Centers for Medicare & Medicaid Services

Evaluation of the Medicare Acute Care Episode (ACE) Demonstration

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Initial Site Visit Report
Final

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Attention:

Jesse M. Levy, PhD
Contract Officer's Representative
Center for Medicare and Medicaid Innovation

Submitted by:

IMPAQ International, LLC
Oswaldo Urdapilleta, PhD (Project Director)
Jasmine Ainetchian
Camellia Bollino, MPA

The Hilltop Institute, UMBC
Stephanie Cannon-Jones, MPP
Nancy Svehla, RN, CPHQ

GLOSSARY OF TERMS

ACE	Acute Care Episode
ACO	Accountable Care Organization
AHP	Albuquerque Health Partners
BHS	Baptist Health System
CBSA	Core-based statistical areas
CHF	Congestive heart failure
CV	Cardiovascular
DHS	Disproportionate hospital share
ESJH	Exempla Saint Joseph Hospital
FFS	Fee-For-Service
HealthWise Silver Elite	Hillcrest Medical Center program that includes monthly health and wellness classes, social events, express registration, free flu shots, in-hospital newspaper delivery, thicker blankets, one free meal for visiting family each day, and in-room medication delivery upon discharge
HMC	Hillcrest Medical Center
HSA	Hospital Service area
Joint Club	Non-ACE related accreditation; benefits for orthopedic patients include pre-surgery seminar, community activities, group therapy, and group meals. The Joint Club is the Gold Seal of Approval™ from The Joint Commission, the nation's largest standards-setting and accrediting body in health care.
Joint Camp	Orthopedic program that offers pre-surgery seminar, community activities, group therapy, and group meals
LHS	Lovelace Health System
LMC	Lovelace Medical Center, one of the main facilities within the Lovelace Health System
LOS	Length of Stay
MAC	Medicare Administrative Contractor
MCO	Managed Care Organization
MFS	Medicare Part B Physician Fee Schedule
MS-DRG	Medicare Severity Diagnosis Related Groups
NOA	Notice of Admission
NPI	National Provider Identifier
OHH	Oklahoma Heart Hospital
PACE	Physician's Alliance for ACE: The role of the BHS PACE Board is to develop rules of governance for the demonstration, develop and monitor quality measures, and to develop the physician gainsharing payment structure. The board, which meets quarterly, has a diverse mixture of participants including physicians (such as orthopedic and cardiovascular surgeons), hospital administrative personnel, and community board members.
PAC	Post Acute Care
PACU	Post-Acute Care Unit
Patient Navigator	Case managers hired specifically to manage ACE patients. They educate and manage patients, families, and physicians involved in the entire episode of care
PCI	Percutaneous coronary intervention
PDSA	Plan Do Study Act
PHO	Physician Hospital Organization
POE	Point of Entry
Pre-Hab	LHS pre-surgery education program for patients to learn about their total joint replacement procedures
SCIP measures	Surgical Care Improvement Project measures

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EXECUTIVE SUMMARY

1. ACE Demonstration

The Medicare Acute Care Episode (ACE) Demonstration, a 3-year demonstration project funded by the Centers for Medicare & Medicaid Services (CMS), uses a global payment for a single episode of care as an alternative approach to payment for service delivery under traditional Medicare fee-for-service (FFS). The episode of care is defined as the bundle of Part A and Part B services provided during an inpatient stay for Medicare FFS beneficiaries for included Medicare Diagnosis Related Groups (MS-DRGs), which are hip/knee replacement or revision surgery and/or coronary artery bypass graft surgery or cardiac intervention procedure. Five ACE sites began the demonstration between April 2009 and November 2010. The specific goals of the demonstration are (1) to improve the quality of care by raising consumer awareness of price and quality information; (2) to increase collaboration among providers and health systems; and (3) to reduce Medicare payments for acute care services by using market mechanisms.

Among the mechanisms to achieve the demonstration goals are an innovative payment model and organizational and contractual arrangements to provide certain cardiovascular and orthopedic services. In addition to the bundled payment for a single episode of care, the implementation and success of the ACE Demonstration centers on the following features: enhanced coordination of care, cost-control incentives, adoption of standardized clinical protocols and quality improvement activities, gainsharing between physicians and facilities, and marketing of facilities as "Medicare Value-Based Care Centers."

Each participating site and, in some instances, each facility within a particular health system developed individualized innovations that affect how the ACE site provides services, coordinates health care, markets to physicians and beneficiaries, and distributes savings between hospital and physicians.

2. ACE Demonstration Evaluation

The innovations within the ACE Demonstration are being evaluated through a variety of quantitative and qualitative analyses. The quantitative and qualitative approaches are complementary; the findings from each type of analysis will enhance the other as the evaluation progresses.

Exhibit ES-1 provides a sample of the specific questions governed by the research domains to be addressed in the quantitative analyses (Medicare cost savings; quality of care; and volume, concentration, and spillover effects) and the qualitative evaluation (incentives, infrastructure and organization, and satisfaction).

Exhibit ES-1: Selected Research Domains and Research Questions

Research Domains	Research Questions (Emphasis on Qualitative Methods)
Medicare Cost Savings	Do actual changes in services provision (e.g., length of stay, discharge patterns) affect total services costs and, thus, potential savings from the demonstration? What were the effects on Home Health, SNF, and other post acute care facilities?
	Did competitive bidding affect sites' ability to adapt changes, particularly in volume and costs?
Incentives	If there was gainsharing, what proportion of savings was paid to physicians? What proportion was retained by the facility?
	Did physicians act in accordance with cost-control incentives? Did beneficiaries act in accordance with their incentives?
Quality of Care	What was the impact of the demonstration on the selected quality of care measures?[1]
Volume, Concentration, and Spillover Effects	Did financial incentives impact beneficiary provider choice and provider referrals?
Infrastructure and Organization	Did the demonstration impact the locus of care in demonstration sites (e.g., proportion of hospital stays in high-intensity care settings, number of diagnostic tests)?
	Were there any changes at the site that were designed to facilitate the demonstration, including improving coordination of care (physicians, facility staff, and managers)?
	Were there any changes in medical care staff participation in quality and cost reduction initiatives?
Satisfaction	Were beneficiaries satisfied with the care they received during the demonstration?
	Were facility staff/managers and physicians satisfied with demonstration strategies?

3. Initial Site Visits: Interviews and Focus Groups

The qualitative evaluation includes two rounds of visits to each site: one in the first year and one in the third (last) year of the demonstration. While the interviews and focus groups address all of the research domains listed above, the questions used in the second round of site visits will differ from the first round in order to capture the sites' experiences with the more mature demonstration. Visits in the first round centered on understanding each site's unique approach to the demonstration goals. The second-round questions will focus on the lessons learned, how barriers were overcome, and the feasibility of future implementation of a full-scale ACE-like program.

As part of the Evaluation of the ACE Demonstration, we conducted an initial site visit to each ACE site between March and September 2011. We had to delay the site visits until we had received OMB approval [OMB Approval 0938-1117] and certain coordination and planning

[1] Quality of Care is defined by the 22 measures included in the *Medicare ACE Demonstration: Design, Implementation, and Management: Design Report* and its update documents. Included are such measures as Use of Internal Mammary Artery in first time isolated CABG (quarterly basis), Percentage of ACE Demonstration procedure cardiovascular re-dos or orthopedic revisions during the prior 6 months (semi-annual), and Inpatient Mortality Rate (annual rate).

issues had been resolved. Exhibit ES-2 presents, for each site, the demonstration site start date and the dates of the initial site visit.

Exhibit ES-2: Demonstration Site Start Dates and Site Visit Dates

Demonstration Site	Demonstration Start Date	Date of Initial Site Visits
Hillcrest Medical Center (Tulsa, OK)	May 1, 2009	April 27-28, 2011
Baptist Health System (San Antonio, TX)	June 1, 2009	April 4-7, 2011
Oklahoma Heart Hospital (Oklahoma City, OK)	January 1, 2010	April 26, 2011
Lovelace Health System (Albuquerque, NM)	November 1, 2010	August 22-24, 2011
Exempla St. Joseph Hospital (Denver, CO)	November, 1, 2010	September 19-21, 2011

The purpose of the initial site visits was to collect data via key stakeholder interviews and focus groups. Participants in the stakeholder interviews were selected management and executive staff at the facilities, who were asked about the ACE Demonstration proposal process, the marketing of the demonstration, organizational/structural changes to the site, their perspectives on strategies related to cost control, care coordination, and quality of care, and their satisfaction with the demonstration.

Focus groups were conducted with three separate target audiences: physicians, non-physician staff, and original Medicare beneficiaries who underwent ACE Demonstration procedures. The content of the focus group discussions depended upon the participants' roles in the demonstration. However, all questions aligned with the evaluation research domains of infrastructure/organization, cost and savings, quality of care, incentives, and satisfaction.

As part of the preparation for and follow-up to the initial site visits, we requested materials from the sites that could improve CMS' understanding of the site-specific implementation and degree of success. Among the materials received were:

- Quarterly ACE-related site reports that have been developed by the site and submitted to CMS
- Primary printed ACE marketing materials
- Screenshots or hyperlinks to online ACE marketing
- Gainsharing policies
- ACE-related procedural documentation given to physicians and/or staff, including report cards

For a full list of materials received from each ACE site, see Appendix Volume II.

The collected documentation revealed additional details about the specific programs at the sites. For example, the proposed financial incentives to physicians differed among the sites. Although the CMS ACE website provided the guidelines that the sites must follow, the actual gainsharing

plans of the sites were not provided in their applications. The materials received from the sites include specific contractual arrangements that laid out the details of the gainsharing plan. Furthermore, the materials made available prior to the site visits improved the content and specificity of the interview and focus group guides and permitted a more accurate understanding of the demonstration details at each sites.

4. Stakeholders: Executives, Hospital Staff, and Beneficiaries

At each site, in collaboration with the ACE liaison, the evaluation team identified appropriate staff who were involved in the Demonstration at the site. The team had access to all requested interviewees except in one instance at ESJH. We conducted a total of 56 stakeholder interviews across all ACE sites. For these interviews, we selected executive staff, medical and nursing directors, and other department heads from quality of care, materials management, billing, and marketing. In addition, at certain sites, physicians and/or nurse leaders were also asked to participate in one-on-one interviews.

Three different types of focus groups were conducted: physicians, non-physician staff (patient navigators, nurses, physical therapists, and other ancillary staff), and Medicare beneficiaries who underwent ACE Demonstration procedures at the sites. The physician and beneficiary focus groups were divided into orthopedic and cardiac groups. In total, the evaluation team conducted 24 focus groups: Medicare beneficiaries (9), physicians (5), and non-physician staff (10). The number of focus groups varied across ACE sites, from 3 at Lovelace Health System to 9 at Baptist Health System (the largest site). Attendance in the physician and beneficiary focus groups was smaller than the targeted numbers for different reasons; for example, some cardiovascular patients were too fragile to travel to the hospital. Independently of the level of attendance, the focus groups sessions were very informative and met their objective. Groups sessions were very informative and met their objective.

5. ACE Outcomes

The information gathered across the initial site visits is rich in scope (from billing issues to coordination of care), in depth (from interviews to contractual arrangement documents), and in the variety of perspectives (from executives, physicians, and non-physician staff to the patients themselves). As expected, the emphasis on the success or barriers to success depended on the discussion topic and the data source. Synthesizing our findings in each domain was complicated by the different perspectives and diversity of responses across ACE sites, and, in many cases, across facilities within a particular health system. The main body of the report delves into each topic by source (interview or focus group). Within each source, we present our findings both across sites and by individual site.

In Exhibit ES-3, we summarize our main findings. Note that in some cells, some stakeholder groups are excluded as the information is not consistent across sites, there was not a clear discussion around a particular topic or it is not a relevant topic for that particular group.

Exhibit ES-3. ACE Outcomes

Quality of Care (QoC)	Satisfaction	Coordination of Care
Key Informants ▪ QoC has improved or been maintained at high ratings ▪ Substantial efforts have been made to monitor QoC on ACE DGRs: new metrics and/or protocols (in most sites) **Physicians** ▪ Improvement on some indicators related to ACE features, primarily coordination of care and discharge planning ▪ Outcomes vary across sites and facilities; mostly stable QoC outcomes **Non-Physician Staff** ▪ Commitment to providing the best care regardless of patient payment source ▪ Increased home health discharges for orthopedic cases **Beneficiaries** ▪ QoC expectations met/exceeded at all but one site ▪ Beneficiaries chose a physician whom then selected the hospital	**Key Informants** ▪ Most administrators and physician leaders were satisfied with opportunities provided by ACE ▪ Considerable discontent with the lack of CMS marketing efforts **Physicians** ▪ Ratings varied from neutral to low satisfaction ▪ Substantial discontent with the lack of CMS marketing efforts ▪ Some discontent with internal site management of ACE ▪ Cardiac and orthopedic physicians have various opinions; due to the emergent nature of cardiac events, implementing ACE been more challenging. **Non-Physician Staff** ▪ Hesitation to rate satisfaction, primarily because of unfamiliarity with ACE and its effects on hospital/system **Beneficiaries** ▪ Most beneficiaries were satisfied with their procedure (few beneficiaries knew that they were included in ACE)	**Key Informants** ▪ Heavy emphasis on coordination by hospital administrators **Physicians** ▪ Engaged in dialogue with non-physician staff and each other ▪ Opportunity to increase communication with administrators on costs and organization **Non-Physician Staff** ▪ Improved discharge planning due to coordination by patient navigators (case management) ▪ Some disagreement regarding effects of patient navigators/ACE case managers **Beneficiaries** ▪ Beneficiaries were part of a streamlined process (confirmed by physicians)
Summary Positive impact on beneficiaries, hospitals and health system, at least anecdotally.	**Summary** No major negative effects on satisfaction across all stakeholders. Some physicians were dissatisfied, particularly those not receiving gainsharing.	**Summary** An improvement over traditional model due to the new model of payment and required coordination between hospitals and physicians.

Costs	Gainsharing and Shared Savings	Volume
Key Informants ▪ Opportunity to introduce cost control initiatives – medical equipment standardization, negotiations on pricing with physicians support ▪ Introduced mechanisms to monitor and analyze costs **Physicians** ▪ Collaboration with hospital administrators to negotiate better prices **Beneficiaries** ▪ Unaware of any tradeoffs in cost/quality (positive outcome).	**Key Informants** ▪ Substantial average savings across procedures ▪ Difficulties allocating/ estimating gainsharing at some sites **Physicians** ▪ Most physicians, except for high volume surgeons, were indifferent to or against the gainsharing because of the small financial impact. ▪ Some believe gainsharing is unethical and have opted out of gainsharing agreements. **Non-Physician Staff** ▪ Several would welcome a mechanism to share savings with non-physician staff in the form of training or additional education **Beneficiaries** ▪ Unaware of why they received a check and, in some instances, would have preferred the money go to their physician or back to Medicare ▪ ACE was not a factor in deciding where to undergo a procedure	**Key Informants** ▪ Unlikely that volume increases were achieved in any of the sites ▪ Anticipated volume increases attributed by some to lack of marketing by CMS ▪ Local markets are very competitive ▪ Where changes occurred, they have not been due to ACE, but rather to mergers or acquisitions of new facilities/physicians **Physicians** ▪ Stable volume for most physicians ▪ No market gain for most sites **Non-Physician Staff** ▪ No volume change for ACE procedures
Summary Most sites agreed that there have been savings in most ACE-DRGs and that these savings would not have been possible without physician support.	**Summary** It can be an important mechanism to incentivize physicians to collaborate with hospitals. Technical issues in computing gainsharing or high QoC measure thresholds may limit passing savings to physicians. Beneficiaries were unaware of Shared Savings, and it was not a factor in choosing the location for their procedure.	**Summary** ACE sites have not seen volume changes; current volume changes are far less than targets. A possible explanation is that ACE is in the early stages at some sites.

The impact of ACE is evident in most sites, although some stakeholders may argue that ACE has not changed much in their operations. ACE has streamlined coordination of care, encouraged cost control measures, and created a new model of collaboration among physicians, hospital administrators, and staff. The cost-control measures are producing savings outside the original Medicare program. The opportunity to create cost-control/savings has spilled over to other insurance markets such as Medicare Advantage and private payers, as the negotiations for better equipment and product prices are applied across all patients undergoing ACE-DRGs, not just ACE patients. Similarly, improvements in coordination of care, particularly the use of standardized protocols, have been introduced or are being introduced in other surgical procedures. Nonetheless, one question that should be of interest to CMS is whether the changes described above are sustainable or one-time shifts, especially regarding cost controls.

Many of the issues described above will be revisited when the evaluation team examines the Medicare claims and other CMS and ACE-specific datasets. The quantitative data will provide information about the net gains in volume, costs, and quality of care at the ACE site, the ACE hospital referral region (local market), and the other comparable market areas in the state and/or neighboring states.

I. BACKGROUND AND INTRODUCTION

The Medicare Acute Care Episode (ACE) Demonstration, a 3-year demonstration project funded by the Centers for Medicare & Medicaid Services (CMS), uses a global payment for a single episode of care as an alternative approach to payment for service delivery under traditional Medicare fee-for-service (FFS). The episode of care is defined as the bundle of Part A and Part B services provided during an inpatient stay for Medicare FFS beneficiaries for included Medicare Diagnosis Related Groups (MS-DRGs), which are hip/knee replacement or revision surgery and/or coronary artery bypass graft surgery or cardiac intervention procedures. Five ACE sites in four states began the demonstration between April 2009 and November 2010. The specific goals of the demonstration are (1) to improve the quality of care by raising consumer awareness of price and quality information; (2) to increase collaboration among providers and health systems; and (3) to reduce Medicare payments for acute care services by using market mechanisms.

The evaluation of the ACE Demonstration centers on whether the use of a bundled payment system will result in Medicare cost savings for the included DRGs while increasing quality and coordination of care. Two types of information are used in the evaluation: Medicare claims data (quantitative) and key informant interviews and focus groups (qualitative). The qualitative data are derived from interviews and focus groups with the staff implementing ACE (e.g., physicians, nurses, and other ancillary/support staff) and Medicare beneficiaries who received a qualifying procedure at an ACE-participating hospital. The interviews and focus groups provide information about infrastructure changes and participants' perspectives, experiences, and satisfaction. The evaluation also explores the impact of physician gainsharing and shared savings payments to beneficiaries.

The key informant interviews were conducted with administrative staff (e.g., chief financial officers, chief executive officers and chief medical officers, physician hospital association leadership), management staff (e.g., nurse managers, ACE managers, business office managers), and lastly with clinical (e.g., floor nurses) and case management staff. Discussions focused on the decision to participate, expectations of ACE, new or revised initiatives developed for ACE, and the impact of ACE on factors such as quality of care, patient volume, and Medicare cost savings.

Focus groups were conducted with three target audiences: 1) physicians; 2) non-physician staff such as nurses, physical therapists, and case managers; and 3) Medicare beneficiaries who received ACE procedures. The focus group sessions covered various topics in the evaluation research domains of infrastructure/organization (staff only), cost and savings (staff only), quality of care, incentives, satisfaction, and feasibility for future implementation.

The qualitative information was collected during site visits to each of the five sites during the first 12 to 18 months of implementation of the ACE Demonstration. This report presents the findings from the first-year site visits conducted between April and September 2011. Another round of site visits will be conducted during the final year of the demonstration at each site.

II. STUDY DESIGN AND METHODOLOGY

1. Study Design

The ACE Demonstration introduces innovative payment and organizational arrangements to providing certain cardiovascular and orthopedic services. The *ACE Demonstration Design, Implementation, and Management* report[2] defined a standard payment model for the five selected institutions. Each participating system/institution (and, in some instances, each facility within the system) developed specific ACE innovations that affect how it provides services, coordinates health care, and markets to physicians and beneficiaries, as well as how savings are distributed among the system's facilities and physicians.

The ACE Demonstration evaluation focuses on the following features:

- Bundled payment for a single episode of care
- Cost-control incentives
- Enhanced coordination of care
- Adoption of clinical guidelines and quality improvement activities
- Gainsharing between physicians and facilities
- Marketing of facilities as Medicare Value-Based Care Centers

The innovations introduced by the ACE Demonstration allow for a variety of quantitative and qualitative analyses. The quantitative and qualitative approaches are complementary; both inform and enhance the other in an interactive fashion as the evaluation progresses.

Exhibit 1 provides a sample of the specific questions associated with these domains that were addressed in the qualitative evaluation (key informant interviews, focus groups, document reviews).

[2] RTI International, Medicare Acute Care Episode Demonstration: Design, Implementation, and Management, Design Report. August 2008.

Exhibit 1: Research Domains, Research Questions, and Methods of Research

Research Domains	Research Questions for Qualitative Studies	Where in the Report to Find answers to these Questions
Medicare Cost Savings	Do actual changes in services provision (i.e., length of stay, discharge patterns) affect total services costs and, thus, potential savings from the demonstration? What are the effects to Home Health, SNF, and other post acute care facilities?	Section IV, B.2 Section IV, B.3 Section IV, E.1 Section IV, E.2 Section IV, E.3
	Did competitive bidding affect sites' ability to adapt changes, particularly in volume and costs?	Section IV, B.2 Section IV, B.4 Section IV, E.1 Section IV, E.2 Section IV, E.3
Incentives	If there was gainsharing, what proportion of savings was paid to physicians? What proportion was retained by the facility?	Exhibit 8
	Did physicians act in accordance with cost-control incentives? Did beneficiaries act in accordance with their incentives?	Section V, B.4 Section V, C.1 Section V, C.2 Section V, D
Quality of Care	What was the impact of the demonstration on the selected quality of care measures?[3]	Section IV, E.3 Section V, B.1 Section V, C.1
Volume, Concentration and Spillover Effects	Did financial incentives impact beneficiary provider choice and provider referrals?	Section V, A.1 Section V, A.3
Infrastructure and Organization	Did the demonstration impact the locus of care in demonstration sites (e.g., proportion of hospital stays in high-intensity care settings, number of diagnostic tests)?	Section IV, B.2 Section IV, B.4 Section IV, E.1 Section IV, E.2
	Were there any changes at the site that were designed to facilitate the demonstration, including improving coordination of care (physicians, facility staff, and managers)?	Section IV, B.2 Section IV, B.3 Section IV, B.4 Section IV, C.1 Section IV, C.2
	Were there any changes in medical care staff participation in quality and cost reduction initiatives?	Section IV, B.2 Section IV, D
Satisfaction	Were beneficiaries satisfied with the care they received during the demonstration?	Section V, A.3
	Were facility staff/managers and physicians satisfied with demonstration strategies?	Section IV, E.4 Section V, C.1

[3] *Quality of Care* is defined by the 22 measures included in the *Medicare ACE Demonstration: Design, Implementation, and Management: Design Report* and its update documents. Included are such measures as Use of internal mammary artery in first time isolated CABG (Quarterly), Percentage of ACE Demonstration procedure cardiovascular re-dos or orthopedic revisions during the prior 6 months (Semi-annual), and Inpatient mortality rate (Annual).

Research Domains	Research Questions for Qualitative Studies	Where in the Report to Find answers to these Questions
Feasibility of Future Implementation	Is the demonstration applicable to the broader Medicare program? What is the applicability/generalizability of the demonstration model across types and sizes of physician groups, facility types, and geographic areas?	Section IV, B.1 Section IV, B.4 Section IV, E.1 Section IV, E.2 Section IV, E.3 Section IV, E.4 Section V, B.1 Section V, B.2
	What refinements of the demonstration design and parameters are suggested by the results of the demonstration?	Section IV, B.1 Section IV, B.2 Section IV, B.3 Section IV, B.4 Section IV, C.2 Section IV, D Section V, A.1.1 Section V, A.2.1 Section V, B.1.1 Section V, B.2.1 Section V, C.1.2

The qualitative evaluation is based on two rounds of site visits: one in the first year of the demonstration and one in the third. While the interviews and focus groups in both rounds will address all of the research domains, the questions used in the second round will differ from the first in order to capture the sites' experiences with the more mature demonstration. Visits in the first round centered on understanding each site's unique approaches to the demonstration goals. The second-round questions will focus more heavily on the lessons learned from the demonstration and the feasibility of future implementation. There will be opportunity to compare the findings from both rounds to uncover how the sites evolved and which strategies persevered over the duration of the demonstration.

At each site, the key informant interview participants were identified in collaboration with the ACE liaisons. At sites with systems of facilities, the interviews were conducted with staff at the system and the facility level. In general, we selected executive staff (CEO/COO/CFO), medical or nursing directors, and sometimes other department heads from quality of care, materials management, and/or marketing. In addition, at certain sites, highly active physicians and/or nurse leaders were also asked to participate in these interviews. Section II.B, below, provides details about selection of the interviewees.

In addition, four different types of focus groups were conducted: physicians, non-physician staff (nurses, physical therapists, and other ancillary staff), beneficiaries, and, at one site, patient navigators. The focus groups were separated into orthopedic and cardiac groups.

The interviews were scheduled to take up to 60 minutes; the focus groups were planned for up to 90 minutes. The interview and focus group moderator guides were customized to each type of interviewee and focus group. The topics that appeared throughout the interviews with key

stakeholders are summarized below. Descriptions of the primary research questions for the focus groups follow.

1.1 Key Informant Questions

Background Questions: These questions focused on the application process and site planning for the implementation of the demonstration. We asked key stakeholders about their considerations and concerns when they applied to participate in the demonstration. If there was an ACE manager, he/she was asked about how the position was established and the responsibilities included. These responses provide descriptive information about the facilities, perspectives on the facilities' objectives and approaches to the demonstration, and how decisions were made in the early planning of the demonstration. Mainly, we were interested in learning why facility administrators chose to participate, what they expected from the demonstration, and information about the facility prior to involvement in the demonstration.

Medicare Costs and Savings: Answers from stakeholders provide insights into the particular types of cost saving strategies. These questions were valuable in determining which strategies have potential for future implementation and how administrators have had to adapt to meet demonstration goals. In addition, administrators have an indirect role in cost savings since materials (e.g. implants), physicians, and facility staff are costly resources. Answers to these questions explain how administrators persuaded physicians and staff to engage and comply with demonstration initiatives to meet cost reduction goals and other measures.

Incentives: Gainsharing incentives for physicians and shared savings payments for beneficiaries are unique features of the ACE Demonstration. Our questions were targeted to determine how administrators, beneficiaries and staff perceived these incentives, whether there were any challenges, and if any new incentives were created. The demonstration was also an opportunity to identify alternative incentives for physicians who are employees of the participating institution.

Quality of Care: Similar to questions of cost saving, answers to these questions highlighted the types of strategies devised by each demonstration facility to improve the quality of care throughout the duration of the demonstration. In particular, the responses from key stakeholders were compared to the ACE Demonstration's stated goals to see how sites originally intended to—and are currently—meeting these objectives. The respondents were asked if they had observed any changes or improvements in quality of care and what benchmarks were used in this assessment.

Volume: Questions pertaining to volume helped ascertain whether facility administrators anticipated increases in volume and market share, to what extent the demonstration affected the hospital market, and whether volume expectations affected development of marketing plans. Changes in volume were important to document, but they were also key to determining whether administrators believed these changes were directly related to the demonstration. Finally, we asked what strategies were developed to produce the desired outcomes and to address any unintended consequences of changes in volume.

Organization and Structure: These questions targeted changes to the infrastructure of the facility resulting from the demonstration, and gauged how the sites' organizational structure affected the degree of the demonstration's success. Respondents were asked about the implementation of the demonstration, staffing changes, new policies and procedures, and the overall impact of the demonstration on staff roles and responsibilities. In particular, we wanted to know what procedures were already in place prior to the demonstration and how staff were encouraged to comply with new demonstration mandates. These questions also provided insight into whether administrators viewed the demonstration as improving or changing the facility and how they sought collaboration when hiring new staff (physicians and nurses). We also inquired into whether additional staff were hired or new positions created.

Feasibility for Future Implementation: Respondents were asked to reflect on the demonstration at the facility and changes implemented. We asked about their satisfaction with the demonstration's effects on the facility and their recommendations for change. We further probed for how they approached challenges and their thoughts on improvements.

