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Pepperdine University
Graduate School of Education and Psychology

HOSPITAL HEALTH CARE EXECUTIVES' ATTITUDES AND BELIEFS ON THE
IMPACT THAT THE HEALTHCARE PROVIDERS AND SYSTEMS SURVEY HAS
ON SERVICE QUALITY AND HOSPITAL REIMBURSEMENT

A dissertation submitted in partial satisfaction
of the requirements for the degree of
Doctor of Education in Organizational Leadership

by

Patrick Flanagan Billiter

September, 2011

Dr. Kent Rhodes, Ed.D. - Dissertation Chairperson

This dissertation, written by

Patrick Flanagan Billiter

under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

Doctoral Committee:

Kent Rhodes, Ed.D., Chairperson

R. Todd Bouldin, J.D.

A. Michelle Rosensitto, Ed.D.

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DEDICATION

To my wife, Melissa Jane Wiese Billiter. You are an amazing woman and the love of my life. You provided me the two greatest treasures in the world when you delivered Katherine and James. You are an incredible mother and our children reflect both your beauty and spirit. You have made countless sacrifices for me and our children and we are all better because of your hard work and dedication to our family. Thank you for being the wonderful spouse, parent, and person that you are. I love you more than you will ever know. Always and forever.

To Katherine Ann Billiter and James Patrick Flanagan Billiter. You are the most important people in my life. I am so blessed to be your father. You provide me unending joy and happiness. You both are so smart and make me so proud to be your dad. I am very proud of both of you. I will always love you.

To my mother, Maureen Ann Flanagan Billiter. You provided your four children and our father with unconditional love. You always told me I could be anything I wanted to be in life if I worked hard at it. You gave me your sense of confidence and competitiveness as well as your loyalty to family. You loved one person in life and Dad knew he was blessed to have you as his wife. I now know what it means to have a soul mate and to experience the joy of parenting. It is the most rewarding job I have ever had. I know you and Dad are together again waiting patiently for the rest of the family to join you. God willing, it will be a long time before we see each other again. I know you are watching over me and my family. I love you and miss you.

To my father, William Overton Billiter, Jr. You always preached about the importance of education and working hard in life. You were so proud when I received

my MBA but I know you would be even more proud of Melissa, Katherine, and James. I know Mom has told you countless stories about them but my only regret in life is that you were not able to meet any of them. Melissa is my soul mate and she looks like a million bucks. Katherine is smart, beautiful and has a presence about her that defies her age. She is Daddy's little girl and has me wrapped around her finger. Your grandson, James is the spitting image of you. As much as I look like you, James looks even more so like you. He is bright, energetic and has a smile and a laugh that light up a room. I know you would be proud. Thank you for your wisdom and love. I miss you and love you.

To my brother, Stephen Thaddeus Billiter, and my two sisters, Suzanne Maureen Billiter Faulkner and Mary Michelle Billiter. Even though I am the baby of the family, I was fortunate enough to have you as my older siblings. I was able to watch how each of you grew up and was able to learn from each of you in different ways. Suzanne, as the oldest, taught me how to be a responsible leader and juggle the balance of work and life. She taught me you can be a good parent and a good leader if you work really hard at both. Stephen taught me how to play sports and was always pushing me to improve myself in all aspects of life. He is a terrific parent and the most selfless person I have ever met. Mary was my protective older sister who has always watched over me. She taught me how to laugh at myself and to enjoy life to the fullest, no matter what it throws at you. I see the same love she gave to me in Katherine with James. Once this is all said and done, you will have to start calling me Dr. Booboo.

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you how busy you are being both a professor and a parent. Your three children are lucky to have you as a mother.

To Shannon Emmes, who has read, reviewed, critiqued, and edited countless papers for me during my doctoral program. You have been an invaluable resource. I am blessed to work with you. You are a brilliant writer and you have tremendous insight and wisdom on both work and the real world. Thank you for keeping me on top of my projects and making my papers exponentially better. You are a phenomenal young woman and I want to thank you for spending so much of your personal time to help me achieve my goal. Because of you, I feel like I have a best friend at work.

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VITA

ACADEMIC HISTORY

Pepperdine University Malibu, CA	Doctor of Education in Organizational Leadership Graduate School of Education and Psychology	2011
Pepperdine University Malibu, CA	Master of Business Administration Graziadio School of Business	1994
University of California Riverside, CA	Bachelors of Science in Economics	1993

EMPLOYMENT

2003 – 2011	Director of Finance ARAMARK Corp. Irvine, CA
2002 – 2003	Director of Finance Fidelity National Santa Ana, CA
2000 – 2002	Director of Business Planning and Support Gateway, Inc. Irvine, CA
1994 – 2000	Sr. Manager of Planning and Strategy Taco Bell Corp. Irvine, CA

PUBLICATIONS

Studying Economics in an International Country	with Dr. June Schmieder-Ramirez
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ABSTRACT

This study surveyed 314 hospital health care executives' attitudes and beliefs on the impact that the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey had on service quality levels and hospital reimbursements from Centers for Medicare and Medicaid Services (HCAHPS, 2008). Additionally, this study reviewed the increase in service quality levels as measured by HCAHPS since its inception in 2006.

Consumers now have access to data that previously was unavailable to them. If consumers see that a hospital has higher HCAHPS scores than a competing hospital in the area, the hospital with the higher scores should attract more patients. This study provides a research base of information that can be used as comparative data for other surveys conducted by those seeking to validate the effectiveness of the HCAHPS survey. A simple one-page 10-question survey was developed by this researcher. HCAHPS Survey Average Aggregate Scores increased by one full percentage point for each of the targeted areas. This indicates that over the past 4 years, the perception of healthcare in the United States has increased slightly.

The survey found that 82.2% agreed that service quality is the primary driver of their organization, 73.2% agreed that HCAHPS is the proper tool to measure service quality, 61.1% agreed that having HCAHPS data publicly shared is positive, and 56.7% agreed that HCAHPS should be used to justify CMIS reimbursement. 6 of the 15 demographic variables were significantly correlated with the aggregated scores. Specifically, higher aggregated scores were related to: (a) higher Hospital's HCAHPS Overall Rating ($r = .80$); (b) being a CEO ($r = .19$); not being a COO ($r = -.16$); and (c)

position of the hospital healthcare executive. Additionally, hospitals located in the West region ($r = .22$) as well as hospitals that identified themselves as being rural ($r = .18$) also showed significant correlation. Finally, the hospital's number of licensed beds ($r = -.25$) was also significantly correlated with the 4 research questions.

Chapter 1: Introduction

Background

In 2002, the Bush Administration launched the Hospital Quality Initiative that was intended to improve patient healthcare quality through accountability and public disclosure of patient's perception of their overall quality of care. The disclosure of the quality of care information was designed to empower and allow consumers to make more informed decisions about their health care. This disclosure of patient care information also was directed to encourage healthcare providers and clinicians to improve the quality of health care.

Beginning in 2002, the Centers for Medicare and Medicaid Services (CMS) partnered with the Agency for Healthcare Resource and Quality (AHRQ, 2008), another agency in the federal Department of Health and Human Services, to develop and test the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey. The HCAHPS survey is the first national, standardized, publicly reported survey of patient's perceptions of the overall quality of their care. While many hospitals have collected information on patient satisfaction for their own use, until HCACPS, there was no national standard for collecting or publicly reporting information about patient experience of care that allowed valid comparisons to be made about hospitals locally, regionally, and nationally. In order to make an accurate comparison to support consumer choice, it was necessary to design and introduce a standard measurement tool. HCAHPS is that standardized survey instrument and data collection resource for measuring patient satisfaction across all hospitals.

In May 2005, the HCAHPS survey was endorsed by the National Quality Forum (NQF), a national organization that represents many healthcare providers, consumer groups, professional associations, purchasers, federal agencies, as well as research and quality-assessment organizations. In December 2005, the Federal Office of Management and Budget gave its final approval for the national implementation of HCAHPS for public reporting purposes. CMS implemented the HCAHPS survey in October 2006 and the first public reporting of HCAHPS occurred in March 2008.

The enactment of the Deficit Reduction Act of 2005 created an additional incentive for acute care hospitals to participate in HCAHPS. Beginning in July 2007, hospitals that receive reimbursements through the Inpatient Prospective Payment System (IPPS) must collect and submit HCAHPS data in order to receive their full annual payment update. Hospitals that fail to conduct or report their HCAHPS survey information may see their reimbursement payments reduced by two percentage points. CMS has estimated that this will result in an average decrease in reimbursements by \$100 per patient (HCAHPS, 2008).

The HCAHPS survey asks discharged patients 27 questions about their recent hospital experience. The survey contains 18 questions about the patient's hospital experience including satisfaction with nurses, satisfaction with doctors, hospital staff responsiveness, cleanliness of hospital environment, pain management, communication about medicines, discharge information, overall rating of hospital, and willingness to recommend the hospital. The survey is not restricted to Medicare beneficiaries in order to not skew the data to one set of healthcare recipients.

The survey is administered to a random sample of adult patients between two and 42 days following discharge. The survey is implemented in four different survey modes: mail, telephone, mail with telephone follow-up, or active interactive voice recognition. Surveys must be conducted throughout each month of the year. The survey is in English but can also be conducted in Spanish, Chinese, Russian, and Vietnamese.

This introduction has discussed the history and background of HCAHPS. The next two sections describe the statement of the problem and the purpose of the study. Additionally Chapter 1 presents research questions detailing this study's intent to evaluate and validate the impact that the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS, 2008) survey has on service quality levels and hospital reimbursements. The survey conducted as the main focus of this study investigates hospital health care executives' attitudes and beliefs on the use of HCAHPS scores to improve service quality as well as justifies hospital reimbursement from Centers for Medicare and Medicaid Services. Additionally in Chapter 1, the significance and limitations of this study are described.

Statement of Problem

Prior to HCAHPS, there was no national standard for collecting and publicly reporting information about patient satisfaction and the quality of service received across hospitals in the United States. HCAHPS was designed to produce data about patients' perceptions of care that allow objective and meaningful comparisons of hospitals on topics that are important to the population. HCAHPS data is publicly reported to enhance transparency of the quality of hospital care provided by each hospital. Additionally,

hospitals must report their scores and be held accountable for their quality of care or risk losing public reimbursement.

Hospitals were allowed to have poor service quality levels, as measured by patients and hospital staff via third party surveys, yet those hospitals still received the same public dollars for reimbursements as hospitals that had excellent service quality levels (HCAHPS, 2008). The *Los Angeles Times* reported that hospitals were compensated for providing incremental services for patients because those patients developed additional illnesses due to the poor service quality levels they received from the same hospital (Do profits come first at hospitals?, 1997). These hospitals were reimbursed for providing poor healthcare to patients, and there was no system in place for consumers (patients) to go and both review and compare hospital information regarding patient safety, satisfaction with nursing, satisfaction with doctors, and overall patient satisfaction about the hospital (U.S. Department of Health and Human Services, 2010).

A review of the literature surrounding (a) the HCAHPS survey, (b) the scoring levels of HCAHPS, and (c) potential reimbursement impact, reveals that very little research has been conducted to examine what this could mean to the health care industry, specifically hospitals (U.S. Department of Health and Human Services, 2010). The literature does demonstrate that opinions of several healthcare organizations representing hospitals as well as agencies representing the United States Government have been solicited and used to justify the use of HCAHPS (2008). However, there is no research on what hospital health care executives' attitudes and beliefs were on the subject.

The use of HCAHPS scores to improve service quality as well as justify hospital reimbursement from CMS may appear to be valid, but what do hospital health care

executives believe about HCAHPS and CMS reimbursement? These executives, which would include Chief Executive Officers (CEOs), Chief Operating Officers (COOs), Chief Financial Officers (CFOs), and Chief Nursing Officers (CNOs), are the leaders and decision makers of their organizations and can implement necessary changes to improve service quality levels. These leaders also have a fiduciary responsibility to their organization and the cost of improving their service quality levels may offset the loss of CMS reimbursement.

The HCAHPS survey is the first publicly reported survey of patient's perceptions of the overall quality of their care. Prior to HCACPS, there was no publicly reported information about patient experience of care that allowed valid comparisons to be made about hospitals locally, regionally, and nationally. Hospitals should have greater motivation to improve patient experiences, as consumers now have access to data that previously was unavailable to them. If consumers see that a hospital has higher HCAHPS scores than a competing hospital in the area, then the hospital with the higher HCAHPS scores should attract more patients to that hospital.

Purpose of the Study

The purpose of this study was to evaluate the impact that the HCAHPS survey has on service quality levels and hospital reimbursements. This study assessed the change in HCAHPS scores from the initial measurement in October 2006 to the latest measurement scores through June 2010. Additionally, this study surveyed hospital health care executives' attitudes and beliefs on the use of HCAHPS scores to improve service quality as well as justify hospital reimbursement from CMS. These executives, including Chief Executive Officers (CEOs), Chief Operating Officers (COOs), Chief Financial Officers

(CFOs), and Chief Nursing Officers (CNOs), are the leaders of their organizations and have the ability to implement necessary changes to improve service quality levels at their respective hospital. In addition, these leaders also have a fiduciary responsibility to their organization and the cost of improving their service quality levels may offset the loss of CMS reimbursement. As such, their support is critical in implementing necessary changes to improve service quality levels. Thus their perceptions offer insight into what changes might be expected as a result of their hospitals' ratings on the HCAHPS survey.

A review of the literature reflects that no researcher has examined health care executives' attitudes and beliefs on the use of HCAHPS scores to improve service quality levels as well as justify hospital reimbursement from CMS. The literature does demonstrate that opinions of other special interest groups have been solicited, as cited earlier in this chapter. Thus, this study fills a gap in the literature. Since no research was found in a search of the literature concerning health care executives' candid and confidential attitudes and beliefs on the use of HCAHPS scores to improve service quality as well as justify hospital reimbursement from CMS, this project provided new information not available prior to this study. It is important to learn about executives' private opinions and perceptions about the threat or benefit the government's intervention has had, or will have, on the health care industry. This group of highly educated, skilled leaders may offer some enlightening insights into the issue of service quality and tying hospital reimbursement rates to publicly reported HCAHPS scores.

Research Questions

The research questions that will be explored in this study are as follows:

1. Did the overall aggregate HCAHPS score increase from the initial HCAHPS survey in October 2006 to June 2010?
2. Do health care executives believe that service quality is the primary driver of their organization?
3. Do health care executives believe HCAHPS is the proper tool to measure service quality levels?
4. Do health care executives believe that having HCAHPS data publicly shared is positive?
5. Do health care executives believe HCAHPS should be used to justify CMS reimbursement?

