**SUPPORTING STATEMENT**

**Part B**

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

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Agency of Healthcare Research and Quality (AHRQ)

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# B. Collections of Information Employing Statistical Methods

The data collection is designed to assess the implementation of automatic referral of eligible patients to cardiac rehabilitation (CR), supported by care coordination, in hospitals that volunteer to take part in a training program that is offered free of charge by the Agency for Healthcare Research and Quality. This program and the information gathering described here are conducted in fulfillment of AHRQ’s congressionally mandated obligation to disseminate Patient Centered Outcome Research produced by other agencies within the Department of Health and Human Services or by other entities, such as the Patient Centered Outcomes Research Institute. The project, known as TAKEheart, will provide training and technical assistance to self-selected hospitals (a) seeking to learn about critical steps to a successful implementation of automatic referral with care coordination, and (b) participating in didactic and peer-to-peer training to plan and implement Automatic Referral with Care Coordination.

The resulting convenience sample of hospitals is not intended to be statistically representative. A limited number of hospitals will volunteer to take part in the training and very few of them will be able to provide referral data at the start of the project. Therefore, we do not intend to track, or test, changes in referral rates. This data gathering is not intended to provide a rigorous design to assess either the impacts of Automatic Referral with Care Coordination or to prove (or disprove) the impacts of the training and implementation program. The evaluation we are proposing will examine reported data on implementation of automatic referral to cardiac rehabilitation supported by care coordination and will examine which characteristics and sets of characteristics of hospitals and cardiac rehabilitation referral programs are associated with successful implementation of Automatic Referral with Care Coordination.

## 1. Respondent universe and sampling methods

Participants

A total of 125 hospitals (“Partner Hospitals”), across two cohorts, will be recruited to form interdisciplinary teams to automate referrals to cardiac rehabilitation and utilize care coordination to guide patients through the referral process. We will select Partner Hospitals to maximize diversity of hospital characteristics using a targeted, purposive recruitment approach. The factors we will use in selection will include rural as well as urban location, cardiac event rate, and populations served (e.g., racial/ethnic minorities). We do not have an *a priori* expectation about the number of hospitals which will have each characteristic.

We will select hospitals with leadership that commit to supplying the technical, financial, and human resources required to implement an automatic referral system.

Additionally, up to approximately 250 hospitals will be identified to participate in a Learning Community to share knowledge about their efforts to increase referral to cardiac rehabilitation more broadly, with a focus addressing disparities.

We make no claim that the results from this study will be generalizable. Rather, our convenience sample of information-rich cases will be illustrative of the kinds of barriers, facilitators and results that hospitals may experience in implementing Automatic Referral with Care Coordination. The final product will be a website at which other hospitals can access high-quality materials and specific guidance regarding the experience of hospitals in implementing Automatic Referral with Care Coordination to help them in their efforts to do so.

## 2. Information Collection Procedures

Sample Size

The two cohorts will have a total of 125 Partner Hospitals. We will survey each Partner Hospital twice: at month seven and month 12 of their 12-month participation in the cohort. The surveys will capture experience with the implementation at the point in time. The information will provide AHRQ with information about what happened in the hospitals that took part in the program.

To further understand the experience of the Partner Hospitals, we will identify a subset of Partner Hospitals to participate in qualitative data collection to capture rich detail on their motivation to participate in TAKEheart, the context-specific implementation strategies they used to implement Automatic Referral with Care Coordination, and how cardiologists participated in, and responded to, the intervention.

1. **Interviews with Partner Hospital Champions.** We will choose eight hospitals in each cohort which demonstrated a strong interest in addressing underserved populations or reducing disparities in participation in cardiac rehabilitation to participate in interviews with the Champion.
2. **Interviews with cardiologists.** We will choose eight hospitals in each cohort (a) with a characteristic of particular interest to AHRQ and (b) which have been engaged in training and technical assistance, to participate in interviews with cardiologists who are not in a leadership role to understand their experience with the hospital implementing Automatic Referral with Care Coordination.
3. **Interviews with Partner Hospitals that withdraw.** We anticipate that a small number of Partner Hospitals will withdraw from the project. We will request a brief interview to understand their motivation for participating and reasons for withdrawing.

We will survey all 250 Learning Community hospitals at two points in time: after the first six months of Learning Community activity and the end of the Learning Community activities. The surveys will capture information about the quality and usefulness of the activities they engaged in.

We will additionally perform a follow-up survey two months after each of ten peer-to-peer virtual meetings, with up to 15 Learning Community participants in each survey, to ascertain whether the hospitals were able to act on what they learned during the session. The total sample will be 150 Learning Community hospitals.

## 3. Methods to Maximize Response Rates

Partner Hospitals will have agreed to participate in the evaluation, and will expect to be surveyed twice during their 12 months of involvement. Additionally, most Partner Hospitals will engage in technical assistance in addition to webinar training, so will have a relationship with a coach, who will promote the survey. Therefore, we anticipate a 90% cooperation rate for the survey of Partner Hospital Champions.

Learning Community hospitals will not have agreed to participate in the evaluation. Therefore, the Learning Community surveys will be quite brief, focusing on the most salient information. We anticipate that the TAKEheart initiative will have positive connotations for them, so we expect an 80% response rate.

## 4. Tests of Procedures

The data collection protocols are designed to capture the unique experiences Partner Hospitals will have implementing Automatic Referral with Care Coordination and Learning Community hospitals will have learning techniques to improve referral rates. In order to establish the face and content validity of the protocols, the constructs were reviewed by our technical expert panel (TEP) (see listing in Supporting Statement Part A) and the tools were reviewed by the Training and Technical Assistance lead for the project.

We will work with the recruitment team to identify hospitals that will be willing to pilot test the tools. Pilot testing will identify any areas of confusion where language needs to be clarified. Pilot testing will also determine whether the time required to complete a survey is longer than intended, so surveys must be shortened to limit the burden on respondents.

## 5. Statistical Consultants

Abt Associates is the contractor which will develop data collection tools and perform all analysis on behalf of AHRQ. The professionals from Abt Associates have over 40 years of experience providing high quality, timely and cost effective data collection for federal agencies. Abt Associates employs many statisticians, economists and experienced research methodologists. Statistician and health economist Lauren Olsho, Ph.D., from Abt Associates, reviewed the proposed statistical analyses. Dr. Olsho has designed several rigorous, practice-based research studies for AHRQ and other federal agencies. She is available should any questions regarding the statistical analyses for this project arise. The key project contact at Abt Associates is Cynthia Klein.

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