach to People Experiencing Homelessness: A Curriculum for Training HCH Outreach Workers. National Health Care for the Homeless Council, June 2002; 330 pages:
<http://www.nhchc.org/Curriculum/curriculum.htm>
22. Lampkin L, Hatry H. *Key Steps in Outcome Management*. Washington, DC: The Urban Institute, 2003: http://www.urban.org/UploadedPDF/310776_KeySteps.pdf
23. Larson CO. Use of the SF-12 instrument for measuring the health of homeless persons - *Methods Health Services Research*, June, 2002.
24. Macnee CL, McCabe S. Satisfaction with care among homeless patients: Development and testing of a measure; *Journal of Community Health Nursing*, 21(3): 167-178, Fall 2004.

Developing Outcome Measures to Evaluate HCH Services

25. McMurray-Avila M. *Organizing Health Services for Homeless People: A Practical Guide*, 2nd Edition; Part V: Organizational Tools/D. Information Systems, G. Quality Improvement/Quality Assurance, H. Program Evaluation. ISBN: 0971165092. Nashville: National HCH Council, 2001:
<http://www.nhchc.org/Publications/>
26. Min S, Wong Y, Rothbard A. Outcomes of shelter use among homeless persons with serious mental illness; *Psychiatric Services*, 55(3): 284–289, 2004.
27. Morley E, Lampkin L. *Using Outcome Information: Making Data Pay Off*. Washington, DC: The Urban Institute, 2004; 48 pages:
http://www.urban.org/UploadedPDF/311040_OutcomeInformation.pdf
28. North CS, Eyrich KM, Pollio DE, Foster DA, Cottler LB, Spitznagel EL. The homeless supplement to the diagnostic interview schedule: Test-retest analyses; *International Journal of Methods in Psychiatric Research*, 13(3): 184–191, 2004.
29. O’Connell JJ. *Utilization & Costs of Medical Services by Homeless Persons: A Review of the Literature & Implications for the Future*. National Health Care for the Homeless Council, 1999:
<http://www.nhchc.org/Publications/utilization.html>
30. Riley ED, Bangsberg DR, Perry S, Clark RA, Moss AR, Wu AW. Reliability and validity of the SF-36 in HIV-infected homeless and marginally housed individuals; *Quality of Life Research*, 12(8):1051–58, Dec 2003.
31. Rosenheck R, Morrissey J, Lam J, Calloway M, Stolar M, Johnsen M, Randolph F, Blasinsky M, Goldman H. Service delivery and community: Social capital, service systems integration, and outcomes among homeless persons with severe mental illness; *Health Services Research* 36(4): 691–709, 2001.
32. Sosin MR. Outcomes and sample selection: The case of a homelessness and substance abuse intervention; *British Journal of Mathematical and Statistical Psychology*, 55(1): 63–91, 2002.
33. Sullivan G, Dumenci L, Burna, A, Koegel P. Validation of the Brief Instrumental Functioning Scale in a Homeless Population; *Psychiatric Services* 52:1097–1099, August 2001.
34. The Working Group on Homeless Health Outcomes. Meeting Proceedings. Sponsored by the Division of Programs for Special Populations, BPHC April 15-16, 1996, Rockville, Maryland; published June 1996; 27 pages. Available from the HCH Information Resource Center: 888/439-3300;
hch@prainc.com
35. Weinreb L, Goldberg R, Perloff J. Health characteristics and medical service use patterns of sheltered homeless and low-income housed mothers. *Journal of General Internal Medicine* 13:389–397, 1998.

Appendix

HCH outcome measures and data collection forms currently in use:

1. Multi-Service Consumer Outcome Scales and Satisfaction Survey - Colorado Coalition for the Homeless, Denver, Colorado
2. Outreach & Service Continuum Tool, Health Care for the Homeless Network, Seattle-King County, Washington
3. Levels of Service measures - Region IX HCH projects in California, Arizona, and Nevada
4. Outcomes Measurement Tool - HCH, Montana (project sites in Billings, Missoula, Helena, and Butte)
5. Service Utilization Graph - Health Care for the Homeless, Inc., Baltimore



CONSUMER OUTCOME SCALES

(Please check the time frame for this current assessment)

Check this box if the survey was completed in Spanish

Baseline:___ Is this at intake?___ Yes

___No (If no, how many months has consumer been in the program:___

6-Mo. Follow-up:___ 12-Mo.- Follow-up:___ 18-Mo. Follow-up:___ 24-Mo. Follow-up:___

Program: _____ Case Manager: _____

Today's date: ___/___/___ Client Name: _____ Clients D.O.B. ___/___/___

Gender: Male Female Transgender Other

Ethnicity: Are you Hispanic/Latino? ___ **Yes, I am Hispanic/Latino**
___ No, I am not Hispanic/Latino

Race: American Indian/Alaskan Native Asian Native Hawaiian/Pacific Islander
 Black/African American White/Caucasian Other _____

Current Mental Health

Diagnosis: _____

Current Health

Diagnosis: _____

Monthly Income: \$ _____

Source(S) of Income: _____



CONSUMER OUTCOME SCALES

Please read each question and decide which number best represents the clients current status in each of the domains. If more than one number seems to apply for a particular category, choose the higher number, indicating more severe status...