Significance of Study

As noted, part of the significance of this study is that it provides a research base of information not available prior to this study. This information also can be used as comparative data for other surveys conducted by special interest groups or government officials seeking to validate the effectiveness of the HCAHPS survey. The study evaluated the impact that the HCAHPS survey has on service quality levels and hospital reimbursements as well as survey hospital health care executives' attitudes and beliefs on the use of HCAHPS scores to improve service quality as well as justify hospital reimbursement from Centers for Medicare and Medicaid Services. Ultimately this study could contribute to policies that affect health care quality.

Key Definitions

The definitions included here are in alphabetical order to clarify issues and describe terms that are commonly used by health care executives and within the health care industry. If the reader is unfamiliar with health care terms, this section should provide information that will assist the reader in understanding this study.

- Abuse: “To make excessive or improper use of a thing, or to employ it in a manner contrary to the natural or legal rules for its use. To make an extravagant or excessive use, as to abuse one’s authority” (Black, 1979, p. 10). In the present study, abuse usually refers to a manner of operations that results in excessive or unreasonable costs to the Medicare or Medicaid programs (Cartwright, Cole, & Forsyth, 2000, p. App. B:1).
- Acute care hospital: “A hospital that cares primarily for patients with acute diseases or conditions and whose average length of stay is less than 30 days” (O’Leary, 1994, p. 19).
- Antikickback statute:

A provision of the Social Security Act (42 USC) that forbids any knowing and willful conduct involving the solicitation, receipt, offer, or payment of any kind of remuneration in return for referring any individual for any Medicaid or Medicare covered item or service, or for recommending or arranging the purchase, lease, or order of an item or service that may be wholly or partially paid through the Medicare or Medicaid programs.

Violation of the antikickback provision can result in a fine of up to \$25,000 for each violation and/or imprisonment for up to 5 years. The law

also mandates exclusion or suspension from government health care programs following a conviction under this statute. (Cartwright et al., 2000, p. App. B:1)

- Centers for Medicare and Medicaid Services (CMS): This is the new name for Health Care Financing Administration or HFCA. Renamed under the George W. Bush presidency.
- Chief Executive Officer (CEO): “The individual appointed by a governing body to act on its behalf in the overall management of an organization” (O’Leary, 1994, p. 176).
- Chief Financial Officer (CFO): “The individual responsible for management of an organization’s overall financial plans and policies and the administration of accounting practices. The job typically includes directing the treasury, budgeting, auditing and tax accounting” (O’Leary, 1994, p. 176).
- Chief Operating Officer (COO): “The individual responsible for the management of day-to-day and internal operations of an organization. In many organizations, the COO is the second highest management officer and, in the absence of the chief executive officer, is responsible for administration” (O’Leary, 1994, p. 176).
- Chief Nursing Officer (CNO): “The individual responsible for management of a hospital’s nursing staff. The job also includes oversees patient care and clinical outcomes” (O’Leary, 1994, p. 176).
- Corporate compliance program: “A program designed, implemented, and enforced by a corporation to detect and prevent violations of fraud and abuse” (Cartwright et al., 2000, p. App. B:3)

- Department of Health Services (DHS): This agency is “a principal department of the executive branch of the United States government with major health-related accountabilities including the responsibilities of the Public Health Service, Health Care Financing Administration, the Office of Human Development Services, and the Social Security Administration” (O’Leary, 1994, p. 248).
- District hospital: “A type of hospital that is controlled by a political subdivision of a state; this subdivision is created solely for the purpose of establishing and maintaining health care organizations” (O’Leary, 1994, p. 264).
- Emergency Medical Treatment and Active Labor Act (EMTALA): This law, passed in 1986, was part of the Comprehensive Omnibus Budget Reconciliation Act (COBRA) and applies to hospitals that treat and bill for Medicare patients. This act requires a hospital’s emergency department to provide any patient that asks to be seen, a medical screening examination. If it is found that an emergency condition exists, the hospital must treat and/or stabilize the patient regardless of the patient’s ability to pay. The hospital may not inquire about the ability to pay until the screening is performed. If the hospital does not have the ability to treat the patient, the patient may be transferred after they are stabilized. The receiving hospital may not refuse the transfer if the receiving hospital has the ability to treat the patient’s condition (Bucy, Hopson, Kalb, & Fabrikant, 2000).
- For-profit hospital: “A hospital that is owned and operated by a corporation or an individual and that operates on a for-profit basis” (O’Leary, 1994, p. 407).
- Fraud and abuse: “Fraud is a false statement, willfully made, for material gain with the intent to deceive; for example, acts such as misrepresenting eligibility or

need for health services, claiming reimbursement for services not rendered or for non-existent patients. Abuse is an exaggerated statement willfully made, for material gain and with the intent to confuse” (O’Leary, 1994, p. 321).

- The Medicare Part B Carriers Manual (MCM): defines fraud as it relates to the Medicare program as: “The intentional deception or misrepresentation that an individual knows to be false or does not believe to be true and makes, knowing that the deception could result in some unauthorized benefit to himself or herself or some other person” (Health Care Financing Administration, 1999, § 14001).
- Health maintenance organization (HMO): “A system of health care delivery that not only pays for the care, but also arranges for the provision of services. In order for the HMO to pay for the cost of the health care, members must receive care from a participating provider who has contracted with the HMC. In most HMOs, members choose a primary care physician from a panel of physicians affiliated with the HMO. The primary care physician serves as a gatekeeper, authorizing all visits to a specialist” (Cartwright et al., 2000, p. App. B:7).
- Joint Commission for Accreditation of Healthcare Organizations (JCAHO):
 - an independent, not-for-profit, national organization founded in 1951 that develops organization standards and other performance measures, awards accreditation decisions, and provides education and consultation to the following types of organizations: hospitals; psychiatric facilities; substance abuse treatment and rehabilitation programs, community mental centers, organizations providing services for the mentally retarded and developmentally disabled; long term care facilities; hospice programs;

ambulatory health and managed care organizations; and health care networks” (O’Leary, 1994, p. 410).

- Managed care: “A broad term used to describe a system of health care delivery that tries to manage the cost of the health care, the quality of health care and the access to health care. The term managed care encompasses a variety of health care delivery organizations, including HMOs, preferred provider organizations (PPOs) and physician-hospital organizations (PHOs)” (Cartwright et al., 2000, p. App. B:8).
- Medicaid: “A federal and state funded program administered by participating states that finances health care for the poor. States receive federal matching funds and are free to design their programs as long as they cover certain federally mandated services and their programs within federal parameters. Most individuals are eligible for Medicaid because they receive cash assistance through federal or federally assisted welfare programs” (Cartwright et al., 2000, p. App. B:9).
- Medi-Cal: California’s Medicaid Program. “This is a medical assistance program that is jointly funded by the federal government and states. It reimburses hospitals and physicians for providing care to needy and low-income people who cannot finance their own medical expenses” (O’Leary, 1994, p. 455).
- Medicare: This is a federally funded health insurance program administered by the Health Care Financing Administration (HCFA). The program “reimburses hospitals and physicians for health care provided to qualified people aged 65 and older, persons eligible for Social Security disability payments for at least two

years, and certain workers and their dependents who need kidney transplantation or dialysis” (O’Leary, 1994, p. 469). All working Americans contribute a portion of their salary to this insurance program for use at age 65. “Part A is hospital insurance that covers hospital costs. Part B is supplemental medical insurance that covers physician and other services” (p. 469).

- “Part A is compulsory coverage and is financed by a payroll tax on employers and employees. Part B is optional coverage, and most individuals who elect this coverage must pay a monthly premium. State Medicaid programs pay Part B programs for individuals who are entitled to Medicaid in addition to Medicare” (Cartwright et al., 2000, p. App. B:9).
- Not-for-profit hospital: “A general or acute care, non-taxable hospital that operates on a not-for-profit basis under the ownership and control of a private corporation. Profits are turned back into maintenance and improvement of the hospital’s facilities and services. Not-for-profit hospitals are usually owned by a community, a church, or another organization concerned with community services and resources” (O’Leary, 1994, p. 545).
- Skilled nursing facility (SNF): “A facility that is primarily engaged in providing skilled nursing care. Such facilities have an organized professional staff, including physicians and registered nurses, and meet other requirements established by law. A patient may be discharged from an acute care hospital and then admitted to a SNF. Skilled nursing care may be provided in an area of an acute care hospital, this area is usually called a skilled nursing unit” (O’Leary, 1994, p. 727).

Limitations of Study

The scope of the study is one important delimitation. This study will focus on clinical outcomes and patient satisfaction in acute care hospitals rather than clinical outcomes. As described in the literature review, correlations have been found between these two measures, but there are distinct differences between these constructs that should be kept in mind.

It is important to comment on limitations of this study so readers can proceed using caution with any conclusions they may make after having these limitations revealed. The survey instrument described in Chapter 3 was purposely designed to be short and simple so as to be easily completed in a few minutes by busy health care executives. The brevity of the survey instrument may be considered a limitation by some readers and researchers as a more detailed survey could provide more in-depth information on the subject being surveyed and measured. The researcher expected that the brevity of the survey would result in a higher rate of return.

The population for this study consisted of CEOs, CFOs, COOs, and CNOs of both not-for-profit and for-profit acute care hospitals across the United States of which there were approximately 4,500 at the time of this study. The sample used for this study was composed of CEOs, CFOs, COOs, and CNOs of hospitals who belong to the American College of Healthcare Executives (ACHE). The ACHE publishes a yearly guide containing the names, addresses, and email addresses of all member hospitals as well as the names of the CEOs, CFOs, COOs, and CNOs in the organization. This survey was sent to all hospital executives listed in this guide that were identified as a hospital member. The association also retains a list of former members, and these members were

included as potential participants in the survey. While the survey was intended for the four top executives, organizations may have various equivalent titles for these positions, or the intended executive may have asked another top manager to or executive to fill out the survey instead.

A simple 10-question survey instrument was developed by this researcher to gather data from hospital healthcare executives. The brevity of the instrument was strengthened by its simplicity. The researcher estimated that this survey could be completed in less than 1 minute for most respondents. The survey listed four research questions and six demographic questions and the survey questions are presented in Chapter 3.

The email survey was sent to over 11,000 healthcare executives. The return rate after 10 days was 314 or ~ 2.8% of the total survey population. While this response rate was statistically significant, there were over 97% of hospital health care executives who did not respond to this survey. Thus, this researcher could only base his analysis and conclusions on the responses received and note that the limitation of this survey was based solely on the responses of those hospital health care executives who participated in the survey.

Health care executives may have been biased towards the use of the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey depending on their respective hospital ranking. If a health care executive's hospital was in the top quartile, that hospital executive may have been more inclined to believe the HCAHPS survey is a more effective tool compared to a different hospitals' executive

whose hospital is in the bottom quartile. This researcher attempted to take into account this bias via descriptive statistics.

Another limitation was the assumption that consumers have a choice in choosing their hospital for health care. In rural areas, there is generally one hospital covering a large geographic area and thus consumers in these rural areas do not have the option to choose which hospital they want to visit because of the limitation of the actual number of hospitals in their area.

Additionally, consumers may also be limited by their health care insurance provider as to which hospital they can visit when they require medical services. Insurance companies negotiate contracts with both hospitals and physicians in order to reduce their operating expenses. As a result, health insurance providers can restrict or reduce the coverage on consumers who go to a hospital or physician who is not part of the health insurance providers plan. Thus, consumers do not have as much freedom to choose which hospital they want to visit based on these factors noted above.

Ecological bias was also a limitation of this survey. Ecological bias is an erroneous assumption that a statistical association between group level variables is representative of the same variables at the individual level. One needs to proceed with caution in assuming from group responses to this survey instrument that these responses represent views of all hospital executives in the population or even as individuals within the surveyed group. In other words, caution should be used in making assumptions. The measurement of the variables in the sample used for research may indeed represent all other individuals in this population, but just as easily may not. This is the reason for the caution to the reader (Rosenberg, 1968).

Summary

The purpose of this study was to survey hospital health care executives' attitudes and beliefs on the impact that the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey has on service quality levels and hospital reimbursements from Centers for Medicare and Medicaid Services. These executives, including Chief Executive Officers (CEOs), Chief Operating Officers (COOs), Chief Financial Officers (CFOs), and Chief Nursing Officers (CNOs), are the leaders of their organizations and have the ability to implement necessary changes to improve service quality levels at their respective hospital. Additionally, this study assessed the change in HCAHPS scores from the initial measurement in October 2006 to the measurement of scores through June 2010.

Hospitals should have greater motivation to improve patient experiences as consumers now have access to data that previously was unavailable to them. If consumers see that a hospital has higher HCAHPS scores than a competing hospital in the area, then the hospital with the higher HCAHPS scores should attract more patients to that hospital. The results of this study provide a research base of information not available prior to this study. This information can be used as comparative data for other surveys conducted by special interest groups or government officials seeking to validate the effectiveness of the HCAHPS survey. The population and sample of this study consisted of CEOs, CFOs, COOs, and CNOs of both not-for-profit and for-profit acute care hospitals across the United States of which there were approximately 4,500 at the time of the study.

Chapter 2: Literature Review

Literature Emphasizing Importance of the Study

Healthcare quality needs improvement. McGlynn, Asch, and Adams (2003) found that most United States residents presume they receive high quality care when they are in a hospital. Although the United States health care system is the most expensive in the world, the Institute of Medicine's report of 2001 proclaimed a chasm between how the United States health care system currently performs and its ideal. Lapses in quality of care are apparent and growing (Corrigan, Donaldson, & Kohn, 2001).

Timeliness of the present study. As a result, the United States is launching major reforms of the health insurance industry and the health care delivery system. As such, ongoing trends toward greater transparency of quality of care and patient satisfaction are likely to accelerate. Value-based purchasing, under which federal health programs will reimburse providers based on scores achieved on those outcomes measures, is nearly certain to be part of a final reform law, but even absent reform, the Obama administration is advancing regulations to implement a similar payment change. Meanwhile, private insurers are continuing to adopt quality metrics, including patient satisfaction, as measures of performance and value, and are advancing pay-for-performance programs of their own. As all payers move toward reimbursement based on quality, organizations that do not move quickly to improve their performance will find themselves at a major competitive disadvantage.

Consumers, who are paying an ever greater share of the costs of care, are beginning to shop for value. They are being pushed in part by some insurers' use of tiers of providers based on their ability to deliver cost-effective care. Additionally, more

savvy patients are turning to Hospital Compare, the federal government's public database of quality and patient satisfaction, when they need to choose a hospital for care.

