



# **BCBSM Physician Group Incentive Program 2012 Program Year**

## **Cardiac Care Initiative: Phase II (Quality)**

### **Initiative Plan**



## **I. Initiative Overview**

The Blue Cross Blue Shield of Michigan (BCBSM) Cardiac Care Initiative (CCI) is one of many initiatives of the Physician Group Incentive Program (PGIP). Since its inception in 2005, PGIP has supported and facilitated practice transformation using a wide variety of initiatives to reward physician organizations (POs) for improved performance in health care delivery. As of September 2011, PGIP includes 40 POs from across the state of Michigan, representing nearly 15,000 primary care and specialty physicians who are members of the BCBSM TRUST PPO and/or Traditional Networks. These physicians provide care to nearly two million BCBSM members.

BCBSM's Physician Group Incentive Program encourages all payer collaboration, catalyzing all payer system development, rather than payer-specific system development. Through PGIP, BCBSM is helping to improve the quality of care for all Michigan residents. Patients throughout the state regardless of payer, benefit from the improved care processes developed through the PGIP provider community. Developing systems of care which are used for all patients helps assure that providers do not have to alter care processes based on whether patients have insurance, or which insurance they have. This is an important factor in ensuring that the best practices and care processes are reliably provided to all patients, all of the time. This all-payer approach to practice transformation is good for patients with coverage from BCBSM and BCN and helps further BCBSM's social mission of cultivating a healthier future for all Michigan residents.

The CCI consists of three phases. Phase I is designed to reduce the use of unnecessary cardiac diagnostic procedures and limit the associated cost trend. Phase II is designed to enhance the quality of ambulatory cardiac care provided to BCBSM members. The first two phases of the CCI complement and build upon the goals of two other current PGIP initiatives - the Radiology Initiative and the Evidence Based Care Report (EBCR). POs participating in the CCI must participate in all phases of the Initiative. Phases I and II were rolled out in the 2011 program year. Phase III addresses the diagnostic/therapeutic cascade in cardiac care and will begin in 2012.

### **Goals and Objectives**

The goals of Phase II of the CCI are to:

- Elevate the standard of care for patients with CAD, heart failure and atrial fibrillation
- Reduce gaps in care
- Reduce regional variability in compliance with evidence-based clinical guidelines
- Improve health processes and downstream outcomes through adherence to guidelines

The Initiative will assist practitioners in understanding their adherence to ambulatory cardiac care guidelines through the provision of bi-annual cardiac quality performance reports.

Initiative objectives are to:

- Increase the use of warfarin or dabigatran in patients with atrial fibrillation
- Improve monthly international normalized ratio (INR) testing rate for patients on warfarin
- Increase the proportion of patients with a qualifying cardiac event who receive cardiac rehabilitation
- Increase the proportion of patients who remain on a beta blocker for six months following a myocardial infarction
- Increase the proportion of patients with CAD who receive a lipid lowering drug

- Improve the annual LDL-C screening rate for patients with CAD
- Increase the proportion of patients with heart failure who are prescribed an ACE/ARB
- Increase the proportion of patients with heart failure who remain on an ACE/ARB

## Summary of Results

Almost half of the PGIP POs -18 of 39 - participated in the CCI in the first year. The POs that have chosen to participate in the CCI represent 2,565 PCPs – 47% of the PGIP total – and provide care to 710,749 attributed BCBSM members – 46% of the total PGIP members.

Although five of the eight quality metrics in the Phase II dashboard have been historically included in the Evidence-Based Care Tracking (EBCR) Initiative, 2010 should be considered the baseline year for the CCI. The May 2011 dashboard included 2010 baseline data. Performance will be assessed when additional data points become available. In 2011, PGIP introduced three new quality measures to EBCR and to Phase II of the CCI as test measures – INR measurements for patients on warfarin, warfarin use in patients with atrial fibrillation and cardiac rehabilitation following an acute cardiac event.

The INR measure resulted in some PO rates over 100% and the measure of warfarin use in patients with atrial fibrillation was quite low. This is likely due to the following reasons:

- Patients are able to receive warfarin for a low cost at their pharmacy and the pharmacy may choose not to process the claim through BCBSM.
- The member may not present a BCBSM card when filling a warfarin prescription, since the cost of the prescription is less than the copayment.

Nonetheless, the new measures offer a useful picture of the quality of cardiac care and should be retained.

The POs participating in the CCI were required to submit action plans with measureable objectives in addition to the regular May Progress Report. Although a portion of the July incentive payment was related to submission of the action plan, three of the 18 participating plans (17%) failed to submit an action plan. Almost all of the POs that submitted an action plan identified an initiative lead, a clinical lead, and a data lead.

Although POs were provided with a possible template for the action plan, and provided with training on the purpose of the plans, the format and content of the action plans was left to the discretion of the PO. As a result, many of the action plans had sparse detail and no clear focus. It was challenging to compare the action plans, identify common themes and evaluate progress and involvement because the plans varied substantially in detail, format and utility.

After reviewing and analyzing the Action Plans, PGIP staff recommends discontinuing submission of Action Plans but expanding the Progress Report to include more detailed, specific questions. The Progress Report format yields a more consistent representation of the POs' participation in the CCI, assures that the POs address specific issues of interest and makes it easier for PGIP staff to analyze and compare PO performance. The Progress Report allows the POs to communicate their focus areas as well as their specific implementation steps for each chosen area in a single, organized format. PGIP staff can understand how the POs are addressing each selected focus area and identify common and unique strategies used by the POs.

(Please refer to appendix IV – PGIP Cardiac Care Initiative Progress Report/ Action Plan – for the list of CCI-specific questions to be included in the November 2011 and 2012 progress reports.)