ACTIVITIES OF DAILY LIVING: “Are you able to take care of yourself and your home? Are you showering, doing laundry, preparing or providing adequate food, cleaning your home?”

- 1- **Independent functioning** (Client **does not** require *prompting* to complete ADL’S)
- 2- Requires **minimal prompting** (reminding) to complete household chores, **monthly or less**
- 3- **Consistent prompting** (reminding) needed to complete household chores and or hygiene, **needs no direct assistance**
- 4- **Occasional direct assistance** needed to maintain hygiene and or chores, **once weekly or less**
- 5- **Regular direct assistance** needed to maintain hygiene and or chores, **twice weekly or more**
- 6- **Continual direct assistance** needed to maintain hygiene and or chores, **nearly daily**
- 7- **Not able** to care for self, **health risk**, requires 24-7 residential or inpatient treatment

LEGAL STATUS: “Are you currently involved with the legal system including Child Protective Services (CPS)? Have you ever been convicted of a crime?”

- 1- **No current** legal problems, and any past problems have been successfully resolved
- 2- **At risk** for illegal activities (e.g., due to past history, choice of friends, current drug use, etc.)
- 3- **Recently released** from jail, *not* on parole
- 4- Court ordered treatment
- 5- On parole **or frequent** police contacts
- 6- Current **active warrants**
- 7- Incarcerated or children have been removed from the home by CPS

QUALITY OF LIFE: “Overall how satisfied are you with the quality of your life? Please include your satisfaction with your housing, the type of recreational activities you do, the amount of money you have and the direction of your life and your ability to pursue your goals and values?”

- 1- **Extremely satisfied/happy** (“*I feel totally fulfilled in all these areas of my life*”)
- 2- **Very satisfied/happy** (“*I’m happy with most areas of my life*”)
- 3- **Satisfied/happy** (*Some aspects of my life are satisfying, but not all*)
- 4- **Neither/neutral** (“*I’m not satisfied/happy or dissatisfied/unhappy, I don’t feel one way or another*”)
- 5- **Dissatisfied/unhappy** (“*I wish some areas of my life were better, but things aren’t too bad*”)
- 6- **Very dissatisfied/unhappy** (“*In general I am not satisfied with my life, I wish most things were better*”)
- 7- **Extremely dissatisfied/unhappy** (“*I wish my life were better/different, things aren’t working out for me*”)

HOUSING QUALITY: “Where have you lived the majority of the time over the last three months?”

- 1- **Independent** living, (*pays total monthly rent without assistance*)
- 2- **Permanent subsidized** housing (e.g. Forum, Xenia Bridges, Volunteers of America, Section 8 voucher)
- 3- **Transitional housing** (time limited, subsidized housing)
- 4- **Residential treatment** (e.g., substance abuse program, supported housing programs, **group home** or assisted living facility)
- 5- **Motel**, or temporarily staying with **friends or relatives**
- 6- **Shelter**, jail, hospital or detox
- 7- **Streets**, no shelter, living in a car (or client doesn’t remember)



CONSUMER OUTCOME SCALES

EMPLOYMENT/SCHOOL: “Are you working or in school right now?”

- 1- **Full-time** work, volunteer, school or vocational training
- 2- **Part-time** work, volunteer, school or vocational training
- 3- **Day labor, migrant or seasonal work**
- 4- **Supported employment/Supported education** as part of a treatment program
- 5- **Unemployed, seeking** work (has a desire to work)
- 6- **Unemployed, not looking** for work
- 7- **Unable to work at this time**(e.g., due to disability or lack of supported employment)

ACCESS TO BENEFITS: “Are you getting any help from government-sponsored programs that help with food, medical insurance income?”

- 1- Client **does not require** benefits at this time
- 2- Has received **benefits sufficient to meet level of need**
- 3- Has received **some benefits**, but still **requires others** to meet level of need
- 4- **Has taken all necessary steps to apply** for benefits and is **awaiting results** or has been **denied due to insufficient disability**.
- 5- Has **appealed a denial** for benefits
- 6- Has **not yet completed application for a all benefits needed** (e.g., food stamps, Medicaid, SSI, AND)
- 7- Client is **not aware of benefits** that are available

PHYSICAL HEALTH: “Do you have any current medical conditions? How do those conditions affect your day-to-day life right now?”

- 1- Actively **pursues healthy lifestyle**, healthy diet/exercise
- 2- **No current medical concerns**, in good physical health
- 3- **Temporary, treatable** health problem that interferes with quality of life in some area (e.g., rash)
- 4- **Ongoing** medical condition that **does not interfere with quality of life** (e.g., well controlled diabetes)
- 5- **Ongoing** symptoms that **interfere with quality of life in one area** (work, social, emotional, housing, activities of daily life, e.g., arthritis)
- 6- **Ongoing** symptoms that **interfere with quality of life in many areas** (e.g., emphysema)
- 7- **Emergency evaluation and treatment** (e.g., heart attack) is required and or condition is **probably terminal** (e.g., some cancers)

MENTAL HEALTH: “Are you in good spirits, how are you feeling emotionally/mentally? Do you feel able to think clearly? How do these things affect your day-to-day life right now?”

