# SUPPORTING STATEMENT

# Part A

Evaluating the Implementation of PCOR to Increase Referral, Enrollment, and Retention through Automatic Referral to Cardiac Rehabilitation (CR) with Care Coordination

Version: January 9, 2020

Agency for Healthcare Research and Quality (AHRQ)

# Table of contents

## 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 https://www.ahrq.gov/policymakers/hrqa99a.html), 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; and
- 2. The synthesis and dissemination of available scientific evidence for use by patients, consumers, practitioners, providers, purchasers, policy makers, 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) the elderly, and (6) individuals with special health care needs, including individuals with disabilities and individuals who need chronic care or end-of-life health care.

The project "Implementation of PCOR to Increase Referral, Enrollment, and Retention through Automatic Referral to Cardiac Rehabilitation (CR) with Care Coordination" fully supports AHRQ's mission. This topic was nominated for consideration under AHRQ's Dissemination and Implementation (D and I) Initiative. The nominators were Million Hearts® (an initiative co-led by the Centers for Disease Control and Prevention (CDC) and the Centers for Medicare & Medicaid Services (CMS). AHRQ's D and I initiative responded to a congressional mandate and funded under the PCOR-Trust Fund. The nomination featured PCOR evidence on the value of cardiac rehabilitation after myocardial infarction or coronary revascularization and an evidence-based implementation strategy, Automatic Referral with Care Coordination. AHRQ judged the nomination to have a high level of fit with AHRQ's criteria of having a substantial evidence base, high potential impact, and high feasibility for wide dissemination and implementation. Outreach with stakeholders indicates that this initiative aligns well but does not duplicate work by NIH; PCORI; CMS and CDC.

After launch, AHRQ named its CR project "TAKEheart." Successful execution of the TAKEheart project can contribute directly to the nation's health. Currently over two-

thirds of eligible cardiac patients are not referred to CR despite extensive evidence of its effectiveness in preventing subsequent morbidity; national estimates of referral range from 10-34%.<sup>1</sup> To help improve CR rates, the Million Hearts<sup>®</sup> Cardiac Rehabilitation Collaborative developed a Cardiac Rehabilitation Change Package (CRCP) and established a national goal of 70% participation in CR by 2022 for eligible patients.<sup>2</sup> The aim of this project is to raise awareness about the benefits of CR, then to spread knowledge about CRCP resources, and finally to increase CR uptake. The project will facilitate implementation of Automatic Referral with Care Coordination in selected, diverse hospitals nationwide which demonstrate their readiness.

AHRQ will evaluate TAKEheart to:

- 1. Assess the extent and effectiveness of the dissemination and implementation efforts, including the uptake and usage of CRCP components including but not limited to Automatic Referral with Care Coordination, and
- 2. Measure changes in CR referral, enrollment, and retention.

Evaluation results will be used to improve the intervention and to provide guidance for future AHRQ Dissemination and Implementation projects. Two cohorts of "Partner Hospitals" will engage in efforts to implement Automatic Referral with Care Coordination\_over twelve month periods. The evaluation of the first cohort will ascertain the diversity of hospitals engaged the activities that contributed to (or hindered) their efforts, and the types of support which they report having been most (and least) useful. This information will be used to improve recruitment, technical assistance, and tools for the second cohort.

In addition, hospitals – including those involved in the implementation – will be invited to attend Affinity Group virtual meetings organized around specific topics of interest which are not intrinsic to Automatic Referral with Care Coordination. Hospital staff engaged in Affinity Groups will create a vibrant Learning Community. The evaluation will determine which Affinity Groups engaged the most participants of the Learning Community, and which resources participants determined the most useful. This information will be used to develop resources which will be available on a new, permanent website dedicated to improving CR.