The Progress Report included a question regarding the focus areas for Phase II of the CCI. All POs chose to focus on LDL-C screening for CAD patients, 83% on lipid lowering drugs in CAD, 78% on ACE/ARBs for heart failure, 72% on persistence of ACE/ARBs in heart failure and 61% on beta blockers after MI. In short, the majority of POs chose to focus on the five cardiac quality measures that have historically been Evidence-Based Care Tracking Initiative (EBCR) measures. Fewer POs chose to focus on the new quality measures that were introduced as test measures in 2011 in the EBCR and the CCI: INR measurements for patients on warfarin (50%) warfarin in atrial fibrillation (33%), and cardiac rehabilitation (28%).

A comparison of the Phase II focus areas selected in the progress report to the results in the 2010 dashboard demonstrates that the majority of the POs with the lowest quality scores selected to focus on those areas that showed the highest need for improvement in the dashboard.

During program year 2012, PGIP will continue to engage participating POs in their efforts to implement the tasks associated with this initiative, offering assistance and support as needed. In 2012, additional analysis of cardiac procedure utilization rates and quality measures will be completed.

## **II. Background**

### **Health Problem and Significance**

Although death rates due to cardiovascular disease (CVD) have been declining since the peak in 1968, CVD remains the leading cause of death in the United States, accounting for approximately one-third or 36% of deaths of the 2.4 million deaths in 2007.<sup>1, 2, 3</sup> On average, 2200 Americans die of CVD each day, an average of 1 death every 39 seconds.<sup>1</sup> Approximately 82.6 million persons in the United States had CVD in 2007 and approximately 16.3 million had coronary artery disease (CAD).<sup>2</sup> Although CAD accounted for approximately 20% of all CVD, CAD resulted in about half of the CVD deaths (and 17% of all deaths) in 2007.<sup>1</sup> A new study by the American Heart Association (AHA) projects that by 2030, 40.5% of Americans – 116 million people – will have some form of CVD.<sup>4</sup> This projection is attributed in part to aging of the population.

The burden of CVD is particularly high in Michigan, with rates of 289.8 deaths per 100,000 compared to the US rate of 261.2 deaths per 100,000.<sup>1</sup> Michigan has the 8th highest death rate nationally due to CVD and the 5th highest death rate due to CAD.<sup>1</sup> The estimated prevalence of angina/CAD in Michigan is equal to that of the nation – 4.4% – but the estimated prevalence of myocardial infarction (generally due to CVD), at 4.5%, is higher than the 4.0% national rate.<sup>4</sup> The Michigan Department of Community Health expects the burden of CVD to increase in future years due to aging of the population and the high prevalence of CVD risk factors (i.e., smoking, high blood pressure, obesity and diabetes) in Michigan.<sup>3</sup>

Despite the decline in national death rates due to CVD, the costs of CVD-related care are increasing. In fact, CVD ranks as the most costly disease in the nation and the AHA reports that CVD is responsible for 17% of national health expenditures.<sup>4</sup> The AHA estimates that \$177

billion will be spent in 2010 in direct and indirect costs associated with CAD.<sup>1</sup> The Michigan Department of Community Health estimates that the U.S. will spend \$503.2 billion on CVD nationally and \$16.8 billion in Michigan in 2010.<sup>5, 6</sup> The AHA estimates that “between 2010 and 2030, total direct medical costs of CVD are projected to triple, from \$273 billion to \$818 billion. Real indirect costs - due to lost productivity - for all forms of CVD are estimated to increase from \$172 billion in 2010 to \$276 billion in 2030, an increase of more than 60 %. The combined costs are projected to exceed \$1 trillion by 2030.”<sup>4</sup>

The National Committee for Quality Assurance’s (NCQA) Healthcare Effectiveness Data and Information Set (HEDIS<sup>®</sup>) is comprised of data submitted by 978 health plan products serving 116 million members, found that “spending on key conditions bears little correlation to the quality of care delivered.”<sup>7</sup> NCQA’s assessment of HEDIS relative resource use (RRU) measures across six areas of care - including cardiovascular disease and uncomplicated hypertension - showed “no clear indication that higher resource use produces better-quality results.” Further, NCQA found that physicians could deliver above average quality of care at below average costs.<sup>7</sup> Researchers at the Dartmouth Institute have found that higher spending due to the choice of location of care and discretionary specialist visits and tests “does not appear to offer overall benefits.”<sup>8</sup>

Over the past 15 years, there has been considerable growth in the:

- Availability and use of effective treatments for patients with CVD, such as statins, beta-blockers and angiotensin-converting enzyme (ACE) inhibitors (or angiotensin II receptor blocker [ARBs], a therapeutic substitute)
- Development and dissemination of evidence-based clinical guidelines for treatment of cardiac disease
- Development of well-accepted metrics of cardiac care quality, particularly in the inpatient setting
- Measurement of quality using standardized metrics.

The rates of beta-blocker treatment in commercial health plans have increased more than 34% since 1996.<sup>9</sup> NCQA found that the proportion of patients receiving beta-blockers following a heart attack increased from 62% in 1996 to 96% in 2005.<sup>10</sup> The Agency for Healthcare Research and Quality (AHRQ) observed that 87.5% of patients with heart failure received all recommended hospital care (including ACE/ARB treatment) in 2005 and 95% received such care in 2008. AHRQ also found that 83.4% of hospitalized patients received an ACE or ARB after a heart attack in 2005 and 93.7% received appropriate treatment in 2008.<sup>11</sup>

Despite evidence of increasing use of effective cardiac treatments, some remain underused. A study of health care quality in 2003 found deficits in compliance with recommended processes of care for a range of conditions. For example, study participants with CAD received only 68% of recommended care.<sup>12</sup>

