

HEALING HANDS



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Are We Making a Difference?

Are the homeless clients we serve making progress toward engagement, stability or recovery as a result of our efforts? Is our program meeting its short- and long-term goals? Answering these questions involves both the art of wondering and the science of performance evaluation, and requires the collaborative efforts of clinicians, program administrators and statisticians.¹

PROCESSES VS OUTCOMES In evaluating program performance, it is important to distinguish between *processes* and *outcomes*.² Failure to do so is like mistaking the number of times a bird flaps its wings for how far the bird has flown.³ To determine whether HCH services (processes) are making a difference in homeless peoples' lives, we must compare short- and long-term results (actual outcomes) of services provided with program goals and objectives (desired outcomes).

OUTCOMES MONITORING (tracking short-term results of services) can be accomplished in most HCH practice settings without impeding client engagement or clinical intervention. Essentially, this involves documenting services provided and conditions or behaviors monitored, before and after service provision. *Performance indicators* (sometimes called *measures*) enable us to specify the conditions or behaviors to be monitored^{3,4} (e.g., *HbA_{1c} level as an indicator of diabetes control*). Increasingly, homeless service providers are expected to participate in some

outcomes monitoring to improve program accountability to consumers, funders and the public.¹

OUTCOMES MEASUREMENT (measuring ultimate effects of services on problems the program was designed to solve) is more technically demanding than outcomes monitoring. It includes demonstrating statistically significant relationships between services provided and long-term results, and generally requires data of higher validity and reliability than many practitioners can obtain. The extent to which they can participate in outcomes measurement depends on program resources and access to appropriate technical expertise, which vary widely among HCH projects.

PERFORMANCE IMPROVEMENT The fundamental purpose of outcomes monitoring and measurement is to provide an empirical basis for improving the quality and effectiveness of services^{2,5} in individual HCH projects and throughout the HCH program. Homeless service providers can contribute to performance improvement by documenting apparent results of services delivered, identifying trends, and generating hypotheses to be rigorously tested by formal research. In this way interventions with positive outcomes for homeless people can be identified and replicated in all programs serving similar populations. Our ultimate goal is to demonstrate the value of the HCH model of comprehensive, integrated care — not just for homeless people, but for us all. ■

A Physician's Perspective on Quality Improvement

by Karen G. Holman, MD, MPH

All clinicians want to make a positive difference in the health of their patients, and most are accustomed to reviewing their own work critically. But many find quality assessment and improvement processes to be confusing, frustrating and excessively time consuming, with results that are not always clinically useful. Providers worry about *how* reported quality data will be used, especially by managed care organizations,

and fear possible medicolegal consequences. With increasing clinical demands and limited staff resources, it is difficult to engage in multifaceted QI processes, even when we acknowledge their value. The good news is, quality improvement programs are improving.

QA Back in the 1970's when I first started practicing medicine, *quality assurance* (QA) was in vogue. QA was designed primarily to

look back at mistakes. Doctors conducted morbidity & mortality conferences to discuss patients who had done poorly, and administrators measured their institution's performance against external standards such as those established by the Joint Commission on Accreditation of Health Care Organizations (JCAHCO). The focus was on individuals who made mistakes, and the presumption was that with education and increased dili-

gence, clinicians and other service providers could avoid making similar mistakes in the future. The most obvious shortcoming of this approach was the focus on individuals rather than systems of care as the primary source of problems.

CQI In the late 1980's, *continuous quality improvement* (CQI) and *total quality management* (TQM) became popular, first in industry, then in health care. The Bureau of Primary Health Care (BPHC) encouraged HCH projects to use CQI, which promotes a team approach to studying and improving patient care. CQI acknowledges that faulty systems are often the source of performance problems, and emphasizes preventing errors by improving systems of care. For example, a multidisciplinary team might develop a plan to ensure that clinicians see all abnormal laboratory reports, instead of depending on each doctor or nurse to track lab results. Unfortunately, CQI focuses almost entirely on how we do things (*process*) and very little on whether we actually improve patients' lives (*outcomes*).

CLINICAL MEASURES In the 1990's, we began to shift our attention to outcomes. This was reflected in the use of *Clinical Measures* — measurable objectives to improve health care in each of five stages in the human life cycle — perinatal, pediatric, adolescent, adult and geriatric.⁵ For example, a clinic might decide to increase its childhood immunization rate to 90%, raise the percentage of women receiving regular PAP smears from 50% to 70%, and document the assessment of cardiovascular risk factors in 80% of hypertensive patients. Clinical outcomes measurement presupposes a community approach to health care and accessible, comprehensive, and continuous primary care, with an emphasis on health promotion and disease prevention.