1.2 Focus Group Discussions

The second part of the qualitative analysis is based on focus groups with physicians, ancillary/support staff, and beneficiaries who underwent an ACE procedure.

Physicians and non-physician staff who participated in focus groups discussed the initial effects of the demonstration from their perspectives. They were asked to describe changes to the infrastructure and organization of the facility that they deemed to be a result of the demonstration. The questions are specifically targeted to protocols, guidelines, and changes directly related to the ACE Demonstration. In particular, staff members were questioned about whether they observed changes in the volume of demonstration procedures. Physicians who have privileges at other hospitals provided insights about why they did or did not perform ACE procedures at the demonstration facility. In addition, other staff members were asked to comment on how the demonstration affected the quality of patient care, coordination of care between staff and physicians, length of stay, and services provided. Staff members were also able to provide feedback regarding gainsharing and incentive policies. These opinions were compared with their responses to questions about their satisfaction with administrators' handling of cost reduction initiatives.

Beneficiary focus groups reflected the individual's own acute care episode experience. Meeting with beneficiaries at the beginning of the demonstration and also near the end will allow us to understand the beneficiary experience as the demonstration matures (early versus later stages). Areas of focus in the first site visit included the effects of marketing, the effect of financial incentives, and beneficiary satisfaction with the quality of care at the facility.

2. Methodology

The IMPAQ team worked closely with the site liaison at each of five sites—Baptist Health System (BHS), Oklahoma Heart Hospital (OHH), and Hillcrest Medical Center (HMC)—to prepare for the 2011 visits. To customize the visits to each of the different demonstration sites, we sought additional information from the sites that may not have been included in the original

demonstration applications or that may have changed since that time. We held conference calls with the ACE site liaisons throughout the site visit preparation process and obtained updated information about key individuals involved with ACE at the sites, organizational structure of the sites, descriptive statistics, ACE protocols, and other documents that contributed to a more detailed understanding of the sites' ACE experiences.

Focus groups and key informant interviews are particularly well suited to solicit reactions and input from participants and, for this project, offered an appropriate methodology for collecting data to answer specific research questions. As we worked with each site, the ACE site liaison helped us identify appropriate physicians, clinical non-physician staff, and key informants such as executives and administrative staff. Working in collaboration with the five sites, the IMPAQ team conducted 24 focus groups and 56 interviews.

Exhibit 2: ACE Site Visits

Sites	Date	Focus Groups	Interviews
Baptist Health System	April 4-7, 2011	9	18
Oklahoma Heart Hospital	April 26, 2011	3	5
Hillcrest Medical Center	April 27-28, 2011	5	9
Lovelace Health System	August 22-24, 2011	3	15
Exempla St. Joseph Hospital	September 19-21, 2011	4	9
Total		**24**	**56**

In addition to the OMB-approved materials, IMPAQ and the Hilltop Institute collaborated to develop the screener guide (see Appendix Volume 1, B) to recruit the beneficiaries for the focus groups. In consultation with CMS, the IMPAQ team also developed the moderator and interviewer's guides for the focus groups and interviews. (See Appendix Volume 1; C and D) After OMB approval, we worked with CMS to refine the guides. These changes allowed for clarification of terms, improved interview flow, and kept the time burden to a minimum. Subsequent to the first site visit at Baptist Health System, the IMPAQ team made further minor changes to the guides for clarification. The questions formulated in the guides were used to gather appropriate feedback about perceptions of Medicare beneficiaries, knowledge and understanding of the ACE Demonstration, ACE shared-savings payments, ACE strategies and organizational changes at the hospital, ACE outcomes at the hospital, gainsharing, and satisfaction with ACE.

The IMPAQ team also developed an Informed Consent form, stating the purpose of the project, the nature of the focus groups and interviews, and the conditions under which the focus groups would be conducted (i.e., voluntary participation, audio taping, note taking, observation by IMPAQ staff, protection of privacy). Before beginning the sessions, all focus group and interview participants were requested to read and sign the Informed Consent form, thus indicating their understanding and agreement with the conditions. The OMB approval number for this project is 0938-1117.

2.1 Focus Groups

2.1.1 Overview

The IMPAQ team conducted 24 focus groups with three audiences: Medicare beneficiaries (9), physicians (5), and non-physician staff (10). The focus group sessions covered various topics stemming from the evaluation research domains of infrastructure/organization (staff only), cost and savings (staff only), quality of care, incentives, satisfaction, and feasibility for future implementation.

Because of the large volume at BHS and because five of its hospitals are involved in the ACE Demonstration, we conducted four focus groups with Medicare beneficiaries: two with beneficiaries who had undergone cardiovascular procedures, and two with those who had undergone orthopedic procedures. OHH is only a cardiovascular hospital; therefore, we conducted one session with cardiovascular patients. HMC is a smaller volume hospital with both orthopedic and cardiovascular procedures; we conducted one focus group with cardiovascular patients and one with orthopedic. LHS and ESJH also have low volume; therefore we conducted one session at each site; orthopedic patients at LHS, and cardiovascular patients at ESJH.

We were scheduled to conduct four physician focus groups at BHS; however, many physicians canceled at the last minute due to scheduling conflicts. We were able to conduct two focus groups: one with cardiovascular physicians and one with orthopedic physicians. We also conducted two individual orthopedic physician interviews. At OHH, we conducted one focus group of cardiovascular physicians. At HMC, we conducted one focus group of cardiovascular physicians. We were scheduled to conduct a session with orthopedic physicians, but all canceled. We were able to speak individually with the lead orthopedic physician at HMC, whose volume is 83 percent of all ACE orthopedic cases. Thus, the information we collected is sufficient in terms of those affected by the demonstration. At LHS, due to physician schedules, we were not able to conduct a focus group with physicians; however we did conduct five physician interviews in order to gain their perspectives. At ESJH, we conducted one focus group with cardiovascular physicians; all four who were invited were able to attend.

We conducted a total of 10 non-physician staff focus groups. Staff members who made up these sessions consisted of ancillary personnel such as nurses, physical therapists, and staff from lab, pharmacy, and rehabilitation. At BHS, we conducted two sessions with ancillary staff and one session with patient navigators. The role of patient navigator, created as part of the ACE Demonstration, was designed to have current staff members take on the responsibility of guiding a patient through treatment, from admittance to discharge. Because these positions were primarily created for the ACE Demonstration, we felt that it was important to gain their perspectives. At OHH, we conducted one session with ancillary staff. At HMC, we conducted two sessions: one group focused on orthopedic procedures, and the other on cardiovascular procedures. Finally, we were able to conduct one focus group with ancillary staff at LHS and one at ESJH.

Exhibit 3 shows the number of focus group sessions we conducted across all sites and within each site. In total, we spoke with 45 beneficiaries, 16 physicians, and 52 non-physician staff in a focus group setting.[4]

Exhibit 3: Focus Groups Sessions and Participants

	Beneficiary Focus Groups	Number of Beneficiary FG Participants	Physician Focus Groups	Number of Physician FG Participants	Non-physician Staff Focus Groups	Number of Non-physician Staff FG Participants
BHS	4	21	2	4	3	19
OHH	1	2	1	4	1	10
HMC	2	12	1	4	2	8
LHS	1	7	0	0	2	8
ESJ	1	3	1	4	2	7
Total	**9**	**45**	**5**	**16**	**10**	**52**

2.1.2 Beneficiary Recruitment

We used a multipronged approach to recruit beneficiaries for the focus groups. First, we obtained from the site liaison a list of beneficiaries who had recently undergone an ACE procedure. However, BHS felt strongly that providing the names and phone numbers of beneficiaries would be a violation of the Health Insurance Portability and Accountability Act (HIPAA). Therefore, IMPAQ requested this information from CMS, and CMS was able provide us with the names and addresses of beneficiaries. To obtain phone numbers, IMPAQ used a phone look up service, LexisNexis Accurint.

To ensure 8 participants per session, our goal was to recruit 10 patients per focus group. Because people often do not show up on the day of the session for various reasons, it is standard practice to over-recruit. We assumed that about 10 percent of the people we contacted would be willing and able to participate. To recruit 40 participants at BHS, we reached out to approximately 400 beneficiaries (200 cardiovascular patients and 200 orthopedic patients). To conduct one focus group at OHH, we reached out to about 100 beneficiaries. At HMC, to conduct two focus groups, we reached out to about 200 beneficiaries. In some cases, the list of beneficiaries was much larger than we needed, so we narrowed the list by zip code and proximity to the hospital and then by date of procedure, if available.

LHS had a low volume of ACE beneficiaries, and we therefore contacted all 50 patients. ESJH also had low volume (22 patients), but many of the beneficiaries live out of state. We recruited four beneficiaries for an in-person focus group, but only three attended. We considered telephone focus groups to reach the population that was located further away, because we had 4 in-person recruits, it was decided that in-person would be the best option.

[4] We spoke with additional physicians and ancillary staff during scheduled in-depth interviews.

Once we identified the beneficiaries, we sent letters to the potential participants about 1 month prior to the site visit. This letter was from IMPAQ along with a letter from CMS. The IMPAQ letter indicated the purpose of the focus groups and that a member of the IMPAQ team would contact them shortly about the dates, times, and locations of the focus groups. The CMS letter was used to encourage beneficiaries to participate in the focus groups and demonstrate authenticity.

IMPAQ then called the beneficiaries and used a screening guide to ensure they were eligible to participate in the focus group. We used the following criteria to screen participants for the focus groups:

- Participant is fluent in English.
- Participant had undergone a cardiovascular/orthopedic procedure at [insert hospital name].
- Participant had undergone a cardiovascular/orthopedic procedure within the past 2 years.

As participants agreed to join the sessions, we maintained a profile report spreadsheet of each session. The sheets were used as a way to know the composition of the focus group, who would attend each session, and who we could expect. This information was only used by the IMPAQ team and will be destroyed after the project is complete.

To compensate for their time and travel, we offered beneficiaries a $25 incentive. The incentives were distributed to the participants after the focus groups were complete, and beneficiaries signed receipts that were kept for financial records.

2.1.3 Physician Recruitment

Physician perspective is a critical component of the evaluation. However, gathering physicians together at the same place during the same time is difficult. Because the ACE site liaisons have relationships with the physicians, we employed the liaisons' assistance to help us recruit physicians to attend the sessions.

To recruit physicians at BHS, we first obtained a list of all ACE physicians, both cardiovascular and orthopedic. Similar to the procedures used for beneficiaries, we mailed a letter to the physicians explaining the project and inviting them to attend a focus group to discuss their experience and perspective on ACE. After sending the letter, we tried to call the physicians to discuss dates and times of the sessions, but learned that it was very difficult to reach them.

After several call attempts, IMPAQ asked BHS to help recruit physicians. As physicians are not employed by BHS, our site liaison assured us that he would aggressively recruit as many physicians as possible; however, he could not promise their participation. Despite scheduling conflicts, we were able to speak with four physicians at BHS in a focus group setting. We were also able to speak with four more physicians during interview sessions.

The site liaisons at OHH, HMC, LHS, and ESJH had more leverage or closer relationships with physicians participating in the demonstration than did the liaison at BHS. Thus, we relied on the liaisons to encourage physician participation. The liaisons at OHH (Stephanie Gibson), HMC

and LHS (Nancy Harrison), and ESJH (Kelli Christensen), coordinated the recruitment effort. Four physicians at each site participated in the sessions, with the exception of LHS. Four out of four physicians participated in the focus group sessions at OHH and ESJH. At HMC, four of five cardiothoracic physicians participated in the focus group. As mentioned previously, all of the orthopedic physicians canceled for the focus group session where four had been asked to attend.

2.1.4 Non-physician Staff Recruitment

The site liaisons at BHS, OHH, HMC, LHS, and ESJH assisted in identifying potential participants for the non-physician staff focus groups. We worked with the liaisons to select appropriate staff to attend the sessions. From each site, we requested a mix of individuals, such as billing and registrar staff, laboratory staff, rehabilitation staff, nurses, and physical therapists. OHH, HMC, and ESJH are single hospital sites, and participants from both orthopedic and cardiovascular units were asked to attend. BHS is a five-hospital system; both sessions contained a mix of participants representing all five hospitals. LHS is a three-hospital system, and we were able to conduct sessions with participants from two of the three hospitals, Lovelace Medical Center and Woman's Hospital. The liaisons at all of the sites led the recruitment effort for non-physician staff participants. In total, 52 non-physician staff attended the sessions.

Selection for the non-physician staff focus groups was based on a number of factors. Orthopedic and cardiac services differ in the type of staff that care for patients. Orthopedic staff dealt with joint replacements, and pre-authorization processes were in place before a patient has surgery. Operating room staff handled both the actual procedure component of the surgery and the recovery room (Post Acute Care Unit) aspect and had different perspectives. Floor staff care for orthopedic patients was similar to that for cardiac patients, but rehabilitation nurses and physical therapists dealt with a separate set of issues. The case managers or patient navigators were able to communicate with pre-scheduled orthopedic beneficiaries prior to admission and during the rehabilitation phase.

Because cardiac patients were usually emergent and were not pre-scheduled, the selection of cardiac staff for the non-physician focus groups is quite different than the orthopedic. The first staff members who first see those patients are in the catheter labs, cardiac surgery area, post operative care in intensive care, or discharged directly from the catheter unit recovery area. EKG technicians and other cardiac technicians provided additional perspectives on how the hospitals implemented the ACE program.

After working with the liaisons, we learned that registration and billing staff had a firsthand view of how the ACE Demonstration rolled out to beneficiaries. These staff members dealt with informing the beneficiary about the ACE program initially, and the billing area handled all the changes in the IT systems to accommodate the new billing codes and payment changes. This group of staff had a strong opinion about how the ACE program worked. The diverse non-physician staff focus groups from all three hospital systems played a significant role in furthering our understanding how each hospital system rolled out the ACE Demonstration program in their facilities. Many staff members knew nothing about the program, while others, like those in billing, had firsthand knowledge and were very informed about the process issues and problems. Nurses tended to know less about the ACE program. Only those staff members who had to

explain to the beneficiaries how the ACE program was going to provide funds had any considerable knowledge to share.

2.2 Key Informant Interviews

The IMPAQ team conducted a total of 55 key informant interviews at all five sites to gather information from persons directly involved in the design, implementation, and ongoing management of key components of the ACE Demonstration. Discussions focused on the decision to participate, expectations of ACE, new or revised initiatives developed for ACE, and the impact of ACE on factors such as quality of care, patient volume, and Medicare cost savings. As shown in Exhibit 4, 28 interviews were conducted with administrative staff (e.g., chief financial officers, chief executive officers and chief medical officers, physician hospital association leadership), 17 were conducted with management staff (e.g., nurse managers, ACE managers, business office managers), and 10 were conducted with clinical (e.g., floor nurses) and case management staff. Because BHS and LHS are multi-hospital systems, we conducted a number of interviews at the system level as well. These participants were able to discuss ACE from a perspective as a multi-hospital system, operating as one unit.

Exhibit 4: Key Informant Interviews Conducted by Category

	Administrators	Managers	Clinical/Case Managers
Baptist Health System	13	2	3
Oklahoma Heart Hospital	3	2	0
Hillcrest Medical Center	3	5	1
Lovelace Health System	6	4	5
Exempla St. Joseph Hospital	3	4	1
Total	**28**	**17**	**10**

The site liaison at each site assisted in identifying potential participants for the interviews. We worked with the liaisons to select appropriate staff with knowledge of and experience with ACE. We worked with the liaisons to interview staff who had been employed prior to ACE, to compare their experiences before and after the demonstration. In some instances, we spoke with informants who had only been employed after the ACE Demonstration began, due to turnover in the hospital.

At each site, we spoke with a number of individuals at executive levels who could provide a broad perspective of ACE at the financial and operational levels. In some instances, we spoke with the vice president of business services, while in other hospitals it was more appropriate to speak with the materials manager. In addition, we spoke with leaders in quality, vendor negotiations, and case management to assess the ACE outcomes in various hospital areas. Last, we spoke with clinical staff such as chief medical officers, lead floor nurses, and Physician Hospital Organization (PHO) board physicians. This helped us gain perspective on any ACE effects at the level of care.

2.3 Conducting the Interviews and Focus Groups

An experienced moderator conducted the interview and focus group sessions at each site, using the OMB-approved discussion guides. The sessions were audio-recorded and a note taker kept records of the discussions. For the focus groups, the participants were informed of the session ground rules and that their responses would be treated as private. The interviews and focus groups were scheduled to take no longer than 60 and 90 minutes, respectively, to complete. After each site visit, the IMPAQ team prepared individual topline reports for each ACE site, to highlight some themes, tones, and verbatim quotes from the interviews and focus groups at that site (the topline reports are included in Appendix Volume III). Some of the material in the toplines is confidential, and those reports will therefore not be available to the public.

In this report, the IMPAQ team provides findings across audience types and across sites. When identifying themes, we reflect on the range and diversity of the experiences and perceptions of the participants, and identify outliers. Most importantly, the participants' experiences are compared across sites.

3. Operational Limitations

When conducting interviews and focus groups, data quality depends on the interviewees chosen and their knowledge. The main audiences we targeted were beneficiaries, executive staff, hospital managers, and clinical staff, including nurses, physicians, physical therapists, and laboratory staff.

3.1 Beneficiaries

Although IMPAQ maintained an aggressive recruitment effort for the beneficiaries, ultimately we collected data only from those who attended the sessions. We had low beneficiary response rates in some cases, particularly at OHH. Overall, orthopedic patients were more likely to accept an invitation to the sessions and attend. Although our estimation that 10 percent of the sample would be willing and able to attend is the standard procedure, we may need to acquire a larger sample for future recruits. At some sites, such as OHH, LHS, and ESJH, a larger pool may not be possible if the total sample is small. We contacted all beneficiaries on the list given to us by the OHH liaison, and only two beneficiaries were able to attend. In general, ACE beneficiaries less mobile because they are recovering from surgery. This is particularly the case for cardiovascular patients, who may be more fragile. For these reasons, many were not able to attend the sessions.

3.2 Liaison Discretion

The liaisons were our main recruitment contacts for all of the audiences aside from the beneficiaries. IMPAQ relied on the liaisons' knowledge and ability to recruit individuals to participate in the focus groups or interviews. Although we worked with each liaison extensively to select the most appropriate interviewee, we were subject to their discretion and opinion about who would be appropriate. We also relied on the liaisons' abilities to encourage that person to show up for the interview or focus group. Almost all of the interviewees did participate in their scheduled interview; however, a number of physicians failed to attend their scheduled focus group.

4. ACE Sites Context

As expected, the qualitative and quantitative evaluations yielded findings in each of the research domains that were mostly consistent and that enhanced each other. The initial site visits led to a deeper understanding of how each site customized the demonstration or adapted it to fit the site's market and organization. The unique characteristics of an ACE site as well as its management of the demonstration were factors that contributed heavily to the site's outcomes. As such, the findings are not comparable or generalizable from site to site.

The ACE sites' locations and markets varied. BHS, LHS, and ESJH, for example, were all situated in highly competitive, oligopolistic markets – at times neighboring other hospitals. Additionally, these competitive markets were at time exacerbated by the high concentration of managed care beneficiaries who were not ACE-eligible. Site visits to both Albuquerque, NM (LHS) and Denver, CO (ESJH) revealed such a market with a very low volume of ACE cases. Another unique situation was that physicians at two ACE sites (HMC and ESJH) became hospital employees at the beginning of the ACE demonstration. Physicians at OHH are also hospital employees, therefore, findings related to changes in volume, spillover effects, and the effects of gainsharing at HMC, ESJH, and OHH are not comparable to BHS and LHS. A common theme among site visit participants at all five sites was that the ACE sites all maintained high quality measures. As a result, physicians and administrators felt there was less room for improvement. If the demonstration was to be expanded to other hospitals, the small changes in the quality measures at the ACE sites may under- or over-estimate what could be expected.

In addition to the site's features, the way administrators, physicians, and staff adapted to or customized the demonstration had an effect on many of our research domains. The level of engagement that physicians had with hospital administration and the demonstration goals varied greatly between sites. At BHS and HMC, the existence of a physician champion who completed the large majority of ACE procedures was a motivator for bringing other physicians on board and for achieving the cost saving and quality of care objectives. Physician involvement was also important at ESJH for standardizing procedures and lowering procedure costs. At the same time, physician satisfaction within each site was quite uniform, which highlighted the effect that a strong positive or negative physician opinion could affect an entire practice's receptiveness to the demonstration. Lastly, it should be noted that due to complications in preparing the sites for the appropriate claims processing procedures, ESJH and LHS began the demonstration more than a year after the other three sites. Therefore, the findings from the two later sites are not comparable to the three more mature demonstrations.

III. PROFILES: ACE SITES

This chapter profiles each of the ACE sites, using information gathered from their ACE applications, quarterly site reports written by site liaisons, onsite communications, and materials collected during the first round of site visits in 2011. Each ACE site proposed different strategies and programs in its ACE application. During the site visits and our discussions with site liaisons, we also inquired whether the implemented ACE-related protocols and programs reflected what had been proposed by the sites in 2008. Compiling and comparing the proposed vs. actual characteristics of the ACE site programs allows for a better assessment of the qualitative findings from interviews and focus groups as well as the quantitative results.

1. Overview of Sites

Sites were selected in early January 2009 to participate in the ACE Demonstration, but each site began implementation of ACE at different times. 5 lists the sites, number of facilities, major ACE procedure type(s) selected for inclusion in the demonstration, and the demonstration start dates.

Exhibit 5: Selected ACE Institutions

Site	Location	Number of Facilities	Major ACE Procedure Type(s)	Demonstration Start Date
Baptist Health System (BHS)	San Antonio, TX	5	Orthopedic + Cardiac	Jun 2009
Oklahoma Heart Hospital (OHH)	Oklahoma City, OK	1	Cardiac	Jan. 2010
Hillcrest Medical Center (HMC)	Tulsa, OK	1	Orthopedic + Cardiac	May 2009
Lovelace Health System (LHS)	Albuquerque, NM	3	Orthopedic	Nov. 2010
Exempla Saint Joseph Hospital (ESJH)	Denver, CO	1	Cardiac	Nov. 2010

The sites are located in separate market areas or core-based statistical areas (CBSA) in Texas, Oklahoma, New Mexico, and Colorado, within the Medicare Administrative Contractor (MAC) Region 4. 6 lists the participating facilities and includes descriptive statistics. The number of acute beds at each facility ranges from 60 to 503. BHS's five facilities total 1,729 beds. OHH has the largest percentage of Medicare market penetration, 61.6%, and ESJH has the lowest market share, 6.3%. Lovelace Westside Hospital, Lovelace Medical Center, and BHS's Medicare cases were 25%, 24%, and 29.49% of their totals, respectively. In 2010, HMC had the highest Medicare case count at 22,226 cases. Other facilities saw between 529 and 18,887 Medicare cases that year. OHH had the highest case mix index (2.22); Lovelace Women's had the lowest (1.08). In 2010, HMC received the greatest percentage of disproportionate share hospital (DSH) payment (33.5%) related to indigent patient populations, while Lovelace Westside Hospital and OHH did not receive the payment.

Exhibit 6: ACE System and Facility Descriptive Statistics

Descriptive Statistics	Baptist Health System	Oklahoma Heart Hospital	Hillcrest Medical Center	Lovelace Westside Hospital	Lovelace Medical Center	Lovelace Women's Hospital	Exempla St. Joseph Hospital
Acute Beds							
2007	1,244	78	407	36	210	114	392
2010	1,729	99	503	60	210	151	369*
Medicare Case Count							
2007	19,790	5,276	5,478	611	1708	518	1,225
2010	18,887	6,012	22,226	529	2,361	577	1.082
Medicare Cases as % of Total							
2007	39.4%	66.4%	32.4%	34.6%	34.1%	10.7%	6.9%
2010	29.5%	61.6%	29.0%	25.0%	24.0%	7.0%	6.3%
Medicare Market Share (2007–2010)							
2007 **2008** **2009** **2010**	33% 34% 35% 35%	Unknown	Unknown	Unknown	Unknown	Unknown	10.8% 9.0% 9.4% 9.5%
Teaching Ratio (IRB)							
2007	-	-	0.138	-	0.002	0.013	0.188
2010	-	-	0.816	-	0.010	0.020	0.197
Disproportionate Share Hospital (DSH) adjust %**							
2007	20.10%	0%	33.2%	0%	5.30%	28.60%	0.00%
2010	17.94%	0%	33.5%	0%	OP: 5.68% Cap: 4.11%	OP: 31.54% Cap: 10.95%	2.94%
Case Mix Index (new grouper)							
2007	1.64	2.20	1.70	1.26	1.64	1.28	1.46
2010	1.70	2.22	1.46	1.35	1.74	1.08	1.44

Source: Self-reported by ACE sites as of August 2011.
* Excludes normal newborn (25), NICU (33).
**The DSH payment helps fund hospitals that serve indigent patients.

Exhibit 7 compares the sites' demonstration features. Of the cardiac demonstration sites, BHS proposed the highest cardiac weighted discount. HMC proposed the highest orthopedic weighted discount. The Part A discount and weighted discount at OHH are quite small in comparison with the other four sites. All sites except OHH provided the opportunity for physicians to participate in gainsharing. The following sections describe the particular features of each site's offerings.

Exhibit 7: Proposed and Actual ACE Demonstration Features

Features	BHS		OHH		HMC		LHS		ESJH	
	2008 Proposed	2011 Actual	2008 Proposed	2011 Actual	2008 Proposed	2011 Actual	2008 Proposed	2011 Actual	2008 Proposed	2011 Actual
Part A Discount %	Cardiac: 8.25% Orthopedic: 2.5%	Cardiac: 8.25% Orthopedic: 2.5%	0.9%	0.9%	4.4%	4.4%	3.0%	3.0%	5%	5%
Part B Discount %	0.0%	0.0%	1.0%	1.0%	4.4%	4.4%	3.3%	3.3%	0.0%	0.0%
Weighted Discount to CMS	Cardiac: ~ 6.5–7.0% Orthopedic: ~ 1.95–2.1%	*Cardiac: 8.25% Orthopedic: 2.5%*	0.9%	0.9%	4.4%	4.4%	3.0%	3.0%	5.0%	5.0%
Physician Reimbursement (Medicare Part B Physician Fee Schedule)	100%	100%	Fixed Fee	100%	100%	100%	100%	100%	100%	100%
Gainsharing Agreement	Physicians: 50% of cost savings in excess of 5% CMS discount	50% of cost savings in excess of admin. costs capped at 25% of Medicare Part B Allowable	None	None	Orthopedic Physicians: 50% of cost savings in excess of 5% CMS discount	Physicians: 50% of calculated cost savings, capped at 25% of their normal Medicare fees	Physicians *and* Nurses: share of savings generated with capitated implants pricing	Physicians: 50% of calculated cost savings, capped at 25% of their normal Medicare fees	Physicians: 50% of cost savings in excess of 5% CMS discount	Physicians: 50% of cost savings in excess of 5% CMS discount

Source: Demonstration Site Applications (2008) and site visits (2011).

Exhibit 8 shows a comparison of site features related to the ACE Demonstration since its inception at each site. BHS has performed the most ACE orthopedic procedures to date (1,931), and OHH has performed the most ACE cardiac procedures (2,841). Each of the hospitals participated in a gainsharing offer of 50% of calculated cost savings to participating physicians, with BHS, HMC, and LHS capping the gainsharing at 25% of the normal Medicare Part B allowable fees associated with their cases. ESJH offered 50% of cost savings gainsharing in excess of the 5% CMS discount. Only BHS and HMC have actually paid out the gainsharing to participating physicians, with an average amount at BHS of $363 per case; the average at HMC is $321 for cardiac procedures and $389 for orthopedic procedures.

The ACE-generated savings (ACE site estimates) to date differ widely among the sites. This may be due in part to the varying lengths of time that each site has been participating in the demonstration and their initial market for these procedures. The sites with longer participation and higher volume have the largest savings. BHS estimates that they have saved $2.2 million from ACE cardiac procedures and $4.3 million from orthopedic procedures through June 30, 2011. HMC estimates its savings from cardiac procedures as $726,600 and from orthopedic procedures as $645,613. LHS had small cost savings ($118,000) from a relatively small number of orthopedic procedures, an estimate over the first 6 months of the demonstration.