A report of national and state-level indicators of inpatient quality for Medicare beneficiaries found that, despite overall improvement in quality of cardiovascular care from 1998-1999 to 2000-2001, variations in quality among states and opportunities for improvement persisted. In Michigan, 85% of Medicare in-patients with an acute myocardial infarction (AMI) received aspirin within 24 hours of admission and 68% of patients with heart failure received an ACE inhibitor. Michigan's performance on a range of inpatient quality indicators for AMI, heart failure and atrial fibrillation (AFib) was at the national median, ranking Michigan 26th among the states in cardiovascular care in 2000-2001.<sup>13</sup>

Quality of care varies widely within the United States. In 2008, NCQA – which primarily focuses on measuring ambulatory care – found that compliance with guidelines for cardiovascular care in the New England region was 5.3 percentage points higher than the national average and 10.2 percentage points higher than compliance in the South Central region, the area with the lowest rankings. Compliance with cardiovascular care guidelines in the East North Central region - which includes Michigan - was 2 percentage points above the national average and 6.9 percentage points above that in the South Central region.<sup>7</sup> In 2010, NCQA analyzed geographic quality variances by assessing the top 10 and bottom 10 performing states. NCQA found that three states from the New England Region were in the top 10 states and three states from the South Central region were in the bottom 10 states. NCQA noted, "that 70 percent of states in the top 10 and bottom 10 are from other Census Bureau regions confirms that quality varies, even within the same region."<sup>14</sup> Dartmouth researchers found that the percent of patients receiving lipid lowering medication following an AMI or cardiac revascularization in Michigan in 1997 averaged 57.2%, ranging from a low of 42.3% in Traverse City to a high of 70.7% in Muskegon and Ann Arbor.<sup>15</sup>

### **BCBSM Experience**

PGIP's Evidence Based Care Report (EBCR) measures a variety of quality and utilization measures for both chronic care and preventive services, including some aspects of ambulatory cardiovascular quality.

<b>PGIP Cardiac Quality Measure</b>	<b>2010 Overall PGIP Rate</b>	<b>2010 PGIP Range</b>	<b>Benchmark (HEDIS 2010 PPO 90th percentile)*</b>
LDL-C screening for members with CAD	82%	74-88%	89.05%
Beta blockers after myocardial infarction	53%	25-83%	80.16%
Lipid lowering drugs in CAD	73%	60-89%	NA
ACE/ARBs in heart failure	69%	50-87%	NA
Persistence of ACE/ARB therapy in heart failure	47%	11-100%	NA
INR Assessment for patients with atrial fibrillation on warfarin**	83%	30-116%	NA
Cardiac rehabilitation in patients following an acute cardiac event	22%	3-56%	NA
Warfarin use in patients with atrial fibrillation	51%	22-73%	NA

\*The 2010 PGIP rates are based on the 2010 calendar year. The 2010 HEDIS benchmarks are calculated for the 2009 calendar year.

\*\*In certain circumstances, the numerator of this measure (the number of months in the measurement year with an INR measurement) is greater than the denominator (the number of 30-day fills for warfarin during the measurement year). This unexpected result is likely due to the following:

- Some members obtain warfarin at the pharmacy under a low-cost prescription program in which the cost of the prescription is less than the member's copayment. The member may choose not to present an insurance card for such prescriptions. If the member presents an insurance card, the pharmacy may choose not to process a claim with BCBSM. Therefore, the member could have an INR measurement in a month in which it appears that a warfarin prescription was not filled.
- The member's physician adjusted the warfarin dose down and the member did not need to fill a prescription in the subsequent month.

### **Possible Solutions**

There is substantial evidence supporting primary and secondary prevention strategies for cardiovascular disease and many cardiovascular treatment modalities. Cardiovascular professional societies have developed credible and well-accepted evidence- and consensus-

based clinical practice guidelines for prevention and treatment. According to one of the Dartmouth researchers, Jonathan Skinner, “The quality measurement industry is still in its adolescence.”<sup>16</sup> However, there is general agreement that measuring performance using standardized, methodologically sound measurement specifications – combined with valid data - and reporting of performance – usually coupled with feedback and benchmarking – can serve as a catalyst for change of administrative and clinical processes to improve adherence to practice guidelines. Recently, payers have been implementing pay-for-performance programs to drive physician compliance with quality measures.

The death rate from cardiac disease has declined sharply over the past three decades. A portion of this improvement is due to changes in individual patient behavior – namely a reduction in smoking – and much is due to the relatively recent introduction and proliferation of new treatments, such as statins, ACE inhibitors and percutaneous coronary interventions (PCIs) with stents.

There has been notable progress in the quality of cardiac care – particularly inpatient care – over the past 15 years.<sup>17</sup> Quality measurement and public reporting do not create improvement, but can motivate practitioners and providers to change administrative and clinical processes to enhance performance. The development of well-accepted and methodologically sound measures of quality – such as administering aspirin to AMI patients upon hospital arrival, prescribing beta blockers for AMI at hospital discharge, administering ACE/ARBs for patients with left ventricular systolic dysfunction and providing smoking cessation advice/counseling to heart failure patients – and public reporting (particularly by Medicare) have served as the building blocks for process changes that result in improved clinical performance.

There is also some evidence of success in advancing the quality of ambulatory cardiac care, as demonstrated in improvements in the small number of HEDIS<sup>®</sup> cardiac-related performance measures,<sup>18</sup> also spurred on by the development of clinically grounded, sound metrics and public reporting.

To further spur improvement, payers have recently turned to using financial incentives to encourage higher quality care. There is limited evidence supporting the effectiveness of these payment incentives,<sup>18 19 20</sup> payers expect that practitioner behavior will change over time.

