# SUPPORTING STATEMENT

## Part A

TeamSTEPPS 2.0 Online Master Trainer Course

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Agency for Healthcare Research and Quality

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## A. Justification

## 1. Circumstances That Make the Collection of Information Necessary

The mission of the Agency for Healthcare Research and Quality (AHRQ) set out in its authorizing legislation, the Healthcare Research and Quality Act of 1999 (see www.ahrq.gov/hrqa99.pdf), is to enhance the quality, appropriateness, and effectiveness of health services, and access to such services, through the establishment of a broad base of scientific research and through the promotion of improvements in clinical and health systems practices, including the prevention of diseases and other health conditions. AHRQ shall promote health care quality improvement by conducting and supporting:

- 1. Research that develops and presents scientific evidence regarding all aspects of health care;
- 2. The synthesis and dissemination of available scientific evidence for use by patients, consumers, practitioners, providers, purchasers, policymakers, and educators; and
- 3. Initiatives to advance private and public efforts to improve health care quality.

Also, AHRQ shall conduct and support research and evaluations, and support demonstration projects, with respect to (A) the delivery of health care in inner-city areas, and in rural areas (including frontier areas); and (B) health care for priority populations, which shall include (1) low-income groups, (2) minority groups, (3) women, (4) children, (5) elderly people, and (6) individuals with special health care needs, including individuals with disabilities and individuals who need chronic care or end-of-life health care.

As part of its effort to fulfill its mission goals, AHRQ, in collaboration with the U.S. Department of Defense's TRICARE Management Activity, developed TeamSTEPPS® (aka, Team Strategies and Tools for Enhancing Performance and Patient Safety) to provide an evidence-based suite of tools and strategies for training teamwork-based patient safety to health care professionals. TeamSTEPPS includes multiple toolkits, which are all tied to or are variants of the core curriculum. TeamSTEPPS resources have been developed for primary care, rapid response systems, long-term care, and patients with limited English proficiency.

The main objective of the TeamSTEPPS program is to improve patient safety by training health care staff in various teamwork, communication, and patient safety concepts, tools, and techniques and ultimately helping to build national capacity for supporting teamwork-based patient safety efforts in health care organizations. Since 2007, AHRQ's National Implementation Program has produced (and continues to produce) Master Trainers who have stimulated the use and adoption of TeamSTEPPS in health care

delivery systems. These individuals were trained during two-day, in-person classes using the TeamSTEPPS core curriculum at regional training centers across the U.S. AHRQ has also provided technical assistance and consultation on implementing TeamSTEPPS and has developed various channels of learning (e.g., user networks, various educational venues) for continued support and the improvement of teamwork in health care. Since the inception of the National Implementation Program, AHRQ has trained more than 5,000 participants to serve as TeamSTEPPS Master Trainers.

Despite the success of the National Implementation Program and the availability of training through this initiative, AHRQ has been unable to match the demand for TeamSTEPPS Master Training. Wait lists for training often exceed 500 individuals at any given time.

To address this prevailing need, AHRQ has launched an effort to develop and provide TeamSTEPPS training online. This program, known as TeamSTEPPS 2.0 Online Master Trainer course, will mirror the TeamSTEPPS 2.0 core curriculum and provide equivalent training to the in-person classes offered through the National Implementation Program.

As part of this initiative, AHRQ seeks to conduct an evaluation of the TeamSTEPPS 2.0 Online Master Trainer program. This evaluation seeks to understand the effectiveness of TeamSTEPPS 2.0 Online Master Training and what revisions might be required to improve the training program.

This research has the following goals:

- 1) Conduct a formative assessment of the TeamSTEPPS 2.0 Online Master Trainer program to determine what improvements should be made to the training and how it is delivered, and
- 2) Identify how trained participants use and implement the TeamSTEPPS tools and resources.

To achieve this project's goals, AHRQ will train participants using the TeamSTEPPS 2.0 Online Master Trainer program and then survey these participants six months post-training. Each activity is briefly described below.

- 1. *TeamSTEPPS 2.0 Online Master Trainer Course*. This training program, which includes 13 accredited hours of training, is based on the TeamSTEPPS 2.0 instructional materials and will be delivered online to 3,000 participants. The training will cover the core TeamSTEPPS tools and strategies, coaching, organizational change, and implementation science.
- 2. *TeamSTEPPS 2.0 Online Post-Training Survey*. This online instrument will be administered to all participants who completed TeamSTEPPS 2.0 Online Master Training. The survey will be administered six months after participants complete the training, see(Attachment A -- TeamSTEPPS 2.0 Online Post-Training Survey)

This study is being conducted by AHRQ through its contractor, Reingold, Inc., pursuant to AHRQ's statutory authority to conduct and support research on health care and on systems for the delivery of such care, including activities with respect to the quality, effectiveness, efficiency, appropriateness, and value of health care services and with respect to quality measurement and improvement, 42 U.S.C. 299a(a)(1) and (2).