- 1- **No current mental health issues**
- 2- Mental health issues **well-managed with medication, Case Management, therapy**, etc
- 3- **Symptoms may cause distress**, but **don’t really interfere** with daily functioning
- 4- **Symptoms interfere with functioning in one area**(work, legal, social, health, housing, activities of daily living) **or are extremely distressing**
- 5- Symptoms **interfere with functioning** in **many** areas
- 6- Client **does not recognize** that symptoms are causing significant problems for self, family, treatment providers or others
- 7- Client **requires emergency evaluation and treatment** (danger to self, danger to others, or gravely disabled)



CONSUMER OUTCOME SCALES

SUBSTANCE USE: “When was the last time you used alcohol or other drugs? What problems have alcohol or drug use caused for you?”

- 1- **No current or past diagnosis** of substance abuse or dependence
- 2- **In recovery for more than 90 days** (3 months)
- 3- **In recovery for less than 90 days** (3 months)
- 4- **Still using**, but actively participating in treatment to reduce negative consequences (“harm-reduction” treatment)
- 5- **Still using** despite **serious consequences in one area** of functioning [e.g., work, legal, social, emotional, health, housing, activities of daily life]
- 6- **Still using** despite **serious consequences in many areas** of functioning
- 7- **Ongoing substance use interferes with getting help** for serious medical, mental health, legal, housing, or other problems

SOCIAL RESOURCES: “Do you feel like there are people who you can count on for support and are there people with whom you can socialize? Are you satisfied with your personal relationships?”

- 1- **Dependable, extensive and satisfying** social network (supportive, available, fulfilling relationships, all nonprofessionals)
- 2- **Several supportive**(three or more) people, is mostly **satisfied** with these relationships and social life(all nonprofessionals)
- 3- Has **two or more** mostly **satisfying** relationships that are supportive and readily available all nonprofessionals)
- 4- **Has one non-professional** relationship that is supportive and readily available
- 5- **Gaps** exist in support network and **often no one is available**
- 6- Without professional support **no supportive** relationships
- 7- **No supportive** relationships

BASIC NEEDS: “Do you and or your family have the resources/money to pay your bills and meet your daily living needs such as providing food, clothing, transportation, and some money for discretionary purposes?”

- 1- **Able to pay all bills**, provide basic necessities, engage in leisure activities while **saving for emergencies**
- 2- **Able to pay all bills**, provide basic necessities with a minimal amount for leisure, **no savings**
- 3- **Able to pay all bills** and provide basic necessities, **not enough for leisure, no savings**
- 4- **Cannot always pay bills** on time **while providing basic necessities** (*still has necessities*)
- 5- **Cannot pay bills** on time and **sometimes cannot provide for basic necessities** (1 -2 times per month **goes without** a meal, clean clothing or transportation)
- 6- **Basic necessities are unmet weekly**
- 7- **Consistently unable** to meet basic needs(e.g. insufficient clothing, hungry)



CONSUMER OUTCOME SCALES

FAMILY/HOUSEHOLD COMMUNICATION: “How does your family most often resolve conflict, deal with problems?”

- 1- **Healthy relationships, talk respectfully** with one another, remain calm, try to **be aware of other’s feelings** and work hard to **avoid emotionally hurting** one another, **never uses physical force**
- 2- **Adequate relationships, at times yell**, but remains calm and does not intentionally hurt one another with words and **never uses physical force or intimidation**
- 3- **Less than adequate relationships, yelling and screaming or avoiding one another are the primary** way we resolve conflict, bringing up hurts from the past but **never use physical force** or intimidation
- 4- **Inadequate relationships, threaten** one another, **intimidate**, intentionally hurt one another’s feelings, **never use physical force**
- 5- **Troubled relationships, yell, threaten and have hit, punched, slapped or restrained** another person’s movement (**uses physical force**)
- 6- **Dangerous relationships**, frequently use intimidation, threats, physical force or restraint, and/or stalking is occurring.
- 7- **Lethal relationships**, have attempted to kill one another, or threaten to do so with identified means. and/or restraining order violations.

YOUTH RISK: “Are your children having problems in school, with friends, with their behavior in general?”

- 1- **No risk**, regular school attendance, no behavior problems, good grades (A’s and B’s), has close friends
- 2- **Low risk**, minimum absences/lateness, one day per month without good excuse, **no D grades, B average**, minimal problems with friends/peers
- 3- **Moderate risk/some issues, absent or late to school 1 day per week, several D grades, mild behavioral problems**, some problems with friends/peers
- 4- **High risk, absent or late 2 days per week, several F grades, poor peer relationships, moderate behavioral problems** (occasional fighting without biting, spitting)
- 5- **Severe risk**, problems in many areas, **failing school**, absent **more than 3 days** per week, **severe behavioral problems**, (hitting, biting, spitting, inappropriate sexual behavior)
- 6- **Extreme danger**, expelled or not going to school, **extreme behavioral problems** (has hurt other children or animals), substance abuse, gang involvement, stealing, violent
- 7- **Removed from home, due to child’s behavior** family is unable to manage

CHILDCARE: “Do you have access to quality, dependable daycare?”