### ***BCBSM Experience***

BCBSM sponsors several hospital-based collaborative quality initiatives (CQIs) focused on improving the quality and cost of inpatient cardiovascular care in Michigan. Under the BCBSM Cardiovascular Consortium (BMC2), 32 hospitals and 843 physicians collaborate to improve outcomes for patients undergoing coronary angiography. An analysis from 2002 to 2009 of BMC2-PCI data reveals substantial improvements, including a 15% reduction in hospital deaths and a 27% reduction in blood transfusions after angioplasty. The initiative saves an estimated \$15.2 million annually in statewide health care costs. The design of the BMC2 - Peripheral Vascular Intervention (PVI) CQI is to improve care for patients undergoing PVI. The initiative has resulted in a significant improvement in the use of antiplatelet and statin medications. BMC2 also saves an estimated \$15.2 million annually in statewide health care costs. The Advanced Cardiac Imaging Consortium (ACIC) is developing best practices guidelines for CCTA. ACIC reduced radiation exposure for patients undergoing CCTA by 53% in the first five months of implementation.

### **III. Initiative Description**

#### **Specific Area of Focus**

Phase I of the CCI focuses on the utilization of diagnostic cardiac procedures, while Phase II focuses on guideline-based components of cardiac treatment for select cardiac diagnoses.

Although the two Phases of the initiative are not entirely aligned – one addresses the use of diagnostic procedures and the other addresses evidence-based components of cardiac treatment – the CCI is more comprehensive and consequential in that it addresses both utilization and quality. Therefore, POs that elect to participate in this initiative must participate in Phases I, II and III (which focuses on the cardiac diagnostic/therapeutic cascade).

Phase II of the CCI will provide each PO, regardless of whether they chose to participate or not, with data on performance against eight evidence-based ambulatory cardiac quality measures.

The assumption underlying Phase II of the Initiative is that POs respond to the availability of quality performance data, coupled with financial incentives for performance and improvement, by:

- Analyzing their performance in comparison to that of other PGIP POs to target areas for improvement
- Adopting strategies to improve performance consistent with their identified opportunities

Possible improvement approaches POs may choose to pursue may include, but are not limited to:

- Developing disease registries
- Developing the infrastructure to provide point-of-service practitioner and patient reminders for needed services

The cardiac quality metrics will be included in both the CCI and the EBCR, a long-standing PGIP initiative.

(See Appendix I for the cause and effect diagram.)

#### **Target Population**

Phase II of the CCI targets PGIP attributed members between 18 and 64 years of age with CAD, atrial fibrillation and heart failure.

#### **Criteria for Participation**

Phase II of the CCI is applicable to the following PGIP physician specialties:

##### Primary Care

- General Practice
- Family Practice
- Internal Medicine
- Pediatrics
- Geriatric Medicine (Internal Medicine and Family Medicine)

### Specialty

- Cardiology

(Note: Cardiac and thoracic surgeons are not eligible for participation in the CCI.)

## **BCBSM Deliverables**

The Initiative will provide each PO with biannual cardiac quality dashboards and quarterly datasets. The quality dashboard will display PO specific performance against eight evidence-based ambulatory cardiac quality measures and comparable quality performance for all other POs. The dashboard will also include a rate representing the average of the top performing PGIP groups treating 10% of the attributed population against which POs can benchmark their performance. Approximately two weeks after receipt of the dashboard, POs will receive an "opportunity analysis," with information on how much the PO must improve to reach benchmark status.

The PO specific datasets will also provide claim-level data for each of the eight quality measures. The quality dataset will be the cardiac subset of the EBCR dataset.

The ambulatory cardiac quality measures include five long-standing ambulatory cardiac-related EBCR measures and the following new metrics, which were added to EBCR in 2011:

- Use of warfarin or dabigatran in patients with atrial fibrillation
- Monthly INR testing for patients with atrial fibrillation on warfarin
- Participation in cardiac rehabilitation following a qualifying cardiac event.

The new measures are based on those endorsed by the American College of Cardiology/ American Heart Association, adapted slightly to allow for data collection through claims data.

*BCBSM reserves the right to modify its evaluative and administrative processes related to the Initiative.*

(See Appendix II for the data delivery schedule.)

## **PO Expectations/Deliverables**

All POs participating in the CCI must provide BCBSM with information on the cardiologists and cardiology group affiliations of cardiologists within the PO. Further, all POs participating in the CCI must participate in Phase I, Phase II and Phase III (addressing the cardiac diagnostic/therapeutic cascade).

POs participating in the Initiative must do the following:

- Identify a clinical lead (may be the same or different clinical lead for Phase I, II and III)
- Identify an analytic lead (may be the same or different analytic lead for Phase I, II and III)
- Distribute dashboard reports and datasets provided by BCBSM to PUs in a timely manner
- Review and use BCBSM dashboards and data sets to investigate and identify variation in cardiac diagnostic procedures among physicians
- Develop and implement strategies and programs to manage the use of cardiac diagnostic procedures
- Attend monthly PGIP Data Users Workgroup meetings and periodic webinars

- Complete biannual progress reports\*

\*Note: POs will no longer be required to submit action plans with measureable objectives. Information will be gathered through additional CCI-specific questions in the progress reports.

## Quality Improvement Model

The NCQA HEDIS measure of LDL-C screening for Commercial HMO patients with cardiovascular conditions increased from 87.5% in 2006 to 88.2% in 2007 to 88.9% in 2008, and decreased in 2009 to 88.4%, an average yearly increase of .30 percentage points. NCQA's measure of LDL-C control for Commercial HMO patients with cardiovascular conditions increased from 56.6% in 2006 to 58.7% in 2007 to 59.7% in 2008 and decreased in 2009 to 59.2%, an average yearly increase of .86 percentage points.

While the NCQA rate increases were observed in an HMO population, not a PPO population, the quality improvement model for Phase II the CCI will be based on the assumption that the improvements in performance will be replicated within the context of a PPO quality improvement initiative. The Initiative will assume an annual average improvement of 0.63 percentage points in 2010 for initial PO participants (the average yearly increase of the two NCQA measures) from baseline in each of the Initiative's quality measures.