Patient Satisfaction Verses Clinical Outcomes

This study focused on patient satisfaction in acute care hospitals rather than clinical outcomes. There is a tremendous amount of literature and research regarding pay-for-performance that has focused on how hospitals measure up against one another clinically, but less emphasis on how patients perceive their hospital care and how the public reporting of that data may influence and improve quality and patient satisfaction. Clinical outcomes and patient satisfaction are both obviously important to hospitalized patients. However, clinical outcomes and patient satisfaction have multiple constructs and specific quality indicators that are difficult for patients to quantify. Patients are not able to distinguish quality in health care. According to Sandrick (2008), patients measure their satisfaction by how courteous and compassionate they were treated, how well they were instructed about what was happening to them, how quickly their concerns were addressed, and that they saw no significant adverse outcome in their condition.

Clinical outcomes are important to patients. Patients who live in the United States presume they are receiving higher quality patient care than what they actually are receiving. This is due to the fact that most patients are not sophisticated enough to discern the quality of patient care. Patients can understand perceived satisfaction and interpret those results rather than actual clinical quality data. The important issue of clinical outcomes remains for other studies to address. At the same time, literature in following sections shows a correlation between patient satisfaction ratings and clinical outcome ratings.

Hospital Consumer Assessment of Healthcare Providers and Systems

“Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) is a game changer. It will transform the way hospitals do business” (Studer, 2010, p. 1). This is a bold statement by Quint Studer especially given the emphasis on financial reform by the Obama Administration. Yet, HCAHPS could be one of the silver bullets that people are looking for to fix healthcare. Healthcare executives, who focus on improving their HCAHPS scores, should see improved results including better clinical outcomes. This in turn could reduce costly readmissions and hospital-acquired infections while generating higher patient satisfaction scores and improved employee satisfaction in their work environment.

The Healthcare Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey was developed by the Centers for Medicare and Medicaid Services (CMS) and the Agency for Healthcare Research and Quality (AHRQ) to create a uniform method of accumulating information about patient’s perceptions on their hospital care. HCAHPS is the result of nearly 4 years of development that involved creating a survey instrument, testing the instrument with hospitals and patients, allowing public feedback, and conducting a pilot test to ensure accuracy and reliability in the data.

Since March 2008, the Centers for Medicare and Medicaid Services has been publicly reporting data from the Hospital Consumer Assessment of Healthcare Providers and Systems survey. HCAHPS is designed to measure patient perceptions of care so that consumers can make informed decisions when choosing a hospital. Use of HCAHPS is required by CMS for general acute care hospitals to maintain eligibility for full reimbursement updates. A majority of the hospital quality of care information gathered

through the HCAHPS program is available to health care consumers on the Hospital Compare website. The website states the following:

Hospital Compare is a consumer-oriented website that provides information on how well hospitals provide recommended care to their patients. On this site, the consumer can see the recommended care that an adult should get if being treated for a heart attack, heart failure, pneumonia, or having surgery. The performance rates for this website generally reflect care provided to all U.S. adults with the exception of the 30-Day Risk Adjusted Death and Readmission measures that only include Medicare beneficiaries hospitalized for heart attack, heart failure, and pneumonia. In March 2008, data from the Hospital CAHPS (HCAHPS) survey, also known as the CAHPS Hospital Survey, was added to Hospital Compare. HCAHPS provides a standardized instrument and data collection methodology for measuring patient's perspectives on hospital care. (U.S. Department of Health & Human Services, 2010, para. 1)

This website was created through the efforts of the Centers for Medicare and Medicaid Services (CMS), along with the Hospital Quality Alliance (HQA). The Hospital Quality Alliance (HQA), with the stated goal of improving care through information, was created in December 2002. The HQA is a public-private collaboration established to promote reporting on hospital quality of care. The HQA consists of organizations that represent consumers, hospitals, doctors, employers, accrediting organizations, and federal agencies. The HQA effort is intended to make it easier for the consumer to make informed healthcare decisions and to support efforts to improve quality in U.S. hospitals.

The major vehicle for achieving this goal is the Hospital Compare website. CMS also reported on the Hospital Compare website the following:

The Reporting Hospital Quality Data for Annual Payment Update (RHQDAPU) program was originally mandated by Section 501(b) of the Medicare Prescription Drug, Improvement, and Modernization Act (MMA) of 2003. This section of the MMA authorized CMS to pay hospitals that successfully report designated quality measures a higher annual update to their payment rates. Initially, the MMA provided for a 0.4 percentage point reduction in the annual market basket (the measure of inflation in costs of goods and services used by hospitals in treating Medicare patients) update for hospitals that did not successfully report. The Deficit Reduction Act of 2005 increased that reduction to 2.0 percentage points. (para. 1)

In addition to giving hospitals a financial incentive to report the quality of their services, the hospital reporting program provides CMS with data to help consumers make more informed decisions about their health care. According to CMS, in Fiscal Year 2009, 96% of hospitals participated successfully in the reporting program and received the full market basket update for FY 2010. In 2011, hospitals will not have to affirmatively report data to CMS. Instead, CMS will calculate the measures using Medicare claims data.

For individual hospitals, the average Medicare payment is the total Medicare payment made to the hospital divided by the number of discharges. The average hospital payments for the same discharge can vary. According to the CMS website, a hospital can get a higher payment for any or all of the following reasons:

- It is classified as a teaching hospital.
- It treats a high percentage of low-income patients (called a disproportionate share hospital).
- It may treat unusually expensive cases (outlier payments).
- It pays its employees more compared to the national average because the hospital is in a high-cost area. Note: A hospital's Medicare payments are adjusted based on the wage rates paid by area hospitals based on their payroll records, contracts, and other wage related documentation.

The pricing and volume information can provide health care executives with a general overview of the expected reimbursement rate. CMS has posted this information for the public to see the cost to the Medicare program of treating beneficiaries with certain illnesses in their community. A better understanding of the cost of care leads to more informed decision-making and better patient care. This is one more way that health care personnel can improve patient satisfaction scores.

The goal of HCAHPS is to financially encourage hospitals to take steps to make care safer for patients. The questions designed in the survey are represented by quality measures that are known to improve the quality of care patients receive during inpatient visits to the hospital. Deirdre Mylod, Ph.D., vice president of hospital services at Press Ganey stated the following:

HCAHPS has been a defining moment for hospitals. The Centers for Medicare and Medicaid Services had said it knew HCAHPS wouldn't by itself improve quality of care, but it had hoped it would be a catalyst for improvement. And by and large, that has been borne out. Consumers may not be using the data to make

health care decision yet, but it does seem that providers' attention and resources, and the level at which they are addressing patient-centered care, has really changed. (Press Ganey Associates, 2010, p. 1)

Characteristics of the HCAHPS survey. The HCAHPS survey is different than prior patient satisfaction surveys. HCAHPS asks patients to complete survey questions on the care they received from nurses, the care they received from doctors, the hospital environment, the experiences they had in the hospital, the information they received at discharge, their overall rating of the hospital, and whether they would recommend the hospital to others.

The objective of the HCAHPS survey is to provide uniform measures of patients' perspectives by standardizing tools and methods of data collection. By creating a national standard for collecting and reporting information from patients, HCAHPS allows an apples-to-apples comparison to be made across hospitals. HCAHPS is the first publicly available program that presents side-by-side information collected from patients about individual hospitals on a wide scale. Giordano, Elliott, Goldstein, Lehrman, and Spencer (2010) found that the potential benefits of having HCAHPS scores published online included increased transparency, improved customer decision making and increased incentives for the delivery of high-quality health care. The HCAHPS program does not rank hospitals as better or worse performers. HCAHPS simply posts the information so consumers can make their own judgment. HCAHPS does provide national and state norms for comparisons of hospital care.

HCAHPS is not merely a patient satisfaction survey. HCAHPS is a tool to obtain patients' views of the consistency in care they received while they were hospitalized.

Jha, Orav, Zheng, and Epstein (2008) conducted a study and found that hospitals that provide a higher quality of care had a higher level of patient satisfaction. Lauer (2008) stated that “HCAHPS scores will get better and better because everyone will dedicate themselves to making it so, if for no other reason than competitive survival” (p. 25).

With the new Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey, the patients are asked to rate their hospital experience. “Always” is the key word for hospitals to be rewarded for their efforts. “Always” as defined by Webster’s dictionary means “at all times.” This is a high standard to attain, yet that is exactly how hospitals want their patients to view their hospital care.

Measured in frequencies, patients are asked about their perception regarding how often they received particular aspects of health care during their hospital stay. Always delivering quality care means providing the best care to every patient, every time and with every interaction. Anything else will not be good enough.

Previously sheltered from public reporting of hospital patient satisfaction scores, hospitals have entered a new era of transparency. As part of a larger movement to help inform consumers, the patient perception of their experience with a hospital will now be reported with other quality metrics. The HCAHPS tool is a standardized, national patient survey, allowing public sharing of comparable data across acute care hospitals. While many facilities have been interested in their patient’s perception of care for a very long time, the potential for public reporting is a very powerful motivator for hospitals to become even better.

Hospital executives will be asked to respond on their opinion and attitudes toward the fact that their HCAHPS scores will be publicly reported. All hospitals will need to

achieve a higher level of clinical, operational, and service excellence in order to achieve the desired financial outcomes.

The HCAHPS survey questions focus on key words in patient communication with doctors and nurses, responsiveness of staff, cleanliness and quietness of the environment, pain control, discharge information, and communication about medications. Key words are important to deliver a consistent message and keep patients informed. The new HCAHPS survey asks the patients about how often the staff explained things in ways they can understand and how often they were treated with courtesy and respect. Evidence shows us that if every employee would focus on communicating with patients, by explaining things in ways patients can understand, it would help reduce patient anxiety and lead to higher patient satisfaction scores. Additionally, active listening by all hospital personnel will help impact the patient perception and subsequently lead to higher satisfaction scores.

Hospitals should be focused on always providing the best care to their patients. The HCAHPS survey tool allows the public to know what other patients think about the elements of care that are most important to them and helps others understand if they would recommend the hospital to their family and friends. If that is not motivation enough, the Centers for Medicare and Medicare Services (CMS) issued a final rule for hospitals paid under the Inpatient Prospective Payment System. Those hospitals eligible for the annual payment update must submit their HCAHPS data or forfeit 2% of the annual payment update. This is part of the quality measures required in the Reporting Hospital Quality Data for Annual Payment Update (RHQDAPU) and is required as of July, 2007. The financial penalty varies from hospital to hospital, based on a number of

factors including average daily census, but could be substantial. This requirement puts in motion the pay-for-participation concept, and there seems to be a clear movement to eventually tie reimbursement to performance on quality metrics, including the patient perception of quality.

The HCAHPS survey provides 27 questions to evaluate and assess patient satisfaction. The questions have been generated from an effort to improve their patient, physician and employee focus on quality care. In the era of publicly reporting the data, this strategy takes on a whole new meaning and will be critical to the long-term success of hospitals.

Importance of the HCAHPS survey. Research has demonstrated that the information collected by HCAHPS is precisely the kind of information consumers value. Including the results of the HCAHPS survey on Hospital Compare enriches consumers' understanding of the ways in which their local hospitals perform. The variety of data available enables consumers to decide for themselves which aspects of care are most important to them and use that information to make decisions about their care.

Hospitals and health care practitioners have long known the value of understanding patients' perceptions of care. Prior to HCAHPS nearly all hospitals routinely collect such information via a third party provider to improve care in their facilities. Apart from a small number of state efforts, the information was not collected in a uniform manner, and therefore, was not consistent nor available to share with the public. HCAHPS now allows hospitals to collect relevant, comparable data that is useful for consumers.

The HCAHPS survey instrument was developed using a scientifically sound process and has undergone substantial scrutiny over the past several years. HCAHPS is not a third party satisfaction survey. HCAHPS was designed to report apples-to-apples comparisons on hospitals across the United States on the patient's perceptions of their quality of care.

Mandated participation in HCAHPS survey. HCAHPS can provide a representative picture of acute care hospitals in the United States. The program is voluntary, however, hospitals that do not submit data to HCAHPS forfeit 2% of their annual Medicare and Medicaid reimbursement. According to the Government Accountability Office (GAO, n.d.), up to 50% or more of patients for which they provide care are insured by the federal Medicare or Medicaid programs, so reimbursements are a critical source of revenue for many hospitals.

Impact of HCAHPS data and public disclosure. HCAHPS evaluations of patients' perspectives on health care quality are shared with the public, unlike a third party satisfaction survey where the data is kept in-house. A number of third party patient satisfaction survey companies including Press Ganey Associates, NRC Picker, AVATAR, and QualityNet all claim their programs drive higher HCAHPS scores on Overall Hospital Rating and Likelihood to Recommend, which are the two most important measures on the survey. Hospitals in a competitive environment will be forced to improve quality. Some hospitals have up to 50% of their patients on Medicare or Medicaid, so they are forced to participate and increase their HCAHPS scores or risk financial penalties.

Other Sources for Patient Satisfaction Assessment

Press Ganey Associates (2010) just released their own analysis indicating that hospitals that partnered with Press Ganey scored higher than non-Press Ganey partners on their HCAHPS scores, specifically the Overall Hospital rating and Likelihood to Recommend. NRC Picker (n.d.) also came out with their own analysis showing that hospitals that partnered with their organization's patient-centered care program scored higher on Overall Hospital rating and Likelihood to Recommend. Additionally, Press Ganey Associates (1997) has also written a book to help educate and train hospital employees to understand HCAHPS and stimulate organizational change to improve scores. According to the authors, "Reflecting on and understanding the impact that care and actions have on patients, providers and facility practices can be amended and patient care improved" (p. 1).

Nurse.com (2007) came out with an online seminar to provide information about the benefits of patient satisfaction surveys, specifically HCAHPS. The program is designed to provide nurses with the tools and resources they need to be successful in delivering quality patient care.

Hospitals can also use third party vendors to collect and submit the data. According to Quality Net (2009), they will implement the HCAHPS survey and upload the data weekly to both the HCAHPS website and directly to the hospital whose services are being surveyed.

Survey items are correlated to the patient satisfaction survey question, "Likelihood of your recommending this hospital to others." This helps provide insight into what patients say hospitals should improve including addressing emotional needs,

such as fears and concerns, and involving patients and their families in discussions and decisions so that they can be an active part of their own care.