Exhibit 8: Comparison of Site Features

Features	BHS	OHH	HMC	LHS	ESJH
ACE Orthopedic Procedures to date	1,931 as of 7/31/11	N/A	725 as of 4/30/11	131 as of 7/31/11	N/A
ACE cardiac procedures to date	1,468 as of 7/31/11	2,841 as of 7/31/2011	1,384 as of 4/30/11	N/A	20 as of 9/1/11
ACE physician staff employed by the site					Cardiologists; Cardiac Surgeons
Types of physicians who are eligible to receive gainsharing	Orthopedics, Cardiologists, Cardio-Thoracic	None	ACE Cardiac surgeons and ACE Orthopedic surgeons	Orthopedic surgeons	ACE Cardiac surgeons (not cardiologists)
Percentage gainsharing agreement with physicians	50% of cost savings in excess of admin costs capped at 25% of Medicare Part B Allowable	N/A	50% of calculated cost savings, capped at 25% of their normal Medicare fees associated with their cases	50% of calculated cost savings, capped at 25% of their normal Medicare fees associated with their cases	50% of cost savings in excess of 5% CMS discount

Features	BHS	OHH	HMC	LHS	ESJH
Percentage of eligible physicians who have received ACE gainsharing	36 of 47 Orthopedic surgeons who have done a case with an ACE DRG have received a gain share at some point in time (76.6%)	N/A	100%	N/A	100%
Average dollar amount of physician gainsharing	Average $1,171/month/physician $363 per case	N/A	$321/ Cardiac case $389/Orthopedic case	Data not available for calculation at this time. An actual gainsharing payment has not been made to date.	$597

Exhibit 9: ACE-Generated Cost Savings Reported by the Sites

ACE Sites	Cardiac Savings	Orthopedic Savings	Total Savings	Savings as of
Baptist Health System	$2.2M	$4.3M	$6.5M	6/30/11
Oklahoma Heart Hospital	$0	N/A	$0	6/30/11
Hillcrest Medical Center	$726,600	$645,613	$1,372,213	4/30/11
Lovelace Health System	N/A	$118,000	$118,000	6/30/11
Exempla St. Joseph Hospital	$112,126	N/A	$112,126	9/30/11

2. Baptist Health System

As the Medicare market share leader in San Antonio, Baptist Health System (BHS) includes five hospitals in its system and has 48 percent of the market. BHS's primary service area, from which 60 percent of its inpatient discharges originate, encompasses 27 zip codes, with a population of 913,676. The secondary service area encompasses 48 surrounding zip codes, accounting for 80 percent of inpatient discharges. According to the 2005 Dartmouth Atlas of Health Care, there are 8 other acute care hospitals within BHS's hospital service area. There are 22 other acute care hospitals within its hospital referral region, which is defined in the 1999 Dartmouth Atlas of

Health Care[5] by documenting where patients were referred for major cardiac surgical procedures and for neurosurgery.[6]

Exhibit 10: BHS Quick Facts

Procedure Types	Orthopedic; Cardiac
Number of Facilities	5
Number of ACE Cases (orthopedic and cardiac)	Orthopedic: 1,931. Cardiac: 1,468 as of 7/31/11
ACE Cost Saving s (figures provided by site)	Orthopedic: $4.3 million. Cardiac: $2.2 million as of 6/30/11
Site Organizational Features	Joint Commission accreditation (Orthopedic)
Unique ACE Features	Dedicated patient navigators; PACE Board

BHS proposed a 2.5 percent discount on the orthopedic Part A component of all MS-DRGs included in the demonstration, and an 8.25 percent discount on cardiac MS-DRGs. BHS intended to absorb the entire CMS discount; physician reimbursement was to be maintained at pre-demonstration levels so that physicians would not be inclined to leave BHS for other physician hospital organizations (PHO). This measure was also intended to encourage physicians to improve efficiency and increase referrals to BHS. It was proposed that physicians would be paid from the CMS ACE bundled payments at 100 percent of the Medicare Part B physician fee schedule (MFS).

2.1 ACE Management

The ACE demonstration is managed at a senior level, including direct involvement by the senior vice president and chief development officer. Across the five sites, the corporate office centrally manages ACE policies and procedures with input and involvement from the facility- and system-wide executive teams. BHS physician champions play a large role in encouraging involvement in ACE and pushing peers to participate.

In the first year of the demonstration, BHS instituted patient navigators to respond to ACE patient needs and to identify ACE-eligible patients for billing purposes. The patient navigators track the admissions of patients receiving ACE procedures and attempt to verify whether the patients will be included in the demonstration.

BHS also involves physicians in the PACE board, a committee of physicians who represent their colleagues with privileges at the health system. The board discusses ACE problems and questions and reviews the physicians' quality metrics and gainsharing.

[5] Center for the Evaluative Clinical Sciences, Dartmouth Medical School (1999), The quality of medical care in the United States: A report on the Medicare Program, *The Dartmouth Atlas of Health Care*, AHA Health Forum, Inc., 294.

[6] Center for the Evaluative Clinical Sciences, Dartmouth Medical School (1999), The quality of medical care in the United States: A report on the Medicare Program, *The Dartmouth Atlas of Health Care*, AHA Health Forum, Inc., p. 294.

2.2 Physicians

Although BHS has five facilities, many of the physicians tend to practice and perform procedures predominantly at one location. None of the physicians are employed by BHS, yet many express a preference for working at BHS due to the high quality of the facility and the hospital's overall organization. Certain physicians performed more ACE procedures than others. These same physicians tended to volunteer for positions on the hospital PACE board and other committees that were developed to discuss and review ACE issues.

At BHS, gainsharing is paid out only when physicians and facilities meet certain criteria. Not only must physicians meet quality standards and cost savings on a case-by-case basis, but *each facility* must also have acceptable overall ratings in these areas for an individual physician to receive a gainsharing payment.

3. Oklahoma Heart Hospital

The Oklahoma Heart Hospital (OHH), in Oklahoma City, is one of the top-volume cardiac programs in the United States, as reported in OHH's application. More than 60 percent of OHH's patients are Medicare beneficiaries. Currently, OHH's hospital service area includes 9 other acute care hospitals, and its hospital referral region includes 53 other acute care hospitals. The facility's organizational structure consists of 61 cardiovascular physicians in partnership with the Sisters of Mercy Health System. Seventy-five percent of the physician members are part of Oklahoma Cardiovascular Associates (OCA), which refers patients to the facility from rural practices.

Exhibit 11: OHH Quick Facts

Procedure Types	Cardiac
Number of Facilities	1
Number of ACE Cases (cardiac)	2,841 as of 7/31/11
ACE Cost Savings (figures provided by site)	$0 as of 6/30/11
Site Organizational Features	Employed physicians; ACE physician CEO/CMO
Unique ACE Features	None

The overall discount to CMS for all ACE cardiac MS-DRGs was 1 percent for Part A ($14,814 bid) and 0.9 percent for Part B ($1,874 bid). Physicians are paid a discounted fixed fee from the ACE bundled payment. OHH suggests that physician ownership of the facility plays a role in physician awareness of efficiency and cost savings. This relationship aids the facility and its physicians to align and continue to drive down costs. OHH's goals, as laid out in its ACE Demonstration application, included "greater standardization, lower acquisition pricing, and monitoring of appropriate utilization." OHH also planned to increase its patient volume in a cost-effective manner without loss of quality. Increased volume was to be achieved by aggressively marketing the demonstration and promoting participation.

3.1 ACE Management

The hospital's chief medical officer and CEO is also an ACE physician and the key motivator and implementer of the demonstration at OHH. He is a very dynamic individual who represents and speaks for the physicians at OHH. The hospital structure is observed to be cohesive and rather flat with little hierarchy.

3.2 Physicians

OHH physicians are employees of the hospital. Independent physicians (two-thirds of whom belong to the Oklahoma Cardiovascular Association Physician Group) became OHH hospital employees in 2010. A core group of 30 to 40 physicians (cardiologists, cardiovascular surgeons, and vascular surgeons) are responsible for the majority of OHH patient admissions. On average, 3,000 to 4,000 cardiac procedures are performed at OHH annually, of which 60 percent (1,500) are for Medicare patients. Because OHH physicians are employees of the hospital, they have a greater stake in the success of the hospital and hospital-related initiatives, such as the ACE Demonstration. In contrast, non-physician staff at OHH are not highly involved in ACE and are rarely, if ever, aware of whether a patient is ACE-eligible.

ACE physicians at OHH do not receive gainsharing and all physicians are salaried based on a common physician performance measurement (RVU: Relative Value Unit) of their procedures.

4. Hillcrest Medical Center

Hillcrest Medical Center (HMC) is the hub of the Hillcrest Healthcare System and was the first hospital founded in Tulsa, Oklahoma. HMC has been in operation for more than 90 years. More than a million people reside in HMC's service area. There are 10 other acute care hospitals in the hospital service area, and 33 other acute care hospitals within its hospital referral region.

Exhibit 12: HMC Quick Facts

Procedure Types	Orthopedic; Cardiac
Number of Facilities	1
Number of ACE Cases (orthopedic and cardiac)	Orthopedic 725. Cardiac: 1,354 as of 4/30/11
ACE Cost Savings (figures provided by site)	Orthopedic $726,600. Cardiac: $645,613 as of 4/30/11
Site Organizational Features	Oklahoma Heart Institute (new facility); Pursuing Joint Commission accreditation (Orthopedic)
Unique ACE Features	Dedicated ACE Case Manager

HMC reimburses physicians at 100 percent of the Part B fee schedule. Both the cardiac and orthopedic bids provided a weighted average 4.4 percent discount to CMS. HMC planned to offset the discount with decreased physician use through increased efficiency. The proposed gainsharing plan pays up to 50 percent of savings to physicians (similar to the other sites' proposed plans).

4.1 ACE Management

Ardent Health Services owns and operates HMC (and Lovelace Health System). The ACE project director oversees administrative activities associated with ACE, such as financials, billing processes, relationships with physicians, and coordination of ACE strategies and efforts among key executives and leadership staff at HMC. Other ACE administrative responsibilities are distributed among local staff.

Much like other ACE sites, HMC has a physician "champion" who has taken the initiative in pursuing ACE and performing ACE procedures. Other key staff members at HMC are the materials manager, the marketing director, and the ACE case manager. The materials manager was instrumental in negotiating with vendors and reducing costs of implants and equipment used in ACE procedures. The marketing director shaped the advertising campaign at HMC and manages the ongoing physician-led seminars, which are an HMC outreach tactic.

In the first year of the demonstration, HMC created a new, dedicated ACE case manager position to identify ACE cases at the start of the patient's visit. The ACE case manager tracks the admissions of patients receiving ACE procedures and attempts to verify whether they will be included in the demonstration. The ACE case manager then obtains a signed ACE participation acknowledgement form from each eligible patient.

4.2 Physicians

HMC underwent a major change to its organizational structure just before the first year of the demonstration. The new Oklahoma Heart Institute opened in March 2009; consequently, HMC's cardiac physicians came under contract with the institute and became employed staff, though some physicians also maintain privileges at other hospitals. The employee status of the cardiac physicians at HMC affects certain aspects of the demonstration, such as gainsharing and the hospital-physician relationship. Cardiac physicians report that because they are salaried, they do not receive gainsharing as was initially proposed. It should also be noted that a large majority of HMC's ACE orthopedic procedures are performed by one orthopedic surgeon. Orthopedic physicians do receive gainsharing payments on ACE procedures. Both cardiac and orthopedic ACE physicians are reimbursed at 100% of the Medicare fee-for-service schedule.

4.3 Unique ACE Features

Due to low patient and community awareness of ACE, HMC implemented a follow-up telephone survey of ACE patients. The survey was administered via telephone post-discharge to discover whether patients knew of ACE prior to having their procedures at HMC and whether the shared savings payment influenced their decision to go to HMC. The Q1 2010 phone survey results revealed an interesting difference between cardiology patients (25%) and orthopedic patients (90%) in knowledge about the demonstration.[7] As at other sites, pre-procedure patient knowledge of ACE was expected to be lower among cardiac patients due to the emergent nature of the majority of ACE cardiac procedures. The site reports highlight the fact that ACE patients

[7] This pattern was confirmed in all of our focus groups with cardiac patients.

are often confused about the shared savings payments: how much the payments should be, who would be sending them, and where they were coming from. The survey has since been discontinued.

5. Lovelace Health System

Lovelace Health System (LHS) includes five facilities that serve Albuquerque and much of New Mexico. Three facilities are participating in ACE: Lovelace Medical Center (LMC), Lovelace Women's Hospital, and Lovelace Westside Hospital. Two-thirds of the general adult medical/surgical beds are located at LMC; the rest are at Lovelace Women's Hospital and Lovelace Westside Hospital.

Exhibit 13: LHS Quick Facts

Procedure Types	Orthopedic; applied for Cardiac DRGs
Number of Facilities	3
Number of ACE Cases (orthopedic only)	131 as of 7/31/11
ACE Cost Savings (figures provided by site)	$118,000 as of 6/30/11
Site Organizational Features	Independent management at facility-level; LHS health insurance plan
Unique ACE Features	*Nursing Incentive Program (proposed)*

LHS proposed to meet ACE goals through a capitated pricing model on implants to reduce costs, and a marketing strategy to draw in the expanding Medicare-aged population of New Mexico and surrounding states. LHS anticipated a 25% increase in the demonstration DRGs.

5.1 ACE Management

Unlike the other ACE site with several facilities (BHS), LHS facilities manage the demonstration locally. Each participating LHS facility creates and implements its own protocols in coordination with local physicians. LHS's application also emphasized patient education as a method to improve the quality of care. This intention was developed into the Pre-hab program, a pre-surgery education program for patients to learn about their procedures and requisite rehabilitation prior to surgery.

ACE administration is mostly performed remotely through the Ardent corporate office; other management functions are decentralized across the three participating ACE sites according to the discretion of the executives and administrators on site. Staff members with significant involvement in ACE include the leadership at each hospital site. At LMC and Lovelace Women's Hospital, the COOs provide direction for the ACE program and oversee its goals in relation to the Lovelace Health System's objectives. At Lovelace Westside Hospital, ACE is not a focal topic.

5.2 Physicians

ACE physicians who perform procedures at one of the three LHS facilities primarily belong to one of two dominant physician practices in Albuquerque. Although these groups chose to participate, some of the physicians opted out of receiving gainsharing from their ACE

procedures. Though some physicians perform procedures at more than one LHS facility, most prefer to remain at one site. Most physicians perform ACE procedures at LMC; only one performs ACE procedures at Lovelace Westside Hospital. There were formerly three physicians contributing to the majority of ACE orthopedic DRG cases at Lovelace Women's Hospital, but two of these have recently retired.

6. Exempla St. Joseph Hospital

Exempla St. Joseph Hospital (ESJH) is located in downtown Denver and has served patients for more than 130 years. Its primary service area spans seven counties. Since 2007, ESJH's Cardiac & Vascular Institute has surpassed all other Colorado hospitals in volume of cardiology and heart surgery patients. The hospital service area includes 10 acute care hospitals, while the hospital referral region includes 33 other acute care hospitals.

Exhibit 14: ESJH Quick Facts

Procedure Types	Cardiac
Number of Facilities	1 (part of 3-hospital system)
Number of ACE Cases (cardiac)	20 as of 9/1/11
ACE Cost Savings (figures provided by site)	$112,126 as of 9/30/11 (Savings generated across all patients, not just ACE)
Site Organizational Features	ESJH health insurance plan
Unique ACE Features	Patient navigator

Similar to other ACE sites, ESJH proposed a 5 percent discount on Part A fees. ESJH reimburses physicians at 100 percent of the Medicare Part B Physician Fee Schedule (MFS) from the ACE bundled payments. Any cost savings from the program will first offset the 5 percent discount taken from Part A fees. Physicians will receive 50 percent of the cost savings in excess of the 5 percent discount from average Part A fees.

6.1 ACE Management

The ACE manager oversees the ACE Demonstration at the Cardiac & Vascular Institute in collaboration with the senior clinical director and the institute's two medical directors. The ACE manager's responsibilities include administrative activities associated with ACE, such as liaising with the ACE patient navigators, maintaining relationships with cardiac surgeons and cardiologists, communication with the financial and billing teams, and coordinating ACE strategies and efforts among Cardiac & Vascular Institute leadership staff. In general, physicians and lower level administrative staff are involved in managing ACE; higher level administrators are not usually involved in directly overseeing the demonstration.

In the first year of the demonstration, ESJH made many changes to its organizational structure and some to its implementation of ACE. In June and July of 2011, less than a year after the start of the demonstration, ESJH hired a new cardiologist group practice. In addition, since the time of the hospital's application, it has become one hospital of a three-facility health system, Exempla Healthcare. A fourth system hospital is under development.

ESJH was one of the last two sites to begin the demonstration. Part of the delay was due to the transition to TrailBlazer. ACE physicians at ESJH had begun identifying cost-saving initiatives and negotiating with vendors in the first quarter of 2010. However, the delays in setting up the bundled payment reimbursement meant that the demonstration did not begin until November 2010. ESJH reported that hospital claims were suspended in the TrailBlazer system until April 2011, when the billing team coordinated with the TrailBlazer representative to rectify the issue. ESJH is resubmitting all ACE claims; however, the delay also impacted patient shared savings payments and physician gainsharing. Physicians were paid even though the hospital had not yet received bundled payments, which resulted in a financial loss for the hospital.

6.2 Physicians

The new cardiologist group practice that replaced the prior physician group joined ESJH in July 2011. In addition to the cardiologist team, the Cardiac & Vascular Institute employs four cardiac surgeons who complete the majority of ACE procedures at the hospital. The cardiac surgeons are salaried and are compensated for ACE procedures in the same manner as they are for all patients. They also receive gainsharing.

IV. RESULTS: KEY INFORMANT INTERVIEWS

IMPAQ and the Hilltop Institute conducted 56 key informant interviews at the ACE sites. The purpose of the interviews was to gather information from persons directly involved in the design, implementation, and ongoing management of key components of the ACE Demonstration. Discussions focused on the decision to participate, expectations of the demonstration, new or revised initiatives developed for the demonstration, and the impact of on factors such as quality of care, patient volume, and Medicare cost-savings. The interviews were conducted with administrative level staff (e.g., chief financial officers, chief executive officers, chief medical officers, and physician hospital association leadership). Interviews were also conducted with management staff (e.g., nurse managers, ACE managers, business office managers), and clinical (e.g., floor nurses) and case management staff.

1. Background and General Understanding

To understand the motivation for participating in ACE, key informants at each site were asked to discuss why their hospital decided to participate in the demonstration. The key reasons, which were consistent across the sites, were improved quality of care for patients, increased volume and market share, better alignment of hospital administrators and physicians, and positioning the hospital to adapt to future changes in health care payment methodologies.

At BHS, the most common reasons given for participating in ACE were the opportunity to improve quality, decrease costs, increase market share, align physicians and hospital administrators, and be in the forefront of changes in the health care arena. When discussing quality as a reason for participating, one BHS respondent stated: "Quality was not where it needed to be, so that was a big driver. We felt this was a better way to align with our doctors. This way we can drive quality, patient experience, and outcomes." Participating in an innovative, cutting edge program was also a key reason for participating, with one respondent stating: "We saw that the healthcare environment is going to continually change, the reimbursement is going to change in the future, and we don't know what the final result will be. But we do know and believe in the initiatives that hospitals seem to be aligning with doctors."

The respondents from HMC shared a similar perspective on using ACE to improve quality, reduce costs, and align physicians and the hospital. One participant, in discussing the interrelated nature of quality and cost, stated: "[ACE] taught me that if you don't have quality, you don't have anything." The respondent also stated that: "Quality can never be at the expense of economics … when you start cutting back on quality, you hurt yourself economically." ACE was seen as a "constructive and good way" to align the interest of the physicians and hospitals while allowing the patients to benefit from improved quality.

At OHH, ACE was seen as "an opportunity to try to prepare ourselves for global bundled payments…and to be ahead of the curve when the change came." Interestingly, one respondent indicated that HMC "didn't go into it to increase our volume because our average daily census stays full all the time." Instead, ACE was viewed as "a good community service and a good public relations move." Other reasons given for participating in ACE included improving quality of care and producing high quality outcomes.

According to LHS respondents, ACE was seen as an opportunity to be on the forefront of trying to find new ways to improve quality and efficiency of care, demonstrate the viability of physician cost sharing and physician collaboration in developing quality and efficiency metrics, and to share savings with physicians. One participant noted that "ACE also gave LHS an option of being able to participate as a system while allowing each hospital to still operate independently because each hospital is different".

Of the ESJH staff interviewed, most were employed at the hospital prior to ACE, but they did not become involved until the project was underway, within the last 6 to 9 months. A few mentioned that because of staff turnover, ACE became a somewhat unexpected part of their role.

When asked how they anticipated their scope of activity to change, the majority of the interviewees said they didn't believe ACE would affect their scope of activity with the exception of an anticipated volume increase. A few participants mentioned that they anticipated their communication with physicians to increase. Because of ACE, staff members will reach out to physicians to review measures and report cards. Prior to ACE, the frequency of this interaction did not occur, now there is a focus on sharing results and forming solution for improvement. Physicians also play a key role in helping identify what measures should be on the (site-specific) ACE report card used for gainsharing.

ACE forced ESJH "to take a deeper dive of cost, care, length of stay etc.…" Although originally intended for cardiac patients, ACE has been a catalyst to look across other areas as well. One participant saw the change in processes as something that is long term; establishing a hospital system that would be familiar with bundled payments and to "attract" patients and Medicare, provide patient base, reason for younger people in cardio to come to hospital, provide them with patients to practice medicine.

When participants were asked why ESJH chose to participate in the ACE Demonstration, most said "to take the first step toward what we think reform is going to do. That bundled payments are coming and it's not going to be an option at some point." Most agreed that participation in ACE will give ESJH an advantage to assess how bundled payments will work at the ground level. One participant said, "I was eager to look at ACE as an alternative to the traditional fee for service. I was also convinced that FFS is for a dying animal."

Administrators stated that ESJH historically has had exceptional results in cardiovascular. For this reason, ACE was seen as a vehicle to raise awareness of the hospital's cardiovascular program and to make the demonstration available to patients in the geographical area.

Key informants at each of the sites were also asked to discuss the features of ACE that were most appealing to them. The responses mirrored those given for participating in ACE and were similar across the sites. The most common responses were the opportunity to reduce costs, improve quality, improve care coordination, and align physicians and hospitals. One respondent at OHH, when asked what component most was appealing, summed it up this way: "Probably the commitment to the highest quality, best outcomes, and the best service to provide to your patients without being too expensive. To me that's key."

2. Current ACE Status/Experience

Respondents were asked to describe any changes, for example in the hospitals' reputation, patient volume, and billing that may have occurred at the sites during the first year of ACE implementation.

2.1 Hospital Reputation

Across and within the sites there were differing opinions on whether participating in ACE has had an effect on the hospitals' reputation. Overall, most respondents at four of the hospitals felt that ACE had a positive effect and noted that their peers are very interested in learning about their ACE experiences. At the remaining site, the respondents indicated that the volume of ACE patients was too low to have an effect on the hospital's reputation.

When asked if participation in ACE affected the reputation of the hospital, the majority of respondents at BHS agreed that ACE had a positive effect on the reputation, both locally and nationally. One respondent stated: "We have received so much interest from around the country about how this program is working; consulting groups and conferences want us to come speak [about ACE]." While there was consensus that ACE has improved the hospital's reputation, there was no clear consensus on its effect on recruiting physicians or encouraging patients to come BHS. Although there was a noted increase in volume, respondents hesitated to say it was a direct result of ACE, stating that "our volume's up, but it's not just ACE patients." It was also mentioned that upon receiving the ACE award, BHS was seen as a market share threat to its peers. The few respondents who felt ACE had not had an effect on BHS's reputation mentioned that the geographical area is so large and dispersed that potential patients are unaware of the demonstration, even with the use of advertising. Nevertheless, BHS remains proud of the fact that it was selected to participate in ACE. BHS developed a PACE board, staffed by physicians, administrators, one ACE beneficiary, and orthopedic and cardiac surgeons. The board holds control of governance of the demonstration. The board created subcommittees to approve decisions related to the demonstration.

A respondent at HMC stated that ACE has improved the reputation of the hospital and that managed care organizations and peers were impressed with HMC's ability to obtain ACE for both the orthopedic and cardiac product lines. Similar to BHS, HMC's involvement in ACE was said to be a topic of interest at conferences, with one respondent stating: "It's out there [our involvement in ACE] and that's great and it can only enhance us."

One OHH respondent stated that ACE "…hasn't affected the hospital's reputation much because we had a great reputation prior [to ACE]. Our patients are very happy with the services they are provided overall." Another respondent acknowledged the effect of ACE on the hospital's reputation at the regional and national level as peers recognize ACE as "something they need to learn about." OHH staff have also been asked to speak at conferences and meetings about their experiences an ACE participant.

At LHS there were differing opinions on whether the demonstration influenced the reputation of the hospital. One respondent noted that as a result of the news articles and television coverage,

people in the community are aware that LHS is an ACE site. “People are impressed that we were chosen amongst all others.” “The business community is impressed because we compete against other organizations and we have something they don’t.” On the other hand, another respondent stated that ACE has not changed the reputation of the hospital, but that “it’s the surgeons bringing their business here.” “The surgeons are the ones that are well established … so the referral patterns for the doctors are very established.”

ESJH interviewees felt that the ACE patient volume was too low to cause any change in reputation.

2.2 ACE Patient Volume

Overall, although increases were expected, the hospitals experienced little or no increase in patient volume while participating in ACE. Although one hospital (HMC) did indicate a “slight” increase in volume, it was hesitant to attribute that increase to ACE. In addition, two of the ACE hospitals are located in areas with large Medicare Advantage participation; resulting in a smaller pool of potential ACE patients.

A common theme that developed during discussions about patient volume was the lack of CMS involvement in marketing ACE. The perceived lack of CMS advertising support for ACE was seen as a significant, though correctable, limitation of the demonstration, which has negatively impacted the anticipated increase in patient volume and patient awareness. As one respondent stated: “As part of the ACE program, CMS was supposed to actively advertise us.... The intention of the program was to drive volume to value-based centers. You do that by enlightening [beneficiaries], and they were not enlightened.” Respondents also discussed the complexities of educating patients about ACE. Despite marketing efforts and physician-led seminars, one site found that very few patients who attended the seminars were able to recall information about ACE. A respondent from another site, with a similar feeling about the complexity of educating patients about ACE, said: “It is in CMS’ best interest for them to educate patients better, and this is much more difficult than one might know.”

At BHS, the consensus was that there were only slight increases in patient volume. One person stated, “volume–we’ve seen some increases but not as large as we had hoped to see.” Since the inception of ACE, BHS has served 2,100 ACE patients, but as one interviewee stated, “I thought we would see an increase in volume, and I don’t know why that did not happen.” The respondent then theorized that the lack of volume was “because the program is very difficult to explain to consumers,”, and noted that patients often misunderstand the goals of the demonstration: “Patients ask if we are selling them something cheaper.” However, based on the information from the beneficiary focus groups, this issue may be irrelevant because beneficiaries generally follow their physician’s recommendation for place of surgery. Other respondents noted that the lack of increase in volume on the cardiac side may be related to the emergent nature of cardiac conditions. As one respondent stated: “We tried several ways [to increase volume], a little on the ortho side—you have more time, not an emergency like cardiac—no one sits and plans a heart attack.” The respondent went on to say, “If the patient’s not aware [of ACE], they’re not making that choice.”

HMC respondents reported that prior to the implementation of the demonstration the hospital anticipated an increase in volume. While there have been increases in both the orthopedic and cardiac product lines at HMC, the respondents believed the increases were not directly attributed to ACE. However, one respondent stated: "We would be more likely to say [the increase in] orthopedic surgeries has been tied to ACE, but not [the increase in] cardiac". One interviewee noted an increase in orthopedic patient volume, but attributed this to the work of the surgeons and not to "people coming in and asking about [ACE]." Another respondent noted that the volume of cardiac patients had increased 10 to 15 percent over the past 3 to 4 years.

