

Health Research and Educational Trust (HRET)/The Alliance Health Centers

**IMPROVING QUALITY THROUGH HEALTH IT: TESTING THE
FEASIBILITY AND ASSESSING THE IMPACT OF USING EXISTING HEALTH IT
INFRASTRUCTURE FOR
BETTER CARE DELIVERY**

Contract No. HHSA29020060022, Task Order No.3

QUALITATIVE EVALUATION PROTOCOL

Qualitative Study Design

This research project will also use case studies comprised of multiple key informant interviews to develop an understanding of the use of health information technologies (HIT) in community health centers. Specific questions are included about the use of HIT in laboratory processes. A pilot site visit to a community health center not included in the study is planned for March 2008, with study site visits to the two community health centers under study planned for Fall 2008 (after OMB approval is received).

The design of these two case studies relies on the methodology described by Yin, which is considered the research standard for this exploratory methodological approach (Yin, 1994). Multiple semi-structured interviews with key informants will form the basis of the organizational case studies, and permit exploration of issues of concern about the use of HIT in these community health centers. These key informant interviews will follow the standards of rigorous qualitative research, using ethnographic interview techniques (Spradley, 1979) and thorough analysis (Miles and Huberman, 1994). Telephone interviews may be used to supplement site visit interviews. All interviews will be audio-taped and transcribed to facilitate data analyses. The interview guide is included as Appendix A.

For each case study, a key contact person at the selected site will help to identify appropriate individuals to interview. Key informants will include organizational leaders, and a combination of clinical and administrative personnel at the sites. Interviews with organizational leaders and administrative personnel will provide information about the history, development and processes involved in laboratory ordering facilitated by HIT. Interviews with clinical personnel including physicians, nurse practitioners, nurses, and medical assistants will provide information about the processes, roles, and individual IT tools and forms used in laboratory ordering processes from the clinical perspective. All key informants will be asked about barriers and facilitators to the process, and will be asked for their suggestions about how to improve the process.

Analysis Plan

Qualitative data analyses will use the constant comparative method of qualitative data analysis (Glaser and Strauss, 1967), and common techniques to code the data (Constas, 1992; Miles and Huberman, 1994). Study investigators have developed a preliminary coding manual (Appendix B) in order to help facilitate the coding process across individual investigators in a first cycle of coding. In later cycles we will code at a more refined or micro level. This iterative coding process will permit us to use a grounded theory approach (Glaser and Strauss, 1967; Strauss and Corbin, 1998), and to explore emergent codes in the data. We will use the Atlas.ti software package (version 4.2) (Scientific Software Development, 1998) to facilitate coding and data analyses, and the formal exploration of patterns and themes within the data.

REFERENCES

Constas, M. (1992). Qualitative analysis as a public event: the documentation of category development procedures. *American Education Research Journal*, 29, 253-266.

Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory: strategies for qualitative research*. New York: Aldine de Gruyter.

Miles, M.B.; Huberman, A.M. 1994. *Qualitative Data Analysis*. Thousand Oaks, CA: Sage.

Scientific Software Development. (1998). *Atlas.ti*. 4.2 ed. Berlin: Scientific Software Development.

Spradley, J.P. 1979. *The Ethnographic Interview*. Fort Worth, TX: Harcourt Publishers.

Strauss, A. & Corbin, J. (1998). *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. Thousand Oaks, CA: Sage.

Yin, R.K. 1994. *Case Study Research: Design and Methods* (2nd Edition). Thousand Oaks, CA: Sage.