SUPPORTING STATEMENT

Part B

Improving Patient Flow and Reducing Emergency Department Crowding

Version ~~January~~ ~~30, 2008~~~~May XX~~June 3, 2009

Agency of Healthcare Research and Quality (AHRQ)

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B. Collections of Information Employing Statistical Methods

1. Respondent universe and sampling methods

This project consists of six case studies which will document the experiences of six hospital emergency departments (ED) as they identify and implement patient flow improvement strategies. The six case study sites are a convenience sample and were selected to reflect diversity of size, ownership, teaching status, safety net status, and types of challenges with ED crowding. The diversity of these sites allows us to refine the hypothesis generated under the original Urgent Matters Learning Network that strategies designed to improve patient flow and reduce ED crowding can be successfully adopted by a diverse group of hospitals. Further, the diversity of sites allows us to explore the different organizational contexts that may facilitate or hinder the adoption of patient flow improvement strategies.

Since the six hospitals were not randomly selected and ~~are likely to implement differing~~will implement different strategies, we make no claim that our results will be generalizable in the statistical sense. The purpose of this project is not to make determinations about causality or degrees of effectiveness (e.g to what degree can a change in patient flow be attributed to a given intervention?). Rather, the project seeks to expand and enhance understanding of factors that facilitate or impede planning, decision-making, and adoption of improvement strategies and associated changes in patient flow across diverse ED settings. The case studies will expand the number and diversity of hospitals within which the Urgent Matters tools for improving ED patient flow are tested, and will increase the likelihood of broader and more successful implementation of these tools in the future by enhancing hospitals' understanding of the contextual factors that may underpin success.

The selection of respondents at each hospital for the interviews will be tailored for each hospital based on the strategy(ies) employed and the level of involvement of organizational representatives in planning and implementing the intervention. The number of interviews is likely to vary across sites based on the size of the hospital and scope of the initiative. We~~; however, we anticipate conducting approximately 12 interviews per site~~will conduct no more than 12 interviews during each round. Interviewees will ~~be selected from key informants such as~~include members of the hospitals' patient flow improvement teams (e.g., nurse leader~~;~~, physician leader~~;~~, additional ~~representatives~~ doctors, nurses and medics from the ED~~;~~, ~~senior hospital leadership,~~ a research analyst, and staff from ancillary services, and information systems~~, and housekeeping~~), the ~~CEOs, finance and accounting professionals~~CFO, ~~chief medical officers, quality improvement professionals~~the chief quality officer (or chief nursing officer)~~, patient advocates, and EMS personnel~~. Depending upon the intervention undertaken, we may also interview other staff, for example, registration clerks, triage nurses, or inpatient staff. By interviewing individuals from different disciplines and

departments, we will be able to obtain varied perspectives on the questions of interest without unduly burdening ED physicians and nurses.

We have obtained the names and contact information of the individuals on the patient flow improvement teams from the NPO. In advance of the site visit, we will ask the team leader from each hospital for the names of any other individuals that are involved or affected by the interventions so that we may contact them for interviews. Additionally, during the interview, we will ask respondents for the names of additional individuals involved or affected by the interventions that we have not spoken to. We will use this information to create a snowball sample. Still, we will interview no more than 12 individuals from each hospital during each round of interviews.

2. Information Collection Procedures

The hospitals participating in the collaborative have already been selected and have provided the study team with a letter of commitment agreeing to participate in all data collection activities. We will send an e-mail to each individual whom we would like to interview, asking for their participation which will underscore the voluntary nature of their participation and will include a copy of the informed consent form. We follow up the e-mail with a phone call to the potential interviewee to ascertain their interest in participating and to schedule the interview. Should the individual agree to participate, he or she would fax a signed copy of the informed consent to the contractor, the Health Research and Education Trust (HRET) or would bring it to the interview. Persons who consent to participate will be interviewed in person for the first round of interviews. Telephone interviews will be used for the second round.

An interview guide will be used to conduct the interviews with multiple key informants. The interviewers are members of the research team with extensive interviewing and research experience.

3. Methods to Maximize Response Rates

While every attempt will be made to schedule and complete the interviews, the study team will be sensitive to staff members uninterested in participating. Potential interviewees will be sent the recruitment letter and numerous phone attempts will be made to attempt to schedule the interview. However, if an interviewee expresses unwillingness to participate, that individual will not be re-contacted. If there are other staff members of that type at the hospital, we will attempt to recruit an additional staff member.

4. Tests of Procedures

~~A pretest of the interview questions will be conducted at a hospital that has recently implemented a patient flow improvement strategy. We will attempt to interview approximately seven staff members with various roles to refine the interview guide and resolve any unforeseen issues.~~ The interview protocols were reviewed by ED and quality improvement staff from a hospital that recently used a team approach to implement a patient flow improvement effort.

5. Statistical Consultants

No consultants outside the study team were utilized for the design of this study.

6. Disclaimer

In light of the limitations discussed in Supporting Statement A part 2, a disclaimer will be included in all reports and publications which will state that:
(1) Our results are not generalizable in the statistical sense. The six hospitals that participated in the collaborative are not nationally representative and the assistance they receive from the NPO during the course of the project may have influenced results. (2) We cannot attribute the change in outcome measures (e.g. ED arrival to ED departure time) solely to the interventions adopted under the UM Learning Network II. The hospitals may implement additional patient flow improvement or general quality improvement activities in the ED or other parts of the hospital that could have impacted the measures. As a result, we will be cautious in our interpretation and dissemination of the data we obtain from the hospitals. We believe that the data provide important contextual information, but we will not seek to attribute causality.