## Incentive Model and Payment Methodology

The biannual cardiac quality incentive payments will be based entirely on performance and improvement. Performance and improvement will be calculated on a weighted average of the quality metrics. Beginning in 2012, the incentive payment calculations will be based on all eight quality measures, including the three quality measures that were test measures in 2011.

In this initiative, incentive payments are based on PO performance, PO improvement over a prior measurement period, and the number of PO-attributed members. The payment methodology generates a single summary score for each PO that represents the weighted sum of the PO's normalized performance score and normalized improvement score. The normalized performance score is represented along a scale from 0-1, where 1 represents the best performance and 0 represents the worst performance. The normalized improvement score – the ratio of current improvement to the theoretical optimal improvement – is similarly represented along a scale from 0-1, where 1 represents the most improvement over the previous measurement period and 0 represents the least improvement over the previous period.

Each PO with a summary score above a certain percentile will receive an initiative incentive payment. The PO will receive a percentage of the initiative-specific incentive pool based on the PO's summary score, weighted by the PO's number of attributed members. POs with summary scores in the lowest percentiles will receive either no incentive payment or a negative incentive payment. The negative payment is based on the PO's summary score and the number of attributed members, factored by a negative 10% payment percentage.

The negative incentive payment is designed to a) encourage POs to become actively engaged in pursuing improvement in those initiatives in which they are enrolled, and b) encourage POs to carefully make their initiative selections and discourage them from enrolling in initiatives without engaging in activities to improve performance. A PO's poor performance on a specific initiative can result in a negative incentive payment that reduces the PO's overall reward payment for the

scoring period. However, a PO's overall incentive payment (for all PGIP initiatives) for a scoring period will never be lower than zero.

Phase II is consistent with the goals of the PGIP EBCR, which is designed to improve the quality of care for a broad range of clinical topics. Because of the congruence of the two initiatives and the potential to amplify the impact on quality of care, POs may participate in both Phase II of the CCI and EBCR and may receive incentive payments for performance and improvement under both initiatives.

*BCBSM reserves the right to use discretion in making incentive payments based on the data and relative PO performance.*

## **IV. Evaluation**

### **Evaluation Overview**

The evaluation of the CCI is designed to assess the effectiveness of the Initiative in achieving stated objectives. The process evaluation (generally the short-term and possibly intermediate-term evaluation) will address how the Intervention is functioning, including process, structure, behavioral and knowledge-based changes brought about as a result of the Initiative. The outcome evaluation (generally the long-term and possibly intermediate term evaluation) will focus on the effects theorized to result from the Initiative's interventions.

Performance on the short-term objectives will be addressed biannually, following review of the progress reports. The preliminary short-term evaluation will be conducted in June 2012, the second evaluation will be conducted in December 2012 and the final short-term evaluation will be conducted in June 2013.

Although the long-term goal of the CCI is a reduction in PMPM cost for cardiac diagnostic procedures, the Initiative's primary intervention is directed at short-term and intermediate problem areas that, when resolved, may reduce a member's likelihood of receiving inappropriate diagnostic procedures.

The primary data source for the intermediate evaluation of the CCI is the progress reports. The evaluation of the intermediate success of the Initiative will be based on whether the performance goals have been met.

The evaluation will be conducted bi-annually, following review of the progress reports. Preliminary intermediate evaluations will be conducted in June 2012 and December 2012, with the final intermediate evaluation in June 2013, two and a half years after implementation of the CCI.

(See Appendix III for detailed evaluation metrics.)

### **Progress Reporting**

Twice a year, in approximately April and August, BCBSM will provide the POs with a progress report template for each PGIP initiative. The progress reports are tailored to the specific requirements and goals of each initiative. The progress reports provide POs the opportunity to update BCBSM on activities, strategies, accomplishments and obstacles during the reporting

period. The CCI progress report includes a number of questions that, when answered by the POs, form the basis for the short- and intermediate-term outcome evaluations.

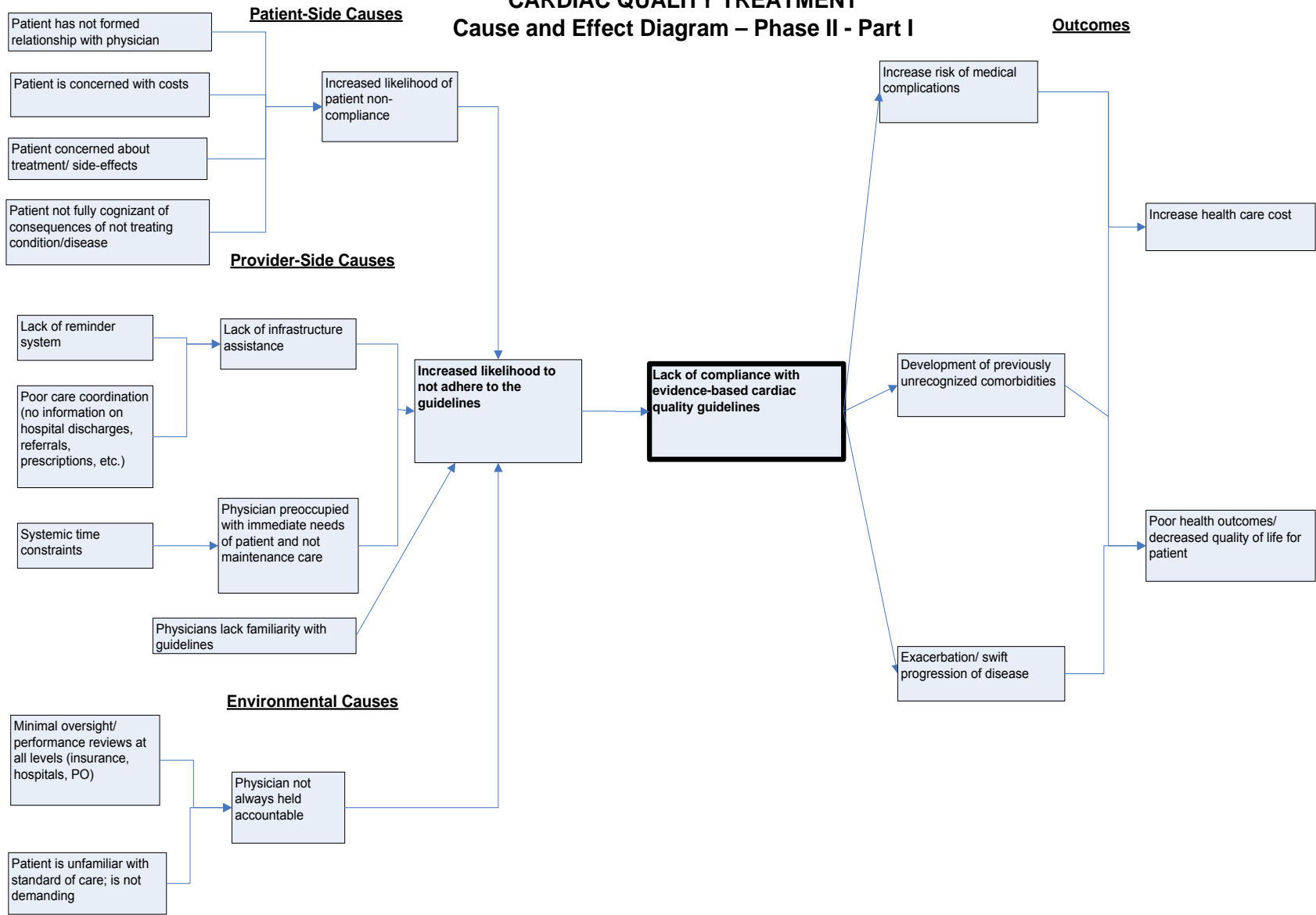
(See Appendix IV for the CCI specific questions.)