Teleki et al. (2007) examined the reporting of HCAHPS scores by sponsors, those that fund data collection and decide how information is summarized and disseminated. They found that sponsors typically publically reported comparative data to consumers, employers, and purchasers. These sponsors reported trend data and summary scores consistent with the known successful reporting practices. These sponsors were also found to be adept at tailoring their reports to specific audiences, assessing the literature, educating hospitals, and evaluating programs.

Healthcare financial leaders are realizing the importance of listening to patients. Greater flexibility in treatment options and new quality and transparency initiatives will place more power in consumers' hands. Although patients need more information than is available in HCAHPS, this measure gives them important information.

The 27 questions asked in the HCAHPS survey covers many of the same areas that hospitals have evaluated on their own patient satisfaction surveys. While some hospitals have transitioned solely over to HCAHPS to measure their hospital, many hospitals are customizing their own hospital surveys tailored to their individual market. In an interview with Larkin (2010) of Health Leaders Media, Redge Hanna, director of service performance at Emory Healthcare in Atlanta said the following:

We try to measure everything we do, by looking at what we do and how we do it at the same time. That essence does not always come through in the HCAHPS survey. It does not give us comments or the overall perception we are leaving people with. (p. 1)

Hanna also commented that Emory received a more complete picture of what is happening at the hospital and can target improvements in different departments when it uses both HCAHPS and their third party survey by Press Ganey Associates (2010). The Press Ganey survey asks more than just the HCAHPS questions and allows the hospital to learn more about its individual departments and how they are or are not achieving patient satisfaction in meeting patients' self-perceived needs. The information provided by Press Ganey Associates and HCAHPS also helps Emory evaluate its employees including doctors, nurses, environmental services staff, and even maintenance. Additionally, using both HCAHPS and Press Ganey surveys allows Emory to benchmark their hospital versus other hospitals in the country (Press Ganey Associates, 2010).

Challenges in Assessment of Healthcare Providers and Systems

Three important challenges for assessment of healthcare providers and systems are (a) defining patient satisfaction, (b) determining what is actually being measured, and (c) interpreting patient satisfaction. These three challenges are discussed in the following subsections.

Defining patient satisfaction. Importance of patient satisfaction assessment. Carr-Hill (1992) wrote that "Across the United States, consumer satisfaction is playing an increasingly important role in quality of care reforms and health care delivery. However, consumer satisfaction studies are challenged by the lack of a universally accepted definition or measure" (p. 236). This observation was a precursor to the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) measurement tool. Although there were many tools to measure satisfaction, the results found by different patient satisfaction survey companies were inconsistent. Linder-Pelz (1982)

defined satisfaction as “positive evaluations of distinct dimensions of the health care” (p. 578). Linder-Pelz’s evaluation of health care included a single clinic visit, treatment throughout an illness, a health care plan, or the health care system in general. Pascoe (1983) defined patient satisfaction as “a health care recipient's reaction to salient aspects of the context, process, and result of their service experience” (p. 189). In Pascoe’s formulation of satisfaction, he evaluated services received as salient characteristics of patients’ health care experience compared with a subjective standard.

Collins and Nicolson (2002) suggested that satisfaction “is a complex and fluid construct, which is defined, redefined, and re-evaluated by participants throughout the interview process” (p. 615). They also noted challenges when comparing the results of studies conducted in different languages because of the inherent differences in word connotations. Therefore, it is essential to be aware of what is being tested when the term ‘satisfaction’ is used in a survey. The authors also identified that the most complex concept issue of patient satisfaction, as well as the most frequently reported, was expressed in terms of doctor-patient interactions. Patient descriptions were complex, emphasizing the importance of verbal and non-verbal communication in the areas of active listening, opportunity to ask questions, receipt of information, being taken seriously, individualized care, and emotional state after visit. Patients frequently noted the importance of active listening (Collins & Nicolson, 2002).

Determining what is actually being measured. Strasser, Aharony, and Greenberger (1993) wrote that although patient satisfaction with medical care has long been a subject of public health research and clinical practice, there is no comprehensive theory that addresses the components or factors influencing patient satisfaction, or the

methods for its measurement. The need for valid and broad scale measures of healthcare quality is clear. Unfortunately, there is no consensus on which aspects of quality to measure, such as focus on the physician, hospital processes of care, or on clinical outcomes including mortality rates.

Measuring patient experiences at hospitals is a challenge. The primary HCAHPS satisfaction question on the survey, asking if the patient would recommend the hospital to friends and family can be viewed two ways by patients (Quality Net, 2009). While some find the question to be a useful assessment of the hospital based on the patient's experience, others believe that the patients' responses reflect a hospital's reputation and brand quality rather than a patient's actual experience.

Collins and Nicolson (2002) reported five emerging themes from patients asked to describe the meaning of satisfaction: (a) receiving a diagnosis, treatment, and cure; (b) receiving information and explanations; (c) the need for participants to feel that they were taken seriously; (d) the need for individualized personal care; and (e) the importance of short waiting times for appointments and treatment.

Darby, social science administrator for AHRQ's Center for Quality Improvement and Patient Safety said, "We went into this really with the idea that [patient experience] is a measure of quality. It is not what someone might call an objective measure, but at the same time it is a measure, and its an important perception" (Kirchheimer, 2007, p. 1).

Interpreting patient satisfaction. Schneider and Palmer (2002) wrote that positive satisfaction ratings include both true positives and false positives. These researchers argued that these attributes compromised the sensitivity in a diagnostic test and by the same token reduced the precision of satisfaction ratings.

In contrast, Taylor et al. (2008) argued that negative satisfaction ratings tend to be truly negative or highly specific in the analogy of diagnostic accuracy and reflect important incidents, such as a lack of respect or medical errors. Their research indicated that negative satisfaction is an accurate score and that the representation of negative satisfaction is important. They wrote that satisfaction ratings do not need to be changed. High satisfaction ratings indicate that care is adequate, not that it is of superior quality; low ratings indicate problems and should not be passed over.

Another defining characteristic of patient satisfaction is its high degree of variety and variance, even within the practice of one doctor. Love and Burton (2005) researched the subject and found that analytical modeling that separates the variance into practice, doctor, and patient levels cannot separate variance between patients. They believed that part of this random error came from the variation within practices and within doctors, which can to be expected, given the complexity of health care. It is not surprising that such complexity can be only partially captured by a short questionnaire about experience and satisfaction.

Despite this result, some researchers found that patient assessments of health care work surprising well. Haggerty et al. (2008) wrote that assessments by patients explain more variance between practices than they do between doctors, which makes sense for an attribute related to organizational arrangements. Conversely, assessments of communication explain more variance between doctors than between practices.

Other studies, including one by Rodriguez, Scoggins, von Glahn, Zaslavsky, and Safran (2009), also found that patient assessments appropriately detected more variance between practices for organizational attributes and between doctors for personal care

attributes. The implication is that the differences between practices and between doctors underestimate the true differences that occur at the practice and doctor levels.

Importance of Health Care Quality Assessment

In an article regarding patient satisfaction and its trends, a Press Ganey Association (2009) report on the experiences of nearly 3 million patients treated at more than 2,000 hospitals nationwide in 2008 found that a 6-year trend toward higher patient satisfaction with inpatient hospitals continued, achieving a record level as of October 2008. This suggests that hospitals have responded to payer and patient demands. Not surprisingly, 2007 marked the beginning of public reporting of data from the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey. In October 2008, Press Ganey found a 1.5% jump in the overall rating of a hospital and a 1.9% increase in the likelihood to recommend a hospital to family and friends, both unprecedented increases in the more than two decades that such data has been collected. Typically, satisfaction follows seasonal ups and downs, with a modest upward trend being found in the past decade.

Press Ganey Associates (2009) confirmed this surge in patient satisfaction. In October 2008, 7 months after the start of public reporting, inpatient satisfaction scores had climbed more significantly than at any other point in the 24 years that Press Ganey has been tracking that data. Even with normal seasonal variations, ratings continue to improve year over year. Despite the economic downturn at the end of 2008, patient satisfaction hit an all-time high. This is a tribute to the continuing dedication of health care providers across the nation.

Patients' satisfaction with their hospital care is important to payers, hospital administrators, physicians, and patients. According to the Institute of Medicine (2001), patient satisfaction is important because it captures the patients' experience of health care outside of direct effects on health and acknowledges the role of the patient as a partner in health care, and as such reflects the patient-centeredness of care. Dranove et al. (1999) also found that patient satisfaction offers insight into patients' perceptions of interpersonal relations and amenities. Patient satisfaction is a goal toward which considerable resources are directed.

Although it is difficult to measure patients' perceptions of health care, it is extremely important that patients' assessments be carefully considered, because they are the ones to whom hospitals are ultimately accountable. It is therefore crucial that patient surveys are refined to maximize precision and minimize bias. Measures of patient satisfaction need to be refined and HCAHPS is one measurement tool that is consistently implemented. When a hospital detects a problem, the issue is real and important to the patient. The way the hospital reacts to the issue should be presented in a way that highlights the informative negative assessments.

The immediately following sections discuss two issues that show the importance of assessment of health care quality:

1. Patient satisfaction indicates important aspects of treatment quality.
2. Transparency and competition are an improvement incentive for healthcare institutions.

Patient Satisfaction Indicates Important Aspects of Treatment Quality

In an article by Reese (2009) in *Managed Healthcare Executive*, Dr. Anne-Marie Audut, Vice President of Quality Improvement and Efficiency for the Commonwealth Fund, was quoted as saying the following:

We can see that there's a pretty linear relationship between clinical quality and the patient experience. The pushback in the industry was always that satisfaction was just a touchy-feely thing, but the literature is increasingly showing the relationship between the patient experience and quality. It's intuitive to some but we need the data to convince the rest. (Reese, 2009, p. 1)

Sofaer, Crofton, Goldstein, Hoy, and Crabb (2005) found that the participants have a high degree of interest in hospital quality and considered it to be so important that they would consider changing hospitals in response to information about certain aspects of hospitals. Adding depth to data, patient comments, both negative and positive, can be enlightening, pointing to aspects of care that may have otherwise been overlooked. Patients have primarily positive comments about their nurses and doctors, but predominantly negative things to say about their hospital rooms and the discharge process. Health care providers are certainly the backbone of a patient's hospitalization and fully deserve the praise they receive from patients. However, hospitals that go out of their way to provide a patient with a clean and functional room and a quick, efficient discharge will reap competitive benefits.

An old quality improvement adage states that a complaint is a gift. Although there are several topics that may draw more negative than positive comments from patients, on the whole, patients have more positive than negative things to say about their

hospital stay. The bias toward positive comments makes it more important for hospital personnel to pay attention to the negative statements. As patients develop personal relationships with their care providers, they wish to acknowledge those who made their experience positive, thus nurse and physician ratings are usually higher. On the other hand, items of a less personal nature, such as the quality of the room or the discharge process, go unnoticed unless something negative occurs.

According to Kaldenberg and Trucano (2007), hospitals hoping to reduce costs and increase profitability should be listening to their patients. Consider the significant loss of revenue due to healthcare-associated, or hospital-acquired, infections. Facilities with higher scores on cleanliness, blood-draw skills, and nurse responsiveness tend to have lower rates of hospital-acquired infections and infection mortality. Think of patient satisfaction as a leading indicator. Patient feedback is often the impetus needed to ensure that risks are addressed before they turn into costly medical errors.

In many ways, patient and employee satisfaction are indicators to look for as an early warning system. When patients and employees begin to express dissatisfaction, this indicates a need to review operations and the patient flow process (Rave et al., 2003).

Without strong patient and employee satisfaction tracking programs, providers will lack the critical information needed to improve efficiency and solve overcrowding problems. Patients provide a critical voice in an organization's operations. By listening for opportunities to improve, providers can increase efficiency and productivity while building patient satisfaction and loyalty.

Barr et al. (2006) examined the impact of statewide public reporting of hospital patient satisfaction on hospital quality improvements using Rhode Island as an example.

These researchers focused on the 11 general and 2 specialty hospitals in the state and how public reporting of comparative data on patient views can enhance and reinforce quality improvement efforts in hospitals. They also found that the adoption of the statewide standardized survey by all of the hospitals facilitated successful implementation of statewide public reporting.

According to Kirchheimer (2007), some hospital systems replaced their own patient satisfaction survey with the HCAHPS instrument to get a leg up on the latecomers. By changing their own internal survey to mirror the HCAHPS survey, these hospitals were gearing up for the public relations response from the release of data.

Transparency and Competition as an Improvement Incentive

Healthcare institutions struggle under substantial challenges to provide quality care that is affordable. Yet many have made marked improvements in quality while keeping costs affordable, through implementing best practices as they become apparent through increasing research. The impetus toward healthcare reform is not to increase the burdens of health practitioners and administrators, but to motivate positive changes. By nature large institutions resist change and find it difficult and costly to implement, so hospitals need incentives to recognize areas of weakness and make needed changes. Financial incentives are powerful motivators for hospitals receiving federal funding.

Patient satisfaction affects hospital reputation and utilization. There is no doubt that increased transparency will increase competition among hospitals. Hospital preference is very important because there is strong competition among health care institutions. According to Johansson, Oleni, and Fridlund (2002), health care is considered to be a competitive market in which the patient is a customer and consumer.

But what differentiates two competing hospitals is not only their scores on quality measures; it is also their reputations in the community and the loyalty of their patients. These factors influence not only consumer choice but also where physicians send their patients and whether current employees recommend their hospital for employment. There are multiple returns from improving patient satisfaction: enhanced community reputation, increased patient loyalty, reduced malpractice claims, improved efficiency, and greater employee and physician satisfaction (Johansson et al., 2002).

Reputations are built over time as word of mouth spreads through a community. A major study analyzed patient satisfaction in 1999 and then the subsequent changes in patient volume experienced between 2000 and 2004. The results showed that hospitals with patient satisfaction in the 90th percentile experienced nearly a one-third increase in patient volume or, on average, an additional 1,382 patients per year. For hospitals with patient satisfaction in the bottom 10th percentile, the average volume loss was 17% according to the Healthcare Financial Management Association (HFMA, 2006).

Press Ganey Associates (2009) has also provided research that indicates that organizations with high satisfaction ratings are the most successful financially. Satisfied patients are more likely to recommend the facility to family and friends, thus increasing market share. An enhanced community reputation also leads to greater patient volumes. Better staff buy-in to improvement efforts leads to a more positive atmosphere for patients and better care.

The fact that hospitals with consistently high levels of patient satisfaction are also consistently among the most fiscally successful is not a coincidence. According to study by Garman, Garcia, and Hargreaves (2004), the most profitable hospitals generally have

the highest levels of patient satisfaction, while the least profitable hospitals often have the lowest. Patient loyalty translates into serious revenue gains. By improving patient satisfaction, providers increase future patient volumes through existing patients and their personal networks. On the flip side, for every patient who complains, 20 dissatisfied patients do not. Of those dissatisfied patients who do not complain, 90% will not return (Garman et al., 2004).