- 1- Certified stable, reliable, quality childcare, friend, family, childcare provider-individual everyday needed **with backup options** (*parent never misses work/school*)
- 2- Certified stable, reliable, quality childcare, friend, family, childcare provider-individual everyday needed but **no backup options** (*parent rarely misses work/school*)
- 3- Childcare is non-certified, and or friend, family, childcare provider-individual is **unreliable** (*parent sometimes misses work/school*)
- 4- Childcare is non-certified, unreliable **and of poor quality** (*Parent often misses work/school*)
- 5- No childcare is available (**parent must stay home**)
- 6- **Child is in an unsafe** childcare environment (**parent is extremely distressed but has no other option**)
- 7- **Child is in an unsafe** childcare environment (**parent is not concerned**)
- NA- If family **does not want or need daycare**

SATISFACTION SURVEY CONTINUED

9. What two things do you like the *most* about the services you received?

10. What two things do you like the *least* about the services you received?

11. How would you change services to better meet your needs?

12. Is there anything else you would like us to know?

THANK YOU

**HEALTH CARE FOR THE HOMELESS NETWORK
MH/CD/CM/OUTREACH QUALITY MANAGEMENT
DEVELOPING STANDARDS AND OUTCOMES**

Purpose:

The Quality Management Plan for HCHN requires that peer groups establish standards and outcome measures for homeless clients to be used by HCHN staff as part of on-going agency quality improvement activities. Because of crossover in the work of mental health and chemical dependency counselors, case managers and outreach workers, common standards and outcome measures are being developed for all of these disciplines.

The purpose of this group has been to develop a clinical tool to measure key outcomes. The attached table is a frame work for what we are doing with clients. This table will be utilized in combination with the HCHN Encounter Form. Initially, we propose using this table to do an initial assessment, a three month, and a six month follow-up on 5 clients (per clinician) to see where they fit into this matrix. In order to accurately complete this table, providers will need to carefully track referrals and follow-up on those referrals. Knowing which referrals have been completed will assist the provider in determining where specific clients fall in this continuum. Therefore, as we start utilizing this table for certain clients, a focus will need to be placed not only on making and documenting referrals, but also on determining the outcome of those referrals.

In the course of using this table, we can demonstrate the broad range and importance of supportive services, train new workers, and use it to describe what we do and how we do it. This table could also be used as part of a client service plan or to review progress. In addition to measuring outcomes, this table can be used by the individual provider as a tool to measure quality and may be used in combination with other tools (such as a client barrier sheet, service plan, general well-being assessments).

In the course of focusing on referrals and outcomes for certain clients, it is expected that everyone will begin focus more on this and the overall quality of services for all clients. The resulting outcome will be much higher rates of reporting of referrals and outcomes.

HEALTH CARE FOR THE HOMELESS NETWORK SERVICE CONTINUUM

Length of Relationship _____ Score: _____

HCHN ID:

Name				Date of Birth			
Last		First		Month		Day	

Year

Assessment Date: _____

- Circle One: Initial Assessment
 3 Month Follow-up
 6 Month Follow-up

	<u>RELATIONSHIP</u>	<u>FINANCIAL</u>	<u>HEALTH/TREATMENT</u>	<u>SOCIAL SUPPORT NETWORK</u>	<u>RESIDENTIAL</u>
<u>INDEPENDENCE</u>	6. Client has a broader social network and expanded support. Client transitions to longer term community support.	6. Client's income is secure. Client manages income.	6. Client manages health needs as is appropriate.	6. Client has an independent, sustained support network. Client is integrated into his/her community.	6. Client maintains permanent housing.
<u>STABILITY</u>	5. Client initiates service planning (sets agenda). Client actively participates in care.	5. Client has a regular income and does budgeting.	5. Client engages in and complies with treatment. Health status improves and symptoms decrease.	5. Client accesses social supports as needed. Client has friend(s) and consistency in social supports.	5. Client is in permanent housing.
<u>MUTUALITY</u>	4. Client follows through on referrals and service plan. Client feels accountability to relationship with provider.	4. Financial resource applications are written. A budget is developed.	4. Client participates in treatment plan and accesses health services.	4. Client seeks support.	4. Housing applications are written. Client is actively pursuing stable housing. Client is stable in transitional housing
<u>PARTNERSHIP</u>	3. Worker and client talk about mutual goals and client's needs. Worker and client meet regularly.	3. Worker and client discuss long term financial resources and/or budgeting.	3. Worker and client plan for the client's health needs and resources.	3. Worker and client identify needs and gaps in support network.	3. Worker and client discuss longer term housing goals and options. Client is in transitional housing.
<u>COMPANIONSHIP</u>	2. Client initiates contact with worker. Worker hears client's story.	2. Worker provides financial information and offers resources/referrals.	2. Worker makes observations about client's health status and provides information, education, and harm reduction counseling.	2. Worker makes observations regarding client's social support network.	2. Worker provides housing information and offers alternatives (such as a shelter referral). Client is in shelter.
<u>APPROACH</u>	1. Observation. Casual conversation between worker and client. Worker greet s client and identifies self.	1. Worker inquires about client's financial status.	1. Worker inquires about client's health needs and providers used.	1. Worker assesses client's social support network.	1. Worker inquires where client resides.

