
Clinical Outcomes Feasibility Study

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National Health Care for the
Homeless Council

Introduction

Currently Health Care for the Homeless (HCH) grantees report on core clinical and financial measures using the Uniform Data System (UDS), an integrated reporting system used by all grantees of primary care programs administered by the Bureau of Primary Health Care (BPHC), Health Resources and Services Administration (HRSA).

HCH providers are committed to providing quality care and are supportive of HRSA's clinical quality measurement and improvement initiative. However, many providers serving in HCH programs where persons without homes are disparately represented among particular medical conditions related to: behavioral health, (e.g. common mental health disorders such as depression and anxiety), cognitive impairment, social functioning (including housing status), substance abuse, HIV, reproductive health, and medical respite care feel that the latter are not reflected in the current Clinical Quality Core Measures.

With support from HRSA, BPHC, the National Health Care for the Homeless Council conducted a feasibility study in the summer of 2010 to identify and develop **supplemental** clinical outcome measures specific to persons who are homeless who seek care at HCH projects and Medical Respite Care facilities.

The objectives of this feasibility study are to:

- 1) Evaluate the methods which HCH/Medical Respite projects are collecting data on current clinical outcome measures.
- 2) Identify validated tools that may be adapted to collect data on the proposed HCH clinical outcomes; and/or develop tools to be validated in the future that may be used to collect data on the proposed HCH clinical outcomes.
- 3) Evaluate what technology, staffing, and resources HCH/Medical Respite projects would need to collect data in their clinical settings.
- 4) Develop a plan of action to conduct a pilot study with 10-16 HCH/Medical Respite projects, collecting data on proposed measures utilizing the appropriate tools. This may also include validating new measurement tools that have been developed during the process.

Background

With HRSA support, in 2004-2005 the National HCH Council convened an HCH Outcomes Work Group to assess how HCH service outcomes could be measured in a more comprehensive method. Members of the Work Group and other consultants represented 17 HCH grantees in different regions of the United States. The Work Group 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 who were particularly knowledgeable about current HCH outcomes measurement efforts.

The Work Group members were 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 summarizing the work group's findings and recommendations *"Developing Outcome Measures to Evaluate Health Care for the Homeless Services"*, (2005) is available at www.nhchc.org/Publications/DevelopingHCHOutcomeMeasures.pdf.

In the report the Work Group made several recommendations. Two are particularly pertinent to this proposal:

- 1) Develop 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.
- 2) Conduct 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.

Since the publishing of the HCH Outcome Measures report, the National HCH Council has looked for ways to pursue these recommendations through its Cooperative Agreement with HRSA. Our proposal for the current budget period includes the following activity: "Develop a proposal regarding meaningful and feasible HCH clinical outcomes measures to assist grantees in meeting HRSA requirements. This may involve proposing actual measures or proposing formal process for determining measures."

Process of Identifying Supplemental Performance Improvement Measures

In September 2009, a Clinical Outcomes Task Force comprised of grantee representatives began building on the foundation already established by the earlier Work Group and decided to propose actual clinical measures that are appropriate for the homeless population and may also be applicable to other special populations.

Because HCH projects vary with regard to geography, availability of resources, services offered and demographics of population served, the Task Force advocated for developing **two levels** of HCH clinical measures. The **Level One** measures are being identified as measures that all projects, even those with limited resources should be able to track with adequate reliability. The **Level Two** measures are additional indicators intended for projects with greater data collection and management capacity (See Appendix A for Proposed Measures Grid).

The Task Force identified ten areas for potentially appropriate homeless specific clinical outcome indicators. The categories of these indicators are as follows:

- Diabetes
- Hepatitis C
- Substance Abuse
- Asthma
- Mental Health/Behavioral Health
- Medical Respite Care
- Global Assessment of Functioning
- HIV
- Sexual Health
- Family Planning

In July 2010, the Task Force which consisted of 11 members, reconvened. These members met via conference call on two separate occasions. During these meetings, the Task Force worked to finalize the measures that had been identified for each proposed indicator. Recommendations were made by the Task Force in terms of survey content as well as how focus group participants should be recruited. The Task Force determined that the survey should be opened up to the larger HCH and Medical Respite community and advised that it be used as a recruitment tool for projects who would participate in focus groups.

Methodology

Survey

The National HCH Council utilized its internal database to develop a potential list of nationally representative survey participants. In August 2010, the clinical measures tracking survey was sent electronically to a total of 260 HCH Medical Directors and Medical Respite Coordinators. As medical respite care is an increasingly central feature of HCH projects, medical respite programs not affiliated with a federally qualified health center (FQHC) were also invited to participate. Through this survey we hoped to learn more about the practices of various projects in tracking

clinical outcomes for the ten conditions identified by the Task Force. The survey was designed to collect the following information:

- HCH specific clinical measures currently being collected at projects,
- Specific tools being used to collect the data,
- How this data was being documented.

The survey also provided a field in which respondents were able to indicate their interest in participating in the study. After 10 days, the survey was closed and recruitment for the focus groups began.

Focus Groups

Based on the desire to achieve a diverse participant pool, projects identified for participation in the focus groups were chosen based on these criteria: geography, size of project, and available resources. Each project was informed they would receive \$500.00 for their participation in the focus groups. Participation was specified as the sharing of information regarding clinical measures being tracked at their projects and the submission of any standardized tools being used to collect data on the identified measures.