A study of New York residents by Boscarino and Adams (2004) found that 33% of New Yorkers were very concerned about the quality of healthcare. Less than half of the respondents recalled hearing or seeing information about healthcare quality in the past year and less than 20% of the respondents used this information in the medical decision making process. The researchers also learned that (a) recommendations by a family member or (b) information about whether a physician was board certified, carried more weight than a government rating or ranking. The researchers concluded that greater access to and use of public healthcare information is a viable way to improve healthcare quality.

The transparency of information allows consumers to review competing hospitals' data and make more informed decisions about their choice in health care. The American Health Association, which collaborates with the Health and Human Services Department, issued a statement that "HCAHPS is only one source of information. Patients need to talk to their physicians before making a final decision about their care" (DerGurahian & DoBias, 2008, para. 6).

Transparency, healthcare consumerism, and government-driven quality initiatives all have turned patient-centered quality measures into a competitive necessity. With

patient-centered care quickly becoming a focal point for consumers and payers alike, not to mention its demonstrated ties to clinical and financial results—patient satisfaction is fast becoming not only a competitive advantage but also a business imperative (Cliff, 2010).

However, patient-centered care requires the use of accurate, systematic approaches to measuring and improving patient experiences. To obtain buy-in, healthcare organizations need evidence of real returns. Success can be achieved by learning from other hospitals that have already tackled these challenges and are those that set the industry standard for quality and fiscal success. The rising costs of providing health care and the changes in payment systems will have an impact on hospitals' bottom line.

Improving patient satisfaction increases loyalty, which increases utilization (Hall, 2008). Huppertz and Carlson (2010) conducted research on healthcare consumers who were randomly assigned to see positive or negative information about a hospital either via HCAHPS scores or an email from a relative. The researchers then analyzed the healthcare consumers' intentions to choose that hospital for a procedure. The researchers found that word-of-mouth communication had a significant impact on hospital choice. The researchers determined that anecdotal narratives were more influential to healthcare consumers relative to data sets provided by the HCAHPS graphs.

Patient satisfaction affects likelihood of malpractice claims. Improving patient satisfaction also can have a direct impact on financial results through a reduction in the number of malpractice claims. According to the Kaiser Family Foundation (2009), there

is an average of nearly \$3.4 billion in paid malpractice claims in the United States each year with average payments of more than \$300,000.

Patients who are more satisfied are less likely to sue. Period. All studies of malpractice claims show the same result. Communication is the key to the vast majority of suits. Anger, not injury, is the trigger for most claims. . . . Empathy and good interpersonal skills prevent malpractice claims. (Press, 2002, p. 21)

This impact of malpractice on the fiscal health of healthcare organizations is clear. The bottom line is that satisfied patients are less likely to seek litigation.

According to Stelfox, Gandhi, Orav, and Gustafson (2005), there is a significant association between patient satisfaction survey ratings and risk management episodes. Each one-point decrease in score is associated with a 5% increase in the rate of risk management episodes.

Mayer, Cates, Mastorovich, and Royalty (1998) completed a study of a 62,000-visit emergency department and level I trauma center and found that patient complaints decreased by over 70% (from 2.6 per 1,000 emergency room visits to 0.6 per 1,000 emergency room visits) following customer service training, and patient compliments increased more than 100% from 1.1 to 2.3 per 1,000 emergency room visits.

Cost Verses Care Quality

According to CMS, enrollment in Medicaid managed care tripled from 7.9 million beneficiaries to more than 27 million beneficiaries. The transition to managed care within both the Medicaid and commercial populations, has been driven in part by the potential cost savings believed to be obtainable by integrating care. Thompson, Ryan, Pinidiya, and Bost (2003) wrote that the impact of managed care on quality of care for

the Medicaid population has been controversial. Despite intense interest from state and national policy makers, there was no information on the quality of care delivered specifically to Medicaid employees. Physicians criticized the managed care program for overly emphasizing cost containment and not patient care.

A study by researchers Wynia, Cummins, VanGeest, and Wilson (2000) in the *Journal of American Medical Association*, found that a significant number of their physician respondents reported that they manipulated reimbursement rules so that their patients can receive services that they deemed necessary. The researchers wrote that, “Physicians’ decisions about what services to offer their patients affect almost 80% of all health care expenditures and have enormous influence on health care quality” (p. 1858).

Bloche (2000) wrote an editorial on the study by Wynia, Cummins, VanGeest, and Wilson in the same edition of the *Journal of American Medical Association*, chastising the results of the study. Bloche argued that physicians should be the advocates for quality patient care and referenced the Hippocratic Oath that physicians pledge to uphold. Physicians are bound to provide for the good of their patients in their best judgment. Bloche’s editorial was titled, *Fidelity and Deceit at the Bedside*. His title accurately reflects the issues physicians and hospitals face in the current fiscally-driven environment.

Other studies have confirmed that hospitals are pushing for procedures that they know they will receive payment for despite whether or not the evidence suggests that the patient requires the treatment. Thompson (2000) wrote that nearly 40% of the respondents on his study admitted to deceiving patients in order to obtain treatment coverage they deemed necessary for their patients. Thompson concludes, “These results

are symptomatic of a broken system” (p. 26). Similarly, in a *Los Angeles Times* news story titled “Doctors in Study Back Lying to Aid HMO Patients,” Maugh (1999) reported that researchers had found that over 50% of physicians said they would be willing to submit “deliberate deceptive documentation” (p. A1) to ensure a patient receives an operation or other care.

The articles referenced above express some of the frustration and difficulty in measuring quality health care in today’s environment. Successful healthcare organizations measure and improve on the things that matter. In health care, nothing matters more than the experiences of patients and the physicians and employees who serve them. Focusing on these areas improves the quality of health care.

Patient abuse of healthcare. An example of patient healthcare quality abuse that increases costs for all parties can be found with patients who go from hospital to hospital reporting false or creatively designed symptoms in order to obtain drugs, including narcotics and other controlled substances. These patients are addicts and need to feed their addictions. The symptoms these patients report are difficult for physicians to question or disprove. The physician is then obligated to provide medication and healthcare treatment to the patient even though they suspect the patient is faking their symptoms. These visits have a cost associated with them and contribute to escalating costs in the healthcare industry. These fraudulent healthcare visits directly or indirectly impact all Americans by impacting the quality and cost of care received by all.

Hospital efficiency. In an article by Snowday (2010) in *Health Management Technology*, the leadership at Pacific Medical Center set out to address patient satisfaction by going through the patient experience from top to bottom. They talked to

patients and visited the hospital as patients. They determined via their experiences that they needed to maximize provider time with patients and reduce overall visit time from 70 minutes to 46 minutes. While hospitals and clinics want to care for more patients, physicians and caregivers feel overwhelmed with their patient load. According to Dr. Brett Daniel, medical director and someone who also played the role of a patient, “We quickly realized that to create the efficient work flows, optimal use of staffing, and reduced wait times we desired, we would have to have a solution to help us manage our patient flow and improve team communication” (Snowday, 2010, p. 28). The staff began to investigate the options available to meet the needs. They realized that the hospital would benefit as a result of reducing patient wait time and improved patient satisfaction. Reducing wait times allows the clinic to see more patients and improve retention.

Efficiency and productivity are closely linked with patient satisfaction as well. Improving patient satisfaction involves removing bottlenecks that are frustrating to patients as well as staff. Increasing patient flow also can have a drastic impact on functional bed capacity and help manage overcrowding.

Stony Brook University Medical Center in New York found significant reductions in length of stay and fewer errors with increased patient and employee satisfaction. Emergency room (ER) patient satisfaction increased from the bottom percentile to the 80th percentile after implementing a full-capacity protocol whereby patients awaiting admission are transferred to beds in acute care hallways when the ER is at full capacity (HFMA, 2006).

Lourdes Hospital in New York experienced a 16% increase in ER volume. At the same time, the average number of patients who left before being seen decreased from

3.2% of the total volume per month to 0.3%, and length of stay for less acute patients decreased by an average of 67%. In addition to setting increased expectations for customer service and staff accountability, Lourdes Hospital improved the processes for tracking patients and instituted training to improve staff interactions with patients.

Factors That Affect Patient Satisfaction

Each patient brings to an inpatient stay his or her own expectations, beliefs, and biases. Care providers that have an understanding of some general trends in patient expectations can better anticipate the needs of different patients based on different characteristics. Care providers must be sensitive to and aware of these differences to overcome barriers.

Size of hospital affects patient satisfaction. Wilson (2009) discovered a pattern in patient satisfaction scores. Wilson found that patients in small or rural communities were more likely to know their caregivers personally. Since many patient satisfaction questions revolve around effective communication between caregiver and patient, hospitals in small communities were more likely to score higher than peers in metropolitan areas.

A continual challenge for large health care providers is to personalize the inpatient experience. As hospital size increases, overall patient satisfaction decreases. At larger facilities, a degree of intimacy may be lost for patients. These institutions are more challenging to navigate and understand. Larger hospitals may have more situations in which individual patients feel lost in the shuffle. Organization-wide service standards can help bring large organizations back to an understanding of providing more sense of human interaction for patients.

Hospital facility conditions affect patient satisfaction. Sofaer et al. (2005)

found through focus groups that cleanliness of the room and bathroom were identified by the participants as being one of the most important indicators of hospital quality.

Wennberg, Baker, and Fisher (2005) also found that patients using hospitals in regions with greater care intensity such as Los Angeles tended to give lower patient satisfaction ratings to their hospitals compared to those using hospitals in regions with more conservative patterns. The researchers found that patients hospitalized in regions with greater inpatient care intensity tended to rate their hospitals unfavorably and were more dissatisfied with their hospital experience due to dirty rooms, noisy nighttime, poor pain control, and shortfalls in communication with doctors and nurses. In regards to the poor communication levels with doctors and nurses, it is easy to assume that there are not enough physicians and nurses to support the patient census, however, quite the opposite is true. The regions with conservative use of inpatient care had happier patients despite using fewer physicians and nurses as measured by full time employee labor (FTE) input, a standardized measure of the quantity of physician resources used in managing cohorts of patients.

Long waits for admission and uncertainty about recovery can add to patients' anxiety. Patients who have more time to plan for an admission are more likely to educate themselves on their condition, know what to expect during and after their stay, and even have the choice of which hospital to use. Similarly, health care providers have more time to prepare non-emergency patients, and are likely more familiar with the patient and his or her medical history than would be the case in an emergency.

Funding/quality issues affect patient satisfaction. According to Taner and Antony (2006), private hospitals provided better services than other hospitals due to economic reasons. Tengilimoğlu, Kisa, and Dziegielewski (1999) found that patients in private hospitals were much more satisfied in a study in which patient satisfaction in relation to public and private hospitals was compared. As a result of the recently increasing levels of awareness of patients, health-care institutions have been forced to be more competitive. Therefore, it has become essential that the level of patient satisfaction increases.

Patients report that care is between “good” and “very good” in the United States. A key differentiator of “good” versus “very good” care is what happens when something goes wrong or the patient’s needs are not being met. The number one priority for inpatient health care providers is the category “response to concerns and complaints made during your stay.” Thus service recovery can make a big difference for patients.

Caregiver work-satisfaction affects patient satisfaction. These trends demand an even higher premium on listening to the voices of patients and then acting on their concerns. Hospitals that are succeeding in improving the patient experience of care across their organizations are winning on several dimensions. According to a Press Ganey Associates (2009) report, there is a direct correlation between highly satisfied caregivers and satisfied patients. That in turn leads to easier recruitment and retention of qualified doctors, nurses, and technicians.

Likewise, attending to physician concerns and improving physician satisfaction increases referrals and patient volumes. Improving employee satisfaction increases employee engagement, which increases staff retention and decreases turnover costs.

According to John Federspiel, CEO and president of Hudson Valley Hospital Center in New York, the return-on-investment has been impressive. There have been reductions in turnover and vacancy, which result in higher patient satisfaction scores and profitability. Content employees help create a facility that people will want to go to have treatment (Hall, 2008).

Nursing satisfaction is one key driver to higher HCAHPS score. If a hospital can reduce its nursing attrition rates, this should help drive satisfaction scores including HCAHPS. This is due to a national shortage of qualified nurses, and the fact that nursing care is a primary function of HCAHPS. Additionally, hospitals in rural areas have higher HCAHPS scores than metropolitan hospitals. This is being attributed to the patient being more likely to know their caregiver.

In a patient-centered environment, all employees on duty are caregivers, each in their own way. They all have an impact on the outcome of a patient's hospital stay. Hospitals that have workplace shortages create an environment where patient safety and patient satisfaction are at risk. According to the American Association of Colleges and Nursing (2010), the current vacancy rate of registered nurses in United States facilities is 8.1%. This shortage is not limited to Registered Nurses, the vacancy rate for speech, occupational and physical therapists is at 11.4%. Nursing assistants have a vacancy rate of 8.0% and pharmacists are at 8.1%.

The workforce shortage obliges hospitals to create a workplace environment where current employees want to continue working and where prospective employees want to work. A Press Ganey Associates (1997) study identified pride in the workplace as the biggest predictor of overall employee satisfaction. There is a well-documented

link between employee satisfaction and patient satisfaction. Frampton and Charmel (2009) define a tenet of employee satisfaction in hospitals by stressing the importance of the staff feel cared for themselves so they can best care for their patients. Therefore, an employee focused environment is believed to contribute to less staff turnover and lower vacancy rates, which then lead to high patient satisfaction scores for the hospital.

Frontline staff performance affects patient satisfaction. Frontline staff members continue to have the greatest impact on the patient's overall experience of care. Sofaer et al. (2005) conducted research with participants in focus groups that identified items being utilized as questions in the HCAHPS survey as being the most important to their perception of the quality of healthcare. Specifically, questions related to doctor communication with patients, nurse communication with patients, and hospital responsiveness to patient needs were primary concerns.

Nurse performance affect patient satisfaction. Nurses play a critical role in communication as patients expect them to stay in touch and keep the patient informed about what is happening and what to expect, and to respond promptly to patients' immediate needs. Lumby and England (2000) found that a proportion of the patients complained about the behavior of nurses, including not sharing enough knowledge and sparing insufficient time. The sharing of knowledge and sparing of sufficient time for the patient, together with striving to give optimal nursing care, are important factors that increase patient satisfaction.