Comments: _____

Provider Signature _____ Revised 08/21/97 3:25 PM - QM Peer Review Matrix Version 3.doc

Health Care for the Homeless Network Service Continuum Guide

The completed Health Care for the Homeless Network Service Continuum should be submitted to HCHN as soon as it has been filled out for a client. **Please submit the green copy to HCHN and retain the white copy for your records.** When you submit the Service Continuum form for a given client, please be sure (if this is a new client) that you submit the HCHN Intake/Encounter Form at the same time. The Service Continuum does not take the place of the HCHN Encounter Form - even when submitting the Service Continuum, you also need to submit an encounter form for each contact with a client.

HCHN ID: The complete HCHN identification code should be written on *every* Service Continuum form.

The HCHN identification code is created by taking the first two letters of the client's last name, followed by the first two letters of the client's first name and the six numbers of the person's date of birth (note that if the day and date of birth are single digit numbers, use zero before the numbers).

Example: **Jane Doe** **birth date July 15th, 1956**
 HCHN ID is DOJA071556

Please double check the order to ensure that you have put the first two letters of the last name first.

It is crucial that the HCHN ID code be reported the exact same way on every Service Continuum and encounter form. Please verify that your HCHN ID codes are accurate and consistent with what you have reported for a given client in the past.

Length of Relationship: This question determines how long you have worked with the client for whom the Service Continuum is being completed. Please report the length of time (since you first encountered the client) that you have had contact with the client in either days, weeks, months or years. *Remember to write in the unit of time - either days, weeks, months, or years when reporting length of relationship.*

Example: You first saw Jane Doe on June 20, 1997 and you are completing the Service Continuum for the first time on September 22, 1997. Length of relationship would be 3 months.

Score: Score records the total of numbers (added up horizontally) for each of the columns; relationship, financial, health/treatment, social skills, and residential. The score should not be larger than 30 (the total if the client is a "6" in each of the above mentioned columns) and should not be

smaller than 1 (in order to complete this assessment, the worker must be at the observation stage in #1 of Relationship). The score should be a whole number (i.e. not 2.5). If you are unsure of where to place a client on the 1 - 6 scale, pick one category and write comments in the comments section.

Assessment Date: Please record the date that the Service Continuum assessment was completed. The date recorded should reflect the actual date that the assessment took place, not the date that the form is filled out.

Circle One: Initial Assessment, 3 Month Follow-up, 6 Month Follow-up

- ◆ Initial Assessment should be circled when the Service Continuum assessment is first done on a client.
 - ◆ 3 Month Follow-up should be circled when the second Service Continuum assessment is done on a client - this should be approximately three months after the initial assessment.
 - ◆ 6 Month Follow-up should be circled when the third Service Continuum assessment is done on a client - this should be approximately six months after the initial assessment.
-

Service Continuum Matrix Instructions:

Relationship:

1. **Observation.** *Worker and client observe one another in shelter, day center, street etc. environment.*
Casual conversation between worker and client. *Greetings “how are you doing?” etc.*
Worker greets client and identifies self. *Worker lets client know who (s)he is and explains what (s)he can do for/with the client. I am John Doe from Health Care for the Homeless, I can work with you to.....*
2. **Client initiates contact with worker.** *Client seeks out/comes to worker voluntarily.*
Worker hears clients story. *Worker hears history, gets insight from client.*
3. **Worker and client talk about mutual goals and client’s needs.** *A service/treatment plan is developed, goals are determined.*
Worker and client meet regularly. *Meetings take place monthly, daily or weekly as is appropriate to type of provider and client’s situation.*
4. **Client follows through on referrals and service plan.** *Steps toward achieving goals are taken by the client, client acts on referrals provided by worker.*
Client feels accountability to relationship with provider. *Client shows up to appointments with regularity, calls in advance to cancel appointments etc.*
5. **Client initiates service planning (sets agenda).** *Client suggests new goals or steps to be taken toward meeting goals, comes to meetings with issues/questions to discuss.*
Client actively participates in care.