Two focus groups were conducted. Each focus group was facilitated by the National HCH Council's Research Director, who directed the discussion during the 90-minute sessions. Each group consisted of 5-6 projects from both HCH and Medical Respite projects. These groups served as a modality for examining what clinical measures were already being collected at projects, standardized tools being used to track measures, how the collection of data is documented (i.e. Manual vs. EMR), the feasibility of tracking measures being proposed by the Task Force, and the resources needed in order to be successful at tracking HCH specific clinical outcome measures.

Data Analysis

Participants' responses and comments were manually recorded to capture all of the information being shared in the focus groups. Information collected by participants in the focus groups was compared to the data collected for the survey to examine any themes that may have emerged.

Results

Information gleaned from the survey and focus groups provided very similar information in terms of measures being collected, the feasibility of collecting outcome measures being proposed, and the resources that would be needed by projects in order to be successful at tracking clinical measures.

Survey Findings

There were a total of 24 responses to the online survey. Each respondent was asked about any clinical measures being tracked at their project in the ten areas identified by the Task Force.

Diabetes

In the area of diabetes, more than one-quarter (39%) reported they were tracking hemoglobin A1c levels at 7.0 or less. Another 38% of respondents reported they track lipid, blood pressure, and/or hemoglobin A1c levels, but not at the goals specified by the Task Force (i.e. LDL less than 70, SBP less than 130, HbA1c at 7.0 or less). Among those who were tracking measures related to diabetes, respondents tracking HbA1c commonly reported tracking hemoglobin at 9.0 or less, lipid levels were commonly stated to be at a goal of 100, and systolic blood pressure at 140. It was reported most often that this measure was tracked every 3-6 months. Of the projects tracking lipid, blood pressure, and HbA1c, respondents reported most often they were tracking this measure once each month.

The qualitative data revealed that respondents reportedly not tracking measures related to diabetes indicated they do not have any staff or that they were not an actual medical clinic. Respondents who were tracking diabetes, but not at the measures proposed, stated HbA1c is “informally” tracked at their project. Respondents stated that patients with high HbA1c levels are encouraged to take their medications and this is manually documented in the patient’s record.

Hepatitis C

More than half (55%) of respondents reported their projects do not track measures related to Hepatitis C. Based on information revealed in qualitative data, it was found that respondents not tracking this measure stated it would be time consuming (requiring extensive chart reviews) and difficult to track in treatment. Other projects reported that Hepatitis C is not a part of their health care plan based on their decision to track other measures; some specific to what HRSA requires. About one-quarter (27%) reported their project does track Hepatitis C measures but not the measure specified by the Task Force (percent in treatment of those who are eligible). More than half (63%) also reported they do not track the percent of Hepatitis C infected patients in remission following their treatment. These respondents indicated most often they were tracking measures related to screening and the “percent of patients with a positive Hepatitis C diagnosis.” Some projects indicated they “referred out” for treatment of Hepatitis C and therefore do not have access to this data.

Substance Abuse

In the area of substance abuse, 65% of respondents reported their projects are currently tracking measures related to substance abuse. Qualitative data was analyzed and it was found that programs varied in terms of the type(s) of substances being tracked at projects; but were inclusive of alcohol,

tobacco, and drugs. The Task Force proposed tracking substance abuse outcome measures at 3 and 6 month remission rates. While 67% of respondents reported they do not track 3-month remission rates, more than half (60%) reported they track remission rates at 6 months. The tracking of this measure varied among the few projects tracking 6-month remission rates from once monthly (33%), 3-6 months (33%), and annually (33%).

When respondents were asked why 3 month remission rates were not measured at their projects, qualitative data revealed that projects lacked needed resources in the area of staffing and technology. Respondents commonly reported tracking this measure would require extensive chart reviews, providers lacked time to track this measure, or that their EMR is not set up to capture this information.

Asthma

Just less than half (43%) reported their project does not track measures related to asthma. One-quarter (29%) stated they were currently tracking the percent of asthma patients with control of their symptoms. Other measures tracked related to asthma include: “action plan” and “spacer use.” Half of the projects measuring asthma reported they track this measure every 3-6 months. Among respondents who reported they were not tracking any measures related to asthma, it was reported most often that projects lack time and resources because documentation is a manual process and requires a chart review.

Behavioral Health

More than one-third (37%) reported they do not track measures in the area of mental health. In reference to patients diagnosed with depression, 32% of respondents reported their project tracks the “percent of patients diagnosed with depression” but not the rates of remission following treatment. Less than 20% reported they track the percent of patients diagnosed with depression in remission. The Patient Health Questionnaire (PHQ-9) was among the most commonly mentioned tool being used to measure patient scores for depression severity. A qualitative analysis of data revealed that respondents are tracking depression screenings (number diagnosed with depression) and the number of clients entering and exiting a program with mental health issues.

In the area of social functioning, more than half (53%) reported their projects do not utilize the Global Assessment of Functioning (GAF) scale. A qualitative analysis of the data revealed that the GAF scale is not a commonly used screening tool at the projects responding to this survey. Respondents reported most often: the GAF is done on selected patients and not performed routinely, there is no mechanism to track this data, and projects utilizing EMR’s don’t have a way to retrieve the data.

Among those respondents who reported their projects do utilize the GAF scale, more than three-quarters (78%) reported their project does not track GAF scores at the measure being proposed (percent of patients diagnosed with a mental illness with a GAF score greater than 50). In addition to this, the majority (89%) reported their project does not track GAF related measures for all persons who are homeless. Respondents did not provide any information as it relates to measures they are currently tracking with the use of the GAF. The PHQ-9 scale was mentioned again, as a tool used for behavioral health.