To collect data on the many facets of the intervention we will implement multiple data collection tools, each of which has a specific purpose and set of respondents:

1. **Partner Hospital Champion Survey.** Each Partner Hospital will designate a "Champion" who will coordinate activities associated with implementing Automatic Referral with Care Coordination at the hospital and provide the Champion's name and email address. The Champion may have any role in the hospital, although they are expected in relevant positions, such as cardiologists or quality improvement managers. We will conduct online surveys of 125 Champions (one Champion per hospital). We will use the email addresses to send the Champion a survey at two points: seven months after the start of implementation and at the end of the 12-month implementation period. The first survey will focus on four constructs. First, it will capture data about the hospital context, such as whether it had prior

experience customizing an EMR or is a safety net hospital. Second, it will address the hospital's decision to participate in TAKEheart. Third, it will capture data on the CR programs the hospital refers to, whether the number or type has changed, and why. (Achievement of milestones towards implementation of automatic referral with care coordination is captured in the Implementation Log.) Fourth, it will collect feedback on the training and technical assistance received. The second survey will focus on three constructs. First, it will collect feedback on the TAKEheart components, including training, technical assistance, and use of the website. We will ask about each Partner Hospital Action Group training module not covered in the first survey. Second, we will ask about the hospitals' response to participating in TAKEheart, such as changes to referral workflow or CR programs. Third, we will ask those Partner Hospitals which have not completed the process of implementing Automatic Referral with Care Coordination whether they anticipate continuing to work towards that goal and their confidence in succeeding.

- 2. Partner Hospital Interviews.
  - a. **Partner Hospital Interviews.** We will select, from each cohort, eight Partner Hospitals which demonstrated a strong interest in addressing underserved populations or reducing disparities in participation in cardiac rehabilitation. We will conduct a key informant interview with the Champion of each selected Partner Hospital to delve into how they are addressing the needs of underserved populations by implementing Automatic Referral with Care Coordination.
  - b. **Interviews with Partner Hospital cardiologists.** We will select, from each cohort, eight hospitals based on criteria selected in conversation with AHRQ, such as hospitals which serve specific populations, or have the same EMRs, which will inform their experience customizing the EMR. We will conduct semi-structured interviews with one cardiologist at each of the selected hospitals twice. In the second month of the cohort implementation, we will ask about their needs, concerns, and expectations of the program. In the 11<sup>th</sup> month of the cohort implementation, we will determine whether their concerns were addressed appropriately and adequately.
  - c. **Interviews with Partner Hospitals that withdraw**. We expect that a small number of Partner Hospitals may withdraw from the cohort. We will identify these hospitals by their lack of participation in training and technical assistance events; Technical Assistance (TA) Providers will confirm their withdrawal. We will interview up to nine withdrawing hospitals to better understand the reason for withdrawal (e.g., a merger resulted in a loss of support for the intervention, Champion left), as well as facilitators and barriers of each hospitals' approach to implementing Automatic Referral with Care Coordination. If more than nine hospitals withdraw, we will cease interviewing.
- 3. **Learning Community Participant Survey.** We will conduct online surveys of 250 currently active Learning Community participants at two points in time, in months 18 and 31 of the project. We will administer the survey by

sending a link to an online survey to email addresses entered by virtual meeting participants during registration. The email will describe the purpose of the survey.

4. **Learning Community Follow-up Survey**. We will conduct a brief online survey with up to 15 Learning Community participants following the final virtual meeting for each of 10 Affinity Group, to ascertain whether the hospitals were able to act on what they learned during the session. The total sample will be 150 Learning Community participants.

To guide their quality improvement efforts, Partner Hospitals will create hospital-specific Action Plans, which will indicate who is responsible for achieving each milestone towards implementing Automatic Referral with Care Coordination and when it is expected to be completed. The TA Providers – not the Partner Hospital staff – will update the Action Plans monthly to track progress. The TA Providers will also supply qualitative assessments of the hospital's situation in the Action Plans.

Some Partner Hospitals will have the technology and personnel in place to collect data on referrals to cardiac rehabilitation before fully implementing Automatic Referral with Care Coordination. However, they need to start collecting the data in order to understand whether their quality improvement initiative is having the intended effect. To help them start monitoring progress, we will provide interested hospitals with a user-friendly Microsoft Excel template which the Care Coordinator can use to facilitate their work follow referral to, and use of, CR. The tool can also be used to submit data, rather than creating a second process to do so. If they do submit data (regardless of whether they use the template), we will produce hospital-specific charts to show their progress towards improving utilization of CR. Templates will be customized to meet the needs of hospitals which plan to track only referral, those which plan to follow patients through completion of their prescribed rehabilitation (up to 36 sessions), and those which would like to track referring providers and CR facilities referred to. The templates will also minimize reporting burden by including functions such as drop-down boxes, field validation, and field protection.