As Cunningham (2008) discussed in her article, *Understanding HCAHPS Patients Safety and Public Reporting*, the impact of nursing care on patient satisfaction has long

been established, so hospitals are working to control attrition rates. According to Lewis (2009), the following applies:

If doctors are essential to a hospital, nurses are perhaps even more so. Taken into consideration that in the United States, there is a fundamental shortage of qualified nurses combined with the fact that nursing care is of primary importance to HCAHPS, if you build a program to improve job satisfaction levels with your nurses, your HCAHPS scores will rise. (para. 9)

According to Laschinger, Hall, Pederson, and Almost (2005), “the level of patients’ satisfaction with nursing care is an important indicator of the quality of care provided in hospitals” (p. 220). In the field of nursing, the most widely accepted definition of satisfaction is that of Risser (1975), who defined patient satisfaction with nursing care as the “degree of convergence between the expectations that patients have of ideal care and their perception of the care that they actually receive” (p. 45). Patient satisfaction also may be equated with the evaluation of the nursing process by the patient.

According to Merkouris, Papathanassoglou, and Lemonidou (2004), the measurement of patient satisfaction with nursing care is important to determine in meeting patients’ needs and to evaluate the quality of the care provided. Patients whose expectations of nursing care are met will participate more readily in treatment and care practices, will give a more positive opinion of the hospital to family and friends, and are more likely to choose that hospital for future care needs. Nursing care plays the key role in providing satisfaction in this arena. Rafii, Hajinezhad, and Haghani (2008) found a highly significant correlation between nursing care and satisfaction with nursing care.

Studies have demonstrated that, in general, patients are satisfied with the nursing care that they receive. O'Connell, Young, and Twigg (1999) found that patient satisfaction with nursing care was high in a hospital setting. They found that good relationships between patients and nurses, nurses' high level of knowledge, polite behavior to the patients, saving time for the patients' care needs, and answering patients' expectations were the factors that increased satisfaction. Önsüz et al. (2008) also found that patients were satisfied and thought that the nurses were polite and cheerful, respectful, and informative.

Type of treatment affects patient satisfaction. Patient satisfaction also depends on the health problem for which the patient is being treated and the duration of hospitalization. Larsson, Larsson, and Starrin (1999) found that the level of satisfaction decreased in patients with chronic health problems, whereas Tokunaga and Imanaka (2002) showed that the level of satisfaction increased with prolonged hospitalization.

Both the type of care being delivered and the condition of the average patient vary dramatically from one specialty area to another. By understanding national trends, care providers can better anticipate the unique needs of subsets of their patient populations. Specialties consistently rated above the national average include obstetrics/gynecology, intensive care, and cardiology. Some of the settings where care is most intensive and patients are the most anxious and vulnerable show the best patient satisfaction results. It is especially critical for hospitals to benchmark specialties against one another to ensure each department remains competitive.

Patients expect certain things from different experiences. For example, expectations of care are different for a patient with an uncomplicated delivery of a

healthy child than those patients in the midst of a crisis bringing them to intensive care. Setting service standards that apply to all employees and care providers across a variety of settings and experiences will create a brand that patients trust from elective or planned life changes to intensive emergency care.

A recent qualitative exploratory study by Hudak, McKeever, and Wright (2004) proposed that “satisfaction with treatment outcome occurs when there is a relative lack of tension between the self and the problematic body part” (p. 723). All researchers must address the problems of ambiguity, variation in patients’ understanding of the concept of satisfaction, and the multifaceted nature of the term satisfaction.

The emergency department has become the hospital’s front door. Not only are more people using the emergency department, but more than half of all hospital inpatients are admitted through the emergency department. Patients who are hospitalized by direct admission are more satisfied with their care. This may be due, in part, to the unexpected nature and gravity of a situation requiring a trip to the emergency department followed by a hospital stay.

One variable the researchers identified in their study was the mix between primary care and medical specialists in the regions they surveyed. In the areas where primary care dominates the health care arena, patients tended to be more conservative in the use of acute care hospitals. The researchers hypothesized that the interaction between the primary care physician and medical specialists in areas where primary care dominates may be an important factor in promoting conservative care. The number of physicians involved in caring for a patient may influence the patient’s experience. If the patient

perceived there were too many physicians providing conflicting explanations or duplication of services, the patient rated the hospital negatively (Wennberg et al., 2005).

Patient expectations affect patient satisfaction. Staniszewska and Ahmed (1999) reported that patient satisfaction is a relationship between expectations and satisfaction. Sitzia and Wood (1997) found that some patients associated satisfaction with resolution of their health problems. Steine, Finset, and Laerum (2001) reported that patients tend to express their emotions during evaluation. Fitzpatrick (1993) observed that patient satisfaction, reflected by quality of life or subjective health, is a multidimensional construct. However, the assumption that satisfaction with health care is shaped by patient experiences seems justified.

Crow et al. (2002) wrote that the variance in satisfaction scores is not surprising given the multidimensional nature of health care and patient satisfaction. Although satisfaction is seen as a judgment about whether expectations were met, it is influenced by varying standards, different expectations, the patient's disposition, time since care, and previous experience.

Nonetheless, qualitative research by Schneider and Palmer (2002) showed that patients will give positive satisfaction ratings even in the face of a negative experience unless they believe that the poor care is under the direct control of the person they are evaluating. The researchers cite the example that the patient may be unhappy about hurried communication with their doctor but still give an adequate rating because they attribute this to time constraints not a lack of intrinsic skills.

Race and ethnic demographics affect patient satisfaction. Goldstein, Elliott, Lehrman, Hambarsoomian, and Giordano (2010) compared the experiences of Hispanic, African-American, Asian/Pacific Islander, American Indian, Alaskan Native, and other multiracial inpatients with those of non-Hispanic White inpatients to understand the differences in patients' perspectives of hospital care. They found that non-Hispanic White inpatients received care at hospitals that provided better experiences for all patients than the hospitals more often used by minority patients. Their research suggests that patient experiences are more similar by race within hospitals.

As more and more HCAHPS data accumulates, reports that drill down on patient subtypes will become more and more valuable. Elliott et al. (2010) found that hospital rankings in HCAHPS varied substantially by the patient health status. They recommended that hospitals focus their quality improvement teams to examine hospital performance with both sicker and healthier patients because the researchers found that while many hospitals do well with one group, they may not do well with another. Staff members should be educated on these differences in the same way that they are educated about cultural diversity. Identifying biases creates awareness and will help break down barriers.

Age affects patient satisfaction. Press Ganey Associates (2010) found that elderly (over age 80) and young middle-aged (age 35-49) patients are among the least satisfied with their experience of care. This may be due to the conditions causing the hospitalization, to other life circumstances, or to other factors. Patients and care providers from different age groups may have trouble relating to each other. Regardless, it is important for care providers to know that they may have to work harder to meet these

patients' needs. Interestingly, Press Ganey Associates (2010) also noted that patients aged 35 to 49 are likely to be the parents of many of the newborn to 17-year-olds and children of many of the 65- to 79-year-olds, the two groups that are most satisfied with their experiences of care.

Gender demographics affect patient satisfaction. The sex of patients also affects their perception of satisfaction. Thi, Briançon, Empereur, and Guillemin (2002) found that male patients were significantly more satisfied with the nursing care than the female patients. Hargraves, Wilson, and Zaslavsky (2001) found that women reported more problems with hospital care than men. They reported that female patients attach more importance to their health than male patients and tend to be evaluators and even administrators of care practices, not only for themselves but also for other members of their family.

Education demographics affect patient satisfaction. The level of education is also of great importance in determining patient satisfaction. A higher level of education was associated with a lower level of satisfaction (Bredart, Robertson, & Razavi, 2003; Quintana, Gonzalez, & Bilbao, 2006; Radwin (2003). The lower levels of satisfaction of the more highly educated patients could be explained by their expectations of higher standards compared to patients with a lower level of education. Additionally, people with higher levels of education are less likely to be intimidated by medical professionals and their education levels. Lumby and England (2000) wrote that patients with higher levels of education probably make greater demands on nursing care, which might lead to expectations of more information and a higher level of education from nurses.

Summary

Richardson-Pelliccioni (1997) writes that the United States health care industry is one of the nation's largest businesses, consuming more than 14% of the gross national product. Both for taxpayers and for individuals, it is critical to find ways to improve healthcare quality while simultaneously keeping healthcare affordable. The literature review describes the challenges in healthcare reform. It also describes some successes in increasing performance and affordability as a result of patient satisfaction assessment, though clearly much improvement is yet needed.

If the public's confidence is to be earned, healthcare institutions must make changes that are significant and transparent. According to DerGurahian and DoBias (2008), hospitals remain wary of how the information is presented. Transparency is good when the information is accurate and fair, otherwise, it does not add any value. The HCAHPS survey provides a consistent method of comparison of patient satisfaction, although there remains a question of how closely satisfaction correlates with clinical outcomes.

Hospitals are in the business of providing healthcare to the public, and healthcare executives are the leaders who operate these facilities. Yet this researcher has found no survey that captures the opinions or thoughts on healthcare quality from this important group of leaders. These are the individuals who are responsible for their respective organization and have the ability to make the greatest impact and influence on changes that solve healthcare quality issues. The research questions answered by the present study offer important insights yet to be clarified in the literature.

Chapter 3: Research Methods

The purpose of this study was to survey hospital health care executives' attitudes and beliefs on the impact that the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey had on service quality levels and hospital reimbursements from Centers for Medicare and Medicaid Services. These executives, including Chief Executive Officers (CEOs), Chief Operating Officers (COOs), Chief Financial Officers (CFOs), and Chief Nursing Officers (CNOs), are the leaders of their organizations and have the ability to implement necessary changes to improve service quality levels at their respective hospital. Additionally, this study assessed the change in HCAHPS scores from the initial measurement in October 2006 to the measurement of scores through June 2010.

Hospitals should have greater motivation to improve patient experiences as consumers now have access to data that previously was unavailable to them. If consumers see that a hospital has higher HCAHPS scores than a competing hospital in the area, than the hospital with the higher HCAHPS scores should attract more patients to that hospital. The results of this study provide a research base of information not available prior to this study. This information can be used as comparative data for other surveys conducted by special interest groups or government officials seeking to validate the effectiveness of the HCAHPS survey. The population and sample of this study consisted of CEOs, CFOs, COOs, and CNOs of both not-for-profit and for-profit acute care hospitals across the United States, of which there were approximately 4,500 at the time of this study. This chapter on research methods is divided into five major divisions

including the introduction, research questions, research design, population and sample, data analyses, and concludes with a summary.

Research Questions

A review of the literature reflects that prior to the present study, no researcher had examined health care executives' attitudes and beliefs on the use of HCAHPS scores to improve service quality levels as well as justify hospital reimbursement from CMS. The literature does demonstrate that opinions of other special interest groups have been solicited. This researcher believes the opinions of the top executives, including Chief Executive Officers (CEOs), Chief Operating Officers (COOs), Chief Financial Officers (CFOs), and Chief Nursing Officers (CNOs), to be critical in implementing necessary changes to improve service quality levels. These leaders also have a fiduciary responsibility to their organization. This study was aimed at these executive change agents.

The research questions explored in this study were as follows:

1. Did the overall aggregate HCAHPS score increase from the initial HCAHPS survey in October 2006 to June 2010?
2. Do health care executives believe that service quality is the primary driver of their organization?
3. Do health care executives believe HCAHPS is the proper tool to measure service quality levels?
4. Do health care executives believe that having HCAHPS data publicly shared is positive or negative?

5. Do health care executives believe HCAHPS should be used to justify CMS reimbursement?

Research Design

McMillan (1996) wrote that “research design refers to the way information is gathered from subjects” (p. 167). This descriptive survey study examined executives’ attitudes and beliefs on the use of HCAHPS scores then presented the results in measures of frequency and percentage distributions. Creswell (2003) explains that there are two main research designs: quantitative and qualitative. Quantitative research design primarily concerns numbers while qualitative research design concerns study of the non-numerical aspects. This study is quantitative because it collects numerical data.

This work can be classified as a descriptive study. Descriptive research strives to provide simple information or answer simple questions. This study’s research design contains no manipulation of data. It involved gathering data from two sources, survey and archival sources. The survey instrument utilized to gather information for this survey was a survey instrument that designed by this researcher. Typical in the survey method of research, the investigator (researcher) selects a sample that will allow for accurate information to be collected. McMillan (1996) also wrote that “most surveys describe the incidence, frequency and distribution of the characteristics of the population” (p. 182). Such statistics were presented in the present study.

Population and Sample

The population for this study consists of CEOs, CFOs, COOs, and CNOs of both not-for-profit and for-profit acute care hospitals across the United States of which there were approximately 4,500 at the time of this study. The remaining hospitals are primarily

long-term care facilities, psychiatric hospitals, rehabilitation hospitals, or children's hospitals and would not use HCAHPS scores for their facility. The sample used for this study is composed of CEOs, CFOs, COOs, and CNOs of hospitals who belong to the American College of Healthcare Executives (ACHE). Approximately 90% of all hospitals and their executives belong to this organization. The other approximate 10% of hospitals that do not belong to this organization include veteran's hospitals or county or district hospitals that claim a different mission than what the association represents. Other hospitals may have too many financial problems to invest the money required for membership.

The ACHE publishes a yearly guide containing the names, addresses, and email addresses of all member hospitals as well as the names of the CEOs, CFOs, COOs, and CNOs in the organization. This survey was sent to all hospital executives listed in this guide that were identified as a hospital member. The association also retains a list of former members, and these members were included as potential participants in the survey. In other words, the hospital executives (CEOs, CFOs, COOs, and CNOs) at U.S. hospitals—in excess of 90% of all not-for-profit and for-profit acute care—were sent surveys. While the survey was intended for the four top executives, organizations may have various equivalent titles for these positions, or the intended executive may have asked another top manager or executive to fill out the survey instead.

In keeping with a researcher's ethical and legal obligation to protect those surveyed, a Research Clearance Form was used, and this is included in Appendix A. All reasonable effort were exercised to protect confidentiality and anonymity of all

respondents throughout the duration of this research. There is no reason to believe this study was in any way harmful to the respondents or their organizations.