Medical Respite Care

In the area of medical respite care, 68% of respondents reported their health center either provides medical respite services or that they represent a stand-alone medical respite program. About half (46%) reported their project tracks stabilization of admitting diagnosis. Stabilization of admitting diagnosis included the resolution of a wound, stabilization of blood sugars for someone who was admitted to the hospital for a diabetic coma, completion of plan or admitting procedure, etc. (See Appendix B for definitions). Among these respondents, half reported this measure is tracked daily at their project. Respondents not tracking this measure indicated most often that they have insufficient resources. It was also reported that a standard way to track this type of measure has not been determined.

About half (46%) reported their medical respite program tracks advancement toward a more stable living environment. Advancement toward a more stable living environment took into account the ultimate goal of permanent housing (Appendix B). Of those respondents tracking this measure, 67% reported this measure is tracked once each month. Respondents not tracking this measure indicated most often that they lack necessary resources. In a review of qualitative data, specific responses were not provided in terms of what these resources were, though there were a few comments related to chart reviews and the capability of their EMR.

When respondents were asked if their project tracked 30-day hospital inpatient readmission rates for the same diagnosis the patient was treated for at the medical respite program, nearly three-quarters (70%) reported they do not track this measure. Respondents indicated most often this measure was not being tracked due to insufficient resources and their inability to get accurate data based on their relationship (or lack of) with hospitals they would need to retrieve this data from.

Respondents specified measures their medical respite programs were currently tracking (as it relates to medical respite care) that were not listed on the survey. Responses revealed through qualitative data described a range of responses including (but not limited to): severity of admitting diagnosis, connection to primary care upon discharge, and use of hospital emergency room department. It was found that while some projects collect patient information at discharge, some of these projects did not reportedly have the mechanism to do any follow-ups after.

HIV

While more than one-quarter (32%) reported their projects do not track measures related to HIV, 42% of respondents reported their project tracks the percent of HIV infected clients with PCP prophylaxis per CD4 count less than 200. More than one-third (39%) reported their project tracks the percent of patients with MAC prophylaxis per CD4 count less than 50. Just less than half (46%) reported their project tracks the percent of HIV infected patients with viral load (VL) less than 48.

Information collected in qualitative data indicated that respondents tracking measures related to HIV were commonly tracking the number of patients referred for treatment and the number of HIV positive patients that enter their program. It was also reported that HIV measures were tracked in a “partner program.” Respondents who reported their projects were not tracking HIV related measures commonly stated their project did not treat HIV; consequently, patients are referred to a specialty clinic for care/treatment.

Sexual Health

When asked about sexual health, 42% of respondents reported their project tracks the percent of patients with an abnormal PAP/HPV screen with documentation of intervention. More than one-quarter (32%) reported they were tracking the percent of women who received a PAP but not at the measure being proposed. These respondents indicated most often their projects were tracking the percent of women who have received PAP’s (not necessarily those that were abnormal) and general sexual health assessments (including family planning) during a visit.

Reproductive Health

More than half (58%) of respondents reported their projects do not track any measures related to family planning. A qualitative analysis of data revealed that projects that were not tracking measures in this area reported: family planning is not a priority at their program, this type of care is not provided at their site, and/or their projects lack the resources needed to perform chart reviews to carry out this task. Among those projects tracking family planning, it was reported that use of contraceptives, counseling on family planning, and entry into pre-natal care were measures considered in this area. There were no respondents who reported tracking family planning at the measure being proposed by the Task Force (i.e. percent of patients with unintended pregnancies at or less than 50%).

Documenting Measures

Respondents in this survey reported the use of both manual/paper records and electronic medical records (EMR). Medical respite programs in particular, most commonly use paper records for documentation of measures being collected at their project. Other specific tools mentioned in terms of documentation include: PECS database, ACCESS, Community Health Information

Association (CHIA) website, HIV Quality Improvement (HIVQUAL), Health Management Information System (HMIS), and Deep Domain. The latter tools/methods of documentation were revealed through qualitative data; the meanings of some acronyms were not provided by respondents.

Focus Group Findings

A total of 11 participants (out of the 18 invited) from various projects across the U.S. participated in the focus groups. Three key areas were identified as a result of the focus groups:

- 1) Methods being used by HCH/Medical Respite projects in collecting data
- 2) The feasibility of HCH/Medical Respite projects to track measures that have been proposed
- 3) Resources needed by HCH/Medical Respite projects in order to collect data in their clinical settings

Methods Currently Used

Participants involved in the focus groups indicated most often that their projects utilize an EMR for documentation of the clinical measures being tracked. More than half (54%) described the utilization of an EMR (6/11), 36% reported use of paper recording (4/11), and 10% reported they use the ACCESS database to document data. In terms of specific databases and systems that were mentioned in the sessions, HIVQUAL was described as software used to enter data for patients receiving HIV care. Another participant reported her project utilizes the Community Health Information Association (CHIA) which is not software, but an actual local program collaboration. This method of “shared reporting” was also described by another participant who stated her project subcontracts with the community health department for cross-disciplinary needs, templates, and shared reporting to “benchmark off of each other.”