## **V. Results**

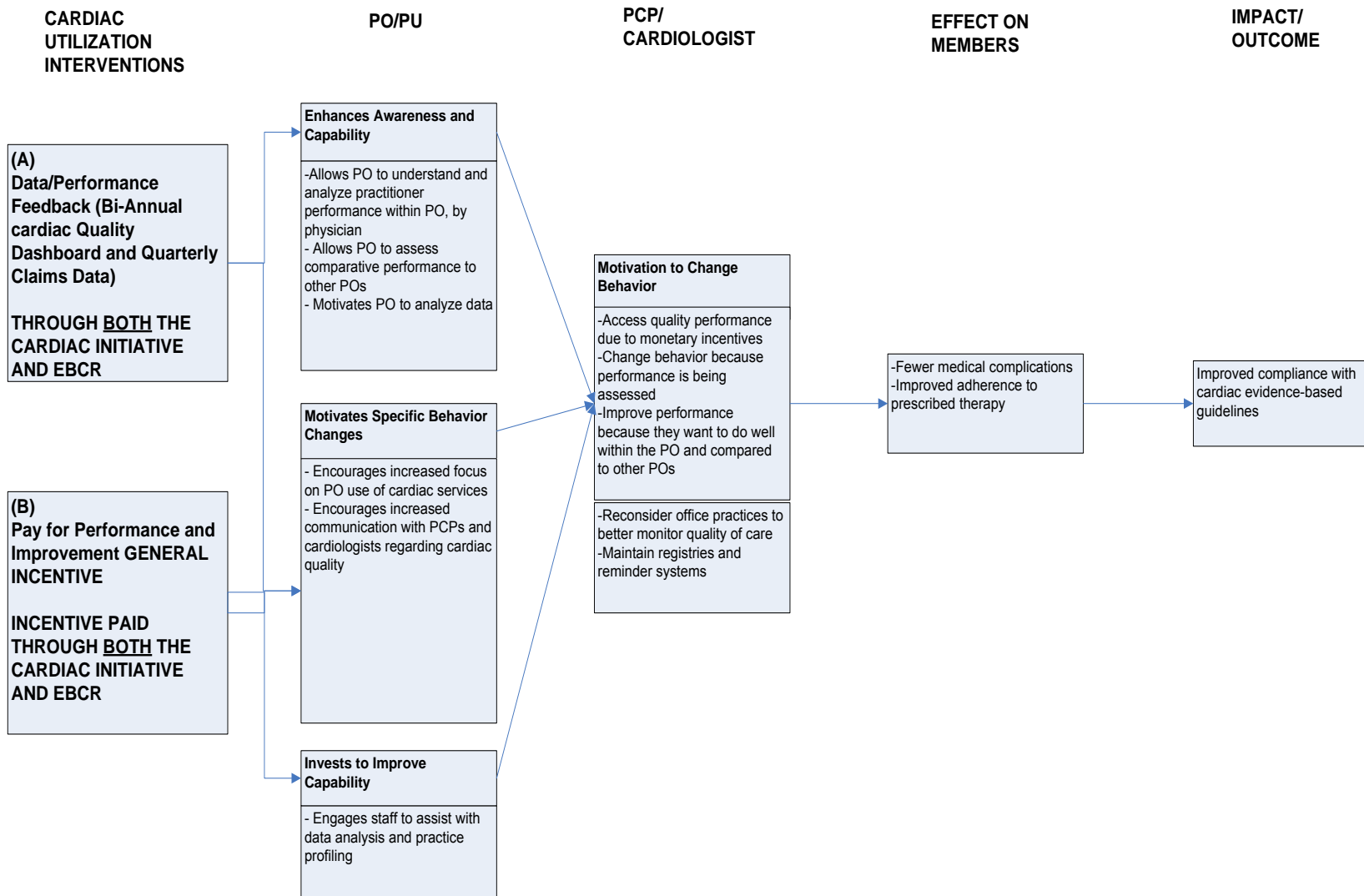
Results will be forth coming.