Survey Instrument

The survey instrument contains statements about which the respondents were asked to express an opinion, attitude, belief, or perception. The survey items were formatted as a Likert measurement scale in which respondents answered each item by indicating their degree of agreement or disagreement towards a statement concerning their opinion, attitudes, beliefs and/or perceptions about the impact that the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey has on service quality levels and hospital reimbursements from Centers for Medicare and Medicaid Services. Respondents marked whether they strongly agree (SA), agree (A), neither agree nor disagree (NAD), disagree (D), or strongly disagree (SD), or don't know (DK). Isaac and Michael (1995) state the following of a Likert scale:

contains a set of items, all of which are considered approximately equal in attitude or value loading. The subject responds with varying degrees of intensity on a scale ranging from extremes such as agree-disagree, like-dislike, or accept-reject. The scores of the position responses for each of the separate scales are summed, or summed and averaged, to yield an individual's attitude score. (p. 148)

The response *don't know* was included in the survey scale in an effort to cover all possible answer selections and to discourage respondents with no appropriate selection available in the scale from leaving blanks on the survey instrument.

The bottom of the survey contained a minimal number of requests for demographic information from respondents. The respondents were asked to place a

check mark in the appropriate box. The demographic information was intentionally minimal in an attempt to ensure further that the results were maintained as strictly confidential. More detailed information may have identified participants. The minimal information requested ensured the participants a high degree of assurance of their anonymity. The information sought could be considered sensitive; therefore, care was taken so no personal identifying information was requested in the survey.

A cover letter accompanied the survey. The letter was designed to seek help from busy executives by asking the executives to answer the survey, which takes no longer than 1 minute to complete. The brevity of the survey was an intentional attempt to attract response from overburdened executives. Such professionals would likely not complete lengthy surveys.

Data Collection Plan

Archival sources. Archival data consisted of the aggregate publically reported HCAHPS data from October 2006 to June 2010. This data source is available publically. This data source was used to answer Research Question 1.

Survey. An emailed survey was sent to all hospital executives named in the guide identified as a hospital member. The ACHE publishes a yearly guide containing the names, addresses, and email addresses of all member hospitals as well as the names of the CEOs, CFOs, COOs, and CNOs in the organization. The association also retains a list of former members, and these members were included in the survey request. Due to the high percentage of hospitals belonging to ACHE, in excess of 90% of all U.S. not-for-profit and for-profit acute care hospitals hospital executives (CEOs, CFOs, COOs, and

CNOs) were sent surveys. This data source was used to answer Research Questions 2 through 5.

The survey contained questions asking the respondents to express an opinion, attitude, belief, or perception using a Likert measurement scale. Respondents were asked to mark whether they strongly agree (SA), agree (A), neither agree nor disagree (NAD), disagree (D), or strongly disagree (SD), or don't know (DK).

The survey was emailed to each executive. The survey questions were as follows. Response options were as follows: strongly agree (SA), agree (A), neither agree nor disagree (NAD), disagree (D), or strongly disagree (SD), or don't know (DK).

1. Do you believe that service quality is the primary driver of your organization?

Response options were as follows: strongly agree (SA), agree (A), neither agree nor disagree (NAD), disagree (D), or strongly disagree (SD), or don't know (DK).

2. Do you believe HCAHPS is the proper tool to measure service quality levels?

Response options were as follows: strongly agree (SA), agree (A), neither agree nor disagree (NAD), disagree (D), or strongly disagree (SD), or don't know (DK).

3. Do you believe that having HCAHPS data publicly shared is positive?

Response options were as follows: strongly agree (SA), agree (A), neither agree nor disagree (NAD), disagree (D), or strongly disagree (SD), or don't know (DK).

4. Do you believe HCAHPS should be used to justify Centers for Medicare and Medicaid Services (CMS) reimbursement?

Response options were as follows: strongly agree (SA), agree (A), neither agree nor disagree (NAD), disagree (D), or strongly disagree (SD), or don't know (DK).

1. What is your hospital's HCAHPS overall rating of Hospital Quartile Ranking?

Respondents were asked to indicate whether their hospital is in the 75th to 100th Quartile, 50th to 75th Quartile, 25th to 50th Quartile, or 0 to 25th Quartile.

6. What is your title?

Respondents were asked to indicate one of the following titles: Chief Executive Officers (CEOs), Chief Operating Officers (COOs), Chief Financial Officers (CFOs), and Chief Nursing Officers (CNOs).

7. What is your gender?

Respondents were asked to indicate whether they are male or female.

8. Is your hospital for-profit or not-for-profit?

Respondents were asked to indicate whether their hospital is for-profit or not-for-profit.

9. Is your hospital in an urban or rural area?

Respondents were asked to indicate whether their hospital is urban or rural.

10. In what region of the United States is your hospital located and is your hospital located in?

Respondents were asked to indicate whether their hospital is located in the West, Midwest, Northeast, South or Southwest region.

11. What is the number of licensed beds for your hospital?

Respondents will be asked to indicate that their hospital licensed bed size is 0 to 100, 100 to 200, 200 to 300, or over 300.

Instrument Development

Since no other research was discovered measuring the opinions, attitudes, beliefs, or perceptions of hospital health care executives about the impact that the Hospital

Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey has on service quality levels and hospital reimbursements from Centers for Medicare and Medicaid Services, a simple survey was created by the researcher to gather the sought-after information from hospital executives. The desire of this researcher was to receive as high a rate of survey return as possible; therefore, the survey instrument developed by the researcher was kept brief by intention and necessity. Executives are extremely busy so it follows logically that there would be a higher chance that an executive would take 1 minute to fill out a survey as opposed to filling out a lengthy survey.

Cox (1996) recommends the following 10 guidelines when a researcher develops survey questions:

1. Use of simple sentences.
2. Avoid using uncommon terminology in the formation of the sentence.
3. Avoid asking for opinions on a subject unfamiliar to the respondent.
4. Avoid hard or soft words that might evoke an emotional response.
5. Avoid using absolute-type wording such as *any*, *every*, and, *all*.
6. Avoid the use of two qualifiers such as one qualifier in the question and another in the list of possible responses.
7. Avoid writing compound questions.
8. Be sure the question fits the scale being used.
9. Sensitive questions need to be worded carefully.
10. Create equal intervals between adjacent choices. (p. 9)

This researcher took considered and deliberate effort to practice these guidelines when designing the items included in the survey instrument. In addition, since the survey

dealt with opinions about sensitive subjects concerning health care laws and regulations, any language that might give the appearance of incriminating the respondent was avoided. The survey allowed the respondent to give candid answers without asking for information that would indicate the respondent has legal risk due to potential or actual violation of laws. There was no deception, intended or incidental, of any kind contained in this survey instrument.

Vogt (1993) indentifies content validity as “a term to describe a measurement instrument or test that measures what it is supposed to measure” (p. 240). Since this researcher developed the survey instrument, content validity was established to determine if the survey instrument questions or statements would relate adequately to the research questions that are the focus and purpose of this research. The survey instrument is said to have content validity if the research questions can be answered by matching one or more of the survey instrument items to each of the research questions. This is true for the present study. Vogt (1993) defines reliability as “the consistency or stability of a measure or test from one use to the next. When repeated measurements of the same thing give identical or very similar results, the measurement is said to be reliable” (p. 195). The findings, as described later, indicated that the survey instrument was both reliable.

Analytical Techniques

Archival data. This first part of analysis was for the aggregate publically reported HCAHPS data from October 2006 to June 2010 via regression analysis to determine whether there was any meaningful increase in HCAHPS scores from the initial survey to the last survey. This relates to Research Question 1. The researcher expected that the overall HCAHPS scores would increase from the initial survey in October 2006

to June 2010, as hospitals would want to receive their full reimbursement from CMS. The only way they would be able to successfully achieve this outcome is to increase their HCAHPS scores relative to the other hospitals involved with HCAHPS and CMS reimbursement. The public will also have the ability to review and compare service quality levels for each participating hospital, and this level of transparency is another factor in explaining why health care executives would want to see high HCAHPS scores for their hospital.

Survey. The second data analysis that was performed was to review the distribution of survey data from the CEOs, CFOs, COOs, and CNOs. The Likert measurement tool allowed for a sample distribution of data that could be easily reviewed and understood. Using the Likert measurement scale, the respondents' answers were measured in aggregate and by organizational title to determine if the majority of health care executives felt the same way or if certain organizational leaders with the same title felt differently than other organization leaders with a different title. The data collected was entered into a statistical database program NCSSTM then analyzed for frequencies and percentage distributions of responses, and tabulated to present the minimal demographic information.

A distribution table of frequencies and percentages was computed for each item and presented in Chapter 4. Since some of the information obtained as part of the survey does not directly relate to answering the four research questions, these detailed results are contained in Appendix C. This includes cross tabulations of executive responses to the survey depending on their current position within the hospital organization. Other interesting relationships may exist that are beyond the scope of this research project, so

this additional information is important to preserve. Executives' responses are differentiated by gender, current position, for-profit and not-for-profit status, as well as geographical location. This researcher hopes that other individuals will find this segregation of information useful for future research on this subject.

The data analyses from the survey instrument provide the reader with pertinent findings relative to the four research questions.

1. Do you believe that service quality is the primary driver of your organization?
2. Do you believe HCAHPS is the proper tool to measure service quality levels?
3. Do you believe that having HCAHPS data publicly shared is positive or negative?
4. Do you believe HCAHPS should be used to justify CMS reimbursement?

Summary

This chapter describes the fundamental survey instrument design and validation of the survey instrument used by the researcher. Another source of data is the aggregate publically reported HCAHPS scores for hospitals. The data collection and analysis methods employed are believed to be the most efficacious procedures for answering the research questions. This research model sought candid beliefs and perceptions of health care executives related to the use of HCAHPS to justify CMS reimbursement. This chapter describes statistical analysis of distributions for the survey data. Other relationships of the data based on demographics are identified as a result of the survey data.

The analyses of the research questions are shared and discussed in Chapter 4. In Chapter 5, the researcher provides conclusions and recommendations based on the outcomes that are derived from the analysis. Chapter 5 also contains highlights of other

interesting correlations or relationships identified, which are not part directly related to the research questions.

Chapter 4: Data Analyses

The purpose of this study was to survey hospital health care executives' attitudes and beliefs on the impact that the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey has on service quality levels and hospital reimbursements from Centers for Medicare and Medicaid Services. The data analysis of information from the survey instrument provides the reader with pertinent findings relative to the research questions. A total of 314 healthcare executives participated in this study.

The purpose of this chapter was to present the data analyses pertaining to each of the research questions that are the object of this study. This first part of this study was to analyze the aggregate publically reported HCAHPS data from October 2006 to June 2010 to determine whether there was any meaningful increase in HCAHPS scores from the initial survey to the last survey. The researcher expected that the overall HCAHPS scores should increase from the initial survey in October 2006 to June 2010, as hospitals would want to receive their full reimbursement from CMS. The only way they would be able to successfully achieve this outcome would be to increase their HCAHPS scores relative to the other hospitals involved with HCAHPS and CMS reimbursement. The public will also have the ability to review and compare service quality levels for each participating hospital, and this level of transparency is another factor in explaining why health care executives would want to see high HCAHPS scores for their hospital. This first part of the study, utilizing aggregate publically reported HCAHPS data, answered Research Question 1.

Additionally, a simple 10-question survey instrument was developed by this researcher to gather information that would produce answers to the Research Questions 2 through 5. A survey instrument (see Appendix D) was designed by this researcher to gather data from hospital healthcare executives by requesting their agreement or disagreement to four questions. According to Isaac and Michael (1995), the Likert rating scale method is easy to understand and use by respondents and has been widely used by researchers in an effective manner to ensure incremental question or item results. The brevity of the instrument was strengthened by its simplicity. Executives have very little time to waste on lengthy questionnaires and usually will not fill out long complicated surveys. The researcher estimated that this survey could be completed in under 1 minute for most respondents. The survey listed four research questions and six demographic questions. The survey questions were presented in Chapter 3 and are reiterated in the sections that follow. The email survey was sent to over 11,000 healthcare executives, including Chief Executive Officers (CEOs), Chief Operating Officers (COOs), Chief Financial Officers (CFOs), and Chief Nursing Officers (CNOs). The return rate after 10 days was 314 or ~ 2.8% of the total survey population. This second part of the study, utilizing survey data, answered research questions 2 through 5.

Research Question 1

Research Question 1 asked, “Did the overall aggregate HCAHPS score increase from the initial HCAHPS survey in October 2006 compared to June 2010?” To answer this question, as shown in Table 1 below, the HCAHPS Survey Average Aggregate Scores increased by one full percentage point for each of the targeted areas of the HCAHPS survey. This indicates that over the past four years, the perception of

healthcare in the United States has increased slightly as measured by the patients who have taken the HCAHPS survey. This is important as HCAHPS impacts CMS reimbursements based on the patient perception of quality of care.

Table 1

HCAHPS Survey Average Aggregate Scores

Category	2006	2010
Nurses	73%	74%
Doctors	79%	80%
Staff responsiveness	60%	62%
Cleanliness and hospital environment	68%	69%
Pain management	67%	68%
Communication about medicines	58%	59%
Discharge information	79%	80%
Overall rating of hospital	63%	64%
Recommendation of hospital	67%	68%

Research Question 2

Research Question 2 asked, “Do health care executives believe that service quality is the primary driver of their organization?” To answer this, Table 2 displays the frequency counts for the relevant question. Table 2 shows that 82.2% of the hospital healthcare executives who responded in this study agreed or strongly agreed that service quality is the primary driver of their organization. Only 15.9% of the survey respondents disagreed or strongly disagreed.

Table 2

Frequency Counts for Survey Question 1

Category	<i>n</i>	%
Strongly disagree	43	13.7
Disagree	7	2.2
Neither agree nor disagree	6	1.9
Agree	81	25.8
Strongly agree	177	56.4

Note. *N* = 314

Research Question 3

Research Question 3 asked, “Do health care executives believe HCAHPS is the proper tool to measure service quality levels?” To answer this, Table 3 displays the frequency counts for the relevant question. Table 3 shows that 73.2% of the hospital health care executives who responded in this study agreed or strongly agreed that HCAHPS is the proper tool to measure service quality. Twenty three percent of the survey respondents disagreed or strongly disagreed with this question.

Table 3

Frequency Counts for Survey Question 2

Category	<i>n</i>	%
Strongly disagree	51	16.2
Disagree	22	7.0
Neither agree nor disagree	11	3.5
Agree	76	24.2
Strongly agree	154	49.0

Note. *N* = 314

Research Question 4

Research Question 4 asked, “Do health care executives believe that having HCAHPS data publicly shared is positive?” To answer this, Table 4 displays the frequency counts for the relevant question. Table 4 shows that 61.1% of the hospital healthcare executives who responded in this study agreed or strongly agreed that having HCAHPS data publicly shared is positive. Thirty five percent of the survey respondents disagreed or strongly disagreed with this survey question.