6. **Client has a broader social network and expanded support.** *Client's social network does not just include HCHN provider, network has grown since first encountering worker.*
Client transitions to longer term community support. *Client begins to work with other providers as is appropriate to situation of HCHN provider and client.*

Financial:

1. **Worker inquires about client's financial status.** *Worker asks questions about income sources and other resources.*
2. **Worker provides financial information and offers resources referrals.**
3. **Worker and client discuss long term financial resources and/or budgeting.** *If no resources available, discuss possibilities for long term financial resources (employment, public assistance, training needed etc.). If client has financial resources discuss budgeting and maintenance of those resources.*
4. **Financial resource applications are written.** *If applicable, applications for assistance completed, employment applications completed etc.*
A budget is developed. *If applicable.*
5. **Client has a regular income and does a budget.**
6. **Client's income is secure.** *Income appears stable, client has consistently received income for an ongoing period of time.*
Client manages income. *Client has income and sticks to a budget (pays bills on time, covers living costs with income).*

Health/Treatment: *

**(Health/Treatment includes physical health, mental health, chemical dependency, domestic violence etc.)*

1. **Worker inquires about client's health needs and providers used.**
2. **Worker makes observations about client's health status and provides information, education, and harm reduction counseling.** *Worker points out health concerns and provides information about health resources, does health education, and harm reduction counseling if appropriate.*
3. **Worker and client plan for the client's health needs and resources.** *Service/treatment plan and goals around health needs are established.*
4. **Client participates in treatment plan and accesses health services.** *Client acts on referrals and accesses treatment.*
5. **Client engages in and complies with treatment plan and accesses health services.** *Client carries out steps and meets goals in treatment plan.*
6. **Client manages health needs as is appropriate.** *If the client is an adult living as part of a family unit, this should apply to both his/her own needs as well as his/her child(ren). Health conditions are under control, client has access to and uses a health care provider and treatment providers if necessary.*

Social Skills (Social Support Network):

1. **Worker assesses client's social support network.** *Worker asks questions about presence of social supports in clients life (either friends or social service providers).*

2. **Worker makes observations regarding client's social support network.** *Worker makes observations to the client about his/her social support network.*
3. **Worker and client identify needs and gaps in support network.** *Develop plan for filling gaps.*
4. **Client seeks support.** *Client acts on suggestions of worker for increasing support. Client seeks support from either providers or friends.*
5. **Client accesses social supports as needed.** *Client knows when (s)he needs support and seeks it from either providers or friends*
Client has friend(s) and consistency in social supports. *Client does not just seek/receive support from service providers, but from at least one friend. There is stability in relationships with social supports.*
6. **Client has an independent, sustained support network.**
Client is integrated into his/her community.

Residential:

*For the residential category, please mark the most appropriate number for your client. For example, even if you do not discuss longer term housing options, but if you are working with a client in transitional housing, please place them at least at #3 on the residential continuum. Numbers 5 and 6 should only be marked for clients in **permanent** housing. For clients in shelter, please mark the most appropriate number for the client's situation - a client in shelter could be as high as a #4.*

1. **Worker inquires where client resides.**
2. **Worker provides housing information and offers alternatives (such as a shelter referral).** *Information should be subject to client's current situation - if client is on the street, provide shelter information, if client is in a shelter provide transitional and permanent housing information.*
3. **Worker and client discuss longer term housing goals/options.**
4. **Housing applications are written.** *Applications for transitional and permanent housing programs.*
Client (with the assistance of worker) is actively pursuing stable housing of his/her choice. *Client acts on housing referrals, goes to necessary appointments.*
5. **Client is in permanent housing.**
6. **Client maintains permanent housing.** *Client has maintained stable housing for a year.*

Comments: Please provide any information here that might be relevant either to the client's situation or the way in which the matrix has been completed. Use this space to explain why a client may not be at the number 1 stage in any of the five areas being tracked on this matrix.

Provider Signature: All completed Service Continuum forms need to be signed by a provider before being submitted to HCHN.

HCH UDS ADD-ON TABLES Region IX HCH Advisory Council

Data Collection Categories & Definitions

Health Care for the Homeless projects in Region IX (California, Nevada, and Arizona) recommended the addition of service levels and data add-on **Levels of Service tables** to enable HCH projects to capture the type and amount of data they need within a given category of services, to describe their practices more accurately and to improve the specified services. Examples of these tables and definitions of different levels of outreach and case management services appear below. Similar tables and definitions for other HCH services (mental health, substance abuse, health education, medical, and nursing services) are available in Gray, 2003: <http://www.nhchc.org/Publications/HCHUDSPilotProjectFINAL.pdf>

OUTREACH SERVICES

OUTREACH				
	USERS		ENCOUNTERS	
Level 1: Approach				
Level 2: Engagement				
Level 3: Referral				

Definitions

Note: Outreach services may be performed by any individual trained to perform outreach services as defined by their HCH project.

LEVEL 1: Approach

Brief initial contacts to establish a visible presence; provide general information on services and ask client(s) if they currently need assistance. *These encounters may not provide a sufficient amount of unique client information that can be used to generate a client record.*

LEVEL 2: Engagement

Establish individualized rapport; listen to client's story/problems and offer support/encouragement; begin to identify basic client need(s). These encounters will usually allow clinician to obtain basic client information, such as name ("street" name/alias), gender, possibly DOB and ethnicity; however, it is unlikely that all client data needed for the UDS (e.g., income level or family size) will be provided. Therefore, these encounters should also be reported in a UDS "add-on" table.

LEVEL 3: Information and Referral

Obtain information about a client's specific need(s); provide information about available services; make and help to facilitate referral. These encounters will usually allow for obtaining of basic client information, e.g. name ("street" name/alias), gender, DOB and ethnicity; however, the client may or may not be willing to provide all client data needed for the UDS, e.g. income level, family size. Therefore, these encounters should also be reported in a UDS "add-on" table.