EBM Now clinicians are beginning to use *evidence-based medicine* (EBM) as a guide to the assessment of clinical outcomes. EBM emphasizes the use of clinical practices that have been confirmed by research to result in positive health outcomes.^{7,8} The basic steps are to:

1. **Ask a specific question** about a patient's care (e.g., "Is the HbA_{1c} test useful in evaluating the control of diabetes?");

2. **Search the literature** for relevant clinical information;
3. **Appraise the information** for validity and usefulness; and
4. **Implement useful findings.** Disease-oriented evidence (DOE) which may increase understanding but makes little clinical difference is distinguished from POEM (patient-oriented evidence that matters). That a drug decreases mortality is POEM.

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As this brief history demonstrates, the process of assessing the quality of our work has changed significantly over the last 30 years, and continues to change. We now have a variety of tools to help us determine whether our efforts are making a positive difference in the lives of our patients. All require time and effort on the part of clinicians.

WHERE'S THE EVIDENCE IN EBM?

Of the six million medical articles published each year, less than 15% are really useful, according to Dr. William F. Miser, director of family medicine at Ohio State University, who has written and lectured extensively on Evidence-Based Medicine (EBM). He advises clinicians to assess the literature critically, so they can concentrate only on articles that are of value to their practice. Here's how:

STEP 1: Screen for initial validity and relevance.

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|---|-------------|
| 1. Is the article from a peer-reviewed journal? (These articles have been extensively reviewed by experts.) | Yes (Go On) |
| | No (Stop) |
| 2. Is the study setting similar to mine so that results, if valid, would apply to my practice? (e.g., to primary care?) | Yes (Go On) |
| | No (Stop) |
| 3. Was the study sponsored by an organization that might have influenced its design or results? | Yes (Go On) |
| | No (Stop) |
| 4. Will this information, if true, have a direct impact on the health of my patients, and is it something they will care about? | Yes (Go On) |
| | No (Stop) |
| 5. Is the problem addressed common in my practice, and is the intervention or test feasible and available to me? | Yes (Go On) |
| | No (Stop) |
| 6. If true, will this information require me to change my practice? | Yes (Go On) |
| | No (Stop) |

STEP 2: Determine the article's intent.

Read the abstract to determine what clinical questions the investigators were addressing.

STEP 3: Evaluate the article's validity based on its intent.

Dr. Miser's article includes a checklist to evaluate the validity of studies in each of four clinical categories: therapy, diagnosis & screening, causation and prognosis.

Summarized from an article by William F. Miser, MD⁹

BREAKTHROUGH SERIES A number of HCH projects are involved in the Health Disparities Collaboratives sponsored by the BPHC. These collaboratives use the *Breakthrough Series* model of performance improvement developed by the Institute for Health Care Improvement — a strategy to achieve rapid change in health care organizations. This approach combines many of the elements reviewed here: team involvement, proactive problem solving, looking at both process and evidence-based outcomes, and assessing whether our actions produce outcomes that are important to patients. [For more information, see the October 1999 issue of *Healing Hands*: www.nhchc.org/hands/1999

We are often frustrated by competing internal and external imperatives to measure and improve our program's performance. Administrators may feel the need to focus on a coming PCER or JCAHCO review; clinicians feel torn between working on Clinical Measures and participating in the Diabetes or Asthma Collaborative; and non-clinical staff just want to find a way to reduce patient waiting times so clients won't be so upset. Coordinating all of these important QI efforts is challenging, particularly in small HCH projects.

I believe the next step should be the development of an integrated approach to quality improvement that enables us to simplify and

coordinate all of these efforts. We need the cooperation of external reviewers to ask a minimum of clinically relevant questions in the same way, meeting the needs of multiple reviewers (JCAHO, PCER, etc.). We need

more flexibility in deciding *how* to conduct our quality assessment activities, while being held accountable for documenting *results*. And we all need continuing education about QI, especially evidence-based medicine. ■

Dr. Holman is a family physician who has worked in homeless health care since 1991. She also served as medical director for a consortium of 13 CHC/HCH projects in the Texas panhandle, 1991-94.

A Closer Look at Outcomes Monitoring

Monitoring and measuring outcomes sounds like a good idea, but some of us wouldn't know an outcome if we saw it, and others are convinced it's a job best left entirely to "the experts." If you are among such people, this article was written for YOU! We asked HCH clinician administrators experienced in performance measurement for clarification and practical advice. Here's what they said:

Did the population you serve get healthier or better health care as a result of your interventions, regardless of national averages?