In reference to specific tools that were mentioned by focus group participants, the PHQ-9 was the most commonly mentioned tool among participants who reported they were tracking measures related to behavioral health. Tools related to social functioning were mentioned as well. These included the “Arizona Self-Sufficiency Matrix” and the GAF scale. Informal tools created by projects were described by participants. One tool mentioned was called the “Episode form” which collects data on every client related to demographics, outcomes that have been set for the patient (at admission), and medical treatment completed/primary care received. Another tool described was titled the “Health improvement assessment form” which is used at admission and discharge to document the state of each condition at admission using a scale (e.g. excellent, good, fair, poor). This tool is specifically used in an effort to track if a patient’s condition improved.

Feasibility of Tracking Proposed Measures

During each focus group session, the facilitator guided participants through the proposed supplemental measures grid. Participants were able to provide feedback on what their program was currently measuring in each area (if any) and the feasibility of tracking the outcome measures being proposed by the Task Force.

Diabetes

A common theme emerged during discussions about the measures being proposed as it relates to diabetes. Several focus group participants were concerned that an HbA1c level of 7.0 was too low and could potentially place a person experiencing homelessness at risk of a hypoglycemic episode. It was stated by respondents that remaining at a level of 9.0 or below while focusing on blood pressure control is “more important” to a patient’s health. Some participants explained that their projects have patients at levels around 7.0 and therefore, felt that it was possible, but stated results would vary by patient. Participants in both groups seemed open to tracking lipid/BP/and HbA1c though specific goals were not elaborated on outside of HbA1c.

Hepatitis C

Participants in both focus groups appeared to be very limited in their ability to track Hepatitis C measures. Participants that reported this condition was an area being tracked at their project indicated it was primarily at the immunizations level, as opposed to an outcome measure. This appeared to be related to a significant number of projects that indicated they do not provide this type of care and stated that patients are often referred to outside programs.

Substance Abuse

As with diabetes, participants were concerned about the measures being proposed in the area of substance abuse. The majority of focus group participants stated they do not track remission rates though some reported 6 month remission rates were something they could attempt to “pull” from their EMR. Participants often stated they were not clear on what is meant by “remission”, how remission could be tracked accurately, or maintained in clients. One focus group participant stated her project tracks sobriety through case management in terms of whether the client is actively participating in Alcoholics Anonymous, has a sponsor, or is taking some other active step toward ongoing sobriety. Many participants reported their projects use a harm reduction model and “remission” does not necessarily relate to this.

Asthma

Of the 11 participants involved, one reported their program tracks measures related to asthma. The participant stated they track receipt of steroid inhalers and utilize an asthma severity plan. It was described that the tracking of this clinical measure would require chart reviews but a template could be created in the EMR.

Behavioral Health

The majority of participants involved with the focus groups reported their projects utilize the PHQ-9 tool to document measures related to mental health. While some participants indicated the tracking of depression (not necessarily the proposed measure of percent of clients diagnosed with depression in remission) would be an easy measure to track, there were other participants who reported this measure would require extensive chart reviews. In general, participants felt that most patients experiencing homelessness have some type of mental health diagnosis. Therefore, a measure in the area of behavioral health was vital.

When discussing the GAF tool for social functioning, there was one project that indicated this as a tool used. One participant reported her project “enters this information as part of every visit.” Those that were not currently utilizing the GAF stated that they felt the GAF was a good tool and would be interested in utilizing it at their project. There were however, comments made about the subjectivity of the tool. It was stated that the score determined would largely depend on the person administering the questionnaire.

Medical Respite Care

There was a positive response to the proposed measures in the area of medical respite care. Of the 11 participants involved in the focus groups, five represented either a medical respite program or a program that provided some type of medical respite care. These participants reported that stabilization of admitting diagnosis and advancement toward a more stable living environment were feasible measures. Some participants placed emphasis on medical respite’s view on the Housing First Model. It was stated that the movement toward housing or some stable environment is a central aspect of medical respite. In reference to tracking 30-day hospital inpatient readmission rate for the admitting diagnosis, participants reported that the ability to track this accurately may present difficulty depending on the relationships/collaborations a project has established with local hospitals for comparison data.

HIV

In the area of HIV, participants seemed to agree that measuring PCP and MAC prophylaxis was within their ability. It was stated by one participant that although they do not currently collect information on MAC prophylaxis, their project’s EMR can be developed to collect this data. Participants agreed that a VL of 48 was a great number to strive for. However, there were a couple participants who indicated their projects would have some difficulty tracking VL. It was also mentioned by a participant that while tracking HIV related measures may be feasible; those being proposed were more process in nature. Another participant stated that tracking VL would be easier than the measures currently proposed in Level One (PCP and MAC). Participants during that session generally appeared to agree with that comment.

Sexual Health

When discussing sexual health, participants reported that measures related to PAP smears were already a core clinical measure as outlined by HRSA. Participants commonly reported that their projects track the number of women that receive a PAP but not necessarily the percent that are *abnormal*. Participants stated most of their projects do not provide this type of care. Since this was something they referred out for, participants indicated there would possibly be some difficulty in accurately collecting this data.

Reproductive Health

Several participants in each focus group session indicated they did not understand the proposed family planning measure. Several barriers were reported when discussing the potential of measuring a clinical *outcome* in this area. Participants commonly reported that they refer patients out when needing care related to a pregnancy. Another participant commented that they do not understand what the relevancy would be in knowing rates of unplanned pregnancy. Participants reported they often do not know whether a pregnancy is unintended because some women come in for their first visit and are already pregnant. It was suggested that this measure be tracked from a contraceptive level of care, which would make this a process level clinical measure. Participants suggested that women coming in for a visit be counseled by their health care provider on their contraceptive options. Participants stated that if rates of unintended pregnancy remain a focus for this clinical outcome, that only women who have previously received a PAP and come in for regular visits be included in this measure.