# Appendix I – Cause and Effect Diagram

## CARDIAC QUALITY TREATMENT Cause and Effect Diagram – Phase II - Part I



## CARDIAC QUALITY TREATMENT Cause and Effect Diagram – Phase II - Part II (Interventions)



## Appendix II – Data Delivery Schedule

2011-2012 CARDIAC REPORTING			
Dashboard Reports			
Initiatives	Data Type	Release Date	Time period of Claims
Cardiac Care (Utilization)	Dashboard Report (Baseline)	01/15/2011	01/01/2006 - 12/31/2006 01/01/2007 - 12/31/2007 01/01/2008 - 12/31/2008
Cardiac Care (Utilization & Quality)	Dashboard Report (Revised Baseline)	01/2012	01/01/2008 - 12/31/2008 01/01/2009 - 12/31/2009
Cardiac Care (Utilization & Quality)	Dashboard Report (Routine)	6/13/2012	01/01/2010 - 12/31/2010 And 01/01/2011 - 12/31/2011
Cardiac Care (Utilization & Quality)	Dashboard Report (Routine)	12/12/2012	07/01/2010 - 06/30/2011 07/01/2011 - 06/30/2012
Datasets			
Cardiac Care (Utilization & Quality)	Quarterly Dataset	03/14/2012	10/01/2010 - 09/30/2011
	Quarterly Dataset	06/13/2012	01/01/2011 - 12/31/2011
	Quarterly Dataset	09/12/2012	04/01/2011 - 03/31/2012
	Quarterly Dataset	12/12/2012	07/01/2011 - 06/30/2012

## Appendix III – Evaluation Metrics

**Table 1: Short-Term Measures**

Category	Process Metric (Applicable to Phase I and/or II?)	Data Source	Specific Measure	Metric	Performance Goal
<b>Initiative Team</b>	Identification of the Clinical Lead  (Phases I and II – clinical leads may be the same or different for each phase)	Progress Report	Question: Please identify the name of the Clinical Lead for the CCI	% of participating PGIP POs that identified a Clinical Lead	At least 90% of POs participating in the CCI will identify a Clinical Lead
	Identification of the Initiative Lead  (Phases I and II – clinical leads may be the same or different for each phase)		Question: Please identify the name of the Initiative Lead for the CCI	% of participating PGIP POs that identified an Initiative Lead	At least 90% of POs participating in the CCI will identify an Initiative Lead
	Identification of the Data Lead		Question: Please identify the name of the Data Lead for the CCI	% of participating PGIP POs that identified a Data Lead	At least 90% of PGIP POs will identify a Data Lead
<b>Participation in the Initiative</b>	PO Participation  (Phases I and II)	PGIP Physician List	NA	Number and % of eligible POs that participate in the Cardiac Care Initiative	At least 65% of PGIP POs will participate in the CCI
	PCP Participation  (Phases I and II)			Number and % of PGIP PCPs participating in the CCI	At least 60% of PGIP PCPs will participate in the CCI
	Cardiologist Participation  (Phases I and II)			Number and % of PGIP cardiologists participating in the CCI	At least 60% of PGIP cardiologists will participate in the CCI

Category	Process Metric (Applicable to Phase I and/or II?)	Data Source	Specific Measure	Metric	Performance Goal
Dataset Use	Number of Datasets Opened  (Phases I and II)	Progress Report	Question: When datasets from BCBSM are made available, my PO does the following:	Number and % of participating PGIP POs that opened the quarterly dataset	At least 80% of POs has a point person assigned and has opened the quarterly dataset

**Table 2: Intermediate Measures**

Overall Objective	Specific Objective	Data Source	Measurement	Metric	Performance Goal
Intermediate Objective 1: POs exhibit progress in building an infrastructure for improving the quality of cardiac services (Phase II)	Objective 1.1: Communicate Initiative and focus areas to PUs	Progress Report	Question: Which of the following measures are specific areas of focus for Phase II of this Initiative? (Please select one or more answers from the list below.)	Number and % of responses by focus area	At least 95% of POs have chosen one or more focus areas
			Question: For each quality measure chosen above, please indicate why your organization chose to focus on this area. (Please select one or more answers from the list below.)	Number and % of responses by reason	
	Objective 1.2: Develop specific target goals for POs		Question: For each quality focus area chosen above, what specific goal/target is your organization aiming for to enhance the quality of care provided to	Number and % of responses	At least 80% of POs have identified specific utilization targets

Overall Objective	Specific Objective	Data Source	Measurement	Metric	Performance Goal
			cardiac patients? For Example: -Achieve PGIP benchmark or higher for cardiac quality performance (Performance) -Improve Quality Score for selected measure by ___% from last dashboard (Improvement)		
	<b>Objective 1.3:</b> Develop strategies to implement the initiative	Progress Report	Question: Listed below are common strategies that POs may use when implementing Phase II (Quality of Care) of the Cardiac Initiative. Please indicate to what degree your organization is using these strategies to implement Phase II	Number and % of POs that reported strategies to implement the initiative	At least 95% of POs have developed at least one strategy to implement the initiative
Question: Which did you use this period to share and collaborate with other PGIP POs in Phase II of this Initiative? (Select one or more answers from the list below.)			Number and % of POs that collaborate with other POs	At least 80% of POs have shares information with other POs	
			Number and % of each PO that reports		
	<b>Objective 1.4:</b> Identify Barriers to implementing Phase I	Progress Report	Question: Which barriers have you encountered in implementing Phase I of this	Number and % of responses for each barrier	

Overall Objective	Specific Objective	Data Source	Measurement	Metric	Performance Goal
			initiative?		