A key HMC player who was less optimistic about the potential for increased volume prior to the start of the demonstration stated: "I didn't have a big illusion that we would get a tremendous increase in volume because of this, and it's played out that way." Opinions on the impact of ACE marketing on patient volume were divided; some respondents felt patients were aware of the demonstration prior to coming to OHH, while others thought they were not. Because the start of ACE was delayed, OHH's marketing campaign occurred significantly earlier than the start of the demonstration, which may have impacted its effectiveness. Marketing efforts included limited television advertisements and radio advertisements that ran on 50 rural and urban radio stations. Because OHH maintains a limited advertising budget, existing radio spots were updated to include ACE-specific information.

LHS respondents indicated that the available market for ACE patients is limited by the large percentage of Medicare recipients who belong to Medicare Advantage plans and are therefore ineligible for ACE. From November 2010 to March 2011, the LHS orthopedics program completed 484 cases of an anticipated 878 cases for the year (only a fraction of these cases are ACE eligible; others involve Medicare Advantage and other health insurance programs). The market in the area was described by one respondent as "bipolar," with potential patients either going either to LHS or to nearby Presbyterian Hospital, which competes for the small market of Medicare fee-for-service beneficiaries. "There are not a lot of splitters [surgeons that operate in both health systems]."

Prior to the start of ACE, ESJH anticipated an increase in Medicare volume; however, according to one respondent, "we found that not to be the case." ESJH's vision was to "drive a lot of referrals from outside physicians from outside our hospital because we were participating in ACE, and in reality that has not happened." Twenty-two ESJH patients have undergone an ACE-qualifying DRG to date, which is lower than the 40 projected based on the 2010 volume of patients with qualifying DRGs. An ESJH respondent noted possible reasons for the low volume of ACE patients: "Almost every DRG that CMS has assigned us is an outpatient DRG [thus not eligible for ACE] in our hospital." Also noted was the high penetration (98–99%) of managed care patients in the area, which further reduces the available pool of ACE patients. One respondent also attributed the low volume to the lack of ACE advertising by CMS.

2.3 Stakeholder Education and Marketing

The ACE sites used a variety of methods to educate physicians, non-physician staff, and potential patients about the ACE Demonstration. Across the sites, patient seminars, brochures, newspaper and magazine ads, and, at some sites, television ads were used to inform patients

about ACE. Additionally, staff meetings and trainings were held to educate physicians and staff about the demonstration. In general the hospitals found educating patients and staff to be difficult due to the complexity of the program.

One of the major challenges identified at BHS was communicating to stakeholders—hospital staff, patients, and physicians—the various components and goals of ACE. As one respondent stated: "Initially, the obstacles were people not understanding." The difficulty in disseminating information to staff and physicians was compounded by the fact that BHS is a five-hospital system. A BHS administrator noted that getting everyone on board with ACE was a major challenge and that there were "at first, a lot of ruffled feathers." To address this issue, BHS identified a representative from each of the five hospitals to facilitate dissemination of ACE information at that hospital. Administrators also met one-on-one with physicians to discuss ACE and the related protocols. While some of the physicians chose not to participate in ACE and left the hospital as a result, those who remained have now taken ownership of ACE.

HMC also found that educating physicians and staff about ACE was a major implementation challenge; one respondent noted that "it takes a while to get everyone up to speed" and that it requires a "real educational package to get everyone aware of [ACE]." Another respondent stated that a large amount of work was needed "to get everyone on center page of why we are doing what we are doing." An example provided was switching away from a stent that was considered standard operating procedure. Managing this process change was described as "almost a cultural change that had to take place." A respondent noted that only two of its patients stated they had come to the hospital because of the Medicare Shared Savings check.

Respondents at OHH shared the same perspective. As one respondent stated: "It's awfully hard for a hospital to market this. People don't understand the concept of ACE. I suspect most beneficiaries didn't know what the check was for." Due to a limited marketing budget, OHH was further hindered in its efforts to educate patients; one respondent stated: "We did not increase our marketing budget for ACE. We used our allocated funds and spots, but just switched the materials to mention ACE." The effectiveness of OHH's marketing campaign may have been negatively affected because the campaign began months in advance of the actual start of ACE.

Some LHS respondents noted improvement in patient education. Prior to the start of ACE, LHS conducted "symptom-based" seminars for all prospective patients, but, as one respondent stated, "once ACE came in, they have more specific seminars."

ESJH launched a vigorous marketing campaign geared at potential ACE patients. Marketing efforts included newspaper and magazine ads. The educational and marketing efforts were less effective than anticipated, with one respondent stating, "I can honestly say we've gotten one patient that wouldn't have come here anyway from all of that hundreds of thousands of dollars in marketing." ESJH provided intensive ACE education for physicians, conducting marketing and education efforts designed to drive referrals to the hospital. Physician education included newsletters, ESJH-hosted physician receptions, ACE brochures, and informational visits by ESJH staff to physician offices in the region. Respondents had various opinions on the level of ACE education that has occurred for non-physician staff. One respondent mentioned that nurses

received education about ACE; however, other interviewees thought that nurses had little knowledge of ACE and could not recall any education or training sessions for ACE.

2.4 ACE Billing Procedures

Respondents at most sites noted the challenges faced in processing ACE Medicare claims, especially for secondary and tertiary payers. Some sites were forced to develop manual processes that required several work hours each month to complete, to ensure that claims were processed properly. Two of the sites have engaged a third-party biller to process their ACE Medicare claims.

Reflecting on ACE, a BHS administrator stated that there were challenges in setting up systems to properly process ACE claims, but that it was a valuable learning experience. ACE facilitated the process of improving their claims processing system so that it could handle bundled payments. He further stated: "Our perception of ourselves is that we are at the top of the nation, ready for bundled payment, and that is exciting because we can handle it." In the absence of an automated system to process ACE claims, BHS developed a manual process to ensure that the hospitals are paid appropriately from all sources. One respondent stated: "We manually track every single one of them. It's difficult every time Medicare does a rate change, and it's hard to make sure that gets down to the bundled payment and gets through on the right date." BHS hired an ACE billing specialist to ensure that the ACE claims were processed accurately and in a timely way. As one respondent stated: "I feel that she's probably overwhelmed, but she doing a good job."

HMC staff identified issues with DRG 247 (percutaneous cardiovascular procedure with drug-eluting stent without MCC) as a major implementation challenge. Because DRG 247 is now designated as an outpatient procedure by Trailblazers, it is not included in the ACE demonstration. Staff characterized the change in designation from inpatient to outpatient as a "disincentive" to ACE participating hospitals. Respondents relayed stories of complaints by patients who had similar stent procedures, with one being designated as an ACE patient while the other was not, resulting in large co-pays for the non-ACE patient. It was also stated that the hospital must then "go through huge amount of time to do these appeals which gets overturned."The DRG 247 issue was described as the "800-pound gorilla in the room that people can't ignore much longer." HMC, unlike the other sites, cited no other billing-related issues, which may be due to the use of a third-party biller for ACE-related claims.

OHH also experienced issues related to processing claims for ACE patients. One respondent indicated that "we were not really prepared for the way we process the payments and adjustments once they come in." OHH also hired an additional business office employee and has expended much time developing and implementing manual processes for ACE payments and adjustments related to Medicare Part B. A respondent stated that 30 to 35 additional person-hours per month were required to complete the newly developed ACE manual processes. TrailBlazer's denial of DRG 247 claims was also identified as an ongoing challenge to implementation. Although an OHH respondent asserted that "the disgruntlement here [about DRG 247] has to do with TrailBlazer and not ACE," because of the large volume of stent procedures completed at this site the issue has had a negative impact on the perception of ACE.

Similar to the other sites, LHS experienced billing issues when processing Part B charges, crossover claims, and coinsurance payments. To address this issue, LHS billing staff mailed letters and/or made phone calls to "educate every claims processor at the secondary arena." Adjustments were also made to internal billing processes.

ESJH uses a third-party administrator who processes the ACE patient claims and provides them to TrailBlazer. One respondent noted that the provider payments for the most part have been going smoothly."

3. ACE Demonstration Incentives

Medicare shared-saving incentives for patients, and gainsharing for physicians are unique features of the ACE Demonstration. Respondents were asked to describe the incentives offered to hospital staff and patients and to discuss any challenges encountered in implementing them.

3.1 Patient Incentives

The exact amount of the Medicare Shared Savings varies by procedure and may not exceed the annual Part B premium, currently $1,157. As a result of multiple procedures, some patients have reached their maximum allowable Medicare Shared Savings benefit. Sites also have the option of providing non-monetary incentives (i.e., tickets to events, beds for family members to stay overnight) to ACE patients.

When asked how the monetary incentive program was received by ACE patients at BHS, one respondent noted: "It's a nice surprise to patients as they have no awareness of the program." One respondent was unaware that ACE hospitals could provide non-monetary incentives to patients, stating: "We were told we could not offer other incentives [because it] looks like we are buying referrals."

However, some ACE patients do participate in hospital-sponsored programs that are available to all patients (e.g., joint clubs, seminars, and workshops). For example, ACE patients at HMC and LHS are able to participate in the hospital's Silver Elite program, which provides an opportunity for patients 60 years of age and older to socialize with other patients, attend free health seminars, and receive in-hospital benefits. BHS has a Joint Club that can be used by ACE patients. LMC has a similar program called the Joint Camp. Although the Joint Camp, which provides patient education, was active prior to ACE, several respondents commented that ACE was an impetus to improve it, which some felt has had a positive result on patient outcomes. Both the Joint Camp and the Joint Club are programs for orthopedic patients. None of the sites had programs specifically for ACE patients, however.

3.2 Physician Gainsharing

Gainsharing distribution differs by hospital. At three of the hospitals, physicians receive gainsharing directly (i.e., they receive a check from the hospital). However, at OHH ACE physicians, who are employees of the hospital, do not receive gainsharing directly; instead the

gainsharing is placed into a general hospital fund to purchase supplies needed to improve patient care. HMC has a hybrid process where the ACE orthopedic physicians, who are not hospital employees, receive gainsharing directly and the hospital-employed cardiac physicians receive it indirectly. There were several complaints about the inability of interventionalist cardiologists, who perform large numbers of DRG 247 procedures (drug-eluting stent procedures) to participate in gainsharing due to the outpatient designation.

Physicians who do not meet established quality performance targets are not eligible for gainsharing. Each of the sites employs a physician report card (report cards are also used at the hospitals to monitor other quality initiatives) to monitor individual performance on quality measures to determine gainsharing distribution amounts.

BHS uses an elaborate gainsharing methodology to determine how physician gainsharing is distributed. For each hospital, a monthly aggregate is calculated for quality measures and for each ACE DRG. Each physician receives a scorecard that provides data on both quality and cost by patient. The physician's scorecard is compared to the aggregate scores for that hospital. Physicians whose scores fall below the quality and cost aggregates do not receive gainsharing that month. According to one administrative respondent: "When we started the program, everyone said it wouldn't work. Even physicians on the board were skeptical. In the first month, six doctors got a gainshare. The next month, a dozen got a gainshare, and this got everyone's attention. The third month, doctors asked, 'Why didn't I get a gainshare check?'" This gave administrators the opportunity to review scorecards with physicians to ensure that changes were made to meet the cost and quality levels needed to obtain gainsharing. An administrator at BHS noted that gainsharing has "moved everyone to the standard because if those physicians are not following protocol, they probably won't get gainsharing, because protocol was designed to improve quality."

At OHH, the cardiac surgeons do not receive gainsharing directly; instead, all gainsharing is placed into a general fund to be used to improve patient care. A common complaint at the site was the inability of interventionalist cardiologists, who perform large numbers of DRG 247 procedures, to benefit from gainsharing due to the outpatient designation. As one respondent stated: "If the demo had included outpatient in cardiac, it would have probably been a game changer."

At HMC, gainsharing was seen as a useful tool in aligning the hospital and physicians. One respondent stated: "This is a motivation for doctors and aligns their incentives to receive a portion of what is saved, and this is why it works." As mentioned above, cardiac physicians are hospital employees and any gainsharing earned goes directly to the hospital. Orthopedic physicians at HMC, who are not employees, receive gainsharing directly. To qualify for gainsharing, physicians at HMC must achieve a rating of 90% or greater on the Surgical Care Improvement Project (SCIP) measures. According to one respondent, both the cardiac and orthopedic physicians at HMC receive 25% of the amount that is normally paid to the physician for such cases. There were differing opinions at HMC about the effectiveness of gainsharing in encouraging physician compliance with quality and clinical protocols. One respondent theorized that the amount of gainsharing earned by many of the orthopedic surgeons is "nothing really substantial" and that the quality has gotten better not because of the gainsharing but because "

[Being scrutinized due to ACE] makes you more conscientious." In contrast, one respondent viewed gainsharing as a motivation for the orthopedic and cardiac physicians, stating: "Without that it would be the same result if they didn't have an opportunity to benefit."

LHS physicians will receive 25% of the Medicare fee schedule; however, no gainsharing has been distributed to date. According to some of the respondents, this is a result of the low volume of ACE procedures completed. To qualify for gainsharing physicians must meet the quality and cost savings criteria established by the hospitals. When asked if gainsharing was an incentive to physicians to participate in ACE, more than one respondent noted that it varied by physician. One respondent stated: "I think the gainsharing does appeal if there is gainsharing to be had. But based on what I've seen for dollars it's not that much per doctor." More than one respondent indicated that one physician had opted out of ACE and stated that "he found it to be highly unethical [to receive money from the government] and chose not to receive gainsharing."

At ESJH, the Director of Finance is responsible for calculating and distributing gainsharing, which, unlike the other sites, is calculated on an aggregate patient basis rather than an individual patient basis. Gainsharing is based on "overall averages with the total number of patients in the quarter," including non-ACE Medicare patients, and is not distributed if physicians fail to meet the established quality measures. The four ACE cardiovascular surgeons receive up to 25% of the Medicare fee schedule, with three of the four surgeons having received gainsharing for the first quarter of 2011. There were differing opinions regarding the gainsharing policies in place, with one respondent stating that the contracts did not define how gainsharing should be distributed. The first quarter's gainsharing was split evenly between the first three physicians hired, not by patient or physician and it appears it was paid for all cardiovascular vascular patients regardless of ACE status. Discussions to further define gainsharing distribution policies are ongoing.

4. Physician Involvement and Compliance

The ability to align hospital administrators and physicians to reduce costs was identified as a key driver for the implementation and the success of ACE at each site. To understand the role of ACE participating physicians, respondents were asked to discuss how new ACE-related protocols are introduced to physicians and how physician compliance is monitored when the protocols are implemented. As discussed previously, at most of the hospitals a physician report card is used to monitor compliance with established ACE and non-ACE clinical protocols, and cost savings and quality measures and to determine gainsharing. The specific compliance measures reported vary by hospital. In addition to the report cards, the hospitals have incorporated additional quality review meetings where results are discussed.

While BHS staff recognize the ACE Demonstration as a collaborative process that involves more than physicians, the willingness of the physicians to work more closely with administrators, to share information on devices, to attend vendor negotiation meetings to drive down costs, and to adhere to ACE-related protocols were described by one respondent as the "biggest win." This joint effort resulted in $4 million of savings in equipment purchases over a 2-year period. BHS physicians monitor themselves using peer-pressure and competition to ensure that they are all meeting the quality and cost measures. As one respondent stated: "Doctors are competitive, they

want to know how they are doing." Hospital administrators were not surprised that a small number of BHS physicians chose not to participate in ACE. One respondent stated: "I think there are a lot of them who understand. You never get 100 percent on board." Another administrator discussed the perceived differences in the adoption of ACE by product line, stating: "On the ortho side, the doctors are very engaged; they literally, over about 6 months, tore apart every piece of what they do with joints in terms of what they do— pre-op, inter-op, every little piece post-op. They dissected every part of this, looked for evidence for [best] practice, put it back together in a good way."

While HMC does not use physician report cards to monitor performance for ACE, there is a system in place to monitor physician compliance with the ACE Demonstration and other quality and cost savings measures. Administrators at HMC regularly review quality and cost data to identify outliers, and they discuss this information with orthopedic physicians. Because the majority of orthopedic surgeries are performed by a single physician, monitoring quality and cost measures is less complicated than for the cardiac product line.

OHH physicians were informed of the ACE Demonstration early in the process, prior to the decision to participate. When respondents were asked to discuss the level of buy-in from physicians, we learned that "they were all onboard with it" and that "they said it sounds like a good deal, and we need to be on the front end." As mentioned previously, physicians at OHH are hospital employees. They do not receive direct gainsharing. Instead, gainsharing monies go into a general hospital fund used to improve patient care. It was noted by an OHH respondent that the hospital staff are "pretty good about being cost-conscious" and are diligent in ensuring contract negotiations for implants result in the best possible rate. Similar to BHS, OHH uses a physician report card system (see Appendix Volume III) to monitor adherence to cost and quality measures. Physicians regularly receive feedback on patient satisfaction and quality measures on their report cards in individual and group meetings. OHH also has a compliance subcommittee specifically for the physicians' group, and one respondent noted, "that's a really good place where we share a lot of information."

Similar to the other sites, physicians at the three LHS sites are kept abreast of their progress in meeting quality and cost goals through one-on-one and group meetings and the sharing of quality data. According to one respondent, "they have to show their cost per case measure against the total construct [for the whole system]." At the smaller LHS hospital, monitoring physician compliance was "very easy for us because we only have three physicians," which allows the quality director to identify and discuss red flags with the physicians on a regular basis. Physicians at this hospital are now more willing to share and compare their performance information with their peers.

ESJH is a preferred Kaiser Permanente hospital, and a large number of its physicians are Kaiser Permanente physicians who do not participate in ACE. The ACE participating physicians are four non-Kaiser cardiac surgeons and cardiologists who are hospital employees. Similar to the other sites, ESJH uses a report card, which was designed with physician input, to monitor progress on quality measures for the ACE Demonstration and other measures. There was no clear consensus on whether all four physicians have an opportunity to review the report card. Some participants were adamant that physicians were able to view the report card if they

participated, because they are a part of the system and have gainsharing opportunities. Conversely, some of the four participants indicated that only the physician medical directors see the report card and, if there are problems, the medical directors will then meet with specific physicians. The report card measures are reviewed by quality staff annually to identify measures that have been met and new measures to be added to the card. In addition, the quality department conducts chart reviews to identify patient care outliers, which are then discussed by the ACE team, which includes physicians. ESJH also maintains several other report cards that track areas including CMS measures and department/service line-specific measures. When asked if there is an established quality measure threshold, respondents stated that the threshold is typically in the 90th percentile or aligns with publicly reported benchmarks for the same measure.

ESJH created an ACE-specific Steering Committee to address emerging and changing issues due to ACE. Originally it was called the Physician Steering Committee; however, it has expanded to include individuals from various areas within the hospital. Members of the committee are the ACE project manager, the patient navigator, marketing staff, a quality team member, two cardiovascular physician medical directors, a cardiologist, the chief nursing officer, the chief medical officer, and a community member. The committee meets once a week, and they discuss different topics at each session, such as marketing strategies, cost savings, the number of patients, cost quality data, and gainsharing data. The committee also reviews the ACE report card, which leads to a discussion of problem areas and potential solutions.

5. ACE Demonstration Outcomes

Respondents were asked to discuss how the ACE Demonstration has affected areas of patient care such as length of stay, coordination of care, and overall quality of care. While there was no clear consensus across the sites that the demonstration has affected length of stay, most of the hospitals saw ACE as an impetus to improve upon existing coordination of care and quality of care efforts.

5.1 Length of Stay

This topic was discussed at length at only two of the five sites. At most sites, administrators echoed the strong opinions of physicians and staff that ACE did not result in changes to length of stay. At BHS ACE was indirectly credited with decreasing length of stay as a result of increased coordination of care and the implementation of the Joint Club. AT HMC, there were contrasting opinions on the effect of ACE on length of stay at this facility.

Overall, the length of stay for orthopedic procedures at BHS was reduced by 1 day, from 5 or 7 days. This decrease was credited to the increased level of care coordination. Many respondents also attributed it to the efforts of the ACE patient navigators who work with ACE patients to ensure they are identified as ACE patients and provide one-on-one interaction throughout their stay. When discussing care coordination efforts, one respondent said, “They know just because of the physical presence there are more people involved in their care and coordinating it.” Hospital administrators and staff anecdotally credited the Joint Club with decreased patient recovery time, with the average hospital stay for Joint Club participants being reduced to 3.5 days.

There was no consensus at HMC whether ACE had resulted in changes in length of stay. At least one respondent indicated there was a decrease in length of stay for surgical patients. However, a larger number of respondents stated that there had been no change in this area.

5.2 Coordination of Care

Coordination of care for ACE patients is an essential component of the ACE Demonstration. The hospitals have employed various methods that have resulted in improved coordination of care, including standardizing aspects of patient care and hiring ACE case managers or patient navigators to better manage the patient (ACE and non-ACE) continuum of care. At each of the sites, case managers or patient navigators were used to identify and/or counsel ACE beneficiaries. The opportunity to improve the quality of patient care was noted at the sites as one of the key reasons for participating in ACE. Each site employs quality review processes, many of which were in place prior to ACE, to regularly review ACE and non-ACE quality measures. The review processes include a feedback loop to physicians and other key staff.

Respondents at BHS stated that ACE had a positive effect on coordinating patient care, with one respondent stating, "[ACE] has helped us with length of stay, helped with collaboration between admissions and preadmission testing prior to surgery, day of surgery, and knowing what the orders and expectations for patients, helps move them along. [Everyone] must work together to make the process as streamlined as possible." A dominant theme from the BHS orthopedic physicians was the implementation of standardized order sets utilized across surgeons and by nursing staff. The order sets were repeatedly referred to as "evidence-based" protocols and were perceived to have increased the quality and coordination of patient care by standardizing patient care. In addition, BHS has patient navigators, who are responsible for coordination of care and who guide patients through the entire episode of care, from admittance to discharge.

There was a consensus at OHH that there were no changes at OHH in the areas of quality of care or care coordination. As all agreed, "We have pretty good coordination of care ... everyone knows what's going on with the patients." Specifically, one OHH respondent noted that there had not been any change in this area and said that "we [the hospital] had all kinds of protocols and pathways [in place] and ACE didn't really change that." OHH also employs case managers who are responsible for coordinating patient care.

At LHS, prior to ACE, there was variation in the processes that contribute to coordination of care. Not all of the three hospitals in the LHS system employed case managers. "It was inconsistent at each of the sites," with the patient being discharged to "pretty much wherever the physician decided to send them or to the patient's preference." Post-ACE processes at one or more sites have changed to "get patients ready to go home." This change includes involving post-acute care providers such as home health agencies in the patient discharge process.

Improved coordination of care—though it could not be directly correlated with the implementation of ACE—was noted at HMC. This improvement was attributed to a reduced use of consultants for orthopedic patients, the focus on the ACE Demonstration, and a heightened attention to patient quality. Hillcrest also employees a case manager who, in addition to providing case management services to non-ACE cardiac patients, identifies and counsels ACE-eligible cardiac patients within the first 24 hours of inpatient care.

To further the goals of the demonstration, ESJH hired a full-time ACE patient navigator to identify ACE patients and to interact with the patients during and after their hospital stay.

5.3 Quality of Care

The opportunity to improve the quality of patient care was noted by all sites as a key reason for their participation in the ACE Demonstration. Each site employs a comprehensive array of quality review processes, many of which were in place prior to ACE. Each site has quality matrixes for both ACE and non-ACE measures. These are reviewed on a monthly, quarterly, and the annual basis. All the sites participate with Medicare and comply with all CMS quality core measures as well as other regulatory agency standards. Each facility added additional quality measures related directly to the ACE Demonstration. The physicians and their Physician Hospital Organizations (PHO's) maintain their own quality matrixes and provide feedback to their individual physicians on a routine basis. These quality matrixes are usually based on established quality measures. They review best practices for any outliers and provide education, one-on-one discussions with the designated physician by bringing this data to their attention and encourage opportunities to improve care.

The five sites acknowledge they are still implementing their protocols, reporting mechanisms specific to the ACE Demonstration quality measures. The quality of care review processes include establishing best practices, developing new protocols for the specific ACE DRGs, identify outliers, and then provide appropriate feedback to ensure that physicians and other key staff are aware of the Demonstrations progress or the need for improvement to established protocols and quality measures.

Overall the five hospital systems have recognized that the ACE Demonstration would not be successful without a comprehensive quality program and development of high quality standards and outcome results.

At BHS, ACE was seen as an impetus to further refine strategies and protocols to improve quality of care. One administrator noted that finding consensus on the quality areas to be measured was a "big challenge" to ACE implementation, stating: "Doctors had different ideas on what we should measure and how do we measure it." Physicians, in conjunction with the PACE board, developed their own guidelines, with quality and cost measures for each DRG. As a result of the demonstration, the review of quality measures was increased from quarterly to monthly, to allow administrators an "opportunity to reward performance on a more frequent basis" and to provide an "opportunity for change and success to get others on board." BHS also strived to ensure that "we had measures in place to prevent the cheapening of health care. We didn't want to sacrifice quality for cost."

An HMC respondent noted that the hospital has invested additional manpower to monitor progress on quality measures, which are reviewed on a monthly basis. According to one respondent, HMC has "aggregated the best quality core measure [scores] in the market for their competitors." The majority of orthopedic procedures at HMC are performed by a single physician who also sits on the quality and finance committees. As a result, this physician is

acutely aware of the quality measures for the orthopedic service line and works closely with administrators to track progress on these measures. Standardized physician's order sets for orthopedic procedures were implemented at HMC as a result of ACE and have been credited with "helping with quality [as] everyone follows them." One respondent noted that there was a slight reduction in length of stay for orthopedic patients and that "the quality outcomes in that arena are very strong." It was also noted that "quality was already high among the cardiology group." Additionally, quality data for the cardiac service line was described as "outstanding." While not ACE-specific, HMC now employs three clinical staff who make post-discharge phone calls to patients that experienced heart failure, to reduce readmissions and improve overall quality. No changes have been noted in readmission rates since implementing ACE.

OHH has a fully electronic medical record system and has had an active quality review process since 2002. OHH respondents noted that they were scoring in the top 1% of hospitals in quality and patient satisfaction. Therefore, OHH has made very few adjustments to strategies and protocols designed to improve quality since the implementation of ACE. OHH credits this high standing to the quality commitment of its nurses and physicians. As one respondent stated: "The patients' experience has to do with the people that take care of them." OHH provides continuing education to improve quality with goals of "hitting 100 percent on anything we report on, like core measures, or Press Ganey [patient satisfaction surveys]" and "being the best in the nation."

One LHS respondent described the clinical quality program at the hospitals as "a fairly robust clinical quality program that sets a level of core protocols across all the levels of the protocols." As a result of ACE, LHS has implemented quality and financial committees to review protocols and performance. Data are reviewed on a monthly and/or quarterly basis, and the committees "also conduct monthly phone calls with the relevant staff to go over interim metrics and to address any problems." It was also stated that "quality improvement efforts are part of our SCIP [Surgical Care Improvement Project], which is a national quality partnership of organizations focused on improving surgical care by significantly reducing surgical complications. We look at those patients with the core measures coming from the government. We also look at them in our infection control committees and reviews."

Quality metrics are shared with the individual physicians by the Ardent (LHS) corporate staff in Nashville, who share overall performance data, but "also there was a spring meeting where individual information was shared with all the orthopods." One respondent noted that "one of the nice things of being part of Ardent is we can compare [ourselves] to other sites and learn from them." It was also noted that as the steering committee "begins to share more information and maturing, there will probably be more standardizations, which will be a change from the three different standardized order sets currently at three of the hospitals".