Resources Needed by Projects to Collect Data

Participants in each focus group identified three main resources needed at their projects: 1) an Electronic Medical Record System (for those still using paper records); 2) Technological support; and 3) Staffing.

Electronic Reporting System

As described earlier, all but one of the programs providing medical respite care indicated they were still using a manual reporting system. It was reported that this system has presented them with some difficulty (can be time intensive) and limits what they are able to do in terms of what data can be collected and report writing. All of the participants representing medical respite programs described that having an EMR or some other more standardized database for collecting information would assist their programs greatly. Participants describing chart review processes reported how time intensive this can be which takes away from their ability to collect data in more areas and be more efficient in the work that they do.

Technological Support

A central theme that emerged was the need for technological support. Participants that indicated their project did utilize an EMR system described how limited they were in their ability to track measures on a *regular* or scheduled basis, run reports, and create templates/questions/checkboxes to add to the EMR. Participants reported that having this IT support would assist in their ability to report their data annually as required. One participant also mentioned that outreach staff (providing care in mobile units), need enhanced technology as the use of laptops and PALMs have not proved to be efficient.

Staffing

Staffing was described as a big issue among the majority of participants in the focus groups. This was largely in part due to the lack of staff to actively track data being collected by providers, run and write reports. Several participants reflected on instances when they had a research assistant, medical student, AmeriCorps VISTA, or some other intern to assist with data collection. They described that having staff to assist with data management and report writing would improve not only how measures were tracked and documented, but reported as well.

Discussion

The goal for conducting the Feasibility Study was to identify and develop **supplemental** clinical outcome measures specific to persons experiencing homelessness who seek care at HCH projects and Medical Respite Care facilities. Identifying supplemental HCH clinical outcomes to determine the quality of care and performance in the delivery of HCH services is not simple, but this undertaking is important to ensure **high** quality care to vulnerable populations.

The four specific objectives of the feasibility study were as follows:

I. Evaluate the methods which HCH/Medical Respite projects are collecting data on current clinical outcome measures.

HCH/Medical Respite projects use both EMR and paper methods to collect data on current clinical outcome measures. There appear to be challenges when using both methods. Although having an EMR simplifies data collection, there are limitations to not being able to take full advantage of the EMR due to lack of time, lack of expertise, or limitations of the IT system not being programmed to collect certain data points. The challenges in utilizing the paper method of collecting data includes the lack of designated staff and staff time to gather information from the charts, as well as having limited time to analyze, interpret and disseminate the data.

II. Identify validated tools that may be adapted to collect data on the proposed HCH clinical outcomes; and/or develop tools to be validated in the future that may be used to collect data on the proposed HCH clinical outcomes.

Many participants in both the survey and focus groups stated that they use various tools to collect data on the 10 proposed HCH specific clinical measures. Most commonly reported was the PHQ-9 for the screening of depression. One HCH project is currently validating a modified GAF to assess social functioning.

Representatives from the 11 HCH/Medical Respite projects that participated in the focus groups have been asked to share any tools they use to document any clinical outcomes. These tools will be evaluated and used in the pilot study proposed in this report.

III. Evaluate what technology, staffing, and resources HCH /Medical Respite projects would need to collect data in their clinical settings.

Qualitative data was obtained regarding technology, staffing, and resource needs. The results revealed that specific challenges in these three areas remain. In fact, these same three areas were identified as challenges in *Developing Outcome Measures to Evaluate Health Care for the Homeless Services*” the document referenced earlier in this report. In the 2005 report, the following observations were made:

Financial challenges:

“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.”

Technical challenges:

“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.”

The present study also revealed that some HCH projects are still unable to track and document the **core measures required by HRSA** because of limited technology, IT support, and staffing (i.e. someone dedicated to documenting and monitoring clinical measures).

IV. Develop a plan of action to conduct a pilot study with 10-16 HCH /Medical Respite projects, collecting data on proposed measures utilizing the appropriate tools. This may also include validating new measurement tools that have been developed during the process.

Overall, participants in the feasibility study and members of the Clinical Outcomes Task Force supported the idea of piloting supplemental HCH specific clinical measures and expressed desire to participate in the pilot study to develop supplemental HCH outcome measuring tools.

There was a positive response to the 10 areas (Level One, Level Two) for outcome indicators proposed by the Clinical Outcomes Task Force. Feedback included the need to “develop the measures more” and to include both process and outcome measures. Process measures may be most appropriate for contraceptive health (prevention of pregnancy for high risk youth as well as adults who are homeless), substance abuse (abstinence vs. harm reduction), cognitive impairment, and tobacco cessation.

Based on the results and feedback from the survey and focus groups, the National HCH Council recommends that HRSA provide funding for a pilot study.

Recommendations

Fund pilot study

The National HCH Council proposes a pilot study be conducted with 16 HCH/Medical Respite projects that is comprehensive, collaborative, cost-effective, and sustainable and is designed to develop and document supplemental HCH/Medical Respite specific clinical outcomes. A flow chart of the proposed pilot study is located in Appendix D.

Pilot sites would agree to use the same outcome measures and data collection forms for a specified period of time (e.g. 12 months). This would ensure that participants use the same definitions, common data fields, and common or compatible databases. Participants would be required to track a core set of outcomes identified by the Clinical Outcomes Task Force, but can track additional outcomes using standardized measures if so desired.