Answering this question in a systematic way is what clinical outcomes measurement is all about, says **Linda Ruble, PA-C, ARNP**, former medical director, HCH project director and CHC administrator at Broadlawn Medical Center in Des Moines, Iowa. Now retired, she continues to volunteer at the homeless outreach clinic and conducts Primary Care Effectiveness Reviews (PCERs) of other federal HCH grantees for the Bureau of Primary Health Care.

HCH projects collect and report lots of data, most of it documenting processes (e.g., *PAP smears administered to women under 30*) or health status (e.g., *HIV-positive clients*), notes Ruble. But few analyze results (outcomes) of the services they provide (e.g., *increased or reduced blood pressure in clients treated for hypertension*).

WHICH OUTCOMES should HCH projects monitor? "Don't try to tackle everything at once," advises Ruble. "Learn to think small about a big topic. Monitor outcomes service providers can understand and think they can measure that will help their patients." Optimally, your findings should also be relevant to populations beyond those served by your project, she says. So try to use at least one clinical measure that other HCH projects are also using (e.g., *HbA_{1c} levels to measure outcomes of diabetes care*). HCH grantees can achieve that broader focus through participation in the Health Disparities Collaborative.

Monitoring **clinical outcomes** is doable even in single-provider HCH projects, assures Ruble. "If you are a small project, make your N small and your measures simple. Track a few patients, once a quarter. If possible, use a control or comparison group to show how you are improving their lives. Be sure to compare similar populations." Mental health workers in Des Moines tracked chronically mentally ill homeless clients who obtained stable housing versus those who kept changing addresses, and compared their health status. They found that clients who moved less were healthier. This simple study, linking intermediate outcomes (stable housing) to ultimate outcomes (improved health status), suggested that aggressive outreach efforts to

help clients find a place to call home were making a difference.

"The main stumbling blocks to outcomes measurement for HCH clinicians are lack of time and lack of knowledge about how to do it. Both barriers can be overcome," insists **Laura Gillis, MS, RN**, clinical operations officer for HCH, Baltimore, who has played a seminal role in the evolution of her project's quality management program. Minimally, HCH projects should **measure staff and client satisfaction** to identify problems, she advises, using standardized instruments easily available from the literature.^{5,10} In addition, **monitor high-risk, problem-prone interventions** that affect the most patients, such as medication procedures.

MEASURING CLINICAL OUTCOMES: PRACTICAL TIPS

- **Keep it simple and doable.** Think small about a big topic that will help patients.
- **Involve everyone from the beginning.** Explain outcome measures and how results will be used. Update staff/clients on findings regularly.
- **Involve those actually doing the work** in analyzing and recommending changes in it.
- **Use a control or comparison group** to show how you are making a difference. Use poverty and severity of illness indices to assure that you are comparing similar populations.
- **Use existing models and standardized tools** that have been validated for use in homeless populations, where possible.
- **Find the job you're doing worst and make it better.** Don't be intimidated by negative outcomes.

Linda Ruble, PA-C, ARNP, Des Moines, Iowa;

Laura Gillis, MS, RN, Baltimore, Maryland

The following questions specify outcomes that any HCH project should be able to monitor, says Gillis:

1. **Did you get your clients onto entitlements?** Social Security Income, food stamps, medical and pharmacy assistance help homeless people meet basic needs. Record whether or not they have these benefits at intake and periodically thereafter.
2. **Are your clients keeping appointments?** Adherence to appointments is an indicator of engagement, a necessary first step in clinical intervention. Calculate the percentage of patients who keep their appointments from month to month.

3. Are your patients responding to treatment? Conduct ongoing chart reviews to monitor a specific clinical outcome. For example, monitor the blood pressure of your clients on anti-hypertensive medications. Put your findings in a database. Record medications administered and blood pressure levels. Track changes in blood pressure over time to identify trends, and try to explain them.

Ultimately, *clinical outcomes monitoring should be driven by your client population*, declares Gillis. “If you see lots of women and children, the outcomes of care you choose to monitor will be different from those selected if you see mainly adult males. Pay attention to cultural differences.”

“We are working toward increasing the understanding of policy makers and funders that there is a continuum of outcomes, just as there is a continuum of care.”

Louise Treherne, LCSWC, HCH, Baltimore

CONTINUUM OF OUTCOMES “It’s a mistake to focus exclusively on ideal or ultimate outcomes, overlooking the intermediate outcomes that are required to get there eventually,” warns HCH, Baltimore’s grants manager, **Louise Treherne, LCSWC**. A clinical social worker with specialty training in oncology and HIV, Treherne has worked with the homeless HIV population since 1991. As a member of local and regional councils responsible for setting Ryan White funding priorities and allocation levels, she participates in establishing standards of care for all grant recipients. Her role is to specify reasonable outcomes for homeless health care that may differ from those used by traditional clinics. She also collects outcomes data used by the HCH project to advocate for continued or increased funding.