Respondents at ESJH stated that the hospital employs the Kaiser Permanente quality of care model, which provides longitudinal care of patients within a group practice, and that the quality of care has always been high. Kaiser Permanente contracted with the hospital and surgeons to provide care for its patients, and the hospital is considered part of the continuum of care. Kaiser Permanente has always collaborated to have a highly coordinated care model, and, as a result, ESJH and the surgeons have become a part of a very successful model where care coordination is well defined. Prior to ACE, ESJH used report cards to monitor quality measures in various areas

of the hospital (e.g., cardiovascular, pharmacy, critical care, and sepsis). An ACE-specific report card was recently added. Quality metrics, which include CMS, ACE, patient satisfaction, and other measures, are reviewed annually and updated as needed. Due to the low volume of ACE patients, the ACE report card includes all patients aged 65 and older. The established quality benchmark for ACE metrics is 90%, and performance is monitored by the quality team.

5.4 Respondent Satisfaction with ACE

Respondents were also asked to discuss their overall level of satisfaction with the ACE Demonstration and to provide suggestions for improvement. Overall, most physicians and administrators were satisfied with ACE. At each of the sites respondents noted satisfaction with improvements in quality of care, coordination of care, and implementation of new or improved ACE-related clinical protocols and procedures. Also at each of the sites, respondents indicated satisfaction with the improved relationships and increased collaboration between physicians and hospital administrators. This collaboration has resulted in increased communication around patient care and increased involvement in decision making to select and purchase devices and implants. This was especially noted at BHS and OHH where respondents commented several times about their satisfaction with the increased physician and administration collaboration resulting from ACE.

Across the sites, many administrators also noted satisfaction with the savings achieved as a result of ACE. For example, BHS achieved an estimated $4 million in savings as a result of ACE-related changes. An estimated 75 percent of those savings were the result of device cost savings.

While most of the respondents at the sites were satisfied with ACE, some noted areas of the demonstration in need of improvement. Little to no increase in patient volume was one of three areas of dissatisfaction mentioned most frequently across the sites. Most sites began the demonstration with the expectation of increased patient volume, but as one respondent noted "that just did not happen." Across the sites, respondents were also dissatisfied with the lack of CMS advertising and marketing which were seen as a contributing factor to the lack of patient volume. Another common area of respondent dissatisfaction was the complexities of processing ACE Medicare beneficiary claims. At several sites, respondents noted the need to develop billing labor and resource- intensive "work arounds" and manual processes to ensure ACE claims were processed properly. The remaining two sites contradicted with a third party biller and did not identify billing as an area of dissatisfaction.

Respondents at ESJH were generally not satisfied with the demonstration. This was mostly related to the delay in the start of the project at the hospital and the lack of clear leadership, resulting from the turnover in key staff, in implementing the various components of ACE.

Common recommendations for improvement included increased marketing efforts by CMS to target potential ACE patients. LHS mentioned a partnership between CMS and AARP as a way to improve communication to Medicare beneficiaries. As it relates to billing, several of the sites mentioned that CMS should provide additional training to secondary and tertiary payors about ACE and the billing changes resulting from the demonstration.

BHS physicians were satisfied with the demonstration because it introduced a new model of payment that required an increased level of cooperation between the hospital and physicians. This increased cooperation resulted in $4 million in cost savings and provided physicians with the opportunity to become involved in the decision making process for purchasing devices and implants. "To achieve better outcomes, the ACE program has shown and proven that we can get physicians to improve quality." As one BHS respondent put it: "I'm very satisfied [with ACE]. We're very satisfied."

- BHS respondents were less satisfied with marketing efforts by CMS that are needed to ensure Medicare beneficiaries are aware of the demonstration.

The majority of HMC respondents were satisfied with ACE and used the following terms to describe their level of satisfaction:

- "Overall very satisfied"
- "Whole team is streamlined"
- "Patient benefitted"
- "Gone well"
- "Seamless"
- "No inferior care given"

At least one HMC respondent was highly critical of ACE, however, and rated his level of satisfaction with the demonstration as a 1, the lowest possible rating on a scale of 1 to 4. The major complaints registered by this respondent were the lack of CMS advertising, delays in patients receiving the Medicare Shared Savings checks, and the lack of momentum for the demonstration.

LHS respondents were generally satisfied with ACE. One respondent noted that after coming from a culture at another hospital, where physicians were very resistant to federal initiatives and mandates, to LHS, where there was "minimal resistance and a fair amount of embracing [ACE] willingly, I am pleased to see that." Another respondent indicted that "the prep[aration] for the demonstration worked particularly well for us" and "I think it has actually been a very good program from a CMS perspective." While overall the respondents were positive about the program, they noted several issues that affected their level of satisfaction. One issue was the complexity of the program, with one respondent stating," It's a complex program—when you include the clinical providers and explain the process, it seems they don't know the scope of the project." Another issue was related to the role of external participants such as vendors and third-party providers, who are "quite external to the process and kind of left out of the process." It was noted that although they were not included in the discussion and planning process for ACE, the demonstration "changed the dynamic with them dramatically." As noted at the other sites, billing of ACE claims was particularly challenging and required the implementation of additional billing processes to "take the global payment and set up the appropriate accounting constructs to work and pay that out to the physicians."

At ESJH, many higher level administrators have left, been replaced, or roles have been consolidated. Interviewees stated that these changes have contributed to the delay in

implementing the demonstration, the lack of involvement of higher administrators, and the few ACE changes that have been made to date. Some respondents stated that there had been complications as a result of the delayed start of the demonstration. While preparations had begun in early 2010, the demonstration did not start until November of that year, which had a negative effect on the level of excitement and interest in participating. The respondents also stated that the very small volume of ACE patients affected the level of cost savings and improvements that could be achieved. This was somewhat overcome by extending the improvements to non-ACE patients and reaping the benefits for all cardiovascular patients. Last, staff mentioned that the lack of involvement of executives and administrators at ESJH meant that there was not as much focus or interest in how to improve ACE. They would like to see ACE be a higher priority across the hospital.

V. RESULTS: FOCUS GROUPS

1. Beneficiary Focus Groups

IMPAQ and the Hilltop Institute conducted nine Medicare beneficiary focus groups at five sites. Five focus groups were conducted with beneficiaries who underwent a cardiothoracic procedure; the other four were with beneficiaries who recently had an orthopedic procedure. The purpose of the focus groups was to capture the perceptions of Medicare beneficiaries who received ACE procedures at a hospital participating in the ACE Demonstration. The discussions with beneficiaries focused on their knowledge and understanding of the ACE Demonstration, ACE Shared Savings payments and in-kind services received as part of their treatment (pre-surgery, during surgery, and post-surgery), and their satisfaction with the quality of care (as defined by the beneficiaries) they received at the demonstration hospitals.

1.1 General Knowledge/Awareness of the ACE Demonstration

The first question we asked all participants was, "Tell me what you know or have heard about the Acute Care Episode Demonstration?" The following questions in this section centered on asking beneficiaries when they learned about ACE, if ACE was a factor in their choosing that particular hospital, and how involved their physician was in influencing them to have their procedure at that hospital.

1.1.1 Comparison Across Sites

Across all sites, most beneficiaries were unaware of ACE. Because the sites had dedicated marketing managers, we expected more beneficiaries to be aware of ACE. Similarly, at all sites, many participants had received a Medicare Shared Savings check, but they did not associate the check with ACE, nor did they fully understand what ACE is or why they received a check. We also heard several times that participants did not become aware of ACE until they received the IMPAQ letter regarding the focus groups.

A factor for lack of ACE awareness may be that participants mentioned their state of mind was not the best when they entered the hospital. Some said that they may have been told about ACE, but due to pain, medication, and other factors, they simply did not remember.

Orthopedic patients were more likely than cardiac patients to be aware of ACE. This can be attributed to the fact that most orthopedic procedures are planned, while cardiovascular procedures are often emergencies and there is less time to discuss details with participants. In addition, HMC, BHS, and LHS offered seminars to orthopedic patients prior to the procedures.

Both cardiovascular and orthopedic participants at BHS seemed to have the most knowledge of ACE among all the sites. A few mentioned that they learned about ACE during a pre-operative orthopedic seminar or after their procedure and they received a letter and check in the mail. In addition, beneficiaries at BHS mentioned seeing posters and ACE brochures around the hospital.

There is a general lack of awareness of ACE from beneficiaries across all sites. Communication about ACE to the beneficiaries is lacking, thus beneficiaries are not making decisions to have their procedures at these hospitals because of ACE. Increasing awareness of the demonstration to the beneficiary through marketing and communication with staff may increase patient volume and alleviate some concerns staff and site executives have.

Participants are coming to the hospitals because either their physician practices there or was told to go there by a physician. ACE could be increasing volume by physician awareness and support. If physicians have privileges at other hospitals, they may be to encourage patients to have procedures at ACE hospitals.

The findings from each site are described below in more detail.

1.1.2 Baptist Health System

Among the cardiac patients, none of the focus group's four participants were able to identify the ACE Demonstration by name. When prompted, some remembered hearing about ACE and mentioned that they had received letters (but unsure from whom), or had been told by a hospital staff member after their procedures, or had received a check. This finding for cardiac patients was expected due to the emergent nature of the cardiovascular procedures, which did not allow for patients to be identified as ACE patients or for beneficiaries to receive ACE materials prior to their procedures. One patient said, "My wife said they explained it to me, after three strokes I forgot.". Because most cardiovascular patients are admitted as an emergency, and patients are in pain and possibly on medication, they do not always remember being told about ACE prior to their procedure.

Among the orthopedic patients, one group of participants was fairly familiar with ACE. One participant had heard about ACE; she mentioned that she worked in health care for many years and keeps "up on what's going on." Others became aware of ACE during a Joint Club seminar that was held at the hospital prior to their procedures. One participant mentioned that the seminar had "explained the whole thing … [and was] pretty thorough." Others agreed that the seminar was useful and explained their procedure, what to expect, and the purpose of the ACE Demonstration.

Other sources of information that patients mentioned were posters in the hospital hallways and hospital staff. A few mentioned that they learned about ACE after their procedure, but also found it hard to remember or understand because they were medicated.

The second group of orthopedic patients was less familiar with ACE and pointed to the focus group recruitment letter from IMPAQ as their introduction to ACE. Because this group of patients was less familiar with ACE, they had many questions about the demonstration and why they were attending the focus group session.

Participants were asked about the Part B Shared Savings payment they received. The majority, if not all orthopedic participants, were first notified about the payment following their procedure, either by staff or by letter when they received a check. Participants did not always remember this process clearly, but some did mention they thought they received a letter explaining that a check

would be forthcoming. The way in which beneficiaries learned about the Shared Savings payment appears inconsistent.

Although most had received the payment, many were confused about why they received it. Others noted that the amount was small and not a factor in choosing where to have a procedure: "The check was not big enough to bring me back here." Some of the orthopedic participants found the check to be "an unexpected surprise," a "treat," or a "deal." A few participants in a cardiac group suggested that they would rather not receive a check and would prefer if the funds were distributed differently: used to reduce premiums or given to the physicians.

While most participants, both cardiac and orthopedic patients, were not aware of ACE prior to their procedures, those who reported knowing about it said that it was not a motivating factor in their electing to undergo a procedure at BHS. Most patients' decisions to go to BHS were determined by their physician; one participant said that she didn't "think anyone was given any kind of information prior where you could have made that decision." Other factors included proximity to the hospital, being brought to BHS in an emergent situation (most cardiac procedures and some orthopedic procedures), or the hospital's reputation for quality care and good service. Overall, most patients felt that BHS has a solid reputation for quality and care and that is why they had their procedures there. When asked about their physician's involvement in their decision to have their procedure at BHS, almost all participants mentioned that their physician said to come to BHS.

1.1.3 Oklahoma Heart Hospital

Focus group participants were not able to identify ACE by name or discuss ACE in any detail. One participant recalled receiving a letter from IMPAQ regarding the focus groups: "I received a letter wanting to know if I wanted to evaluate them and that's about it." Because participants were unaware of ACE, we asked if they received a Medicare Shared Savings check, in an effort for them to associate the check with ACE. One participant did recall receiving a check; however, she was unsure why she received the check and what the check was for. Another participant indicated that a spouse had handled all of the business affairs during the hospital stay and did not recall receiving a check, but if he did, he was unclear whether it was from the insurance company.

The participants did not recall seeing or hearing any advertisements for ACE at OHH or recall hearing about ACE from hospital staff. One participant mentioned that he may have been told about ACE but could not remember: "I don't have a lot of memory of things from that period of time. From what I do remember, sometimes [it is] not exactly the way it happened. It was a confused time back there…."

Participants agreed that they had their procedure at OHH because of its reputation and because of the physicians. One participant said, "I recommend this place to everybody because the care is just unbelievable." Participants agreed that ACE did not make a difference is selecting OHH for their procedures.

1.1.4 Hillcrest Medical Center

Participants at HMC were not aware of the ACE Demonstration. When asked about ACE, almost all participants commented that they did not have any knowledge of ACE or know what the demonstration was about. A few mentioned that the first time they heard of ACE was when they received a letter from IMPAQ regarding the focus groups.

However, a few remembered that they signed "something" prior to their procedure that might have been about ACE, but this was unclear to them because they said they were either on medication or the information was explained hastily. One participated stated, "I signed the form, it was like a study or something done by Medicare and Medicaid," indicating a lack of clarity about ACE.

A few participants recalled receiving a check in the mail after their procedure. Similar to the beneficiaries at the other sites, they were unsure why they received the check and didn't necessarily associate the check with ACE. One participant recognized ACE because she read about it in a newspaper; however, she didn't recall the details or the name of the newspaper.

When asked about why they chose to have their procedures at HMC, almost all of the participants, both cardiovascular and orthopedic patients, chose to have their procedure at HMC because of a specific physician. Some mentioned that their primary care physician recommended a specific physician or that they heard from friends that a particular physician was the "best." In fact, many stated that they would not have come to HMC if it were not for a particular physician, because they believed that HMC had an unfavorable reputation in recent years. Very few beneficiaries mentioned that they chose HMC because it is close to home and they had been coming there for years.

1.1.5 Lovelace Health System

The participants had some general knowledge of the ACE Demonstration. Initially, most participants agreed that the IMPAQ letter was the first they had heard of the demonstration. However one participant was aware of ACE and mentioned that she was "the first" beneficiary to be enrolled. She explained that she learned about ACE on the day of her procedure and agreed to "sign up for it" after she was informed.

Later in the discussion, one participant asked about whether ACE was related to the "stipend" or check that came in the mail. This comment triggered others to recall the check and "project" they were a part of. As a result, most participants withdrew their initial position and agreed that they were notified of ACE when they underwent their respective inpatient procedures. Additionally, the majority of participants recalled signing an acknowledgment form to participate in ACE during their admittance.

When asked about media coverage or marketing of ACE, most agreed they did not recall seeing any media coverage or marketing materials on ACE. Participants had mixed responses as to whether they knew they would receive a Shared Savings check for their participation in ACE.

Some acknowledged that they were so informed, while others were surprised to receive a check. All the participants received a Shared Savings check.

Beneficiaries said that they chose to have their procedure at LHS because of its location, acceptance of their insurance by the system, and the physicians who work with LHS. They were unaware that LHS was taking part in ACE, and all stated that they would have had their procedure at LHS regardless of ACE.

1.1.6 Exempla St. Joseph Hospital

At ESJH, three cardiac beneficiaries participated in the focus group. Two participants had their procedures in the summer of 2011, and remaining beneficiary had her procedure in December 2010. Two participants stated that they did not recall being told about the ACE Demonstration; one participant mentioned she was "woozy," and another participant was brought to ESJH as an emergent case. Similar to participants at the other sites, participants mentioned that the IMPAQ letter for the focus group was the first time they heard the term ACE. However, one beneficiary was aware of ACE and said she was informed prior to her admittance to the hospital. She was educated about ACE during her consultation at the thoracic surgeon's office. She was told that the hospital "is cost-conscious now and that it would be a change in the method that Medicare billed.…" The other participants were generally unaware of ACE. None of the participants could recall seeing marketing materials or hearing any advertising about ACE.

One participant was aware that she would receive a Shared Savings check. She said that information was "part of the pamphlet that the nurse gave me." Another participant mentioned that he just received a check in the mail, but was unclear why. A third participant mentioned that she was unaware of ACE, but as the discussion continued she started to recall more information. She said, "[I] did hear something but I haven't gotten it. I'm vague on this. But I remember in fact it was $115 or less or somewhere in that vicinity. That's the only thing I remember actually. Oh it was after my procedure."

1.2 Benefits of the Demonstration

We asked beneficiaries to talk about the benefits of the demonstration or benefits they received from the ACE hospitals**.** We asked participants to focus on the in-kind benefits (non-financial) of the demonstration they received rather than the Medicare Shared Savings check.

1.2.1 Comparison Across Sites

Four of the five sites (all but LHS) created a role for a special case manager to care for ACE patients. At BHS and ESJH, these individuals are called patient navigators; at OHH and HMC, they are called ACE case managers. Patients across all the sites were generally unaware of a particular person assigned to help them navigate the system. However, most beneficiaries were aware that a few staff attended to their needs, and there was little criticism about services received while they were hospitalized. Because most of the sites created an ACE case manager role and there is a lack of recognition of this special position with ACE. There may need to be better marketing, and examination of communication practices with beneficiaries to facilitate

better awareness and role of this individual. Particularly, BHS and ESJH's, patient navigators, as this role and title were developed uniquely for ACE as special case managers who walked beneficiaries through the process.

Patients at BHS, especially orthopedic patients, commented on benefits such as the Joint Club and pre-operative seminars; however, these benefits are not ACE-specific. Both HMC and LHS offer in-kind benefits, but beneficiaries were largely unaware of any ACE in-kind benefits. Those beneficiaries who had heard of HealthWise Silver Elite did not fully understand the program. Patients at LHS have an opportunity to attend the Pre-hab program, although this is not ACE-specific. ESJH is the only facility that offers pre-surgery accommodations for an ACE patient; this is handled by the patient navigator.

1.2.2 Baptist Health System

Participants at BHS, particularly orthopedic patients, discussed several benefits they experienced during their stay. Some mentioned the orthopedic pre-operative seminars as a benefit, and stated that the information received was informative and helped them prepare for surgery. Others discussed the Joint Club, which includes a pre-surgery seminar, as a benefit saying that they were "given a book of exercises" and that the Joint Club also informed them of the rehab services post surgery. One of the orthopedic participants highlighted the relevance of the Joint Club, saying that it was "very informative as to what to expect." Although participants were pleased with these benefits, they are not ACE-specific. Other benefits that participants described are listed below; however, again, these are specific to BHS and not ACE:

- Recovery equipment (orthopedic)
- Outstanding care
- Food service
- Personnel introductions to patients
- Recommendations for post-care
- Post-care materials/literature

When asked about the benefits that were most important to them, orthopedic beneficiaries in each of the groups talked about the high quality of care at BHS. They went on to discuss the importance of personnel introductions, where staff greet the patient in their room and discuss what their role will be with that patient. One participant noted "…being introduced to one of the key personnel or key members of the staff in the orthopedic area was very good … because the people who care for us either really care for us or they don't."

The participants in the cardiac focus groups did not recall any ACE or non-ACE in-kind benefits. The only benefit that they could remember was the Medicare Shared Savings check. Cardiac

participants were asked to describe their experience with patient navigators.[8] None of the cardiac participants recognized the term *patient navigator*; however, some did recognize the services provided (with prompting)m such as coming into the room to tell them about "what was going on," "asking if they needed anything while in the hospital," and "calling them to follow-up" after discharge from the hospital. However, it was unclear to the participants if it was the patient navigator or another hospital staff person who performed these tasks.

1.2.3 Oklahoma Heart Hospital

As stated by OHH administrators, ACE participants do not receive incentives, other than the Medicare Shared Savings check, for participating in the demonstration. The focus group participants confirmed this information.

OHH has a dedicated ACE case manager. The participants were asked if they interacted with a case manager. Participants did not recognize one person in particular as a case manager. Respondents mentioned that "someone" helped out with getting materials like a walker, and someone either from the hospital or physician's office called to check up on them after they were discharged. However, it was unclear to the participants if a particular staff member was assigned to them. Overall, participants could not recall if they received any in-kind benefits.

1.2.4 Hillcrest Medical Center

HMC has a dedicated case manager for beneficiaries as part of the ACE program. We asked participants about their interaction with this individual, especially as it pertains to ACE. Overall, participants were not aware of a case manager or anyone special assigned to them because of ACE. One participant seemed surprised that there was such a position, commenting that she "had both knees done, one in 2007 and the other one in 2010 [and] never had a case manager."
A few participants recalled that several nurses interacted with them after their procedure and spoke to them about physical therapy or rehab options, and others followed up with them when they were at home recovering. It was unclear to the participants if this was their case manager or just a nurse. Often, several individuals would follow up with patients; again, it was not clear who the case manager was and that person's role. One participant noted: "I did talk to a lady but I didn't know if she was a case manager." Another did acknowledge briefly working with a case manager prior to her realizing that she could "do everything on her own [and] didn't need her."

Participants were not aware of any in-kind services, and of those who were aware did not associate this service with ACE. Silver Elite is a free program offered at HMC, and was mentioned in the HMC ACE application. This program was available to ACE patients and includes monthly health and wellness classes, social events, express registration, free flu shots, in-hospital newspaper delivery, thicker blankets, one free meal for visiting family members each day, and in-room medication delivery upon discharge. Because of the level of detail described in the ACE application, we expected participants to be aware of this and discuss details of the

[8] Earlier in the demonstration, the service was only offered to cardiac patients. We only learned that it was also offered to orthopedic patients after we arrived on site. As a result, only cardiac patients were asked about patient navigators.

service. Very few participants had heard of the Silver Elite program. One participant stated: "I got a letter telling me I was eligible to join. So I called and joined that Silver Elite thing." She further reported receiving a t-shirt following enrollment, which led others to reveal that they too received not only a shirt but also a pair of shorts before leaving the hospital, perhaps indicating that they were also enrolled in the program. When asked about whether family members received meals or rooms to stay with the patients, all were not aware of this service.

1.2.5 Lovelace Health System

The participants were asked if they were familiar with the LHS Pre-hab program, an education and pre-surgery program for total joint replacement patients (not developed for ACE nor restricted to ACE patients). In general, the participants were not aware of the Pre-hab program or the Joint Camp program. Four of the participants stated that they received therapy at home, although they did have the choice to attend therapy sessions at a rehabilitation center.

When asked about benefits received while at LHS, the participants listed visits from a case worker, efficient check-in and progression from pre-op through the procedure, and attentive staff. Two of the participants, however, stated that they did not have positive experiences while staying at LHS, particularly that they did not receive proper attention from staff. When asked what they valued in a hospital, they all agreed that competent staff is key for peace of mind and comfort.

The participants in the focus group were asked if they met with a case manager during their hospitalization. There was a general consensus among the group that they had some interaction with a case manager "type" of person in a post-operative setting, mostly related to discharge and rehabilitation facilities. There was disagreement on the strength of the hospital's rehabilitation programs. One participant stated that he was unclear about what physical therapy activities he should be doing following his discharge from the hospital, and did not receive assistance until multiple days after the procedure. Another participant, however, stated that "here at this hospital they have a really good therapy team. They were constantly reminding me of what I needed to be doing."

1.2.6 Exempla St. Joseph Hospital

In terms of benefits for ACE patients, the participants mentioned that they had heard of the hospital offering and arranging for post-operative home care and rehab; however, this is offered to all patients, not just those participating in ACE. Two of the three participants remembered receiving a phone call at home after their discharge. Only one of the participants was aware of the term patient navigator and could recall interacting with her. The participant was very impressed that the patient navigator arraigned for her to stay at a nearby facility the night before her procedure because her home was far away. The other participants did not recall meeting with a patient navigator, one stating, "everything happened so fast that they just started on me. I was visited right after by the cardiologist and the surgeon to tell me what to expect. So I was well informed [about the procedure]. I don't remember a navigator."

1.3 Quality of Care and Satisfaction

In the final section of the beneficiary focus group discussions, we asked beneficiaries about the quality of care they received at the hospital in which they had their procedure. We also asked participants to grade their satisfaction with the hospital on a scale of 1 to 4, 4 being very high, and 1 being very low. (This rating is not an overall assessment of the quality of care at each hospital, just the opinions of the beneficiaries.) In this portion of the discussion, we wanted to understand how ACE contributed to their satisfaction with the hospital, if at all, and if participants would have had their procedure at the hospital regardless of ACE.

1.3.1 Comparison Across Sites

Participants were happy with their experience, only suggesting improvement in areas such as food quality and up to date charts, areas that are not associated with ACE. Patients from OHH, BHS, LHS, and ESJH appear to have been the most satisfied with their stay, with the largest number of complaints coming from patients treated at HMC. It appears that beneficiary satisfaction is related to individual hospital procedures and staff rather than being clearly derived from ACE. Most patients were not aware of ACE and therefore would have come to the respective hospitals in any case. In general, BHS patients were more pleased with their stay than patients at the other sites due to perceived benefits at the hospitals such as Joint the Club (orthopedic patients).

Overall, it seems there is more opportunity to explain ACE to orthopedic patients, as they are often scheduled surgeries with time to learn about ACE prior. Cardiac patients tend to be emergent, making it more difficult to explain ACE to these patients, or it is less of a priority. Therefore, the opportunity to make beneficiaries aware of ACE, is even less for cardiac patients.

1.3.2 Baptist Health System

Orthopedic patients took the opportunity to praise the high quality of care they received at BHS, making comments such as “understanding,” “listening,” “attentive,” and “aware of what I was going through”. There also were positive comments regarding the patient community created by the Joint Club. Participants sensed a close relationship between their surgeon and hospital, stating “it was clear that the hospital personnel knew what my surgeon’s expectations were, so that was partly why I felt the care was so good.”

The majority of participants recounted positive experiences at BHS that matched the level of quality care they had described previously. However, a few cardiac patients mentioned negative experiences, such as being left in a hallway, receiving food that was not in accordance with the patient’s diabetic diet, not being observed frequently enough by staff, and not knowing which medications were being administered to them.

Both orthopedic and cardiac patients were asked to rate the quality of care at BHS. The majority of orthopedic patients rated their care with the highest score. Cardiac patients had more mixed reactions to their satisfaction and the ratings varied. The majority rated their satisfaction as 4; however a few rated their satisfaction as 1, and the rest as 2 or 3. When prompted to expand on

why they rated a certain way, some participants mentioned negative experiences such as a delay in discharge because of disorganized staff, and time management problems with staff.

Aspects of their hospitalization that patients found less than satisfactory included the food, communication problems with the nursing staff, difficulty in contacting the physician, and billing problems with supplementary insurance because of the demonstration. One participant suggested that "ACE needs to contact at least the major supplemental insurances to let them know 'yes, we expect you to pay this amount' ... it needs better communication."

1.3.3 Oklahoma Heart Hospital

Participants took this opportunity to discuss the high quality of care they received at OHH. Both stated that the staff seemed to enjoy what they were doing, were very professional and non-obtrusive, and took the time to explain treatment regimens (e.g., tests and vitals) before completing them. One participant said, "It was not only being very professional, it was what they did, but they all seemed to have zest for what they are doing."

When asked about how OHH compares with their description of "quality of care," participants agreed that OHH was excellent. One participant said, "just about all those things [listed above] are what I experienced while I was here." The participants also commented positively about the facility's cleanliness and quality of food served during their stay. Specific comments about quality of care included, "I just found it a very pleasant experience to be in this place," and "Everybody has been nice to me and been good to me and … even tried to help me with my diet."

When asked to rate the quality of care received at OHH, participants gave OHH the highest possible rating. When asked if OHH could do anything differently in the area of patient care, participants agreed "there wasn't anything … they missed the boat on."

1.3.4 Hillcrest Medical Center

When asked how their experience at HMC compared with their definition of "quality of care," the reactions were mixed. Some felt their experience at HMC did not stand up to their description of excellent quality of care, stating that the nurses did not answer the call button and did not dispense their medications at the correct time. Others mentioned that they received "spectacular service," stating "I would ring the bell and they would be right there." A few in the cardiac group said that the care they received from their physician was excellent, but that was not necessarily the case with the nurses and other staff. However, when asked to rate their satisfaction with the quality of care received at HMC, most participants indicated that they were satisfied, with 7 of out 12 giving the quality a rating of 4.