Throughout the pilot study, (as shown in the timeline and logic model in Appendix E & F) the National HCH Council will provide guidance, resources and support to sites that commit to the study. The Research and Learning Teams of the National HCH Council, with the assistance of collaborating partners will develop, implement and evaluate the different aspects of the pilot study and provide non-financial resources to track outcomes and goal achievement. It will also be the intent of the pilot to identify clinical outcomes that are “universal” and appropriate for other

vulnerable populations. Thus the National HCH Council will approach the Migrant Clinicians Network and others who serve low income populations to be collaborating partners in this study.

Meet infrastructure needs

Computer hardware and software remain basic needs that some agencies find difficult to meet. In fact, some are even having difficulty complying with tracking and documenting core measures. Even if funding is not provided to the National HCH Council to conduct a pilot study to identify supplemental HCH clinical measures, funding and technical assistance should be provided to HCH projects to enable them to perform the tasks being requested of them by HRSA (e.g. core measure documentation). A **full proposal for a pilot study** may include funding for infrastructure needs of participating projects which includes: hardware, software, and staff time.

The National HCH Council welcomes the opportunity to submit a full proposal for a pilot study inclusive of budget.

Conclusion

For many years the National HCH Council and HCH grantees have recognized the 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. It is recognized that this documentation is also a means of ensuring accountability to funders.

The work of the National HCH Council's Clinical Outcome Task Force and the findings of the feasibility study reiterate 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 HCH grantees and to improve their homeless assistance programs.

Through survey and focus group methods, we affirm the feasibility of developing supplemental HCH specific outcome measures which could be used effectively 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.

We propose a pilot study that would engage 16 HCH/Medical Respite projects to examine tools that can measure performance and quality of care provided to medically complex individuals homeless or housed. The National HCH Council believes a pilot study to determine supplemental HCH specific clinical measures would enable the development of appropriate research leading to evidence-based practices and ultimately improve the health status of people who are homeless and receive health care services at HCH and Medical Respite facilities.

Appendix A

Proposed Homeless Specific Supplemental Measures

	Diabetes	Hepatitis C	Substance Abuse	Asthma	Mental Health	Medical Respite	Global Assessment of Functioning Scale(GAF)	HIV	Sexual Health	Family Planning
Level 1	A1C <7.0		3 mo remission rate			Stabilization of admitting diagnosis	% diagnosed with mental illness with GAF>50	% PCP/MAC prophylaxis per CD4 count		% with unintended pregnancies at or less than 50%
Level 2	lipid/BP/and A1C at goal <i>Goal: LDL less than 70, SBP less than 130, HbA1c at 7.0 or less</i>	% in treatment of those who are eligible	6 mo remission rate	% with control of symptoms	depression % in remission	Advancement toward a more stable living environment (with ultimate goal of permanent housing)	GAF for all patients who are homeless	% with VL <48	% abnormal Pap + HPV with documentation of intervention	
		% in remission				30-day hospital in-pt readmission rate related to admitting respite diagnosis				

NOTE: Diabetes and Family Planning are already HRSA Core Measures. Hypertension and Childhood Immunizations are also Core Measures and not part of the grid.

Appendix B

Proposed Clinical Measures Definitions

Key Terms¹

- **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.

Definitions related to Proposed Conditions

Medical Respite Care is acute and post-acute medical care for homeless persons who are too ill or frail to recover from a physical illness or injury on the streets, but who are not ill enough to be in a hospital. Unlike "respite" for caregivers, "medical respite" is short-term residential care that allows homeless individuals the opportunity to rest in a safe environment while accessing medical care and other supportive services.

Federally qualified health centers (FQHCs) receiving grants under section 330 of the Public Health Service Act, are permitted to provide medical respite care as an optional service. Federally qualified health centers provide recuperative care services at approximately half of all known medical respite programs in the United States.

¹ IBID

HRSA does not currently track clinical measures related to medical respite care. The following measures are being proposed in an effort to increase the professional merit of medical respite programs while standardizing medical respite clinical outcomes.

Level One: Stabilization of admitting diagnosis

Examples include: resolution of a wound, finished a course of antibiotics, stabilization of blood sugars for someone who was admitted to the hospital for a diabetic coma and is now learning to monitor their blood sugars, completion of plan or admitting procedure (e.g. colonoscopy).

Level Two (a): Advancement toward a more stable living environment (with ultimate goal of permanent housing).

Medical respite programs make efforts to discharge patients into housing whenever possible. However, external variables such as housing stock may prevent a patient from accessing permanent housing immediately after discharge. The following examples would indicate advancement toward a more stable living environment: the patient was living on the street when he/she entered the program and was discharged to a shelter; the patient was in a shelter and was discharged to a transitional living facility.

Level Two (b): 30 day hospital inpatient readmission rate related to admitting respite diagnosis.

This clinical measure tracks any hospital readmissions for the diagnosis that was treated at the medical respite program.

Human Immunodeficiency Virus (HIV)

Level One (a): Percent of HIV infected patients with PCP/MAC prophylaxis per CD4 count

- Percent of HIV infected patients with PCP prophylaxis per CD4 count less than 200
- Percent of HIV infected patients with MCA prophylaxis per CD4 count less than 50

Asthma

Level Two: Percent with control of their symptoms

Includes the percent of patients who have no recorded emergency room visits following care.

Appendix C

Focus Group Questions

Question 1 – Are you currently documenting any clinical outcome measures that are required by HRSA (e.g. immunization, pap, diabetes, prenatal)? – If yes, how are your results?