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

#### **Analysis Plan**

#### Quantitative analysis

We will first produce descriptive statistics of survey data to explore which Dissemination & Implementation were achieved. When each cohort's implementation period is completed, we will use combined data on Partner Hospitals to assess which hospital, CR program, or CR facility characteristics are associated with greater or lesser success in implementing Automatic Referral with Care Coordination. (a) Within each category (e.g., hospital), univariate analysis will identify individual characteristics that are correlated

with implementation of Automatic Referral with Care Coordination. (b) Across categories, multivariate analysis will identify characteristics independently associated with success after adjusting for other included factors. (c) We will perform exploratory factor analysis to identify factors, or sets of characteristics, which – in combination – have a strong influence on outcomes in either direction. For example, in a recent study of the experiences of primary care physicians and staff following lean workflow redesign, three influential factors were identified: personal motivation, work satisfaction, and ownership.<sup>1</sup> With a maximum of 125 hospitals, we will have to keep the factors to a minimum, which is why we hope to create sets of characteristics. (d) Finally, we will determine whether any of the individual or sets of characteristics seem necessary but not sufficient, meaning that without them success is not found in any hospital, using Qualitative Comparative Analysis.<sup>2</sup>

#### Qualitative analysis

Semi-structured interview guides will ensure that topics of interest are covered. A coding scheme will be developed inductively and deductively. Data will be analyzed by aggregating at the theme level. Results for Partner Hospitals and the Learning Community will be compared across cohorts and over time, respectively, to understand the interaction of opinions and experiences with maturity of the implementation.

Report	Data sources	Analyses
Memorandum on Webinar and	Website and webinar statistics (secondary	DS
website statistics	data)	D3
Memorandum Partner Hospitals	Interviews with Partner Hospitals that	DS MM
that withdraw	withdraw	DS, with
Memorandum on Partner	Partner Hospital Champion Survey; Key	
Hospitals	Informant Interviews with Partner Hospital	DS MM
	Champions; Interviews with Partner	DS, WWI,
	Hospital cardiologists; Interviews with	QA, IVI V
	Partner Hospitals that withdraw	
Individualized feedback reports	Partner Hospital-submitted intervention data	DS
to each reporting hospital		D3
Memorandum on the Learning	Learning Community Participant Survey	DS
Community		D3
Annual and Final Evaluation	All sources listed above.	DS, MM,
Reports		QA, MV

#### Exhibit 1. Report analyses

DS = Descriptive statistics and interpretation

- MM= Mixed Methods analysis and interpretation
- MV = Multivariate analysis and interpretation
- QA = Qualitative analysis and interpretation

Hung DY, Harrison, MI, Truong Q, and Du X. Experiences of primary care physicians and staff following <sup>1</sup> .lean workflow redesign. *BMC Health Services Research* (2018) 18:274

Legewie N. An Introduction to Applied Data Analysis with Qualitative Comparative Analysis (QCA).<sup>2</sup> .Forum: Qualitative Social Research. 2013;14(3):Article 15

### 2. Purpose and Use of Information

The evaluation results will benefit the project's dissemination and implementation team, which will create a permanent, public website with evidence-based, actionable resources, including specific guidance relevant to hospitals with particular characteristics or situations, for improving their CR referral, enrollment, and retention rates through application of Automatic Referral with Care Coordination or other methods.

Specifically, the data collected will help the project team:

- 1. Understand the extent to which dissemination efforts were successful in the short term in reaching and engaging hospitals participating in CR education and improvement initiatives;
- 2. Understand the facilitators and barriers to successfully implementing Automatic Referral with Care Coordination and time required for implementation;
- 3. Assess the implementation of Automatic Referral with Care Coordination in Partner Hospitals
- 4. Improve training and technical assistance for the second cohort of Partner Hospitals
- 5. Improve the resources to be made available to the second cohort of Partner Hospitals and on the permanent, public CR website.

The data gathered for this study are intended to provide information about the execution and short-term effects of the TAKEheart initiative. They are not intended to evaluate the effectiveness of CR or the long term effects of TAKEheart or of Automatic Referral with Care Coordination on CR referral, enrollment, and retention. Nor does the evaluation intend to generate generalizable findings about the operations of the hospitals in the study or any other hospitals across the country.

A manuscript describing the project and its results will be produced for publication in a peer-reviewed journal.