When asked what suggestions they had for improvement, participants mentioned better cleanliness, keeping charts up to date with medication schedules, and more courteous and friendly staff. Although participants had mixed reactions when it came to their satisfaction or dissatisfaction, it appears ACE was not a factor.

1.3.5 Lovelace Health System

When asked to describe excellent quality of care in one or two words, the participants agreed that competence and compassion (also described as "bedside manner" and "staff concern") were important in determining quality of care. For the most part, beneficiaries were in agreement that LHS met their definition of quality of care. Overall, the participants were satisfied with the quality of care at LHS, with one participant somewhat less satisfied and another not particularly satisfied.

When asked for suggestions for improvement, one participant noted that the involvement of Albuquerque Health Partners[9] made a difference in the quality of care at LHS. The participants also noted that their physicians/surgeons did not inform them about the ACE Demonstration and they would have liked to have a conversation with their physician about ACE. Most learned about ACE during their hospitalization

1.3.6 Exempla St. Joseph Hospital

When asked to describe their expectations of "quality of care," the participants mentioned frequent visits from nurses and safety precautions, such as helping patients out of bed or protecting patients from infection. The participants' expectations of quality of care were met at ESJH, with the exception of the one participant.

All three participants rated their satisfaction with ESJH's quality of care as 4 out of 4, the highest possible rating. When asked to comment on areas where improvements could be made, one participant mentioned coordination of care could be improved upon. He explained that his physicians had cleared him to go home, but one last individual needed to clear him before leaving the hospital and this person was either unaware of the patient or unavailable. As a result the participant waited with his family for hours to go home. The other two participants had different experiences, stating they had "pretty comprehensive discharge instructions." Participants also mentioned they received phone calls as part of their follow up and spoke with staff about their rehab options.

2. Physician and Non-Physician Focus Groups

We conducted five physician focus groups, five physician interviews,[10] and nine non-physician focus groups at five sites. The majority of the physician and non-physician focus groups were conducted with staff associated with cardiovascular procedures. The purpose of the focus groups was to capture the perceptions of the providers and staff at ACE hospitals. Discussions with physicians focused on satisfaction with ACE, impressions of ACE-related organizational and procedural changes (if any), experiences with gainsharing (if offered), and any observations regarding effects of the ACE Demonstration on volume and quality of care. The focus groups with non-physician staff captured their "on the ground" experience with the ACE Demonstration,

[9] ABQ Health Partners is the largest multi-specialty independently owned medical group in New Mexico.
[10] At some sites, where it was not possible to schedule a focus group with physicians, interviews were held one-on-one with ACE physicians to gather their perspectives and opinions.

any ACE-specific organizational or procedural changes, and opinions on any changes on procedure volume, quality of care, and coordination of care.

2.1 Background Experience with Demonstration

We asked participants about their involvement with ACE, decision to participate, and how it has affected their scope of work. While physicians were asked about how they had chosen to be involved with ACE, non-physician staff were typically asked first about their knowledge of ACE and how they had learned about it. Once the context had been set up, we asked participants about their expectations of ACE prior to the commencement of the demonstration and their initial reflections on the effects of ACE.

2.1.1 Comparison Across Sites

Physicians at each of the sites had minimal involvement in the application process, but were persuaded by hospital administrators—and some peer pressure—about the benefits that could be realized in the demonstration. Differences in the hospital-physician relationship were reflected in the physicians' comments about their levels of their involvement in ACE. The hospitals were organized differently; at some, physicians were employed by the ACE site. None of the physicians at BHS are employed by the hospital, but cardiovascular physicians at HMC, OHH, and ESJH are hospital employees. Orthopedic physicians at HMC are independent, but those at LHS are employed.

At BHS, in particular, and at other sites to a lesser extent, physician champions of ACE were identified as primary proponents of the program who encouraged involvement by others. HMC physicians had the most negative impressions of ACE and remarked on how little involvement they had in the application as well as how dubious they were about the anticipated outcomes. At ESJH, the cardiovascular surgeons took the most interest in ACE, not only in performing ACE procedures, but also actively participating in implementing cost-reduction strategies.

Non-physician staff across all sites had a basic knowledge of ACE, but only staff at OHH, LHS, and ESJH recalled attending any training or seminar that formally introduced the demonstration. At ESJH, non-physician staff attended presentations by the patient navigator, and at LHS some staff were told about ACE by the chief operating officer of their hospital.

At BHS and ESJH, patient navigators provided insight into their role and how it has been important in identifying ACE patients and providing patient education. The patient navigators at these two sites seem to have had the greatest impact on patient care – based on both their own perceptions and those of their colleagues. However, physicians and non-physician staff at BHS were not as optimistic about the roles of the patient navigators, and some felt the patient navigators had little patient interaction or impact. At LHS, only staff at one hospital were familiar with the work that ACE case managers were doing.

Across sites, most physicians and non-physician staff expected or were told to anticipate an increase in volume associated with ACE. BHS and HMC physicians mentioned an initial expectation that ACE marketing by CMS would drive a large increase in volume. This

expectation was most enthusiastically held by orthopedic physicians at BHS. However, all noted that the expected volume surge did not occur. Though HMC cardiovascular volume grew during the demonstration, the physicians all attributed this growth to the opening of a new cardiovascular institute, not as a result of ACE. At OHH, physicians seemed to have fewer expectations about whether ACE would drive procedure volume. LHS and ESJH physicians have similarly restricted markets for ACE patients and did not expect that volume would change much as a result of ACE, because most patients would not be eligible to participate.

Regarding other changes due to ACE, non-physician staff at each of the sites reported that there had been very few changes, if any, to their activities. Primarily, this was due to their lack of knowledge about whether a patient was in ACE at the time of hospitalization. Non-physician staff with management roles at LHS had greater involvement in tracking ACE progress and implementing initiatives. At ESJH, operating room nurses are involved in refining protocols and tracking equipment use in order to drive down costs.

A common theme across sites was the reflection that ACE served as an impetus to strengthen the relationship between hospitals and physicians due to the need to align for activities such as negotiations with implant vendors. At ESJH, physicians noted that becoming employees of the hospital was an additional motivator to align with the hospital. Non-physician staff at HMC, on the other hand, noted a frustration with hospital administration's lack of organization and instruction regarding coordination of care and responsiveness to an increase in orthopedic and cardiovascular patient volume. At BHS and OHH, non-physician staff brought up concerns about patients' knowledge of ACE and how to assuage their doubts.

2.1.2 Baptist Health System

Physicians: Physicians were not involved in BHS' decision to apply for inclusion in the ACE Demonstration. However, all were encouraged to join due to the opportunity for increased income, the opportunity for patients to receive a Shared Savings payment, and the anticipated increase in patient volume as a result of Medicare recognition and marketing on behalf of the hospital. Within the orthopedic group, physicians were motivated by their peers and champions of ACE to take part in the demonstration. Some of the terms used were "win/win" and "good opportunity." One physician was initially dubious, noting that "I wasn't sure people would [travel] two hours [for a procedure] to get a $100 check back from the government."

Three of the four physicians had privileges at other hospitals, but stated that their choice to perform the large majority of their procedures at BHS was a reflection of the high quality of the health care system. Additionally, orthopedic surgeons noted that two BHS facilities offer Joint Clubs[11] (also known as "Joint Camps") for orthopedic patients, and this program is considered to contribute to good outcomes for total joint replacement patients.

[11] The Joint Club is a non-ACE-related accreditation that two BHS hospitals received. The benefits provided to orthopedic patients include community activities, group therapy, and group meals.

Physicians reflected on their initial expectations for ACE's effect on their scope of activity and mentioned they believed volume would increase significantly (one physician estimated a 20% increase). However, none felt that this had happened. One physician believed that "the hospital never grew volume" in the first year of its inception, but rather fought to maintain its prior volume in light of a temporary departure of some of its physicians. While a few physicians left BHS temporarily at the start of the ACE program, only one permanently chose to cease performing procedures at the hospital due to its decision to participate in ACE.

Orthopedic physicians agreed that, though volume did not "skyrocket" as expected, the quality of care and tracking of quality data did improve. One orthopedic physician believed that the quality at BHS "only got better with the ACE Demonstration," while another believed that "before we had the Joint Camp, it was pretty good, probably average, and then when we got the Joint Camp, it was above average, and then when we came in with the ACE Demonstration everybody kind of came together and started working together, again the quality got better."

In addition, the hospital-physician relationships were strengthened due to the need for the hospital and physicians to align themselves to achieve lower pricing on ACE orthopedic implants.

Non-physician staff: While all of the participants were familiar with ACE and had experience with aspects of the program, there were differences in the opinions of non-physician staff in the orthopedic and cardiovascular groups about the effects of ACE on BHS. The expectations for the program were that it would increase patient volume, increase the number and accountability of physicians, keep costs low, and increase the work in terms of documentation and patient care. There was disagreement over whether patient volume truly increased, but the participants generally agreed that any increase in volume was due to the gradual improvement of the hospital system itself, not necessarily to ACE. The participants also pointed to what they perceived to be a lack of marketing on the part of CMS. One participant felt that:

> "We were already growing the orthopedics part of it and very purposefully, already meeting every week for a year or two before ACE even started, and when they talked about the ACE program, there was a lot of speculation that CMS was going to help us with advertising, with sending out postcards, or billboards, and things like that to help increase the volume. To the best of my knowledge, that never came to fruition. But, we did have some increase in volume here in the hospital. It's hard to say if that was directly because of the ACE program."

Although CMS did advertise on behalf of ACE, the sites seemed to have expected a greater amount of marketing.

The participants described a change in quality metrics, an increase in conformity to best practices, and an increase in administrative transparency. The participants discussed the decrease in costs associated with ACE due to "efficiencies of scale," "getting better deals from vendors," and the fact that "the supplies we're using have been streamlined … as we're able to drive ownership from the physician perspective." One participant stated: "ACE was truly a cost

savings program." The staff felt that the ACE Demonstration did not affect the scope of their work, because they were not aware of which patients were ACE and which were not.

The perceptions of the participating non-physician staff concerning the role of patient navigators revealed discrepancies in knowledge about the position. In one group, there was a general lack of knowledge of the patient navigator role, including who was a patient navigator, how many worked in the hospital system, what their role was, and whether the role of patient navigator was distinct from that of a case manager. One participant called patient navigators "an enigma," stating: "I don't know if anybody knew what their job was, what they did. There may be one for cardio; there are cardiac educators, but we can't speak to what they do." This group was under the impression that it was the responsibility of the admissions department to identify ACE patients, and that of the business office to determine the proper protocols for billing and coding. One participant thought that navigators "may have been able to pick up more patients that would've qualified for the ACE program, but it's hard to say."

The other group was more familiar with patient navigators, but disagreed on the significance of their role. Some stated that patient navigators have "direct contact with them [other non-physician staff] about cultures, infection, and MRSA screening" upon admission, and that patient navigators have even been "adopted in other areas, [for example] in the ER to make sure there's continuity between ER and primary care. We also have a surgical navigator to align with physicians." The pharmacy director stated that her department did not interact directly with patient navigators, mostly because it was an inpatient pharmacy; if the pharmacy provided outpatient services, they would have had more interaction with patient navigators.

The respondents had mixed opinions regarding patients' knowledge of the ACE Demonstration. One group agreed that their patients "are more engaged and asking more questions," that there is a large amount of education on ACE and considerable effort in promoting community awareness of ACE. As one participant noted, "It's on our website, we do a publication that we promote out to the community, and some of our docs have spoken about the demonstration and what that means from a quality and practice perspective around the community. Our press secretary spoke at a press conference about Medicare costs." The other group, however, felt that ACE had not been promoted as much as BHS wanted, and that patients were not aware of the Medicare beneficiary Shared Savings payment. One participant stated: "If I remember right, CMS put the kibosh on us marketing from that angle, at least using the words 'come to Baptist, get $200 back in your pocket.'" Another stated: "I can't think of five times in 2 years that someone even mentioned the money they were getting back from Medicare, and I think the physicians dropped that too, because that's not what the patient cared about."

Patient Navigators: The patient navigators were all involved in case management prior to the inception of ACE, and a few retained their positions as heads of case management in different BHS hospitals. In describing their main responsibilities as patient navigators, the participants outlined a few tasks: identify possible ACE candidates by looking at admission schedules, communicate with and educate patients about the ACE program, collaborate with case management throughout the patients' stay, and follow through with patients concerning their discharge. One participant noted that their main responsibility is to "catch them from the front door." This comment met with general agreement.

The patient navigators noted that, while there was some resistance at the beginning of the ACE Demonstration, most physicians "eventually came onto the bandwagon." In addition, there was general agreement that the effects of ACE were spilling over into other areas at the hospital. One participant noted that "the navigator role has been so successful that other entities like the CHF [congestive heart failure] navigator, which we have now, is actually a spin-off of ACE, because it's very focused, minimizing variance [and] really working with physicians."

It was noted that vascular physicians wanted to include input from patient navigators on their own cases after seeing what the patient navigators had accomplished in other areas. The success of the program was said to be based on the "persistence on the navigators' part in going to doctors and explaining that ACE was based on best practices." Participants said that, in the future, it would benefit ACE if patient navigators could work more with physicians face-to-face, both pre- and post-operatively, to make sure that patients get what they need and to minimize variance. They also suggested streamlining patient discharges to standardized facilities, "improving the discharge process … making sure that they are meeting our goals … [and] having the right amount of resources for that patient navigator to be efficient in that job."

Participants noted the difficulty in explaining the Medicare Shared Savings check to beneficiaries. It was perceived that patients did not believe that CMS would actually give them money. One participant stated that a few patients have claimed that their banks will not cash their check and that others are afraid to cash it because they think that the state will come and reclaim it. Still others were under the impression that they were required to pay their hospital bill with the Shared Savings check. The participants stated that some patients believe that the patient navigators are solicitors working for Medicare and trying to sell them a "scam." The older population that the navigators work with is "very cautious, always asking 'what's the catch?'" The navigators explained that patient education is an important aspect of their roles.

In terms of marketing, the patient navigators explained that at the beginning of the ACE Demonstration, physicians and administrators were proactive in working with business development to publicize the program. However, as time passed, the patient navigators had the impression that the physicians were not telling their patients about ACE, and it was not until the patients met with the navigators that they learned about the program. Respondents commented that while some primary care physicians engaged in their own marketing efforts initially, they have now gone on to other things.

2.1.3 Oklahoma Heart Hospital

Physicians: Not long after the commencement of ACE at OHH, independent physicians practicing at OHH became OHH hospital employees. Two-thirds of the physicians belong to the Oklahoma Cardiovascular Association Physician Group. A core group of 30 to 40 physicians (cardiologists, cardiovascular surgeons, and vascular surgeons) are responsible for the majority of OHH patient admissions. The hospital CEO is a practicing cardiologist who participates in ACE and attended the focus group.

Primarily, the hospital CEO was involved in the application process. When describing the motivation for wanting to join ACE, he said that "…it was just to get an experience to find out how difficult this would be to do. We saw this as a way to get feet wet, to try and determine if there was something different, and get some information, some further information about how we do things and use that as a reason to integrate more between the doctors and the hospital."

Physicians with privileges at other hospitals (non-OHH employees) were asked about whether ACE encouraged them to primarily practice at OHH. Physicians commented that the hospital's characteristics outside of ACE—it "is so efficient and streamlined"—were greater drivers than ACE. In fact, physicians did not expect or recount many organizational or procedural changes after the start of ACE.

Because OHH physicians are employees of the hospital, they talked about having a greater stake in the success of the hospital and hospital-related initiatives such as ACE. Respondents identified integration of services, cost-efficient care, increased integration among physicians and hospitals, and preparation for potential changes in health care delivery (e.g., changes in fee-for-service payment model) as key reasons for participating in ACE. The physicians were informed about ACE in a series of physician meetings, and all of the OHH physicians are participating in ACE.

Non-physician staff: A brief overview of ACE had been provided to staff in team meetings prior to the start of the demonstration. All reported knowing about ACE; however, the extent of their knowledge differed greatly. Some staff knew very little about ACE, while others were more knowledgeable and able to describe, in various levels of detail, the parameters of the demonstration. When asked to describe the ACE Demonstration, participant responses included, "All I know is that a patient has to qualify for it," "They have to sign a form at registration" and "...then they (hospital) can get reimbursed; the patient can get reimbursed up to $1,150 on savings if they qualify." When asked if they had heard the term "value-based hospital," only one participant answered affirmatively. According to one participant, "The nurses don't know a lot about [ACE]."

Some of the non-physician staff expected that ACE would affect the hospital's financial and billing procedures. One commented, "I didn't know exactly how that would work, getting the money and posting to our end of it, and then streamlining it so that the other providers get paid also. It actually turned out to be very simple." However, the overwhelming theme was that there were not many changes or differences for non-physician staff. According to one participant, "from a nursing standpoint, it doesn't change for us at all. We never know when somebody walks into the door whether they are Medicare, Medicaid, private insurance, or otherwise."

The non-physician staff agreed that one difference was the need to explain ACE to patients and present them with an additional form to sign, indicating their acknowledgement of participation.

2.1.4 Hillcrest Medical Center

Physicians: Only cardiovascular physicians chose to participate in a focus group at HMC. None of the physicians were involved in the hospital's decision to apply for inclusion in the ACE Demonstration. However, all mentioned that hospital administrators emphasized benefits such as

streamlining patient care, increasing coordination between hospitals and physicians, and receiving assistance from Medicare to steer patients to HMC for ACE procedures. One physician felt that ACE would be a prelude to the Accountable Care Organization (ACO) and that involvement in ACE was an advantage for HMC because it paved the way for compliance with future policies. Another physician elaborated by saying:

> "Working together with hospitals and physicians is a model that we have to go to … it's not going to work when you have physicians making decisions which are going to bankrupt a hospital, and hospitals making decisions without consulting with physicians in order to best manage patients appropriately. So, that synergy has to happen."

The cardiovascular physicians were all recently employed by HMC just prior to the commencement of the demonstration (one had privileges at another local hospital). Therefore, all participated in ACE. Some physicians wrote letters regarding their agreement to participate in ACE, and these letters were included in HMC's application. When discussing their first impressions of ACE and the information they received during the application phase, the physicians stressed that they expected greater involvement from CMS in terms of marketing HMC and encouraging beneficiaries to go there for ACE procedures. Two considered the patient volume since the inception of the demonstration to be "disappointing."

The physicians were asked to reflect on their initial expectations for how ACE would affect their scope of activity at HMC. Physicians talked about costs and that their relationships with vendors were under more and more scrutiny. The ACE demonstration facilitated the conversation that took place between the hospital, physicians, and vendors that led to a reduction in the vendors' prices. While physicians agreed that there has been an increase in patient volume for cardiac procedures, they said that the change in volume was not due to ACE. According to them, the shift in volume began before the start of the ACE Demonstration and has continued at the same rate. Furthermore, they felt that none of the patients having procedures at HMC decided to go to HMC as a result of ACE.

In terms of other changes to their activities as a result of ACE, the physicians mentioned an increase in administrative responsibilities, such as attending ACE meetings. They viewed this additional responsibility as a negative change because it was a drain on their time and resources that could be devoted to patients.

Non-physician staff: While all of the participants had heard of ACE, they were not confident in their knowledge of the basics. In the orthopedic group, they had all heard of ACE informally through their manager and knew vaguely about the principal aspects, such as the hospital receiving a bundled payment and that physicians and patients can receive additional Shared Savings payments. The non-physician staff did not feel particularly involved in ACE. None of the participants reported that they had attended any HMC trainings on ACE. As a result, they did not feel they knew enough about it to answer any questions from patients.

One participant mentioned that, prior to the start of ACE, she had attended a few meetings and there seemed to be some concern regarding how an increase in ACE patient volume could affect

staffing: "We were concerned. Is there going to be an influx of patients? Are we going to be able to service them, keep up with the demand staffing wise?" While there have been discussions about hiring staff and also talk about an increase in orthopedic volume, the participants said they did not know who was an ACE patient and who was not. Therefore, they could not say whether the volume increase was due to an increase in ACE patients. One participant said, "We have a surgeon that does a lot of orthos here. Is it because he has increased his orthos or is it truly because of the ACE?"

In terms of how ACE has affected their scope of activity, the participants had various perspectives and concerns. In the orthopedic group, nurses talked about the increase in volume and the difficulties in accommodating all patients due to bed and staffing shortages, but did not feel there had been an effect on quality of care. The nurses also discussed the coordination of care between their floors and other staff, such as physical therapy. They stated that much of the coordination that takes place is managed by individual staff and is not directed by the administration. There seemed to be frustration regarding staffing needs, and nurses talked about bearing the brunt of increased patient volume. Neither focus group reported that there was any organized patient education about ACE, and the cardiac participants said they would find someone else to answer questions if a patient asked about ACE.

The ancillary staff for cardiac procedures also felt that ACE had no impact on patient care, but said there was definitely a negative effect on HMC's reputation as the "discount" and "rebate" hospital. Prior to ACE, the participants felt that HMC was referred to as the "indigent hospital." Cardiac lab technicians voiced their initial concerns that the products used in procedures were changing after vendor negotiations. They said they spent time reviewing charts and speaking with the physicians because of their fear that HMC would begin using the cheapest products in patients. Overall, the participants did not report any protocol changes as a result of ACE. Cardiac participants noted that some changes have come about concurrently due to the new Oklahoma Heart Institute and a well-known cardiac surgeon joining the staff.

2.1.5 Lovelace Health System

Physicians: The majority of physicians became involved in ACE because other physicians were involved, whether within the same practice group or in the hospital system. Two physicians in particular were asked by the administration to participate in ACE. Physicians were generally aware that ACE has the potential to increase volume, create savings, and increase efficiency. However, physicians lacked an in-depth knowledge of ACE, and they did not feel that ACE was changing any of their protocols significantly. Most agreed that the quality of care at LHS is already high and that ACE will not likely affect that. However, one physician stated that "it seems like this may be the future of how medicine is paid and how health care is paid through a Medicare system, so it was interesting to be involved early on." Another noted that LHS's reputation has suffered in the past few years, and suggested that participation in the ACE program might have offered some initial energy "to get past that."

After attending two meetings led and organized by hospital administrators, physicians were under the impression that LHS's participation in the ACE Demonstration would not significantly affect their scope of work with the hospital system. Several physicians mentioned that the lack of

ACE volume may be attributed to the type of patients who undergo total joint procedures at LHS. A large number of patients in Albuquerque and the metropolitan area have Medicare Advantage plans and are therefore not eligible for the ACE program.

Non-physician staff: The two focus groups were held with staff of two different LHS hospitals. In the smaller focus group, the participants were primarily managers or directors who oversee direct reports in their divisions. Both focus groups at LHS were very knowledgeable about ACE. The participants stated that the goal was to "increase quality and process workflow and obviously decrease cost." They also mentioned the financial aspects of the project, such as the opportunity for patients to receive a Shared Savings rebate, that Medicare reimbursement was paid in a "lump sum," and that the revenue that the hospital saved through this project was "divvied up somehow."

One focus group discussed the impact of ACE on existing programs like Pre-hab[12] as well as pre-existing hospital policies. Both groups agreed that ACE has helped with identifying patients at the point of admission, which also begins an assessment of their post-operative needs (such as home health care and rehabilitation).

There was a consensus in one group that hospital staff have a basic understanding of the program, would be able to answer most patient questions, and could refer patients to the proper individuals for answers to more complex questions.

One participant had anticipated that staff would have more involvement in designing the program, stating that "[we] thought we would be able to dictate the type of services, that it would be hard-wired in our facility and spread out throughout all the patients," and that ACE would lead to the development of standards of care for patients. While this expectation has not been met, the focus group participants acknowledged that the demonstration is still in its infancy.

While both groups acknowledged that the majority of staff were satisfied, they agreed that they had initially expected an increase in patient volume and in the number of physicians practicing at LHS.

2.1.6 Exempla Saint Joseph Hospital

Physicians: When asked about what motivated them to take part in ACE, the physicians responded that they were not involved or informed about the initial application process. They explained that the ESJH CEO had a consultant from Heartworks, who suggested that ESJH apply for the project, and this was decided before the physicians were involved. The physicians stated that the same consultant informed them about ACE months later. They then became interested because "it would help to prepare for where CMS was headed."

[12] The LHS "Pre-hab" program was piloted at Lovelace Women's Hospital and then expanded to Lovelace Westside Hospital and Lovelace Medical Center. The program is designed to offer education and pre-surgery information for total joint patients.

While the physicians did not expect that the demonstration would bring about a change in patient volume, it seemed to them that the former CEO (who initiated the program) thought it would "open the floodgates" of Medicare volume, since most patients at ESJH have insurance with Kaiser Permanente. Physicians agreed that ACE would be a way for CMS to help pay for cardiovascular services and that was a motivating factor. One physician anticipated that more cardiac surgeons would want to start performing procedures at ESJH.

The physicians indicated that there have been multiple levels of outreach to the Denver area and out-of-state physicians, such as mailings and cocktail receptions, to inform them about ACE. However, these marketing efforts have not been particularly effective, so the hospital has "abandoned much aggressive marketing." The physicians stated that they were told CMS would mail out ACE brochures, but that there appeared to have been a delay.

The physicians agreed that they did not expect any positive changes in hospital quality because quality was already a premium. One physician added, "I think our intent was to make sure we didn't change anything." Another physician stated that "we made a real point that, in addition to the required quality metrics for ACE, we made a much more robust report card that we wanted to look at on a regular basis, which was far more than was required."

Non-physician staff: The first focus group consisted of two cardiovascular operating room nurses, one was a specialty coordinator for cardiac acute services and the other was the perioperative materials manager for the operating room. Prior to the site visit, these two participants (and a third who could not attend the group) requested to meet with the IMPAQ team together due to their interrelated work on streamlining equipment used in the operating room for ACE cases. Both participants had been involved with the ACE Demonstration since early 2010, when the preparations for ACE began. One participant did not expect that the demonstration would have much impact at ESJH, while the other anticipated seeing cost savings and some cost-driven incentives. Both stated that they were informed about ACE during a staff meeting.

The second focus group consisted of three floor nurses in the Cardio Vascular Institute and the patient navigator. The patient navigator is an individual who previously was a floor nurse and now is responsible for identifying ACE patients during their hospitalizations and speaking to them about ACE as well as answering questions about their care. The participants in the group stated that they learned about ACE through PowerPoint presentations that the patient navigator gave in various staff meetings. They also recalled receiving emails and hearing some radio advertisements. There was some discussion of the "value-based" designation that the hospital received upon being selected to participate in ACE. The participants noted that there was a significant delay between the tentative start date of the demonstration (around January 2010) and the actual implementation date (November 2010).

The cardiovascular operating room nurses in the first focus group explained that the demonstration affected their scope of activity by introducing more contracting work, more review of pricing, and more collaboration with different teams and surgeons. One nurse stated that the main task that was changed was the ongoing maintenance a database of all the equipment and materials that are ordered and then used during surgeries. They felt that ACE has increased

cost-consciousness and has inspired some competition among surgeons. In terms of changes to materials, the nurses agreed that the surgeons have been very supportive in negotiating directly with the vendors themselves.

The floor nurses felt that their roles have not changed as a result of the ACE Demonstration, and they are mostly unaware of the ACE status of patients under their care. The introduction of a patient navigator for cardiovascular patients was the main change. The nurses felt that she was integral in the hand-holding and reassurance she offered to patients and their families by checking on the patients throughout their stays.

2.2 Organizational Changes and Strategies

We were interested in understanding the effect of the demonstration on hospital organization and structure, cost and quality strategies, and operational or procedural guidelines from the perspective of the ACE physicians and other hospital staff. Participants were also asked about their satisfaction with these changes and the introduction of new strategies. All participants were also asked to comment on the relationship between physicians and non-physician staff as well as hospital administrators' interactions with staff in relation to ACE.