CASE MANAGEMENT SERVICES

CASE MANAGEMENT		
	USERS	ENCOUNTERS
Level 1: Assessment (15 min.)		
Level 2: Planning/Referrals and Follow-up/Phone Calls/Intervention (15-30 min.) (Note: includes maintenance)		
Level 3: Assisted/Supported Referral and Counseling (30+ min.)		

Definitions

LEVEL 1: Assessment

Can be done by any provider (e.g. nurse, outreach worker, case manager, social worker, medical provider) who has contact with a client. The objective is to ensure that the client receives an assessment of health and social service needs, information about available health and social services, and a follow-up plan of care. Duties include conducting an initial assessment of the client’s needs for food, shelter, income, health care, education, and transportation; identifying an emergency contact; prioritizing the need for immediate care, services and/or treatment; developing a plan to address identified needs, including care available at the service site or by referral; identifying the client’s ability to participate in implementing the care plan; assisting the client to meet the care plan goals; promoting and facilitating communication among providers serving the client; monitoring and evaluating services received by reviewing progress toward attainment of care plan goals; acting as a liaison between the client and other agencies; and documenting all contact and issues in the client record.

LEVEL 2: Planning/Referrals/Follow-up/Intervention

Level two case management includes level one services plus those listed in level two. Can be provided by any person who has regular contact with the client, including a case manager, outreach worker, medical provider, social worker, or nurse. The objective is to ensure that the client receives services that are not available in the primary care site at an outside referral site. Duties include establishing with other agencies communication and arrangements for secondary referrals and transportation; assessing the client’s ability and willingness to participate in the plan of care; documentation of the referral and transportation plan; and tracking and evaluating the appropriateness of the referral.

LEVEL 3: Assisted/Supported Referral and Counseling

Can be delivered by a person who has training as a case manager, medical provider, social worker, or nurse. The objective is to ensure that high-risk clients who require special assistance to negotiate complex, highly structured systems successfully negotiate the transition from the primary care site to another service/support system by accompanying the client. Duties include encouraging client participation in the development of the care plan, advocating on behalf of the client within the outside referral system, and establishing a plan for follow-up, continuing contact, and re-evaluation.

**FAMILY HEALTH CENTERS OF SAN DIEGO
HEALTH CARE FOR THE HOMELESS ENCOUNTER FORM**

CLIENT INFORMATION	
DATE ____/____/____	
CLIENT NAME _____, _____ <i>Last name, First name</i>	
SSN ____-____-____	DATE OF BIRTH ____/____/____
Substance Abuse History Y N U	Mental Health Issues Y N U

Procedure code	<i>Please <u>X</u> all that apply</i>	Description
Case Management		
CMA		Level 1: _____
CMP		Level 2: Planning/Referrals/Follow-up/Intervention
CMR		Level 3: Assisted Supported Referral and Counseling
Outreach		
OUTA		Level 1: Approach
OUTE		Level 2: Engagement
OUTR		Level 3: Referral
Mental Health		
MHAR		Level 1: Assessment and referral for MH services
MHPA		Level 2: Mental Health provider assessment
		Level 3: Mental Health Treatment
MHTI		A) Individual
MHTG		B) Group
Substance Abuse		
SAAR		Level 1: Assessment and referral for SA services
SAPA		Level 2: Substance Abuse provider assessment
SADD		- Dual Diagnosis Assessment
		Level 3: Substance Abuse Treatment
SATI		A) Individual
SATG		B) Group
Health Education		
		Level 1: Informal/client-initiated – prevention
HEII		A) Individual
HEIG		B) Group
		Level 2: Formal or structured/health maintenance
HEFI		A) Individual
HEFG		B) Group
		Level 3: Chronic Disease Management
HECDI		A) Individual
HECDG		B) Group
Case Manager:		Site:

Referrals: <i>(Please <u>X</u> all that apply)</i>							
<input type="checkbox"/>	FOOD	<input type="checkbox"/>	EMPLOYMENT	<input type="checkbox"/>	SOCIAL SERVICES	<input type="checkbox"/>	MEDICAL
<input type="checkbox"/>	CLOTHING	<input type="checkbox"/>	HOTEL VOUCHERS	<input type="checkbox"/>	MEDI-CAL/DSS	<input type="checkbox"/>	DENTAL
<input type="checkbox"/>	SHELTER	<input type="checkbox"/>	REHAB. PROGRAM	<input type="checkbox"/>	CMS	<input type="checkbox"/>	VISION
<input type="checkbox"/>	DAY CENTER	<input type="checkbox"/>	DETOX	<input type="checkbox"/>	TRANSPORTATION	<input type="checkbox"/>	ER
OTHER:				NOTES/DETAIL:			

Example of the YTD report:

HCH Case Management Report

From 01-01-2002 to 09-30-2002

	Totals				
Contact Method	A	B	C	D	Method Totals
Initial Encounter/ Needs Assessment	49	102	38	2	191
Planning/Referral/ Follow-up/Intervention	233	168	87	16	504
Assisted or Supported/ Referral/Counseling	0	3	41	102	146
Time Code Totals	282	273	166	120	841