## 2. Purpose and Use of Information

This is a new data collection for the purpose of conducting an evaluation of TeamSTEPPS 2.0 Online Master Trainer program. The evaluation will be primarily formative in nature as AHRQ seeks information to improve the delivery of the training.

To conduct the evaluation, the *TeamSTEPPS 2.0 Online Post-Training Survey* will be administered to all individuals who completed the TeamSTEPPS 2.0 Online Master Trainer program six months after training. The purpose of the survey is to assess the degree to which participants felt prepared by the training and what they did to implement TeamSTEPPS. Specifically, participants will be asked about their reasons for participating in the program; the degree to which they feel the training prepared them to train others in and use TeamSTEPPS; what tools they have implemented in their organizations; and resulting changes they have observed in the delivery of care.

## 3. Use of Improved Information Technology

The *TeamSTEPPS 2.0 Online Post-Training Survey* will be administered via the Web to participants.

In order to reduce respondent burden, the training participant questionnaire will be administered via the Web. The participant information acquired by Reingold when participants enroll in the TeamSTEPPS 2.0 Online Master Trainer program will be used to develop the questionnaire's distribution lists. Each potential respondent will receive four e-mail contacts to encourage participation (i.e., an advance notice of the questionnaire, an initial invitation to complete the questionnaire, and two follow-up e-mails to remind respondents to complete the questionnaire).

Using an online system for data collection, rather than administering a paper-based questionnaire, makes completing and submitting the questionnaire less time-consuming for respondents. Any skip patterns included in the questionnaire (i.e., questions that are appropriate only for a subset of the respondents) will be automatically programmed into the Web-based form of the questionnaire, thereby eliminating any confusion during questionnaire completion. In addition, the contractors can also ensure that important items are not inadvertently skipped or ignored by setting software requirements to ensure proper completion of questionnaires based on specific respondent selections.

# 4. Efforts to Identify Duplication

AHRQ is aware of two other evaluations of the TeamSTEPPS suite of training programs, each requiring an Office of Management and Budget (OMB) clearance package. Each

project is evaluating a different TeamSTEPPS training program and will collect data from distinct populations of individuals who participate in training. Each of these two other evaluations is described below.

- 1. **Assessing the Impact of the National Implementation of TeamSTEPPS Master Training Program.** This effort provides in-person training to participants using the TeamSTEPPS core curriculum. AHRQ proposes to repeat an earlier survey of program participants and has submitted its prior OMB clearance package #0935-0170 for renewal.
- 2. *Implementation of TeamSTEPPS in Primary Care Settings.* This effort provides training to primary care practice facilitators who then implement TeamSTEPPS in primary care practices. AHRQ proposes to conduct an evaluation of the TeamSTEPPS in Primary Care training.

Besides the two evaluation efforts listed above, AHRQ intends to collect similar data on the *TeamSTEPPS 2.0 Online Master Training* project. This effort (described in this submission) provides online training to participants using a newly developed online version of the TeamSTEPPS 2.0 core curriculum. AHRQ proposes to conduct a formative evaluation of the TeamSTEPPS 2.0 Online Master Trainer program. The survey approved for the Assessing the Impact of the National Implementation of TeamSTEPPS Master Training Program effort has been slightly modified to align with this program's target participants and curriculum.

#### 5. Involvement of Small Entities

The information collected may involve small entities, as TeamSTEPPS 2.0 Online Master Trainer course participants may work for very large or small hospitals or practices. All participants will be required to complete the same number of items as large practices. For this study, only items that provide critical information for answering the study questions will be included.

# 6. Consequences if Information Collected Less Frequently

This is a one-time collection to answer specific questions about the TeamSTEPPS 2.0 Online Master Trainer program.

# 7. Special Circumstances

This request is consistent with the general information collection guidelines of 5 CFR 1320.5(d)(2). No special circumstances apply.

# 8. Federal Register Notice and Outside Consultations

As required by 5 CFR 1320.8(d), notice was published in the Federal Register on May 14, 2014, Page 27614 for 60 days (see Attachment B).

#### 8.b. Outside Consultations

This project is part of AHRQ's patient safety portfolio and supports AHRQ's TeamSTEPPS program. AHRQ consulted with the Health Research & Educational Trust (HRET), the contractor leading AHRQ's National Implementation of TeamSTEPPS. HRET is also a contractor on the TeamSTEPPS Online project. HRET confirmed that this is a unique, one-time data collection focused on the TeamSTEPPS 2.0 Online Master Trainer curriculum.

There are no unresolved issues or conflicts associated with this initiative.