2.2.1 Comparison Across Sites

Of the five sites, the physicians at BHS talked more about changes that have been brought about by ACE than did the physicians at the other sites. The physicians at BHS and the non-physician staff discussed the effect of the standardization of order sets, an effort that was propelled by ACE. This was a major change for BHS, and the staff was pleased with the outcome and improvements to quality and coordination of care. Physicians and non-physician staff at the other sites were far more hesitant to attribute any substantial changes or improvements at their hospitals to ACE. At HMC, orthopedic non-physician staff commented on the order sets that are used post-op, and although these are not formally standardized across physicians, the non-physician staff reported that they are extremely consistent.

Billing was another issue that physicians at OHH and HMC mentioned as a change, but the physicians at each site had slightly different exposure to and experience with billing. At OHH, the physicians expressed frustration over the billing process and explained the difficulties associated with billing Medicare patients with a secondary payment source. The major change was the amount of administrative time that was needed to educate secondary payers about the new billing processes. At HMC, the physicians were unsure how much training was given to their office staff to inform them about the billing process, but optimistically commented that ACE had given HMC a chance to experiment with the future ACO payment system. Physicians at LHS and ESJH also noted that ACE served as a pilot for the hospital prior to ACOs and the future direction of Medicare payment.

According to the non-physician staff at BHS, the areas that saw the most change due to ACE were billing, admissions, and case management (referring to the implementation of the patient navigators). OHH non-physician staff mostly agreed with those at BHS, noting primary changes

that occurred in purchasing, registration, and billing. At ESJH, physicians' attitudes and willingness to scrutinize their costs and protocols were the largest change.

BHS and OHH physicians also noted that there had been cost savings and cost reductions via negotiated implant prices. At all of the sites, physicians were involved and aware of the negotiations conducted to drive down the prices of implants and equipment used in ACE procedures. At ESJH, even non-physician staff were involved in some aspects of the negotiations. Non-physician staff at all the sites also remarked on this effort and change in practices, but they had much less information than the physicians about the actual process and whether it was related to ACE.

While the leadership and administrative responsibilities of physicians increased due to ACE at all of the sites, the physicians at OHH, BHS, and ESJH reflected on this positively as opportunities for the hospital-physician relationship to grow and for an increase in hospital administration transparency. However, at HMC, physicians had a negative reaction to the increased administrative demand on their time due to ACE, time they felt could have been spent on patient care. This opinion may have been due to the overall sense the HMC physicians had that ACE has not been a worthwhile program for HMC. Physicians at LHS seemed the least involved.

Participants were all asked whether the changes that had occurred due to ACE were satisfactory and whether they were truly unique to the demonstration. BHS had the most positive perspective on ACE, and physicians felt ACE had been a catalyst for many improvements at the health system. However, non-physician staff surprisingly did not report as much optimism about the changes that ACE had brought to BHS. Some participants felt that while there have been organization and protocol changes and improvements in the Baptist Health System, they are most likely not due to the inception of the ACE program. As one participant stated, "We're making changes almost every day … it wasn't flipping a switch, it was more of an evolution and it is never intended to stop…." The cardiovascular surgeons at ESJH also were pleased with their involvement in ACE and in reducing costs. At OHH, physicians said that it had already been a strong hospital, but that ACE facilitated a few improvements. HMC physicians had the least to say; they were quite disappointed with the impact of ACE and concluded that ACE had very little effect on the hospital. HMC non-physician staff similarly had very little to say about ACE-related changes and seemed frustrated with the lack of structure in general regarding their roles and coordination of care among nurses, physical therapists, and other ancillary staff. The LHS physicians were least aware of the demonstration goals and were skeptical of some aspects of the program, such as gainsharing.

2.2.2 Baptist Health System

Physicians: A consistent and dominant theme expressed by the BHS orthopedic physicians was the implementation of standardized order sets across surgeons and used by nursing staff. These order sets were constructed from the preferences of the physicians and were influenced by best practices seen elsewhere. The order sets were repeatedly referred to as "evidence-based" protocols that were perceived to have increased the quality and coordination of patient care. Hospital administrators and nurses were crucial in enforcing the standardization. Physicians were

told that neglecting to use the standardized order sets would preclude them from being able to operate at BHS, and nurses were encouraged to enforce this firmly.

The physicians linked the creation and implementation of the standardized order sets to gainsharing, claiming that it was the impetus for the physicians to willingly discuss their orders and compare notes. While this was true for the orthopedic physicians, the cardiac physicians who participated in the focus group reported that they had received very little gainsharing. However, this is due mostly either to the fact that they conducted outpatient procedures or as a result of their role in the procedures (non-surgical, medical cardiologist). When physicians were probed on their thoughts regarding the gainsharing practices at BHS, the cardiac physicians said that they did not see any benefits to gainsharing and that they continued to practice in a manner that was best for their patients regardless of the gainsharing. The orthopedic physicians explained the requirements necessary for physicians to receive gainsharing (hospital savings, hospital achievement of quality metrics, individual physician cost savings, and individual physician achievement of quality benchmarks) and how physicians supplied the necessary peer pressure to consistently meet requirements as a group and receive gainsharing as individuals. Thus, ACE was seen by them as an instrument to encourage physician relationships (via positive peer pressure) by focusing on improving quality, comparing and contrasting best practices, working toward a common goal, and having a "much improved environment in terms of camaraderie." As stated by one physician, "…by looking at every other practice in town and seeing what they were doing, we were able to take the best of evidence-based medicine [and] the best pathways."

According to the BHS orthopedic physicians, ACE led to organizational and protocol changes resulting in the creation and implementation of standardized order sets, increased monitoring and transparency of quality of care metrics, the improvement of quality of care metrics (reporting to CMS and patient outcomes being shared with physicians), and an increase in cost reductions via reductions in implant prices negotiated by an aligned physician-hospital group.

Non-physician staff: The general consensus of both non-physician staff focus groups was that, while there have been organization and protocol changes and improvements in BHS, they are most likely not due to the inception of the ACE program. As one participant stated, "We're making changes almost every day … it wasn't flipping a switch, it was more of an evolution, and it is never intended to stop…. Some of this might be timing, with ACE we had a better opportunity to work with medical staff and get their buy in." The participants in the other focus group agreed that, while they are not dissatisfied with the effects of the ACE Demonstration, they have not noticed significant changes related to the program.

One area where ACE was seen to have an influence was in purchasing and the ability to negotiate contracts with vendors based on volume. One group also agreed that the demonstration was a factor in connecting the hospital system more closely with federal guidelines on quality of care and use. The same group discussed the positive influence of ACE in recruiting staff in the past year. Prospective employees have noted the existence of ACE (among other programs at the hospital, including BHS' chest pain accreditation) in their decision to work at BHS.

However, the other focus group noted that although there was a hope that more physicians would choose BHS as their site for primary care, this did not occur, and the physicians who did move

business to BHS did so because of affiliation agreements. One participant mentioned that ACE had contributed to a few physicians increasing patient volume, but the rest of the group disagreed.

In terms of protocol, the non-physician staff participants stated that their quality of care practices do not differ according to a patient's participation in ACE. One participant stated, "I frankly don't want [physicians] to be aware [of a patient's ACE status] and wouldn't encourage them to look at the patient's payer source." A few participants in the other group mentioned that the areas of the system that saw the most change were in case management, the business office, and admissions, not the physicians, ancillary staff, and nurses. However, this group did note that they appreciated the administration's stance on a physician who refused to comply with the new cost-saving and quality measures and subsequently took his patients elsewhere. They were pleased to see the administration's support for ACE. One participant stated, "It was a good sign for the administration to say that this guy took some volume with him, but we're committed to the project and what it stands for, so we'll let him walk."

Patient Navigators: The patient navigators specified that their roles are related to financial and quality outcomes. As one participant stated, their primary concerns are: "Are we going to meet our quality measures and will docs be able to obtain gainshare?" The patient navigators agreed that identification of possible ACE-eligible patients is an important responsibility. The patient navigators also intervene to ensure care coordination, which has led BHS to set expectations with specific home health companies to follow established quality of care protocols. Working with these home health providers is expected to result in better patient outcomes in the long run, especially in terms of readmission rates.

While all the patient navigators seemed generally satisfied with the current state of the program, one participant stated that he "would hate to have to go through the first year again." The patient navigators mentioned again that it was initially difficult to get the physicians to buy into the program and get on board with standardized order sets and other protocols that changed as a result of ACE.

In describing the protocol changes that occurred with ACE, the patient navigators described the new process of identifying patients as "running around from ORs [operating rooms] to cath[eter] labs, calling insurance companies to verify what is appropriate, and backtracking to let the patient know that the situation has changed." A lesson that one patient navigator learned is to tell patients that it is *possible* they are eligible to participate in the ACE program. The patient navigators learned to be cautious in communicating with patients because things might change. The final DRG is what makes a patient eligible for the demonstration, which a patient navigator can anticipate but cannot know for sure until after the procedure. A similar lesson came from communicating with dual-eligible beneficiaries, who are not eligible to participate in the demonstration.

A challenge that patient navigators predict is the new system of computer entry. This system just began at Southeast Baptist Hospital and will soon be extended to the rest of the hospital system.

2.2.3 Oklahoma Heart Hospital

Physicians: Physicians reflected on their initial expectations of how ACE would affect their scope of activity at OHH. The participants mentioned an increase in volume, but were unable to quantify the expected increase. Participants in the physician focus group noted very few changes in organizational protocols or strategies after the implementation of ACE. They attributed this to the efficient manner in which OHH continuously operates. Some of the more notable organizational changes discussed by physicians included leadership, billing, and Medicare cost savings.

ACE served as a catalyst in creating new physician leadership positions and physician-staffed committees to manage OHH physicians and independent physicians practicing at OHH. The leadership positions and committees were developed to represent the interests of physicians and to provide input into decisions related to the delivery of care. Areas addressed by the committees include models of care, cost and procedural efficiency, and improving the overall experience of the patients and physicians at OHH.

OHH physicians expressed frustration with the Medicare billing process, specifically for those Medicare patients with a secondary payment source. Because secondary payers are not included in ACE, they were unsure of the billing process for ACE Medicare claims, resulting in a delay in payments to the hospital. While OHH recognized the efforts of CMS to resolve the secondary payer issue, the respondents cited the extensive resources required to educate its secondary payers about the billing process.

With regard to cost savings, respondents noted that OHH is physician-owned and is strongly motivated to operate efficiently. They said that OHH was very "cost-conscious" by using a single vendor process to reduce device expenditures. This process was in existence prior to the implementation of ACE and continues to be refined. Although OHH is primarily a single-vendor system, there is a process in place to review requests for devices that fall outside the primary vendor's product list.

Non-physician staff: One participant commented that prior to the start of ACE there had been uncertainty about how the billing process would work. This participant stated, "I didn't know exactly how it would work, getting the money and posting to our end of it." The participant also stated that after the start of ACE, she found the process to be relatively simple.

In general, most participants were rarely aware of a patient's payment source or whether the patient was participating in ACE. The participants stated that non-ACE and ACE patients are all treated the same and receive the same level of care and services that was provided prior to the demonstration. When asked to describe any changes seen during the first year of ACE, the group mentioned changes in equipment purchasing, registration, and billing processes. In the area of equipment purchasing, the participants discussed OHH's efforts to lower costs by "shopping for the best price on the best products for the department … when contracts were up," but could not attribute this process directly to ACE. Changes in the registration process include informing patients about ACE and requiring them to sign an ACE acknowledgement form in the event they undergo an ACE procedure during their hospital stay. The most significant change was in the

billing area, where a staff person reviews the records of Medicare patients daily to determine whether they qualify for ACE. Those identified as ACE participants are tagged using an ACE-specific designation for billing purposes.

2.2.4 Hillcrest Medical Center

Physicians: The physicians consistently commented that ACE was not a driver of change at HMC. In terms of billing practices, the physicians noted that coordination of the bundled payment was probably easier for the cardiac physicians because they are employed by the hospital. However, their processes have not changed. One concern that continued to emerge was further pressure to reduce costs in light of both billing according to only one DRG and ACE. As stated by one physician: "The DRG process in and of itself is a problem, but then when we're already losing, we're making a lot less money with the ACE project. We have to scrutinize even more."

The physicians did not attend any trainings or workshops, but their office staff were trained early in the demonstration. The physicians did not know many details about what that training entailed. They felt that their interactions with patients have not changed since the start of ACE because physicians do not consider educating patients about ACE to be part of their responsibilities. In fact, the physicians were adamant that they cannot distinguish ACE patients from others while they are undergoing treatment at the hospital.

The physicians felt that hospital administrators have been supportive, but they stated that negotiations with vendors and the coordination of care at the hospital are both changes that would have come about naturally without the presence of ACE. Previously, when the physicians were in private practice, they did not have an incentive to come to the table and work with the hospital to lower costs. Now that they are employed by HMC, they say their interests are aligned and they find it "eye-opening to be able to bundle and look at a bunch of things together with [the] administration." One physician commented that "what we did get out of [ACE] is a ready-made ACO," by which he meant a new payment system. The advantage has been that the physicians are taking more of an interest in reviewing procedures and costs to understand which procedures lose money and which can have lower costs.

The physicians were asked whether they believed the ACE Demonstration was facilitating real changes in quality improvement strategies and cost reduction. The participants said that they did not feel there had been much of a difference in procedures at HMC. One physician said, "we feel it's pretty much a waste of time." Another stated: "it was a very small catalyst at best."

Non-physician staff: The participants in the orthopedic group noted a few minor equipment and product changes that had come about due to the vendor negotiations. The cardiac group mentioned that there is an ACE case manager who is involved in identifying and flagging ACE patients once they enter the hospital. Other than these changes, the participants in these focus groups did not feel there had been any changes in the clinical practice and protocols, quality of care measures, or the relationship between staff members involved in treating ACE patients.

The orthopedic group participants again mentioned that there had been an increase in orthopedic procedure volume and that they were satisfied with this, but did not relate it to ACE. As a result of the high volume, the nurses felt they were pressured to communicate more with other staff and develop a better process for handling the patient load. The participants talked about taking it upon themselves to print out schedules and give them to other nurses and the therapy groups to make sure that patients were kept on the proper regimen.

The cardiac group talked about the ACE case manager being a good resource, but they questioned the ACE project and what is best for the patient. From their perspective, the ACE case manager is ensuring that the patient has the appropriate stay designation (inpatient or outpatient). However, those designations can affect the amount of reimbursement the patient receives and the amount of the co-pay they are responsible for.

Some of the lab technicians discussed the limited options available to them when selecting equipment and products used in treating patients. According to these individuals, the decisions regarding the products are made by the purchasing department and there is little or no collaboration with the providers about what should be used or the best products. One technician likened the process of purchasing products to "buying a Cadillac and a Pinto" and stated that, for the patient, the best product available is the one that should be used.

2.2.5 Lovelace Health System

Physicians: Most physicians did not recall protocol changes as a result of ACE. One physician did note the standardization of particular orders; however, he stated that this had occurred prior to the start of ACE. Some physicians mentioned efforts that were made to decrease narcotics use in the hospital and that ACE might have had some influence on this for cost control measures. Physicians discussed negotiations with vendors to purchase and use less expensive implants. All agreed that cost saving measures have not affected their practices or standards of care. Two of the physicians were involved in negotiations with vendors; however it was noted that the [vendor] preferences of the physicians carry "very little weight."

The physicians at LHS had not yet received gainsharing at the time of the site visit, and there was little awareness of gainsharing other than they knew they might receive an extra check. However, one participant stated that there will be a meeting soon to compare the cost savings outcomes for each physician to determine the gainsharing amounts. Overall, the participants were not aware of the criteria they must meet to qualify for gainsharing. One lead physician explained that the criteria used for gainsharing would look at "baseline costs based on historical costs including OR equipment and implants, so our gainsharing is based on what we have some control of and showing a cost savings of a certain amount which we were informed of coming in."

One issue that was brought up in several interviews was ethics and gainsharing. One respondent noted that some physicians opted out of gainsharing for ACE patients because they felt it was unethical for physicians to receive extra money for performing their regular duties. Furthermore, one physician responded commented that physicians could be perceived negatively if they choose to perform a procedure at an ACE hospital to receive gainsharing. Another physician

expressed concern that ACE may incentivize patients to have a procedure performed when it may not necessary. He commented, "when you incentivize someone with dollars it changes their overall thought process. It helps them decide whether or not to do an orthoplasty. Some people who are in moderate pain may not get the surgery, but then the money comes into play." Although he is not aware that this is occurring, he is concerned that it might occur.

Overall, physicians at LHS felt that ACE has not changed relationships with other staff members. One physician commented that it may be possible that staff communications have increased because of ACE. He also noted that there is "probably some trepidation about standardizing everyone's orders." There was general consensus that the hospital administration supports the demonstration, although the physicians did not feel pressured to participate.

All of the physicians noted that the hospital has done some marketing, including seminars for potential ACE patients. One remembered that pamphlets and posters were available at the hospital where he practices.

Non-physician staff: The participants agreed that some organizational changes have been implemented since the commencement of the ACE Demonstration. There has been some standardization of protocols and order sets. Some participants emphasized the multidisciplinary collaboration that was promoted by ACE, which includes case management, physical therapy, occupational therapy, and other divisions within the hospital (e.g., dietary and pulmonary staff have visited the Pre-hab class to give patients information on other health needs following their surgeries). A member of the surgical services team explained that, because of ACE, it appears the hospital has been doing more procedures and has required more equipment; due to the need to invest in more equipment, the hospital administration has "engaged our surgeon partners … and then we engaged the companies that sold those products" and managed to negotiate with vendors, who were willing to offer equipment at a lower cost because the hospital would be purchasing more equipment. There was a general consensus between the two groups that ACE has not changed the way the different departments function at a higher level.

2.2.6 Exempla Saint Joseph Hospital

Physicians: Participants were asked about their involvement in setting prices for implants. They explained that all the valve vendors—valves being "the big ticket item"—attended multiple meetings and granted concessions on the cost of valves without forcing ESJH to purchase inferior products. Prices of other products were examined as well. The physicians stated that the efforts on part of the participating physicians were partly because of the gainsharing, but also because they "became more invested in the hospital, especially now that we're employees." When ACE started, the physicians were not hospital employees.

When asked about their satisfaction with the organization changes that have taken place at the hospital, the physicians were hesitant to answer. One stated, "It's hard to say we're satisfied because we really haven't changed much except for the scrutiny we're putting forth." Another physician voiced his concern that "ACE isn't going to work" and that, upon reviewing relevant financial documents, "you'd see we're losing money on ACE." While he acknowledged that the

financial aspects were not the only important part of the project, he also could not feel satisfied with the project.

One physician voiced his disappointment with Medicare's marketing outreach as well as with hospital administration's management of the program. He stated that "we thought we were going to get something back for what we were doing. The gainsharing has been a fiasco. They promise you this, and I'm starting to see that maybe it's a false promise." He was also concerned that, while savings were coming from the treatment of all patients, gainsharing will only be calculated on patients participating in ACE, and even then they will only receive up to 25% of what was saved on those particular patients. He stated, "We ought to be treated like partners." Some statements by the physicians contradicted other information that was gathered during the site visit. For instance, physicians initially said they did not receive gainsharing, but later mentioned that they received gainsharing for all ACE procedures regardless if they patient qualified. These discrepancies seem to highlight the disorganization of communication between staff and administrators.

Non-physician staff: The cardiovascular operating room nurses reported on the work they did with the cardiovascular surgeons to bring down procedure costs. For example, the surgeons began limiting their use of a more expensive heart valve, which then led to the vendor coming back to the negotiating table to discuss the price again. The participants felt that nurses have always been cost-conscious, but that ACE has caused surgeons to start noticing cost as well. The floor nurses agreed that most processes did not change after the implementation of ACE. The only notable exception was the patient navigator, who conducts follow-up phone calls with patients and works with patients' families. The patient navigator mentioned that organization/protocol changes are in the works, but "we haven't rolled them out to the floor yet." Nurses commented that the patient navigator is so helpful that they would like to see patient navigators for all patients.

The participants in the first focus group stated that they were satisfied with the organization/protocol changes that have taken place at ESJH as a result of the demonstration, because "it is nice to be involved with physicians and vendors and build relationships with vendors when looking at quality and cost savings." On a similar note, they agreed that relationships have improved between physicians, nurses, and other support staff, because the demonstration opened the door for more open dialogue and respect, which made non-physician staff feel more like partners. In the second focus group, one participant stated that "everyone feels more comfortable," and another said that "it makes patients more informed." In terms of relationships with physicians, there was agreement that the patient navigator plays an important role in controlling costs by making physicians aware of costs.

There seemed to be general dissatisfaction in the first focus group with the role of hospital administrators in ACE. It was stated that the administrators "haven't been involved with what they're doing, there is not a whole lot of interaction, and a lack of familiarity or ability to explain the ACE project 'on the ground.'"

3.1 ACE Demonstration Outcomes

We also gathered information on the participants' thoughts about the end results of many of the ACE efforts and strategies that had been implemented. Participants were asked about their subjective observations on quality of care indicators such as readmission rates, coordination of care, discharge processes, and length of stay at their hospitals. Physicians spoke about their experiences with gainsharing and provided a rating of their satisfaction with the demonstration overall.

3.1.1 Comparison Across Sites

Physicians and non-physician staff commented on patient care indicators. At all sites, physicians and non-physician staff were either hesitant to comment or felt that there had been no negative changes to length of stay, readmission, or discharge planning. BHS orthopedic physicians were the only group to notice changes and to state that the length of stay at their facility had decreased and the go-home rate for orthopedic patients had increased. However, physicians and non-physician staff mentioned that these rates could vary greatly across BHS facilities and the physicians were only comfortable assessing the changes at their own facility.

Non-physician staff at each site seemed to agree with the observations of the physicians in terms of changes to patient outcomes at the hospitals. At most sites, physicians and non-physician staff believed that the patient discharge process had been streamlined due to the use of standardized order sets or the introduction of patient navigators. An exception was one of the HMC non-physician staff groups that reported that cardiovascular patients seemed to be sent home early due to a shortage of beds (which was caused by an increase in cardiac volume from the new Oklahoma Heart Institute). None of the physicians or non-physicians reported an increase in patient volume that could be attributed to ACE.

Across sites, the physicians had different opinions about gainsharing and their satisfaction with its inclusion in the demonstration. Part of the differences in opinion could be linked to whether or not the physicians were employed by the hospital/system. OHH and HMC physicians, who are employed by their hospitals, stated that they do not receive gainsharing, and LHS physicians have yet to receive any. At BHS, however, orthopedic surgeons were eager to participate in ACE due to their eligibility to receive gainsharing and commented that the cap on gainsharing should be increased so that physicians can receive a larger portion of the savings. LHS physicians felt quite differently and some opted out of gainsharing because they believe it may be unethical. Because of the very low ACE patient volume at ESJH, the physicians there were pleased to receive gainsharing, but felt that they should be able to receive gainsharing on all cardiovascular patients, not only ACE patients, since cost savings are being achieved on all patients.

In terms of patient quality, non-physician staff across sites were committed to the idea of providing the best care and insisted they cannot distinguish between ACE and non-ACE patients. Some patient care features were developed uniquely at each site, but some controversy seemed to linger around each feature. Patient navigators at BHS stated that they had important roles in the patient process, but other staff did not agree. OHH hired an employee to follow up with patients to improve post-acute care, but found this program did very little to reduce readmissions and

other undesirable outcomes. ESJH non-physician staff were one of the only groups to strongly discuss the positive benefits of a patient navigator.

ACE Satisfaction ratings varied greatly. In general, physicians gave low to neutral satisfaction ratings whereas non-physician staff tended to refrain from providing a rating due to unfamiliarity with the demonstration goals and effects on the site. Only at BHS did both orthopedic physicians gave ACE a good rating. Despite BHS's high ratings, these physicians had many suggestions for improvement, as did physicians elsewhere. All physicians felt that the marketing of ACE by CMS had not been sufficient and, as a result, the volume growth that had been expected did not occur. BHS physicians added that gainsharing should increase from 25% to a 50-50 share between the hospitals and the physicians. Some physicians, such as at HMC and LHS, felt that their facility's internal management of ACE had also been inefficient and unsatisfactory. And, across BHS, OHH, and HMC, cardiovascular physicians touched on the issue of the exclusion of outpatient cardiac procedures. Non-physician staff satisfaction ratings were provided with hesitation on the part of most participants. We concluded that many felt unfamiliar with ACE and its effects on their hospitals to the extent that they felt unable to provide accurate assessments. Some who had greater management responsibilities tended to rate the program lower because they felt there was room for improvement.

3.1.2 Baptist Health System

Physicians: The physicians were asked to comment, based on their own observations, on the effect of ACE on length of stay. The orthopedic physicians felt that length of stay at their facility had decreased since the start of the ACE Demonstration. Some physicians mentioned that insurance companies have affiliations with BHS that may require some patients to stay longer or receive extra tests, which can affect metrics such as length of stay. Additionally, the physicians were optimistic about the go-home rate (discharged to go home) for orthopedic patients, which they reported to be more than 80% of patients. The physicians felt that the primary impact of ACE on the patient discharge process was the use of standardized order sets that direct the patient's post-operative orders.

Satisfaction was another important factor in the physicians' experience with ACE. Both orthopedic surgeons rated a high satisfaction rate with the ACE Demonstration. While their satisfaction could be linked back to some of the positive outcomes they had mentioned previously (gainsharing, lowered costs, increased quality, greater standardization, and improved coordination of care), these physicians had strong opinions regarding the areas in which the ACE Demonstration could be improved. These were:

- Development of and funding for marketing of ACE and BHS by CMS, which physicians felt was a promise CMS had made to the hospital applicants.
- Volume growth (tied to marketing efforts by CMS) in both orthopedic and cardiac procedures.
- Increased gainsharing, from 25% for physicians to a 50-50 share between the hospitals and the physicians.
- Inclusion of outpatient cardiac procedures (a concern expressed by cardiovascular physicians).

Non-physician staff: There was general agreement that patient length of stay has decreased. However, this was not attributed to the ACE Demonstration; rather, it was seen as a national trend. One group noted that discharges are now being planned in advance. One participant noted that "the processes we put in place were less geared towards reducing stay than they were towards making sure that we did the right things at the right time to provide the best outcome, and making sure we did that in an efficient manner." In terms of administrative outcomes, both groups noted that the administration had increased its transparency and shared information with the staff frequently. One participant stated that the ACE Demonstration has had the effect of "creating a greater alignment of common goals and purposes" and that "the buy-in and participation has become second nature to physicians, as opposed to questioning it." In providing suggestions for improving the ACE Demonstration at BHS, both focus groups agreed that having a full-time dedicated patient navigator would be beneficial.

While one group agreed that specific processes have been developed according to the ACE Demonstration process, the other group was more apathetic about the effects of the program on the hospital system. When asked to rate the success of the program on a scale of 1 to 4, the remaining participant of one group[13] gave the program a rating of 4. In the other group, four out of the five participants declined to give any rating, stating that "whether the patient is in ACE or not, they're going to be treated the same, and the order sets are going to be the same," suggesting that any changes they saw in the hospital system could not be directly attributed to the ACE Demonstration. Elaborating further, one participant stated that, in general "…a lot of what we're doing may have started with ACE, but it's not limited to the ACE Demonstration project."

Patient Navigators: When asked to describe how ACE has affected relationships between physicians, nurses, and other support staff, the patient navigators emphasized the consistency that runs through the system. This extends to the treatment of both ACE and non-ACE patients, using evidence-based procedures and standardized order sets. The patient navigators stated that the transition to the new system of order sets was difficult for physicians and nurses alike, and BHS has still not fully converted. As one participant stated, "We still don't have cardiac really mapped out." The patient navigators agreed that they wanted to take personal responsibility for patient outcomes: "We have to do something to help change the system. Medicare today has no longevity and is not viable, so what can we do in our individual practice to improve it?"

When asked how ACE has affected the coordination of care and length of stay, the patient navigators agreed that there was variation among BHS facilities, and that it was difficult to change habits and the practices of individual physicians. That said, patient navigators appeared to be proud of the efforts BHS has made to partner with outside providers and home health companies to set expectations for post-acute care. This effort made the process "flow easier, because we're case managers by background, that's what we do."