“Unrealistic outcome measures can put HCH clinicians under undue pressure to get HIV-positive clients into treatment prematurely,” explains Treherne. For example, a proposed requirement for all programs receiving Baltimore City money to care for persons with HIV infection is to demonstrate that 75% of such clients are on antiretroviral (HAART) therapy. But it would harm some homeless patients to put them on medications to which they can’t adhere, thereby cutting short their future therapeutic options. It could also harm the community by putting additional resistant virus on the street. Treherne is working with the city health department to develop appropriate benchmarks for the HCH project that won’t harm their clients or the community.

“Basically, we insert the language of harm reduction into what a successful outcome is,” she explains. “Most funders are looking for traditional outcomes — increased CD4 count and reduced viral load in HIV-positive patients. But some of our clients aren’t ready for anti-retroviral therapy. We measure traditional outcomes for patients on HAART, and use process indicators (e.g., number of clinic visits) to measure intermediate outcomes for those who aren’t ready to adhere to medical treatment.”

The Prevention Outreach Education Team (POET) project is a good example of interim goals that are attainable. Team members go out into the community to educate homeless people about STD/HIV risk

reduction. Of 1000 homeless persons contacted by POET and referred to the HCH clinic last year, 480 (48%) showed up. Of those seen in the clinic, 90% were found to be HIV negative, and 83% hadn’t been to the clinic in three years, if ever.

“These findings tell us we are reaching the individuals we had hoped to reach,” concludes project director **Deborah Formella, MSN, CRNP**. “We needed to know how to get people engaged and whether they were using HCH services before we could measure behavior change, our ultimate goal.” The state AIDS administration is working with Formella to develop realistic behavior modification goals and outcome measures.

SPECIAL CHALLENGES Monitoring clinical outcomes can be especially challenging. Here’s advice from HCH clinicians in the know about how to avoid common pitfalls:

- **Include enough patients in your intervention and control groups to accommodate natural attrition** in this highly mobile population. Remaining connected with randomly selected patients for an extended period may be difficult.
- **If your outcome measure involves procedures, know who will pay for them;** advocate for public support.
- **If part of the outcome measured is frequent contact, have a plan to get patients back to the clinic within a reasonable time.** Use aggressive outreach; give clients some leeway in the follow-up schedule.
- **Facilitate follow-up with unsheltered homeless people** (especially those with HIV/AIDS) by giving them pocket calendars and 2-3 stamped postcards, to communicate with you if they have trouble getting to clinic appointments. Teach clients how to ride buses, especially in winter. Leave three or four bus tokens at a shelter or soup kitchen as an incentive to return to the clinic.

SO WHAT are you learning from the outcomes you monitor, and how are you using that knowledge to improve your services? Many HCH projects are not yet addressing these questions, which are at the heart of quality improvement, observes Linda Ruble. “Once you’ve done your study, what are you going to do about it?”

“The purpose of monitoring outcomes is to learn,” agrees Laura Gillis. “If we learn that our patients’ blood pressure is not going down, we assess the problem, make recommendations for change, implement them, then monitor again. It’s a constant, cyclical process.” When assessing a problem, it’s important to involve the people who do the relevant work, she adds. For example, it’s part of a medical provider’s job to do chart audits to track patients’ viral loads. That way, the data are real to them. Gillis estimates this takes each clinician about five hours per month.

At HCH, Baltimore, all components of the organization — clinical, administrative and community relations teams — are expected to

monitor and improve their activities over time. These efforts helped the free-standing clinic obtain JCAHO accreditation last year. Preparing for the review process was long and arduous, recalls Gillis, but well worth the effort. “It pushed us to organize systems that enable us to monitor outcomes and improve quality of care.” Accreditation is an external measure of that quality, which is also an asset in fundraising, she says.

Electronic databases can greatly facilitate outcomes monitoring and organizational learning. The Health Care for the Homeless Network (HCHN) in Seattle-King County used an encounter database, originally designed to generate demographic data for Uniform Data System (UDS) reports to the BPHC, to answer questions about service utilization by subgroups of homeless clients. They used these data to identify diagnostic and demographic indicators of high service usage so they

could concentrate provider expertise and supportive services where they were most needed.¹¹ HCHN is also using encounter data to measure housing status as an outcome of project services.