## 9. Payments/Gifts to Respondents

No remuneration of respondents is planned.

## 10. Assurance of Confidentiality

Individuals will be assured of the confidentiality of their replies under Section 944(c) of the Public Health Service Act, 42 U.S.C. 299c-3(c). That law requires that information collected for research conducted or supported by AHRQ that identifies individuals or establishments be used only for the purpose for which it was supplied.

Information that can directly identify the respondent, such as a name and/or social security number, will not be collected. Only basic biographical information will be collected for the purpose of describing the respondents. Participation will be voluntary and participants will be informed that their responses will be confidential. A statement of confidentiality will appear on the online survey and contain the following statement:

"The confidentiality of your responses are protected by Sections 944(c) and 308(d) of the Public Health Service Act [42 U.S.C. 299c-3(c) and 42 U.S.C. 242m(d)]. Information that could identify you will not be disclosed unless you have consented to that disclosure."

Reingold will collect all information, and response data will be stored on secure servers. Files will be password-protected. Only members of the project team will have access to the data. Only aggregated data will be reported to AHRQ.

# 11. Questions of a Sensitive Nature

Questionnaire items do not require respondents to provide information of a sensitive nature as defined by OMB and DHHS or to provide information such as social security numbers or Medicare/Medicaid numbers. The *TeamSTEPPS 2.0 Online Post-Training Survey* includes an introduction that addresses aspects of informed consent such as a description of the research objectives, a discussion of the importance of their input and experiences, details concerning how the data will be used, and confidentiality of personal information. The introduction will be positioned at the beginning of the questionnaire. Continuation to complete the questionnaire will indicate the respondent's consent.

No questions of a sensitive nature will be asked on the *TeamSTEPPS 2.0 Online Post-Training Survey*. Although written consent will not be required, all respondents will be

informed about the nature of the study and that their participation is voluntary. There are no known consequences of participation, and all confidentiality procedures will be described.

#### 12. Estimates of Annualized Burden Hours and Costs

Exhibit 1 shows the estimated annualized burden hours for the respondent's time to participate in the study. The *TeamSTEPPS 2.0 Online Post-Training Survey* will be completed by approximately 3,000 individuals. We estimate that each respondent will answer 10 items (i.e., number of responses per respondent) and responding to these 10 questions will require 20 minutes. The total annualized burden is estimated to be 10,000 hours.

Exhibit 2 shows the estimated annualized cost burden based on the respondents' time to participate in the study. The total cost burden is estimated to be \$35,930.

Exhibit 1. Estimated Annualized Burden Hours

I Form Name	Number of	iresbonses ber	Hours per response	Total burden hours
Training participant questionnaire	3,000	1	20/60	1,000
Total	3,000	N/A	N/A	1,000

Exhibit 2. Estimated Annualized Cost Burden

Form Name	Number of respondents	burden	hourly wage	Total cost burden
Training participant questionnaire	3,000	1,000	\$35.93	\$35,930
Total	3,000	1,000	N/A	\$35,930

<sup>\*</sup>Based on the mean of the average wages for all health professionals (29-0000) for the training participant questionnaire and for executives, administrators, and managers for the organizational leader questionnaire presented in the National Compensation Survey: Occupational Wages in the United States, May 2012, U.S. Department of Labor, Bureau of Labor Statistics. www.bls.gov/oes/current/oes\_nat.htm#37-0000

# 13. Estimates of Annualized Respondent Capital and Maintenance Costs

Capital and maintenance costs include the purchase of equipment, computers or computer software or services, or storage facilities for records, as a result of complying with this data collection. There are no direct costs to respondents other than their time to participate in the study.

#### 14. Estimates of Total and Annualized Cost to the Government

This project has a base period of 30 months. Exhibit 3a shows the annualized costs. The total contractor cost to the government to conduct the one-time questionnaire as well as to analyze and present all results is estimated to be \$181,521. This amount includes costs for developing the data collection tools (\$24,889); collecting the data (\$108,667); and analyzing the data (\$35,061) and reporting the findings (\$12,903).

**Exhibit 3a. Estimated Annualized Contractor Cost** 

	Estimated Annualized	
Cost Component	Contractor Cost	
Project Development	\$8,296	
Data Collection Activities	\$36,222	
Data Processing and Analysis	\$11,687	
Publication of Results	\$4,301	
Total	\$60,506	

A Health Communications Specialist (the Project Officer) will be responsible for project management and oversight. This will include oversight of the data collection approach and review of interim and final reports of summarized results. The estimated cost to the Federal Government for these activities is provided in Exhibit 3b. The average annual salary for the GS-13, Step 6 level is \$104,911. Federal salary information based on the 2014 OPM Pay Schedule for the Washington/DC area is available on the OPM website at <a href="http://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/pdf/2014/DCB.pdf">http://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/pdf/2014/DCB.pdf</a>.