Patient navigators were eager to improve the discharge process, which was their most important goal. They stated that they want to ensure that post-acute providers have the right competencies. They ask providers for feedback on the patients and go onsite to meet patients to look at their

[13] Throughout the hour-long focus group, three of the four participants had to excuse themselves to attend to other business.

outcomes and the results of the quality scores. Because post-acute care facilities are competitive, one patient navigator stated that "vendors want to be on our good side because we hold them accountable."

Of the patient navigators who participated in the focus group, eight of nine rated their overall satisfaction with the program as 3 (out of 4), with the ninth giving a rating of 4. The general consensus of the group was that, while they were generally satisfied with the ACE Demonstration, there is still room for improvement. The participants agreed that patient navigators have competing priorities; they wish they had more time to perform their navigator duties such as making post-discharge phone calls and to dedicate more time to ACE patients. They also wanted to have greater alignment with skilled nursing facilities and home health agencies. All of the participants seemed to be proud of their position as patient navigators and of their contributions to the hospital system in relation to the ACE Demonstration. One participant found the role insightful in prospective care coordination, finding that much of her role involved "what Medicare wants us to do, the patients' expectations, the safe discharges, all of that encompassed [as] it's really making a whole new turn." Another stated that it has "prepared us to embrace what we have to do in the future."

3.1.3 Oklahoma Heart Hospital

Physicians: The participants indicated there was no noticeable increase in patient volume. This outcome was attributed to a lack of knowledge about ACE, although OHH had invested in an ACE advertising campaign. The group also theorized that patient decisions on where to have their procedure are heavily influenced by recommendations from their primary care physician and the reputation of OHH, not by the ACE incentives or the hospital's CMS value-based hospital designation. The participants stated there was no decrease in the number of patient readmissions as a result of ACE. To reduce readmission rates, OHH adopted a call-back system for discharged heart failure patients to ensure they are receiving the appropriate follow-up care. This initiative necessitated hiring a full time employee, for which the hospital receives no compensation. One participant indicated the lack of CMS or financial incentives to encourage lower hospital readmission rates.

The participants noted that while OHH is cost-conscious, patient quality remains paramount. When discussing staffing patterns, one physician commented, "If we compare ourselves, we staff our hospital at almost twice the level of the other average hospital. We do that because we care about the patient experience, we care about the quality, we care about doing what we think is the best job we can."

Non-physician staff: Some participants described having specific ACE responsibilities, and other staff members were aware of processes developed specifically in response to ACE. However, others maintained that there had not been any changes as a result of the demonstration. The group mentioned that most staff members are aware of the hospital's quality measures and noted that many of the quality measures were in place prior to ACE. When asked if members of the group were involved in developing the quality measures, the group indicated that staff members feel very empowered to make suggestions to administrators via a suggestion box process called "Peggy's Bucket."

The participants were in agreement that there were no changes at OHH in the areas of quality of care or care coordination. As all agreed, "We have pretty good coordination of care ... everyone knows what's going on with the patients."

3.1.4 Hillcrest Medical Center

Physicians: The cardiovascular physicians do not receive any additional money or gainsharing as a result of the ACE Demonstration. Because they are employed by HMC, they are salaried. Though they admitted their payment structure was complicated, one physician clarified that "none of us get a check that comes with a memo that says 'ACE.'"

The physicians were asked to comment, based on their own observations, on the effect of ACE on indicators such as length of stay, hospital readmissions, and patient discharge patterns. For each of these indicators, the physicians did not report any change since the start of ACE. The conversation did lead them to comment that they always strive to do the best for their patients and that they have never been asked to hurry patients out of the hospital or make medical decisions based on the financial implications.

Satisfaction was another important factor in the physicians' experience with ACE. Of the four physicians, each rated the ACE Demonstration at HMC differently. One physician said, "from what we've done, 4, what CMS delivered, 1," where 1 is the lowest rating.

Because satisfaction was low in general, the physicians were asked what, in their opinion, should be changed to improve ACE. The lack of marketing by CMS was an issue that displeased the physicians. Additionally, physicians commented on the restrictions that CMS placed on HMC's own advertising efforts. The physicians felt that these limitations prevented the hospital from properly promoting ACE and encouraging patients to come to HMC. One physician said, "we were sort of baited into [ACE] and told we could get more people to the hospital. And, in the end, that wasn't there. It seems it's really Medicare studying us." Overall, the physicians were disappointed with ACE.

Non-physician staff: Although the staff knew of the Shared Savings payment for ACE beneficiaries, there are no ACE financial incentives for non-physician staff at HMC. In addition, Hillcrest HealthWise, a program with in-kind benefits for patients that was described in the HMC ACE application, was hardly recognized or acknowledged by the focus group participants.

In terms of indicators such as length of stay and readmission patterns, each group had slightly different observations. The orthopedic non-physician staff reported that the length of stay is generally short (77% of patients stay 3 days, and 2% stay 2 days), but this has not changed since the start of ACE. Moreover, they did not feel there had been a change in discharge patterns or patient readmissions. Although the addition of the ACE case manager meant that a new staff member was now involved in the patient's treatment options and discusses the post-acute placement of the patient with the therapist, there is no change for non-physician staff because they are not aware whether a patient is participating in ACE or not.

The cardiac non-physician staff felt that patients are sent home early (perhaps partly because the hospital is short on beds). Many cardiac patients are admitted in the mornings and then sent home in the evenings to move patients along. Physicians are involved in these decisions, and the case manager determines how to code the cases (and whether they are ACE-eligible). However, when this group was asked whether there had been changes to the readmission rates and the patient discharge process at HMC, they said "no."

Both groups were asked to rate their satisfaction with ACE at HMC. In the orthopedic group, the participants were vague and unsure of how to answer. Two ended up giving a rating of 3 (satisfied), but felt as if they had no basis on which to be satisfied because they did not feel involved in ACE. They said most staff members really do not know enough about it. For the cardiac participants, the ratings were above "satisfied." These ratings were given because the non-physician staff felt they did not know what the outcomes were or how patients felt about their care.

3.1.5 Lovelace Health System

Physicians: Physicians agreed that ACE has not affected hospital outcomes. Physicians speculated that this is because there has not been an improvement in the discharge processes or rehabilitation programs, physicians felt that ACE did not meet their expectations. One physician stated that the hospital administration should meet regularly with other staff beyond physicians. He stated, "It's the nurses and nurses' aides, the case workers, and the physical therapists that are all involved with care. I would hope they're having meetings or formal trainings…. I think everyone knows it's going on, but what it actually means and the actual goal is I'm not sure if everyone has an actual grasp on it."

In terms of satisfaction with the program, the majority of the physicians were neither satisfied nor dissatisfied. It appears this is due to a lack of any significant change in the way they practice.

Non-physician staff: Focus group participants confirmed that there are no incentives for staff to participate in the ACE Demonstration, and there is no Nursing Incentive Program currently in place (as described in the hospital's ACE application). Both groups were aware that beneficiaries who received ACE procedures receive a rebate and that physicians have some gainsharing opportunities (the participants were not particularly familiar with the specifics of that program).

There was some disagreement about how much the ACE Demonstration has resulted in substantive changes at LHS. The smaller group agreed that the demonstration has not affected the services provided, and the changes that have occurred cannot be immediately attributed to ACE. According to one participant, "it seems like our length of stay has come down," but this assertion was anecdotal. The changes that have been seen include an improvement in pain management.

The level of satisfaction with the demonstration among the participants varied. The group at one hospital generally had a higher level of satisfaction, with one participant rating her satisfaction of the program as 3 out of 4, and the other two rating their satisfaction as 3.5. The satisfaction scores of the group at another hospital were more spread out, with two participants rating their

satisfaction as 4, three as 3, one as 2, and one declining because she felt that she did not know enough about the program to rate it. The latter participant had only worked at the hospital since April, but another participant suggested that it was telling that, despite being at the hospital for months, she barely knew about the program. One participant involved in surgical services was very satisfied because "it's really cool to see some of the physicians and surgeons engaged in conversations with us on how to get better pricing and outcomes."

Other participants stated that "it would have been nice to have more education" on the program, and there was a general feeling that both staff education and patient education are not prominent enough. In some instances, staff did not rate their satisfaction at the maximum score, because they wanted to see improvements in the demonstration. In general, they said that ACE had room for improvement, despite its good performance.

3.1.6 Exempla Saint Joseph Hospital

Physicians: The focus group participants stated that they had just received their second gainsharing check. However, one physician believed that ultimately the gainsharing aspect of the project would end. While the hospital has been looking at cost data for years to try to save money and retain high quality metrics, the physicians admitted that ACE let them look more critically at what they are doing. To these participants, it seemed that the most successful outcome of the demonstration was that it "changed our relationship with our vendors for sure." Otherwise, the physicians stated that the demonstration did not affect coordination of care, length of stay, number and type of services provided, the discharge process, or patient readmission patterns.

When asked to rate their satisfaction with the ACE Demonstration, the physicians were once again hesitant. All said that they feel neutral or "middle of the road" about the project. When asked to elaborate, they stated, "It hasn't brought us more volume. I have concerns about how the quality data will be used," and "It's been interesting, but I don't see that it's leading to a good thing for patient care in general."

Non-physician staff: The cardiovascular operating room nurses were aware of physician gainsharing and beneficiary Shared Savings payments and stated that they would like to see gainsharing for nurses, particularly "funds in the form of nursing education or conferences." Among the floor nurses, there was agreement that, other than the patient navigator's involvement, ACE has not affected hospital outcomes.

When asked to rate their satisfaction with the ACE Demonstration, one participant in the first focus group rated the program as 2 out of 4 because, while she liked "the opportunity to provide quality products at a better price for patients," she acknowledged that the program was still new and there was room for improvement. The other participant rated her satisfaction as 2.5 or 3 out of 4 and reiterated the benefit of collaborating with physicians. In the other focus group, one participant gave the program the highest possible score (4); and the other three rated the program as 3 out of 4. However, one participant felt that "the administrative side has been awful, and I would rate it a 1."

Some participants argued that "working with CMS has been a struggle. From the patient point of view, it takes forever to get reimbursement, billing has been a nightmare, gainsharing has been a nightmare, and we've had a hard time sharing with other hospitals and knowing what Baptist is doing." One participant suggested a monthly conference call with the other ACE sites to "be on the same page and have more resources to help with problems."

VI. SUMMARY OF FINDINGS

As evidenced by the site visits, each site implemented the ACE Demonstration quite differently, and, at times, the interview/focus group responses varied widely from very positive and satisfied to frustrated and displeased.

1. Medicare Costs and Savings

The sites' opinions about the demonstration were tied to their initial expectations that ACE would lead to cost savings and whether it actually did so. At BHS, administrators generally agreed that ACE had generated a large amount of savings, which the physicians were also quick to point out. The savings were attributed both to a slight increase in volume and to the negotiated reductions in orthopedic implants pricing. However, at OHH and HMC, those who participated in the interviews and focus groups were hesitant to acknowledge ACE-related improvements and savings. There was less certainty that ACE had caused increases in volume or that the cost savings that had been achieved through vendor negotiations eventually made a significant difference to the bottom line. Physicians at OHH and HMC wavered as well, which could be related to the relatively small number of them who received ACE gainsharing. LHS respondents were less enthusiastic about cost savings although they did negotiate better pricing on implants and equipment, which had a role in driving down costs. At ESJH, participants were pleased with the cost savings achieved not only on ACE cases, but also throughout the Cardio Vascular Institute and even in some other hospitals in the ESJH system.

Orthopedic procedures seemed to have the greatest cost savings because the cost of these procedures is so closely linked to the cost of the implants and devices used. When the costs of these products could be negotiated down with vendors, the overall costs of the procedures decreased. The orthopedic physicians and others associated with ACE orthopedic procedures, noted and discussed these orthopedic changes and savings. Cardiac surgeons as well as administrators were dissatisfied that several cardiac outpatient procedures could not be included in ACE. Many administrators and physicians across all of the sites emphasized the benefits of including cardiac outpatient procedures in the demonstration.

Although all of the hospitals attempted to negotiate with vendors, HMC appeared to employ a better strategy. The materials manager at that site developed analyses of the costs of each ACE procedure type and then devised how and which products to target in his negotiations with vendors. The materials manager included physicians in his discussions with vendors, relying on the pre-existing rapport between the physicians and vendors. HMC continues to track spending by procedure to maintain the achieved cost savings. ESJH also involved physicians heavily and used physicians to negotiate directly with the vendors. Even some nurses influenced the cost control strategies.

2. Incentives

Patient incentives and physician gainsharing is a unique feature of the ACE Demonstration. A key component of the demonstration is to answer the following questions: 1) if there was gainsharing, what proportion of savings was paid to physicians? 2) What proportion was retained

by the facility? 3) Did physicians act in accordance with cost-control incentives? 4) Did beneficiaries act in accordance with their incentives? Respondents were asked questions during the focus groups and interviews to gain insight into these areas.

Physicians employed by the hospitals, with the exception of ESJH physicians, did not receive gainsharing. The physicians at OHH are hospital employees, and all gainsharing is placed into a general fund used to improve patient care. Similarly, cardiac physicians at HMC, who are also hospital employees, do not receive gainsharing directly. Any money generated goes back to the hospital, and cardiac physicians do not receive any of the funds. ESJH physicians have a unique arraignment. During the initial phases of ACE, cardiovascular surgeons were not employees of the hospital and they signed an ACE gainsharing contract. However, after ACE was implemented, they became hospital employees and their employee contracts included the gainsharing agreement they signed originally. If these physicians meet the quality benchmarks of 90% or greater, all physicians will receive a percentage of gainsharing. Gainsharing is distributed evenly across all cardiovascular surgeons, even if some did not perform a surgery in that quarter. Furthermore, because ACE volume is low, gainsharing is calculated based on all patients who are 65 and older, not just those who qualify for ACE.

Most physicians at BHS and orthopedic physicians at HMC and LHS are not employees, and therefore they receive ACE gainsharing. The process for distributing gainsharing and monitoring physician compliance varied at each site. Because BHS is a multi-hospital system, their structure is more elaborate than HMC's. For each hospital, a monthly aggregate is calculated for both cost savings and quality measures for each ACE DRG. Each physician receives a score card that provides data on quality and cost by patient, which is then compared to aggregate scores for that hospital. Physicians whose scores fall below the aggregate scores do not receive gainsharing that month. Overall, gainsharing has been well received by physicians at BHS and has created friendly competition among the physicians.

To qualify for gainsharing, physicians at HMC must achieve a rating of 90% or greater on the Surgical Care Improvement Project (SCIP) measures. There were differing opinions at HMC about the effectiveness of gainsharing to encourage physician compliance. One respondent felt it is "nothing really substantial" and that the quality has gotten better, not because of the gainsharing, but because "[Being scrutinized due to ACE] makes you more conscientious." In contrast, another said, "Without that, it would be the same result if they didn't have an opportunity to benefit," viewing it as a motivating factor to keep physicians compliant.

Beneficiaries are also eligible for benefits such as a Medicare Shared Savings check and in-kind benefits. However, none of the sites offered patients incentives other than the Shared Savings check, except ESJH. The patient navigator at ESJH will find accommodations for ACE patients who are coming from out of town.

A consistent theme heard across the beneficiaries' focus groups at all sites is that they were unaware of why they received a check and did not associate the check with ACE. Of those who received a check and were aware of ACE, it was not a motivating factor in having their procedure at that hospital. Most beneficiaries cited quality, reputation, and outstanding physicians as the reason they chose a particular hospital.

3. Quality of Care

An improvement in the quality of care provided to patients is a key goal of the ACE Demonstration. Medicare beneficiaries, physicians, non-physician staff, and key informants were asked a series of questions to determine the progress made in this area as a result of ACE.

To better understand the experience of those who participated in the demonstration, beneficiaries were asked to discuss the quality of care they received at each of the sites. When asked to use one or two words to describe quality of care as it relates to a hospital stay, beneficiaries used such words as "professionalism," "care and being well-trained," "excellent doctors," "extremely caring," and "cleanliness." While a few beneficiaries noted negative experiences during their stay, overall the majority of beneficiaries at each of the sites recounted positive experiences and indicated that the words used to describe quality of care matched their experiences during their stay in the hospital.

Physicians attending the focus groups at the five sites had differing opinions about the effectiveness of ACE in improving quality of care. HMC physicians questioned whether ACE had facilitated any substantial changes in quality improvement. They also noted that the procedures in place at HMC had not changed significantly as a result of ACE. The same perspective was offered by OHH physicians, who felt there were no substantial changes or improvements made at the site as a result of ACE. In contrast, physicians at BHS echoed the sentiments of BHS administrators in crediting ACE with implementing standardized physician order sets that have been linked to improving quality of care.

Opinions on the effectiveness of ACE in improving quality of care also varied among non-physician focus group attendees. Non-physician staff at BHS generally felt that any increase in volume was not a result of ACE, but rather the result of improvements in the hospital system. However, the non-physician staff did associate progress on quality measures and increased conformity to best practices to the implementation of ACE. Staffs at HMC, OHH, and LHS did not feel there had been any substantial changes in the quality of care measures since the impact of ACE.

ESJH was touted by respondents as having a traditionally high level of patient care, and ACE was seen as a natural extension of their quality efforts. Because of ACE and the use of physician report cards, surgery has been more efficient and time in the catheter lab has decreased. Respondents said that prior to ACE there was little awareness of time and cost of procedures. They mentioned that all patients receive the same standard of care and that ACE has generated spillover effects into other product lines (e.g., changes made in the labs affect all patients, not just ACE patients). As one participant stated, "I think we've taken what we've learned about cost accounting, and as other programs come at least we know and have developed a mechanism and methodology to do it."

When asked to discuss quality of care as it relates to the ACE Demonstration key informants across all sites stated that their sites employ quality review processes, many of which were in place prior to ACE, to regularly review ACE and non-ACE measures. Across all sites processes and protocols to measure progress in meeting ACE Demonstration goals and to improve overall patient quality of care have been developed or improved. A common practice across the sites is

the use of a physician report card to monitor physician compliance to quality and cost measures and to ensure physicians are meeting the established quality of care measures.

At BHS, ACE was seen as an impetus to further refine strategies and protocols to improve quality of care. BHS developed their own guidelines, with quality and cost measures for each DRG and changed the review of quality measures from quarterly to monthly which provides administrators with an "opportunity for change and success and to get others on board [with quality effort]." As one respondent noted "We didn't want to sacrifice quality for cost."

An HMC respondent noted that the hospital has invested additional manpower to monitor progress on quality measures, which are reviewed on a monthly basis. According to one respondent, HMC has "aggregated the best quality core measure [scores] in the market for their competitors."

OHH respondents noted that they were scoring in the top one percent of hospitals in quality and patient satisfaction. This progress is attributed to an "active quality review process" that has been in place for nine years. Therefore, since the implementation of ACE, OHH has made very few adjustments to strategies and protocols designed to improve quality. Quality related continuing education classes are provided to OHH staff to improve progress on quality measures.

Respondents at ESJH stated that the hospital employs the Kaiser Permanente quality of care model, which provides longitudinal care of patients within a group practice, and that the quality of care has always been high. Prior to ACE, ESJH used report cards to monitor quality measures, including CMS and patient satisfaction measures, in various areas of the hospital (e.g., cardiovascular, pharmacy, critical care, and sepsis). Following the implementation of ACE, an ACE report card was added. Quality measures are reviewed annually and updated as needed.

4. Volume, Concentration, and Spillover

All of the sites except ESJH believed that volume would increase as a result of the ACE Demonstration. Some also expected that marketing of ACE by CMS would lead to increased Medicare market share for their hospital. However, based on the interviews, none of the hospitals saw the increases they had anticipated. BHS felt that its volume had increased slightly, but that initially volume decreased due to the departure of one physician who did not want to participate in the ACE Demonstration and to vendor changes that had taken place. HMC cardiac procedures increased, but staff and physicians attributed the volume increase to the newly opened Oklahoma Heart Institute, not to the ACE Demonstration. The volume at ESJH is even slightly lower than the totals from 2010.

Administrators reported that there were two main barriers to volume increases: insufficient marketing efforts and inadequate motivation for patients. Across the sites, administrators and staff were disappointed with CMS' involvement in marketing the demonstration and the hospital sites themselves. Some felt that CMS should distribute targeted advertising to beneficiaries who could potentially require an ACE procedure, and that CMS should support the hospitals in local media. Additionally, CMS' restrictions on wording in the sites' advertising materials prevented the sites from effectively educating and persuading patients to participate in ACE.

The second barrier that administrators reported was that the only incentive for beneficiaries to choose an ACE site was the Shared Savings payment, although most were unaware that they would receive a check. Physicians, staff, and beneficiaries reported that the payment was not important enough for a potential patient to prioritize it over other concerns when selecting a hospital. A very large majority of patients select a hospital based on the recommendation of their physicians. Still other patients, primarily cardiac patients, end up at a hospital as a result of an emergent medical situation, leaving no option for deliberation. Additionally, focus groups with beneficiaries revealed that the quality of care, reputation of the hospital, and reputation of the physician were the most important factors in choosing a hospital, not whether a payment was made to the beneficiary. The Shared Savings payment ultimately was a confusing topic for patients. Many distrusted it, did not understand why they should receive it, or felt it should go to the physician and/or the government instead.

Despite the lack of growth in volume, physicians did not tend to change their practices or where they performed procedures. At BHS, those physicians who had always performed most procedures at BHS continued to do so and cited the high quality of the hospital as a reason for remaining there. OHH physicians also praised the quality of the hospital facilities and operations. ACE did not change how they treated patients. At LHS, some physicians are retiring and this has affected the patient volume as well.

5. Infrastructure and Organization

Some of the common themes noted at the sites during the implementation were the need to hire additional staff and to adjust billing practices to process ACE beneficiary claims. At each of the sites, case managers (also called patient navigators or ACE case managers) were used to identify and/or counsel ACE beneficiaries, and were seen as a critical element in the ACE Demonstration. HMC was unable to identify ACE beneficiaries using its existing information technology infrastructure. As a result, potential ACE beneficiaries were not identified until after they were discharged. After hiring an ACE case manager, HMC was able to identify 98% of ACE beneficiaries during their hospital stay, up from 78%. Although very few focus group beneficiaries were able to identify the patient navigators or ACE case managers by title, some beneficiaries did recall receiving what they described as “extra help” while in the hospital, and follow-up calls once they were discharged. The evaluators were unable to determine if the staff being discussed by the participants were in fact the case managers.

In addition to case management staff, some of the sites found it necessary to either hire additional staff or restructure staff to address issues related to ACE billing. Problems related to DRG 247 (Percutaneous cardiovascular procedure with drug-eluting stent without MCC) and other billing issues resulted in the need for manual “workarounds” at one site, requiring substantial person-hours to complete. LHS employed a retired orthopedic surgeon as medical director for the ACE program. The director plays a role in the day-to-day ACE operations and works collaboratively with the ACE financial and quality committees.

ACE sites were also given flexibility to determine which staff members were eligible to receive gainsharing and how to distribute it. Generally, at each of the sites, gainsharing was limited to

the physicians performing the ACE procedures. Two of the sites employed a physician report card system to monitor compliance with quality and cost measures. Gainsharing incentives were tied to individual physician performance on the score cards. Cardiac physicians at OHH and HMC are hospital employees and do not receive gainsharing directly. Instead, the gainsharing becomes part of the hospital's income and is used to improve patient care. The majority of key informants and physicians at the sites described gainsharing as a motivator for physicians to reduce cost and improve quality.

LHS is in the unique position of having another hospital, Hillcrest Medical Center, in the Ardent family participating in ACE. As one respondent noted, "there was a lot of development in process in regards to Hillcrest's [ACE] experience" which LHS was able to benefit from. LHS was told, "This has been done by us [Hillcrest]—here's a turnkey and how to work in this program." When asked if there were any processes at Hillcrest that did not translate well to LHS, one respondent noted "not really—pretty much all of the processes were pretty much turnkey."

ESJH is presently one hospital in the three-hospital Exempla Healthcare System in Denver. However, it is also integrating with a larger umbrella organization of 12 other hospitals. The interviewees commented at length on the several changes to the hospital's corporate structure as a result of the integration taking place, and how the changes affected some aspects of the ACE Demonstration. ESJH, similar to LHS, employs a medical director who is very involved in all aspects of the ACE Demonstration and is described as one of two physicians who "have been our champions for ACE." One ESJH respondent noted that the hospital "naively thought it was going to be fairly easy and found out that it's a terribly complex phenomenon that touches all aspects of the hospital." ESJH has experienced turnover, which has resulted in the loss of several staff (the former CEO, the first ACE project manager, physicians) who were instrumental in applying for the demonstration and planning the project. This turnover "slowed down" the implementation process. To further the goals of the demonstration, ESJH created an ACE Steering Committee and hired a full-time ACE patient navigator to identify ACE patients and to interact with the patients during and after their hospital stay. The hospital also hired a person to assist in marketing efforts for the hospitals and for ACE.

6. Satisfaction

Satisfaction with the demonstration is a key component of the evaluation and an indicator of the demonstration's success. The evaluation seeks to answer the following questions: (1) Were beneficiaries satisfied with the care they received during the demonstration? (2) Were facility staff/managers and physicians satisfied with the demonstration's strategies?

Overall, physicians appear to be satisfied with ACE; however, they had varied opinions at each of the sites. BHS physicians rated their satisfaction with the ACE Demonstration as high, which is attributed to gainsharing, lower costs, increased quality, standardization, cohesion among the staff, and increased coordination of care.

Additionally, most staff and managers agreed that ACE had a positive effect on the reputation of the hospital, both locally and nationally. One respondent stated: "We have received so much interest from around the country about how this program is working. Consulting groups and

conferences want us to come speak [about ACE]." Respondents were asked if there had been a change in patient volume as a result of ACE**.** While most thought BHS' volume increased slightly, they had anticipated much higher volume. In actuality, BHS' volume decreased.

Similarly, physicians at OHH were very satisfied with ACE and invested in the reputation of the hospital. Many noted that OHH is cost-conscious, yet patient quality remains paramount. When discussing staffing patterns, one physician commented, "If we compare ourselves, we staff our hospital at almost twice the level of the other average hospitals. We do that because we care about the patient experience, we care about the quality, we care about doing what we think is the best job we can."

HMC physicians appeared to be the most dissatisfied. Many were unaware of the details of the ACE Demonstration and felt that nothing had really changed as a result of it. Particularly because the cardiac physicians are often attending to emergencies and there is not a lot of time to discuss ACE with the patients. Some felt that their attendance at the focus group was taking them away from their patients, and excluding outpatient procedures "cheated" beneficiaries out of a check.

HMC staff also reported that prior to the implementation, the hospital had anticipated an increase in volume. While respondents stated that there have been increases in the orthopedic and cardiac procedures, the increases were not directly attributable to ACE. Interviewees thought that the expansion of Oklahoma Heart Institute and the reputation of the hospital's physicians contributed to the increase.

Physicians at LHS mentioned ethical issues around the gainsharing and Medicare Shared Savings check. One physician noted that some physicians decided to not participate in ACE because they felt it was unethical for physicians to receive extra money for performing their regular duties. Furthermore, one physician suggested that physicians could be perceived negatively if they choose to perform a procedure at an ACE hospital to receive gainsharing. Another physician expressed concern that ACE may incentivize patients to have a procedure performed when it may not necessary. He commented, "When you incentivize someone with dollars, it changes their overall thought process. It helps them decide whether or not to [have] an orthoplasty.

Physicians at ESJH are highly engaged in ACE and have been active in updating report card metrics and sitting on various meetings. However, when asked if they were satisfied, they expressed feeling neutral or "middle of the road."

Physicians and other staff across all sites had similar considerations in the following areas:

- Expectation that CMS would market ACE and the ACE sites more predominantly
- Volume growth
- Increase gainsharing from 25% for physicians to a 50-50 share
- Inclusion of outpatient cardiac procedures

Beneficiaries on the whole appear to be satisfied with their hospital stay. When asked to rate their satisfaction, almost all rated it as 3 or 4, with 4 as the highest rating. However, beneficiaries

in general lacked knowledge of ACE and chose their respective hospitals for reasons other than ACE. Although most beneficiaries were pleased with the hospital staff and their procedures, they tended to rate their satisfaction with the hospital and not ACE.