## 3. Use of Improved Information Technology

In order to minimize respondent burden and to permit the electronic submission of survey responses and data collection forms, the Partner Hospital Champions and Learning Community participants surveys will be web-based and deployed using a well-designed, low burden, and respondent-friendly survey administration process and instruments. We will send an email to potential respondents with a link to the survey. We will collect email addresses by requiring registration for online Learning Community activities, for example, participation in Webinars or in Affiliation Group virtual meetings.

Training and technical assistance activities for Partner Hospital or Learning Community participants will be conducted by web-conference to streamline and facilitate participation among the health care organizations. Interviews will be conducted by telephone with video conference capability.

Many newly created materials will be posted on an active website, which Partner Hospital and Learning Community participants can access information at their convenience. The website will also contain links to relevant CRCP tools participants may find helpful. This format is ideal for busy health care staff and clinicians who can access the information as they wish.

Partner Hospitals will use a user-friendly Microsoft Excel template to track patients through referral to cardiac rehabilitation and, if they choose, through enrollment and prescribed sessions. The hospital's Data Points of Contact will strip personally identifiable information (PII) from the file prior to uploading it using Huddle, an online platform for data sharing which meets FedRAMP requirements. Abt staff will retrieve the files and transfer them to a FedRAMP-compliant server, on which all de-identified patient data will be kept.

## 4. Efforts to Identify Duplication

Automatic Referral with Care Coordination builds on AHRQ's participation in the American Association of Cardiovascular and Pulmonary Rehabilitation/Million Hearts<sup>®</sup> (MH) Cardiac Rehabilitation Collaborative and will use the materials it developed for the collaborative's Cardiac Rehabilitation Change Package. AHRQ is maintaining close contact with Million Hearts, including having a Million Hearts representative on the TAKEheart Technical Expert Panel. AHRQ intends the results of the project to augment Million Hearts' work. Outreach with stakeholders indicates that this initiative aligns well with work by NIH; PCORI; CMS and CDC but does not duplicate their work. AHRQ has not identified any related work or data collection efforts.

### 5. Involvement of Small Entities

This project does not intend to intentionally involve nor exclude or impact any small entities. However, to the extent an identified and recruited health care organization meets the requirements for participation and is a small entity, we will involve them and expect no greater impact than on other participating health care organizations. The instruments and procedures used to collect data are designed to minimize the burden on all respondents.

### 6. Consequences if Information Collected Less Frequently

The data collection plan and procedures will be the same for both cohorts. We will collect data from a variety of sources within Partner Hospitals in order to minimize burden on any individual respondent while capturing the full experience of the intervention. The planned frequency of data collection is necessary to accurately assess the adoption and effectiveness of the program.

- Partner Hospitals Champion Surveys will be collected twice, at the middle and end of the cohort.
- Key Informant Interviews with eight Partner Hospital Champions will be performed once per cohort.

- Interviews with eight Partner Hospital cardiologists will be performed twice, near the start and at the end of each cohort, to track changes in knowledge, attitudes and behaviors.
- Interviews with Partner Hospitals that withdraw will be held once per hospital, for up to nine hospitals that withdraw.

Additionally, the Learning Community Participant Survey will be administered *twice* during the entire project while the Learning Community Follow-up Surveys will be administered *once* for each of just ten Affinity Groups.

Not collecting the data would place us at risk of not obtaining adequate information to assess the effectiveness of the training and technical assistance, and therefore reduce our ability to improve (a) training and technical assistance for the second cohort of Partner Hospitals and (b) the resources to be provided online for hospitals implementing Automatic Referral and Care Coordination in the future, without the support of technical assistance. Limitations on data gathering would also reduce the degree to which the project's final, publicly available resources meet hospitals' needs, and patients' needs, related to the improvement of participation in cardiac rehabilitation.

# 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

# 8.a. Federal Register Notice

As required by 5 CFR 1320.8(d), notice was published in the Federal Register on February 4, 2020 on page 6190 for 60 days (see Attachment B). AHRQ did not receive comments from the public during these 60 days.