Question 2 – How are the clinical outcome measures tracked at your project being documented?

Relates to: documentation through the use of EMR, manual/paper documentation or record keeping, and any standardized tools used

Respite specific – What ‘system’ is being used for reporting of clinical outcome measures?

Question 3 – What supplemental HCH specific clinical outcome measures would you want to track at your project (if any)?

Question 4 – Considering resources, in order to document or track these *desired* clinical outcomes, what resources do you believe your project would need to be more efficient?

If you are doing a great job, what resources do you have that enables you to do this effectively and efficiently?

Resources may relate to technology/ equipment, staffing, funding, etc.

Question 5 – Please look at the grid. These are supplemental HCH specific clinical outcomes that have been proposed by the Clinical Outcomes Task Force for standardization of HCH projects. Are you currently tracking any of these? If so, which ones?

Question 6 – Based on the outcome measures that have been proposed by the Clinical Outcomes Task Force, do you have any concerns about how this data can be collected?

Final Question – If a HRSA representative (or some other funding representative), offered you funding to track the measures being proposed, what resources and technical assistance would be needed to efficiently track the HCH specific outcome measures being proposed?

Appendix D

Proposed Pilot Study²

Clinical Outcomes task force modifies proposed clinical outcomes to reflect results of survey and focus groups in feasibility study.
Oct 2010 - Dec 2010

National HCH Council Research and Evaluation Team develop the measures and identify validated tools. If a validated tool is not available for the measure chosen, one will be developed during the pilot study. National Council Learning Team facilitates the process of identifying of experts who can provide TA for all projects. May collaborate with PCA or another entity for this effort.

Nov 2010 - Dec 2010

A technical advisor (TA) is assigned by region or by state depending on number of HCH programs in pilot study. The TA component of study also has a budget which should not be extensive as most of the larger programs with electronic records would probably need coordination of methods and interventions.

Jan 2011 - Aug 2011

The National HCH Council Research and Evaluation Teams develop monitoring tools. In collaboration with the Learning Team and TA experts meets with each HCH/ Medical Respite program for the program to decide on one or more measure for each line of service (medical, MH, SA, HIV, housing run by program, etc).

Feb 2011 - Apr 2011

The TA then works with program to ensure standardized data gathering, program response to data, intervention, and continued data management. For some larger programs with Electronic Health Records or those already doing some of what they need through the collaborative not much TA will be needed. Other programs using paper records or with less than ten staff may not only need TA involvement but perhaps some financial assistance to collect data not already part of UDS.

Apr 2011 - Jul 2011

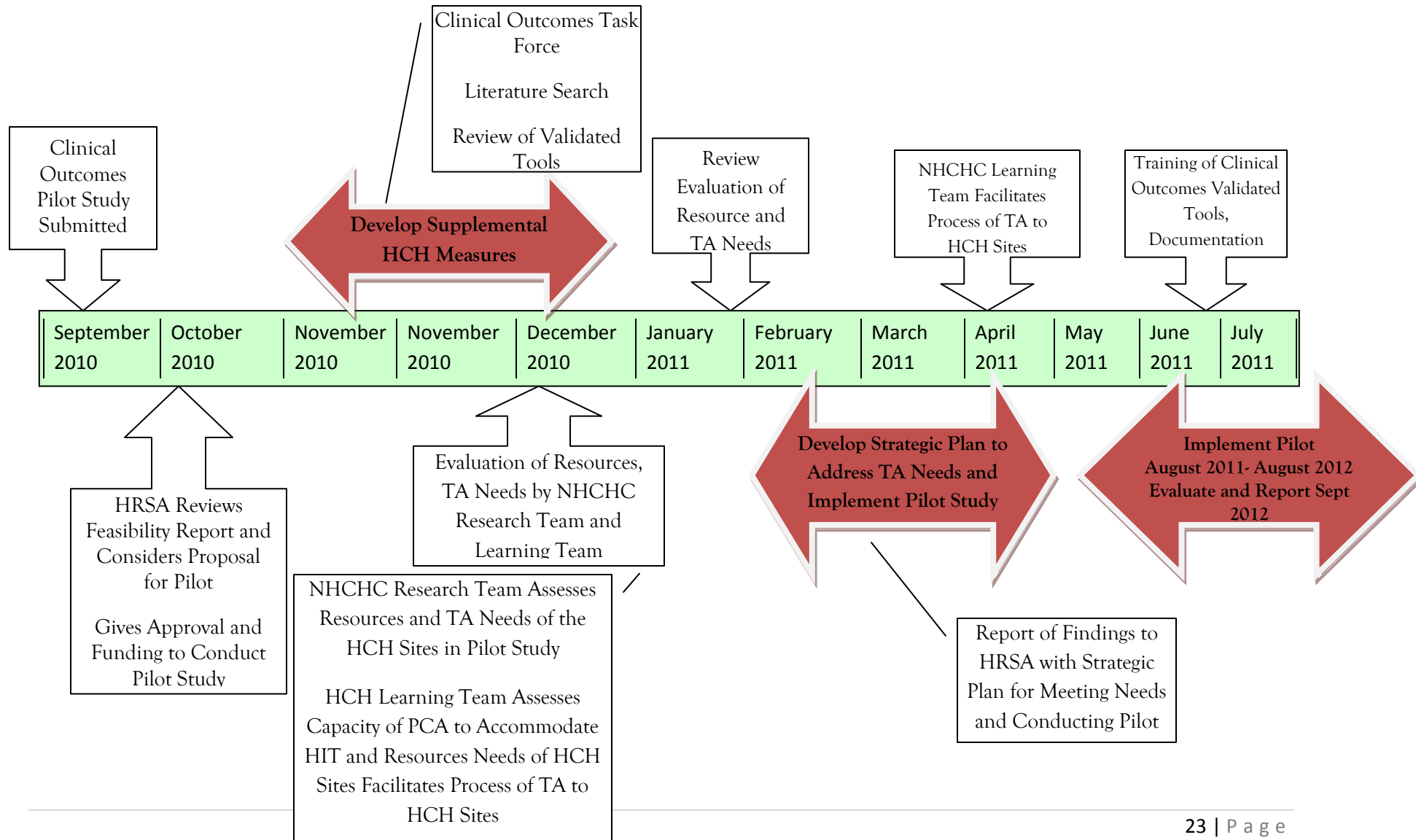
The TA can document due diligence of programs in their area. For some programs the standardizing and embedding of data gathering and analysis may be the main goal for the first year. For other programs, the expectation might be to analyze the measure results and document planned interventions in one or more areas. The programs would still be responsible for documenting this process and reporting their data as part of their yearly reporting, separate from the TA report. Certain data items might be worth reporting by state/region/nation.

