# **Healthcare System Surge Capacity at the Community Level**

# **Supporting Statement B**

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# **B. Collections of Information Employing Statistical Methods**

### 1. Respondent Universe and Sampling Methods

This proposed research will use a purposive sample, therefore study findings cannot be statistically generalized to the respondent universe. However, the lessons learned from this qualitative research will inform strategies to promote the establishment of community collaborations being developed by CDC and other Department of Health and Human Services agencies, as well as state and local governments and private health care organizations.

The key units of observation for the proposed qualitative study are emergency practitioner leaders, community-based practitioner leaders, and preparedness experts in ten communities representing all geographic regions of the US and including large cities, midsize cities and rural areas. HSC and CDC expect to invite approximately 100 respondents in order to identify 63 respondents willing to participate. These 63 respondents will include ten emergency practitioner leaders working at safety-net hospitals, ten emergency practitioner leaders working at hospitals that do not have safety-net missions, ten primary care leaders representing large practices and ten primary care leaders representing small practices (the 2008 HSC Health Tracking Physician Survey found the median primary care physician worked in a practice of four physicians, so small primary care practices will be defined as practices with fewer than four physicians), ten preparedness experts representing local or county government and ten preparedness efforts representing community-based associations or coalitions.

#### **Study sites**

Initial CTS study sites were selected randomly to be nationally representative of communities with populations over 200,000. CTS sites used for this study include: Boston, MA; Greenville, SC; Indianapolis, IN; Miami, FL; Orange County, CA; Phoenix, AZ; Seattle, WA; and Syracuse, NY. The two additional sites are New York City, NY and Chicago, IL. The rationale for site selection was as follows:

# Core sites

Six CTS sites (Boston, Greenville, Phoenix, Seattle, Orange County, Miami) were previously studied in the HSC Issue Brief *Developing Health System Surge Capacity: Community Efforts in Jeopardy* because of their efforts on surge capacity. This study gathered extensive information about community efforts in preparing for disasters, although collaboration was not a specific focus. Our findings will build on the work done in the earlier Issue Brief, allowing us to focus more efficiently on the specific impact of collaboration among private-sector entities and between private and public sectors.

#### Additional sites

In order to include other regions of the country several additional sites were added. New York City (not a CTS site), which was also included in *Developing Health System Surge* 

*Capacity: Community Efforts in Jeopardy* because of its significant investment in preparedness.

Indianapolis (CTS site) and Chicago (not a CTS site) were added to the sites in order to include more Midwestern region representation. Interviews in these communities will probe on the effects of CDC activities, if any. The Syracuse (CTS site) was added to include more rural respondents in the study.

Eligible practitioners in the CTS communities will be identified from three sources: (1) practitioners identified as leaders by current CTS site visit contacts; (2) media reports and publicly available documents describing each community's response to H1N1; and, (3) other practices and preparedness experts participating in the study. Practices will be selected for the study purposively from among eligible practices to vary in size and specialty.

Exhibit 5 identifies the individual respondent types within each type of organization and outlines the total numbers of individual respondent interviews and respondent organizations in each category.

# **Exhibit 5. Target Respondent Organizations and Individual Respondent Types**

**Sampling:** The sample population is targeted to include at least 63 respondents identified through medical societies and local or state health departments. This purposive sampling approach has been useful in the past in identifying informative interview subjects and/or those most familiar with the topic of study.

# **Estimated number of participants:**

Organization	Respondent Type	Interview	Number of
Type		Length	participants
Emergency	Private, non-safety net	45-60	10
Department	Public/safety net	45-60	10
Primary Care	Larger practice	45-60	10
(including	Solo/2 physician practice	45-60	10
Community			
Health Centers)			
Preparedness	Public/Department of	45-60	10
	Health		
	Health care preparedness	45-60	10
	coordinator/collaboration		
	leader		
Rural (GV, PX,	Clinician-leader at rural	45-60	3
SE only)	site (ED or PC)		
PROJECT	7	780 min	63
TOTAL			

# 2. Information Collection Procedures

**Participant Recruitment.** Participants will be recruited either by phone, e-mail, or fax depending on availability of the participant's contact information. Attachment E is a sample invitation letter. The purpose of the communication is to explain the study, gain respondents' agreement to participate and schedule the interviews. Each respondent who agrees to participate in the study will receive a written confirmation of the interview date and time by e-mail or fax (see Attachment G).

**Interviews.** In-depth interviews will be conducted by two-person teams, which will be comprised of a lead interviewer and a note taker. Respondents will be reminded of the focus of the study and the way their information will be used. The interviews will follow semi-structured protocols. Two protocols tailored to different respondent types have been developed (see Attachments C and D). The following domains of information will be explored:

# Background

- Market information
- Non-surge collaboration
- Non-surge competition
- Framework/infrastructure for disaster response

Information on surge planning and H1N1

- Details of disaster/surge plan
- How did H1N1 affect organization
- Details of H1N1 preparation

Perceptions of response and role of collaborations

- Facilitators in response
- Barriers in response

Interview notes will be typed and assigned initial codes by the note taker and reviewed for accuracy by the lead interviewer. Interview notes will be then be stored and coded using Atlas.ti (version 5.0) qualitative data analysis software.

Thank-you letters are routinely sent by mail (see Attachment H).

# 3. Methods to Maximize Response Rates

Respondent organizations are not being selected via probability-based sampling methods. A "response rate" has no clear meaning in the context of a qualitative study.

Based on previous experience, recruiting is likely to be more difficult for primary care practitioners. The strategy for identifying eligible practitioners includes contacting the state medical societies and previous primary care contacts to identify respondents who are interested in participating in the study. Every effort will be made to schedule interviews with these respondents at times most convenient for them.

# 4. Tests of Procedures

The interview protocols were reviewed by Laurie Felland, MS, Assistant Director of Qualitative Research and Senior Health Researcher at HSC. Ms. Felland has extensive experience developing interview protocols for emergency practitioners, primary care practitioners and public health experts, and has conducted previous research on preparedness in CTS sites.

#### 5. Statistical Consultants

Because this study is qualitative, no statistical consultants were contacted.

AHRQ's contractor, HSC, will be responsible for overseeing the recruitment of participants, conducting all of the interviews, and analyzing and reporting the findings. The principal investigator and project director is Emily Carrier, MD, MSCI. She can be reached by phone at 202-250-3533 or by email at <a href="mailto:ecarrier@hschange.org">ecarrier@hschange.org</a>.

# 6. Analysis Plan

On a rolling basis over the course of the project, the project team will review interview notes and meet regularly to discuss the study's key findings. Using an iterative process, the team will identify new themes as they emerge, explore and shape already identified themes in greater depth, and ensure that saturation in the data collection is reached. The interview data will be coded using the "integrated" approach described by Bradley et al. (2007). This approach combines the inductive development of codes from the data—the "grounded theory" approach (Glaser and Strauss 1967)—with a preliminary deductive "start list" of codes, which provides an initial organizing framework based on the existing literature (Miles and Huberman 1994). Atlas.ti software (Version 5.0) will be used to store, code and search the interview data for analysis. Data reduction will be achieved by summarizing coded interview data from Atlas.ti in data tables, which will then be analyzed to refine themes, weight the evidence supporting each finding, and identify respondent disagreements and disconfirming evidence.