“We spend an enormous amount of time collecting data on our clients and entering it into an electronic database,” says principal investigator **Susan Kline, MN, PNP, ARNP**. “If we don’t maximize the use of these data to identify trends, outcomes, successes and gaps in service, we are not utilizing this resource to its full capacity.” She thinks it might be a good idea for HCH projects like hers to share electronic data management systems with other projects, “so they won’t have to reinvent the wheel.” *For more information about the HCHN database, contact Susan Kline at 206/296-4654; susan.kline@metrokc.gov.* ■

BPHC Expectations

As the progenitor and primary federal funder of Health Care for the Homeless projects, the Bureau of Primary Health Care has a major interest in the quality and impact of services HCH clinicians provide. The Bureau has also taken the lead in educating homeless service providers about the latest developments in performance evaluation. HCH grantees look to the BPHC for guidance and understanding as they struggle to adapt quality measures often designed for mainstream health care organizations serving healthier, more stable populations.

In a recent interview, **Jean L. Hochron, MPH**, HCH Branch Chief, Division of Programs for Special Populations, BPHC, and Deputy Chief **Amy M. Taylor, MD, MHS**, responded to the following questions posed by HCH Clinicians’ Network members:

What are the Bureau’s expectations of HCH projects with respect to measuring clinical outcomes?

Jean: “Current expectations are articulated in the Program Assistance Letters (PALs) and Policy Information Notices (PINs)¹² — *to have a continuous quality improvement program, select and implement clinically meaningful outcome measures, and apply what you learn to improve patient care and health status.* The Bureau has not stipulated particular health outcomes that must be measured or standards that must be met as a condition of funding. Instead, we continue to work closely with HCH grantees to help them develop mean-

ingful performance evaluation systems. The 1996 Working Group on Homeless Health Outcomes was the first step in a multi-stage process to develop outcome measures specific to homeless health care.⁴ We are working with grantees to meet the goals articulated at that meeting — to improve the quality of care received by all homeless people, and to educate funders, policy makers and managed care organizations about specific interventions that lead to positive outcomes for people experiencing homelessness. Policies specified in the PINs and PALs reflect our ongoing commitment to these goals, in partnership with HCH providers.”

How can HCH providers reconcile expectations that they increase clinical productivity and spend more time on QI?

Jean: “There are no absolute productivity requirements for HCH projects. In looking at UDS data on encounters and FTEs, we recognize that not all of the time a clinician spends on site can be devoted to seeing patients. CME, QI and other administrative activities are also intrinsic to good clinical practice.”

Amy: “The concern that quality activities eat into clinical time is particularly an issue for projects with few providers. I would advise clinicians to choose outcome measures that they know will be clinically useful, so their quality improvement time is well spent.”

Should HCH grantees employ health out-

come standards used by traditional providers?

Amy: “Ultimately, yes. Someone who is homeless should have the same quality of health care as anyone else. That’s not to say that we don’t recognize how difficult it is to realize that goal, but we shouldn’t set the bar lower for homeless people.”

Jean: “The goals are the same for both HCH and traditional providers, but some intermediate standards or expectations may need to be modified for homeless patients. Others may not.”

What has been learned from the Health Disparities Collaborative about the application of evidence-based medicine to outcomes measurement by federal HCH grantees?

Amy: “It’s still too early for there to be published outcomes on the Diabetes Collaborative, but participating health centers report anecdotal evidence of reduced HbA_{1c} levels in their monthly progress reports. The Rand Corporation is evaluating the Asthma and Depression collaboratives, which have completed Phase I. Cardiovascular I and Diabetes III are beginning in April, and Asthma II is scheduled to begin in late summer.”

Should all HCH projects be using health outcome measures developed for the Health Disparities Collaborative?

Jean: “Grantees are not required to use specific health outcome measures, but it’s

extremely helpful to adopt one or more of them. The Health Disparities Collaborative is a good model. The Bureau would like more HCH projects to join the collaboratives.”

Amy: “I recommend that every HCH project join one of the collaboratives. If projects are seeking ideas about outcome measures, that’s a fine place to look. Take one of the national goals within a collaborative and adopt it as

your own. Use the collaboratives as resources for your own quality improvement efforts. National outcome measures used in the collaboratives are derived from evidence-based medicine identified by expert panels. Clinicians who serve on these panels were selected because of their research, their clinical experience in community-based health centers, and their expertise in treating particular diseases or conditions. Those serving on the

expert panel for the Health Disparities Collaborative also have a good understanding of chronic disease management and the model of change advocated by the Institute for Health Care Improvement. Therefore, the Health Disparities Collaborative offers an extremely useful framework to guide HCH outcomes measurement.” ■

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