Time Codes:	A = <15 min.	B = 16 to 30 min.	C = 31 to 60 min.	D = > 1 hour
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Example of the one month report:

HCH Case Management Report

From 09-01-2002 to 09-30-2002

	Totals				
Contact Method	A	B	C	D	Method Totals
Initial Encounter/ Needs Assessment	2	9	8	0	19
Planning/Referral/ Follow-up/Intervention	14	11	15	0	40
Assisted or Supported/ Referral/Counseling	0	1	2	11	14
Time Code Totals	16	21	25	11	73

Time Codes:	A = <15 min.	B = 16 to 30 min.	C = 31 to 60 min.	D = > 1 hour
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HCH OUTREACH NURSE ENCOUNTER LOG

Patient Name - First Initial

	Initial Encounter/ Basic Needs Assessment & Care/ Information Exchange	Medical Assessment/ Referral/Treatment	Follow-Up/ Assisted/Supported Referral / Counseling	Referral Codes / Time Codes Comments
DATE				
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

Time Codes: A= 1 - 15 min. B= 15 to 30 min. C= 31 to 60 min. D= > 1 hour

Referral Codes: CL = HCH Clinic H = Hospital CM = Case Manager

H:\brooks\HCHP Excel\Outreach Nurse Log.xls

HCH Case Management Encounter Log

Patient Last Name - First Initial

	DATE	Initial Encounter/ Needs Assessment	Planning/ Referral/ Follow-Up/ Intervention	Assisted or Supported Referral / Counseling	(Time spent w/pt) Comments	In Person	Phone/ Other
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							

B= 16 to 30 min. C= 31 to 60 min. D= > 1 hour

ib\HCHP Excel\CaseMgmt form.xls

Outcome Measures to be field tested by HCH grantees in Montana, June 2005 (Contact: Yellowstone City-County Health Department, Billings, MT)

DOMAIN	1 IN CRISIS	2 VULNERABLE	3 SAFE	4 BUILDING CAPACITY	5 EMPOWERED
Life Skills	Unable to meet basic needs such as hygiene, food, activities of daily living.	Can meet a few but not all needs of daily living without assistance.	Can meet most but not all daily living needs without assistance.	Able to meet all basic needs of daily living without assistance.	Able to provide beyond basic needs of daily living for self and family.
Mental Health	Danger to self or others; recurring suicidal ideation; experiencing severe difficulty in day-to-day life due to psychological problems.	Recurrent mental health symptoms that may affect behavior, but not a danger to self/others; persistent problems with functioning due to mental health symptoms.	Mild symptoms may be present but are transient; only moderate difficulty in functioning due to mental health problems.	Minimal symptoms that are expectable responses to life stressors; only slight impairment in functioning.	Symptoms are absent or rare; good or superior functioning in wide range of activities; no more than every day problems or concerns.
Substance Abuse	Meets criteria for severe abuse/dependence; resulting problems so severe that institutional living or hospitalization may be necessary.	Meets criteria for dependence, preoccupation with use and/or obtaining drugs/alcohol; withdrawal or withdrawal avoidance behaviors evident; use results in avoidance or neglect of essential life activities.	Use within last 6 months; evidence of persistent or recurrent social, occupational, emotional or physical problems related to use (such as disruptive behavior or housing problems); problems have persisted for at least one month.	Client has used during last 6 months, but no evidence of persistent or recurrent social, occupational, emotional or physical problems related to use; no evidence of recurrent dangerous use.	No drug use/alcohol abuse in last 6 months.
Family Relations	Lack of necessary support from family or friends; abuse (DV, child) is present or there is child neglect.	Family/friends may be supportive, but lack ability or resources to help; family members do not relate well with one another; potential for abuse or neglect.	Some support from family or friends; family members acknowledge and seek to change negative behaviors; are learning to communicate and support.	Strong support from family or friends. Household members support each other's efforts.	Has healthy/expanding support network; household is stable and communication is consistently open.
Mobility	No access to transportation, public or private; may have car that is inoperable.	Transportation is available, but unreliable, unpredictable, unaffordable; may have car but no insurance, license, etc.	Transportation is available and reliable, but limited and/or inconvenient; drivers are licensed and minimally insured.	Transportation is generally accessible to meet basic travel needs.	Transportation is readily available and affordable; car is adequately insured.
Community Involvement	Not applicable due to crisis situation; in "survival" mode.	Socially isolated and/or no social skills and/or lacks motivation to become involved.	Lack knowledge of ways to become involved.	Some community involvement (advisory group, support group), but has barriers such as transportation, childcare issues.	Actively involved in community.

HEALTH CARE FOR THE HOMELESS, BALTIMORE

Service Utilization of a Homeless HIV+ Client with Multiple Co-Occurring Disorders:

AIDS, Hepatitis C, Peptic Ulcer, Hypertension, Vision Impairment, Arthritis, Allergies,
Muscle/Ligament Tear, Alcohol Dependence, Polysubstance Abuse, Major Depression