Exhibit 3b. Federal Government Personnel Cost

		Average	Estimated Hours Per		
Activity	Federal Personnel	Annual Salary	Year	Annual Cost	Total Cost*
Data	Health Communications				
Collection	Specialist	\$104,911	6	\$302.63	\$756.58
Oversight	(GS-13, Step 6)				
Review of Interim and Final Results	Health Communications Specialist (GS-13, Step 6)	\$104,911	4	\$201.75	\$504.38
Total			\$504.38	\$1,260.96	

<sup>\*</sup>Total cost based on a base period of 30 months.

The **estimated total annualized cost** for this activity is **\$61,010**. This cost includes annual contractor costs (\$60,506) and Federal personnel costs (\$504).

# 15. Changes in Hour Burden

This is a new collection of information.

## 16. Time Schedule, Publication, and Analysis Plans

The time schedule for the data collection, data analysis, and final report preparation is presented in Exhibit 4.

**Exhibit 4. Time Frame for Data Collection, Analysis, and Preparation of Final Report** 

Data Collection and Analysis	Time Frames
Administer training participant questionnaire	Immediately on OMB approval
Analyze data	60 days from end of data collection
Prepare final report	90 days from end of data analysis

Reingold will analyze the survey data to identify trends in use of the TeamSTEPPS 2.0 Online Master Trainer curriculum, as well as the perceived impact of the program on organizational outcomes. To that end, a three-phase analysis is proposed. This analysis includes (1) ensuring the quality of the data collected, (2) conducting descriptive analyses, and (3) conducting comparisons of specific cohorts. These phases of analyses are described below.

To ensure maximum integrity of the results, several data-screening and checking procedures (Tabachnick & Fidell, 1996) will be conducted. Specifically, data quality checks will be performed by searching for deviant response ranges, anomalous response patterns, excessive missing data, extreme outliers, and highly skewed or irregular distributions. From these analyses, faulty data or data of poor measurement quality will be flagged, corrected, and/or eliminated. For example, excessive missing data is an indicator of poor data quality. Respondents who fail to respond to more than 10 percent of the protocol questions in the survey will be identified; for these cases, the pattern of responses will be reviewed more carefully to determine if, for example, a given respondent's data should be eliminated. Any strategies that result in the elimination of data will be jointly discussed by the contractor and AHRQ representatives and then fully documented in the final report.

For the descriptive analyses, Reingold will employ the following approach: (1) Compute a number of descriptive statistics for each variable measured by the survey; (2) develop early warning data protocols (specific statistical analyses to indicate significant variability, low response rates, or error in the data); (3) conduct item analyses; and (4) conduct comprehensive group and subgroup analyses.

Reingold will calculate frequency distributions, means, and standard deviations for each closed-ended item included in the survey and combinations of related items that focus on a particular variable or issue. In addition, Reingold will calculate these statistics for each subgroup represented in the sample (e.g., year of training attendance) and conduct analyses to identify subgroup differences. Frequency distributions will show the percentage of people who responded to each response option for each item included in the protocol. Means and standard deviations will be used to examine the relative importance of different items and item combinations that measure specific issues

associated with each survey. Finally, standard deviations will be used to examine the level of agreement among respondents regarding issues that are identified as important.

A few items included will be open-ended in nature as a means of following up on closed-ended items to obtain richer detail on unique activities being conducted post-training. The individual responses to the open-ended items will be recorded, compiled, and examined for any themes or patterns of interest. If appropriate, codes will be defined based on the themes identified, and the open-ended responses would be coded into closed-ended categories, which would then be tabulated. Otherwise, the results will be summarized in a memo.

The data gathered from the survey will allow the identification of differences between roles that Master Trainers may fulfill. For example, the analyses will include comparisons of each TeamSTEPPS tool and strategy based on the ratings of usefulness by averaging the usefulness ratings of each tool across all participants. Then, t-tests will be conducted to assess the magnitude of any subgroup differences. In addition to conducting comparisons of tool usefulness, the analyses will compare tool use and perceived impact, and will analyze variations in these characteristics by training participant type. T-tests will be conducted to identify the magnitude of any differences by training participant type. For example, these analyses will demonstrate how useful a specific tool is for direct implementers as opposed to those Master Trainers whose roles are primarily to facilitate implementation or training of TeamSTEPPS.

## 17. Exemption for Display of Expiration Date

AHRQ does not seek this exemption.

#### List of Attachments

Attachment A -- TeamSTEPPS 2.0 Online Post-Training Survey

Attachment B -- Federal Register Notice

Attachment C -- Advanced Notice Email

Attachment D -- Importance of Participation Email

Attachment E -- Reminder Email

Attachment F -- Thank you Email