# 8.b. Outside Consultations

The Abt team has consulted with a technical expert panel (TEP) to provide expertise and guidance to develop the plan and design for this project, including the development of a set of activities that are critical to effective implementation of Automatic Referral with Care Coordination, development of training modules, and the evaluation for which this data collection is designed. The following experts with knowledge and experience in cardiac rehabilitation, including managing implementation of Automatic Referral with Care Coordination at hospitals, comprise the TEP, listed here in alphabetical order:

- Kathleen Hewitt, DNP, RN, AACC, President of American Hematology Association. Associate Vice President at American College of Cardiology until 2019.
- Preeti Kolankarai, MIS, Patient Portfolio Advisor with the American Heart Association (AHA),

- Cara Lewis, Ph.D., HSPP, licensed clinical psychologist and Beck Scholar recognized by the Beck Institute for Cognitive Behavioral Therapy; President of the Society for Implementation Research Collaboration.
- Karen Lui, RN, MS, FAACVPR, of GRQ, LLC has directed hospital-based cardiac rehabilitation (CR) programs and cardiology practice-based cardiac rehab programs for 25 years.
- Amy Miller, MD, PhD, board certified in both cardiovascular medicine and clinical informatics; overseeing the clinical informatics team at Partners eCare and serving as the clinical informatics lead for implementation of automatic referral module of Epic.
- Ana Mola, PhD, RN, ANP-BC, MAACVPR, Director of Care Transitions and Population Health Management Department of Care Management for New York University Medical Center. Current President of the American Association of Cardiovascular and Pulmonary Rehabilitation.
- Susan Rogers, American College of Cardiology.
- Tara Bristol Rouse, MA Patient and Family Engagement Project Consultant for the American Hospital Association's Health Research and Educational Trust.
- Calondra Tibbs, MPH, PhD, Chief Operating Officer at WomenHeart: The National Coalition for Women with Heart Disease.
- Kathleen Traynor, RN, MS, FAACVPR, Director of Cardiovascular Disease Prevention at Massachusetts General Hospital since 1992. Immediate past President of the American Association of Cardiovascular and Pulmonary Rehabilitation.
- Hilary Wall, MPH, Senior Scientist in the Division for Heart Disease and Stroke Prevention at the Centers for Disease Control and Prevention (CDC); Science Lead for Million Hearts®, a national initiative co-led by CDC and the Centers for Medicare & Medicaid Services with the goal of preventing one million heart attacks and strokes by 2022.

The first TEP meeting was held in-person on July 10, 2019. The second TEP meeting, was held on October 23, 2019.

## 9. Payments/Gifts to Respondents

No respondents will receive payments or gifts.

Both Partner Hospital and Learning Community participants will have access to evidence-based, high-quality information through the website and webinars. Partner Hospitals will also receive free technical assistance.

Partner Hospitals which submit data on referral to cardiac rehabilitation will receive quarterly Feedback Reports which can compare the hospital's data to a comparator of interest: other participating hospitals, their referral rate at baseline, or the goal of 70 percent of eligible patients being referred. CR referral is increasingly used in performance measurement, and many hospitals may be interested in these data. If hospital choose, their Feedback Reports will be customized to allow interested Partner Hospitals to filter data by referring cardiologist or by CR facility.

## 10. Assurance of Confidentiality

Individuals and organizations 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.

# 11. Questions of a Sensitive Nature

The data collection protocols do not contain any questions concerning political affiliations and attitudes; respondents' mental or psychological problems; illegal, antisocial, self-incriminating or demeaning behavior; critical appraisals of other individuals with whom respondents have close relationships; legally privileged relationships; or records describing how an individual exercises First Amendment rights. Nor do they contain questions related to sexual behavior and attitudes, religious beliefs, income or proprietary business information. Respondents to the survey will be explicitly informed that their participation is voluntary, information they provide is confidential to the extent provided by law, and they may choose to withdraw from the study or not respond to specific items without penalty. We will also remove individual staff and health care organization names from written interview records and reports to maintain respondent confidentiality. Data on patient referrals will only provide referral dates. No data will be obtained on individual conditions, needs, or care received.

## 12. Estimates of Annualized Burden Hours and Costs

Exhibit 2 presents estimates of the reporting burden hours for the data collection efforts. Time estimates are based on prior experiences and what can reasonably be requested of participating health care organizations. The number of respondents listed in column A, Exhibit 2 reflects a projected 90% response rate for data collection effort 1, and an 80% response rate for efforts 3 and 4 below.