Jul 2011 - Aug 2012

² Adapted from proposal developed by Dr. James Hartye; Raleigh, NC (2009)

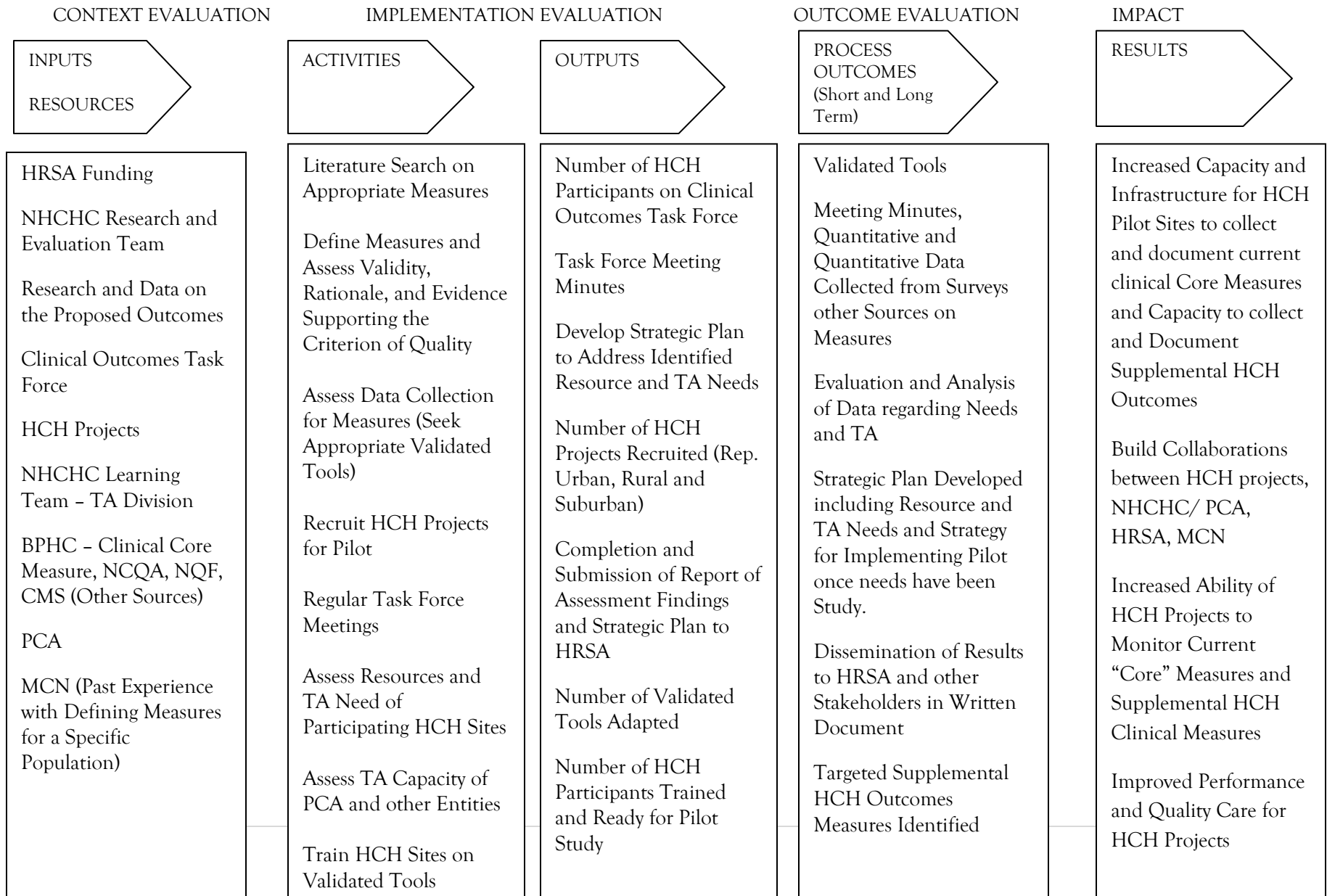
Appendix E

National Health Care for the Homeless Clinical Outcomes Pilot Study Timeline



Appendix F

Logic Model to Implementing Pilot Study for Supplemental HCH Outcomes



References

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 Road, Suite 450, Vienna, VA 22182; (800) 400-2742.

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