**Table 3: Long-Term Measures**

Objective	Type of Outcome	Outcome Measure	Description
Improve cardiac-related quality outcomes (Phase II)	Quality of Care	Increase the use of warfarin or dabigatran in patients with atrial fibrillation	Warfarin use in patients with atrial fibrillation for PGIP POs that select the CCI will increase by a greater amount than would have been achieved without the CCI
		Improve monthly INR testing rate for patients on warfarin	Monthly INR testing for patients on warfarin for PGIP POs that select the CCI will increase by a greater amount than would have been achieved without the CCI
		Increase the proportion of patients with a qualifying cardiac event who receive cardiac rehabilitation	The proportion of patients with a cardiac event that receive CR in PGIP POs that select the CCI will increase by a greater amount than would have been achieved without the CCI )
		Increase the proportion of patients who remain on a beta blocker for 6 months following a myocardial infarction (current EBCR measure)	The proportion of patients who remain on a beta blocker for 6 months following a myocardial infarction for PGIP POs that select the CCI will increase by a greater amount than would have been achieved without the CCI
		Increase the proportion of patients with CAD who receive a lipid lowering drug (current EBCR measure)	The proportion of patients with CAD who receive a lipid lowering drug for PGIP POs that select the CCI will increase by a greater amount than would have been achieved without the CCI
		Improve the annual LDL-C screening rate for patients with CAD (current EBCR measure)	The rate of annual LDL-C screening for patients with CAD for PGIP POs that select the CCI will increase by a greater amount than would have been achieved without the CCI
		Increase the proportion of patients with heart failure who are prescribed an ACE/ARB (current EBCR measure)	The proportion of patients with heart failure who are prescribed an ACE/ARB for PGIP POs that select the CCI will increase by a greater amount than would have been achieved without the CCI
		Increase the proportion of patients with heart failure who remain on an	The proportion of patients with heart failure who remain on an ACE/ARB for PGIP POs that select the CCI will increase by a greater amount than would have been

<b>Objective</b>	<b>Type of Outcome</b>	<b>Outcome Measure</b>	<b>Description</b>
		ACE/ARB (current EBCR measure)	achieved without the CCI

## Appendix IV – Progress Report Questions (Phase II – Quality)

Activity Period:

Date Completed:

Physician Organization Name:

Main Physician Organization Contact Person:

Phone Number:

Email Address:

### PHASE II: Quality of Care for Cardiac Patients

1. Which of the following measures are specific areas of focus for Phase II of this Initiative? (Please select one or more answers from the list below.)

- Warfarin or dabigatran in atrial fibrillation
- INR measurement for patients on warfarin
- Cardiac rehabilitation following a cardiac event
- Beta blockers following a myocardial infarction
- Lipid lowering drugs in coronary artery disease
- LDL-C screening in patients with coronary artery disease
- ACE/ARBs prescribed for heart failure
- Persistence of ACE/ARBs in heart failure
- Other (please describe below)

1. A) For each quality measure chosen above, please indicate why your organization chose to focus on this area. (Please select one or more answers from the list below.)

- Below benchmark performance
- Greatest opportunity for improvement.
- Gaps in care can be identified
- Patient Safety
- Was previously working on this area
- Currently reviews and reports on this measure as part of the EBCR initiative.
- Risk factor modification
- Area allows for community-wide emphasis on prevention and population health
- Identified process that needs to be improved for office flow- focus on LEAN process improvement cycle
- Can be readily addressed through usage of our electronic disease registry
- Other (please describe below)

1. B) For each quality focus area chosen above, what specific goal/target is your organization aiming for to enhance the quality of care provided to cardiac patients? For Example:

- Achieve PGIP benchmark or higher for cardiac quality performance (Performance)
- Improve Quality Score for selected measure by \_\_\_% from last dashboard (Improvement)

2. Listed below are common strategies that POs may use when implementing Phase II (Quality of Care) of the Cardiac Initiative. Please indicate to what degree your organization is using these strategies to implement Phase II.

Strategy	Fully Developed	Partial Developed	Not a Strategy
1) Review with Quality Committee			
2) Identify physician outliers			
3) Link the data with reports/data from other payers			
4) Adopt or establish cardiac clinical practice guidelines for cardiac treatment			
5) Implement/update patient registry to identify gaps in cardiac care			
6) Align internal incentives program with the cardiac quality measures			
7) Develop process to flag patients with gaps in care			
8) Develop process to follow-up with patients to assure compliance with the plan of care/ patient reminders for needed services			
9) Other (please describe below)			

3. Which did you use this period to share and collaborate with other PGIP POs in Phase II of this Initiative? (Select one or more answers from the list below.)

- Informally shared data, documents or processes with other PGIP POs (please specify which POs below)
- Attended PGIP Data Users Workgroup
- Participated in workgroups, committees or collaborations
- Presented at PGIP Quarterly Meeting
- No collaboration occurred during this reporting period
- Other (please describe below)

4. Which barriers have you encountered in implementing Phase II of this initiative?

- Staff members are not adequately trained on elements of the Initiative, including the data
- Inadequate financial or staff resources
- Difficulty incorporating changes into workflow
- Difficulty integrating information systems (e.g., EMR, registry, etc.)
- Underestimated time needed to complete task(s)
- Lack of provider buy-in or cooperation
- Resistance/lack of awareness on behalf of patients
- Data received from BCBSM appears to be incorrect
- Data received from BCBSM is missing data elements that we need for analysis
- Data received from BCBSM is not timely
- Other (please describe below)

**Applies to both Phase I and II**

- 1) Do you integrate the findings from BCBSM data into your quality improvement efforts?
  - a. Always
  - b. Sometimes

- c. Never
  - d. Our PO has considered using this strategy in the future
- 2) Was the quarterly PGIP initiative dataset (Microsoft Access format) distributed opened by your PO? If yes, then by whom?

## Appendix V – PGIP Contacts

For additional information on the CCI, contact the following initiative leads:

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## Endnotes

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