- 1. **Partner Hospital Champion Survey.** We assumed 113 hospital champions will complete the survey based on a 90% response rate. It is expected to take up to 45 minutes to complete for a total of 169.5 hours to complete. (Attachment C)
- 2. **Partner Hospital Interviews.** In-depth interviews will occur with select Partner Hospital staff.
  - a. **Interviews with Partner Hospital Champions.** We will have a single, 90 minute interview with eight Partner Hospital Champions, in each cohort, from Partner Hospital which have a common characteristic of particular interest, for a total of 24 hours. (Attachment D)
  - b. **Interviews with Partner Hospital cardiologists.** We will hold individual, up-to-30 minute interviews with eight cardiologists, twice in each cohort, for a total of 16 hours. (Attachment E)
  - c. **Interviews with Partner Hospitals that withdraw.** We will interview up to nine withdrawing hospitals for no more than 20 minutes to better understand the reason for withdrawal as well as facilitators and barriers, for a total of 2.7 hours. (Attachment F)

- 3. **Learning Community Participant Survey.** We assumed 200 Learning Community participants will complete the survey based on an 80% response rate. It is expected to take up to 15 minutes to complete each survey for a total of 100 hours. (Attachment G)
- 4. **Learning Community Follow-up Survey.** We will conduct a brief, online survey of participants of each of just ten selected Affinity Groups at two months after the virtual meeting. We assumed 120 Learning Community participants will complete the survey based on an 80% response rate. It is expected to take 10 minutes to complete each survey for a total of 20.4 hours. (Attachment H)

Dat Pro	a Collection Method or ject Activity	A. Number of respondents	B. Number of responses per respondent	C. Hours per response	D. Total burden hours
1.	Partner Hospital Champion Survey*	113	2	0.75	169.5
2a.	Interviews with Partner Hospital Champions	16	1	1.5	24.0
2b.	Interviews with Partner Hospital Cardiologists	16	2	0.5	16.0
2c.	Interviews with Partner Hospitals that withdraw	9	1	0.3	2.7
3.	Learning Community Survey**	200	2	0.25	100.0
4.	Learning Community Follow- up Survey**	120	1	0.17	20.4
ТО	TAL	474			332.6

#### Exhibit 2. Estimated annualized burden hours

\* Number of respondents (Column A) reflects a sample size assuming a 90% response rate for this data collection effort.

\*\* Number of respondents (Column A) reflects a sample size assuming an 80% response rate for this data collection effort.

Exhibit 3, below, presents the estimated annualized cost burden associated with the respondents' time to participate in this research. The total cost burden is estimated to be about \$21,497.

Data Acti	a Collection Method or Project vity	A. Number of respondents	B. Total burden hours	C. Average hourly wage rate	D. Total cost burden
1.	Partner Hospital Champion Survey*	113	169.5	\$72.27	
2a.	Interviews with Partner Hospital Champions	16	24.0	\$72.27	\$1,734
2b.	Interviews with Partner Hospital Cardiologists	16	16.0	\$96.58	\$1,545
2c.	Interviews with Partner Hospitals that withdraw	9	2.7	\$72.27	\$195
3.	Learning Community Survey**	200	100.0	\$47.95	\$4,795
4.	Learning Community Follow-up Survey**	120	20.4	\$47.95	\$978
TO	ΓAL	474	332.6		\$21,497

Exhibit 3. Estimated annualized cost burden

\* Number of respondents (Column A) reflects a sample size assuming a 90% response rate for this data collection effort.

\*\* Number of respondents (Column A) reflects a sample size assuming an 80% response rate for this data collection effort.

We obtained median hourly wage rates for relevant occupations from the Bureau of Labor & Statistics on "Occupational Employment Statistics, May 2018 Occupation Profiles" found at the following URL on October 1, 2019: https://www.bls.gov/oes/current/oes\_stru.htm#15-0000.

We assume that half the Partner Hospital Champions will be cardiologists and half will be Quality Improvement managers. We calculated the hourly rate of \$72.27 by averaging the median hourly wage rate for cardiologists (\$96.58, occupation code 29-1069) and medical and health services managers (\$47.95, occupation code 11-1141). The occupation of medical and health services managers has been used for quality improvement staff in other AHRQ projects. We used this rate for the Partner Hospital Champion Survey, Interviews with Partner Hospital Champions, and Interviews with Partner Hospitals that withdraw.

We used the cardiologist rate, (\$96.58, occupation code 29-1069), for the Interview with Partner Hospital Cardiologists.

### 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 Annualized Cost to the Government

Exhibit 4 demonstrates annualized cost to the government while Exhibit 5 displays the government personnel cost for this project. "Annualized Cost" is the total cost divided by three. Note that project activities will not be distributed equally across the three years.

Cost Component	Total Cost	Annualized Cost
Project Development	\$275,475	\$91,825
Data Collection Activities	\$367,300	\$122,433
Data Processing and Analysis	\$275,475	\$91,825
Publication of Results	\$264,121	\$88,040
Total	\$1,182,371	\$394,123

Exhibit 4. Estimated Total and Annualized Cost

#### **Exhibit 5. Government Personnel Cost**

Tasks/Personnel	Annual Salary	% of Time	Cost
PRE OMB Approval Costs			-
Government Personnel Costs			
Social Science Analyst – GS15*, Step 10	\$166,500	10%	\$22,200
POST OMB Approval Costs			
Government Personnel Costs			
Social Science Analyst – GS15*, Step 10	\$166,500	10%	\$27,750
Grand Total			\$49,950

\* Salary Table 2019-DCB, General Schedule (GS) Locality Pay Tables for the Washington DC area. Accessed from <a href="https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/2019/general-schedule/">https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/2019/general-schedule/</a> on October 1, 2019.

### 15. Changes in Hour Burden

This section addresses new information collection.

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

Exhibit 6 presents the project timeline.

#### Exhibit 6. Project Timeline

Description (in chronological order of start)	Due Date		
IMPLEMENTATION ACTIVITIES			
TEP active	May 2019 – March 2021		
Development and management of website to	May 2019 – October 2021		
raise awareness and recruit hospitals	-		
Partner Hospital cohort 1 active	January 2020 – December 2020		
Learning Community active	January 2020 – October 2021		
Partner Hospital cohort 2 active	November 2020 – October 2021		
Develop a permanent web page	September 2021 – March 2022		
EVALUATION ACTIVITIES			
Analysis of recruitment activity and early	February 2020 – March 2020		
Partner Hospital participation	-		
Interviews with Partner Hospital	February 2020 – November 2021		
cardiologists			
Interviews with Partner Hospitals that withdraw	February 2020 – September 2021 (as		
	needed)		
Memorandum on Partner Hospitals that	February 2020 – September 2021 (as		
withdraw	needed)		
Collect cardiac rehabilitation referral,	April 2020 – November 2021		
enrollment, and retention data from Partner	(quarterly)		
Hospitals			
Individualized feedback reports to each	May 2020 – December 2021		
reporting hospital	(quarterly)		
Annual and Final Reports	May 2020, May 2021, March 2022		
Memorandum on Webinar and website statistics	July 2020, November 2020, May		
	2021, Jan 2022		

Description (in chronological order of start)	Due Date		
Partner Hospital Champion Survey	August 2020, January 2021, June		
	2021, November 2021		
Learning Community Surveys	September 2020, October 2021		
Memorandum on the Learning Community	November 2020, January 2022		
Interviews with Partner Hospital Champions	November 2020 – September 2021		
Memorandum on Partner Hospitals	August 2020, August 2021		

#### **Publication Plan:**

Study results will be disseminated through a peer-reviewed publication. The final materials will posted on a new website which we will develop for AHRQ and disseminated via AHRQ's Office of Communication and Knowledge Transfer (e.g., e-mails to relevant professional associations and postings on listservs).

### 17. Exemption for Display of Expiration Date

AHRQ does not seek this exemption.

### List of Attachments:

Attachment A – Acronyms

Attachment B – Federal Register Notice

Attachment C – Partner Hospital Champion Survey

Attachment D – Interviews with Partner Hospital Champions

Attachment E – Interviews with Partner Hospital cardiologists

Attachment F – Interviews with Partner Hospitals that withdraw

Attachment G – Learning Community Participant Survey

Attachment H – Learning Community Follow-up Survey

- 1. Cardiac Rehabilitation Change Package. Accessed at https://millionhearts.hhs.gov/tools-protocols/action-guides/cardiac-changepackage/index.html October 7, 2019. No update date available.
- 2. Ades PA, Keteyian SJ, Wright JS, Hamm LF, Lui K, Newlin K, Shepard DS, Thomas RJ. Increasing Cardiac Rehabilitation Participation From 20% to 70%: A Road Map From the Million Hearts Cardiac Rehabilitation Collaborative. *Mayo Clin Proc.* 2017;92(2):234-242.