Table 4

Frequency Counts for Survey Question 3

Category	<i>n</i>	%
Strongly disagree	65	20.7
Disagree	44	14.0
Neither agree nor disagree	13	4.1
Agree	54	17.2
Strongly agree	138	43.9

Note. *N* = 314

Research Question 5

Research Question 5 asked, “Do you believe HCAHPS should be used to justify CMS reimbursement?” To answer this, Table 5 displays the frequency counts for the relevant question. Table 5 shows that 56.7% of the hospital healthcare executives who responded in this study agreed or strongly agreed that HCAHPS should be used to justify CMIS reimbursement. Thirty eight percent of the survey respondents disagreed or strongly disagreed with this survey question.

Table 5

Frequency Counts for Survey Question 4

Category	<i>n</i>	%
Strongly disagree	91	29.0
Disagree	27	8.6
Neither agree nor disagree	18	5.7
Agree	52	16.6
Strongly agree	126	40.1

Note. *N* = 314

Additional Findings

Table 6 shows that 35% of the hospital healthcare executives who responded in this study were employed by hospitals whose HCAHPS Overall Rating was in the top quartile, while 13.4% of the survey respondents were employed by hospitals whose HCAHPS Overall Rating were in the bottom quartile.

Table 6

Frequency Counts for Hospital Rating

Category	<i>n</i>	%
0 - 25th percentile	42	3.4
26 - 50th percentile	72	22.9
51 - 75th percentile	90	28.7
76th - 100th percentile	110	35.0

Note. *N* = 314

Table 7 shows that 24.5% of the hospital healthcare executives who responded in this study identified themselves as Chief Executive Officers (CEOs), 34.4% of the hospital healthcare executives who responded in this study were Chief Operating Officers (COOs), 17.7% of the hospital healthcare executives who responded in this study were Chief Nursing Officers (CNOs), and 23.9% were Chief Financial Officers (CFOs).

Table 7

Frequency Counts for Respondents Job Title

Category	<i>n</i>	%
CEO	77	24.5
COO	108	34.4
CNO	54	17.2
CFO	75	23.9

Note. *N* = 314; CEO = Chief Executive Officer, COO = Chief Operating Officer, CNO = Chief Nursing Officer, CFO = Chief Financial Officer

Table 8 shows that 21.7% of the hospital healthcare executives who responded to this survey were female, while the other 78.3% identified themselves as male.

Table 8

Frequency Counts for Gender

Category	<i>n</i>	%
Female	68	21.7
Male	246	78.3

Note. *N* = 314

Table 9 shows that 10.2% of the hospital healthcare executives who responded to this survey identified their hospital as being for-profit. The remaining 89.8% of respondents indicated their hospital was not-for-profit.

Table 9

Frequency Counts for Hospital Status

Category	<i>n</i>	%
For profit	32	10.2
Not-for-profit	282	89.8

Note. $N = 314$

Table 10 shows that 39.2% of the hospital healthcare respondents identified that their hospital was located in the West region of the United States, 15.9% indicated that their hospital was located in the Midwest region, 16.9% of respondents listed the Northeast as their hospital location, 15.0% of the respondents listed the South as the region their hospital was located in, while 13.1% of respondents listed the Southwest region as the location of their hospital.

Table 10

Frequency Counts for Hospital Region

Category	<i>n</i>	%
West	123	39.2
Midwest	50	15.9
Northeast	53	16.9
South	47	15.0
Southwest	41	13.1

Note. *N* = 314

Table 11 shows that 15.3% of the hospital healthcare executives who responded to this survey identified their hospital as being in a rural area. The remaining 84.7% of respondents indicated their hospital was in an urban area.

Table 11

Frequency Counts for Location

Category	<i>n</i>	%
Rural	48	15.3
Urban	266	84.7

Note. *N* = 314

Table 12 shows that 52.5% of hospital healthcare executives surveyed work in hospitals with 300 or more licensed beds, 11.1% of respondents work in hospitals with

under 100 beds, 16.9% of respondents work in hospitals with 101 to 200 licensed beds, and the remaining 19.4% of respondents work in hospitals with 201 to 300 licensed beds.

Table 12

Frequency Counts for Bed Size of Hospital

Category	<i>n</i>	%
0 - 100	35	11.1
101 - 200	53	16.9
201 - 300	61	19.4
Over 300	165	52.5

Note. $N = 314$

Table 13 displays the Likert ratings for the opinion statements. The repeated measures ANOVA test was significant ($p = .001$) as were the subsequent Bonferroni post hoc tests (all significant at the $p = .001$ level). Highest rated statement was for item 1, “Do you believe that service quality is the primary driver of your organization?” ($M = 4.09$) followed by significantly lower ratings for each of the three other survey items.

Table 13

Descriptive Statistics for Opinion Ratings Sorted by the Highest Mean Score

Question	N	M	SD	Low	High
1. Do you believe that service quality is the primary driver of your organization?	314	4.09	1.38	1	5
2. Do you believe that HCAHPS is the proper tool to measure service quality?	314	3.83	1.50	1	5
3. Do you believe that having HCAHPS data publicly available is positive?	314	3.50	1.63	1	5
4. Do you believe that HCAHPS should be used to justify CMS reimbursement?	314	3.30	1.71	1	5

Note. $N = 314$.

Ratings based on 5-point Likert scale: 1 = strongly disagree to 5 = strongly agree

Repeated Measures ANOVA Results: $F(3, 939) = 69.72, p = .001$.

Bonferroni post hoc tests results: $1 > 2 > 3 > 4 (p = .001)$.

Table 14 displays the Pearson product-movement correlations for 15 selected demographic variables with the four key research questions posed by the researcher in the survey. These four research questions include the following:

1. Do you believe that service quality is the primary driver of your organization?
2. Do you believe HCAHPS is the proper tool to measure service quality levels?
3. Do you believe that having HCAHPS data publicly shared is positive?
4. Do you believe HCAHPS should be used to justify Centers for Medicare and Medicaid Services (CMS) reimbursement?

Six of the 15 demographic variables were significantly correlated with the aggregated scores. Specifically, higher aggregated scores were related to: (a) higher Hospital's HCAHPS Overall Rating ($r = .80$); (b) being a CEO ($r = .19$); not being a COO ($r = -.16$); and (c) position of the hospital healthcare executive. Additionally, hospitals located in the West region ($r = .22$) as well as hospitals that identified themselves as being rural ($r = .18$) also showed significant correlation. Finally, the hospital's number of licensed beds ($r = -.25$) was also significantly correlated with the four research questions.

Table 14

Correlations for Selected Variables with the Aggregated Opinion Score

Variable	
Q5 - What is your hospital's HCAHPS Overall Rating?	.80*****
CEO	.19*****
COO	-.16**
CNO	.12*
CFO	-.12*
Q7 - What is your gender?	-.11*
Q8 - Is your hospital for-profit or not-for-profit?	-.10
West	.22*****
Mid-West	-0.08
North-East	-.11*
South	-0.08
South-West	-0.07
Urban	-0.06
Rural	.18*****
Q10 What is the number of licensed beds?	-0.25*****

Note. $N = 314$.

* $p < .05$. ** $p < .01$. *** $p < .005$. ***** $p < .001$.

^a Coding: 0 = no 1 = yes.

Table 15 displays the results of the regression model. The model was statistically significant ($p = .01$) and accounts for 63.3% of the variance in the dependent variable. Specifically, the Hospital's Overall HCAHPS Rating was related to research question 1, "Do you believe that service quality is the primary driver of your organization?" ($\beta = .80$, $p = 0.01$), research question 2, "Do you believe HCAHPS is the proper tool to measure service quality levels?" ($\beta = .82$, $p = 0.01$), research question 3, "Do you believe that having HCAHPS data publicly shared is positive?" ($\beta = .81$, $p = 0.01$), and research question 4, "Do you believe HCAHPS should be used to justify Centers for Medicare and Medicaid Services (CMS) reimbursement?" ($\beta = .79$, $p = 0.01$). Additionally, hospitals that identified themselves as being in rural areas had significant correlations with research question 2, "Do you believe HCAHPS is the proper tool to measure service quality levels?" ($\beta = .10$, $p = 0.01$), research question 3, "Do you believe that having HCAHPS data publicly shared is positive?" ($\beta = .12$, $p = 0.01$) and research question 4, "Do you believe HCAHPS should be used to justify Centers for Medicare and Medicaid Services (CMS) reimbursement?" ($\beta = .11$, $p = 0.01$). Hospital healthcare executives who said they were in urban areas showed significant correlations with research question 3, "Do you believe that having HCAHPS data publicly shared is positive?" ($\beta = .16$, $p = 0.01$) and research question 4, "Do you believe HCAHPS should be used to justify Centers for Medicare and Medicaid Services (CMS) reimbursement?" ($\beta = .15$, $p = 0.01$). Finally, hospital executives who hospitals were located in the West region showed significant correlation with Research Question 4, "Do you believe HCAHPS should be used to justify Centers for Medicare and Medicaid Services (CMS) reimbursement?" ($\beta = .09$, $p = 0.01$).

Table 15

Regression Analysis

Variable	B	SE	β	p
Question 1 Constant	0.60	0.14		.01
Q5 - What is your hospital's HCAHPS Overall Rating?	1.08	0.05	.80	.01
Question 2 Constant	0.34	0.17		.05
Q5 - What is your hospital's HCAHPS Overall Rating?	1.11	0.05	.82	.01
Rural	0.21	0.17	.10	.01
Question 3 Constant	1.09	0.05		
Q5 - What is your hospital's HCAHPS Overall Rating?	1.09	0.05	.81	.01
Urban	0.46	0.12	.16	.01
Rural	0.45	0.16	.12	.01
Question 4 Constant	0.16	0.17		
Q5 - What is your hospital's HCAHPS Overall Rating?	1.07	0.05	.79	.01
Urban	0.45	0.12	.15	.01
Rural	0.45	0.16	.11	.01
West	0.26	0.10	.09	.01

Note. $N = 314$

Final Model: $F(2, 310) = 538.00, p = .001. R^2 = .641.$ Candidate variables = 15.

^a Coding: 0 = No 1 = Yes.

Since no research to date has been found in a search of the literature concerning health care executives' attitudes and beliefs on the use of HCAHPS scores to improve service quality as well as justify hospital reimbursement from CMS, this research project provides new information not available currently. It is important to learn about executives' private opinions and perceptions about the threat or benefit the government's intervention has had, or will have, on the health care industry. The candid and confidential responses from this group of highly educated, skilled leaders may offer some

enlightening insights into the problem of service quality and tying hospital reimbursement rates to publicly reported HCAHPS scores.

Summary

This chapter has presented the statistical results computed from answers hospital health care executives provided on a survey instrument concerning their opinions about the HCAHPS survey. The survey contained 10 statements for which the respondents were asked to provide gradient degrees of agree-disagree answers on a Likert scale. The data resulting from these answers are the focus of this chapter. Chapter 5, the final chapter, provides a discussion and summer of the findings as well as conclusions and recommendations.

Chapter 5: Summary, Conclusions and Recommendations

The final chapter presents a discussion and summary of the data as well as conclusions and recommendations that are generated from the data collected in this research project. Any noted weaknesses in the research design and information collection methods will also be discussed. A quantitative research study was employed to survey hospital health care executives' attitudes and beliefs on the impact that the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey has on service quality levels and hospital reimbursements from Centers for Medicare and Medicaid Services. A total of 314 healthcare executives participated in this study. The interest and participation of the busy executive respondents is gratifying. Every effort has been made to protect the identity of the respondents since their participation is always trust dependent. By this I mean that that participant believes the researcher's claim to protect their best interest without ever knowing the researcher. The results exist out of the involvement and generosity of the participants. Thanks to all who trusted in me and participated in this endeavor.

Presented in Chapter 1 was the purpose of this study which was to survey hospital health care executives' attitudes and beliefs on the impact that the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey has on service quality levels and hospital reimbursements from Centers for Medicare and Medicaid Services. These executives, including Chief Executive Officers (CEOs), Chief Operating Officers (COOs), Chief Financial Officers (CFOs), and Chief Nursing Officers (CNOs), are the leaders of their organizations and have the ability to implement necessary changes to improve service quality levels at their respective hospital. Hospitals should have

greater motivation to improve patient experiences as consumers now have access to data that previously was unavailable to them. If consumers see that a hospital has higher HCAHPS scores than a competing hospital in the area, then the hospital with the higher HCAHPS scores should attract more patients to that hospital. The results of this study provide a research base of information not available prior to this study. This information can be used as comparative data for other surveys conducted by special interest groups or government officials seeking to validate the effectiveness of the HCAHPS survey.

In Chapter 2 the detailed literature review describes the challenges in healthcare reform. Richardson-Pelliccioni (1997) wrote that the United States health care industry is one of the nation's largest businesses, consuming more than 14% of the gross national product. Both for taxpayers and for individuals, it is critical to find ways to improve healthcare quality while simultaneously keeping healthcare affordable.

The literature review also described some successes in increasing performance and affordability as a result of patient satisfaction assessment, though clearly much improvement is yet needed. If the public's confidence is to be earned, healthcare institutions must make changes that are significant and transparent. According to DerGurahian and DoBias (2008), hospitals remain wary of how the information is presented. Transparency is good when the information is accurate and fair, otherwise, it does not add any value. The HCAHPS survey provides a consistent method of comparison of patient satisfaction, although there remains a question of how closely satisfaction correlates with clinical outcomes.

Chapter 3 describes the research methods employed in the study and Chapter 4 presents the results of the research data as it related to the four research questions.

Additional research information is included in this paper. This information is offered so the reader can possess an abundance of information related to the subject that is not specific to the research questions.

The following is a discussion of the research questions as well as the implications generated by the executives' responses to the questions on the survey instrument. Their responses were predominately consistent and sequentially logical. The answers given by the executive respondents could have been predicted in advance since there was a consistent pattern of answers between the questions.

Research Question 1

Research Question 1 asked, "Did the overall aggregate HCAHPS score increase from the initial HCAHPS survey in October 2006 compared to June 2010?" Scores increased by one full percentage point for each of the targeted areas of the HCAHPS survey. This indicates that over the past four years, the perception of healthcare in the United States has increased slightly as measured by the patients who have taken the HCAHPS survey. This is important as HCAHPS impacts CMS reimbursements based on the patient perception of quality of care. This indicates that hospitals did put a focus on increasing patient satisfaction as moving over 4,500 hospital scores by a full percentage point on 27 questions is extremely challenging. The new baseline for the average hospital patient satisfaction score for each of the questions is one point higher today than it was 4 years ago.

Research Question 2

Research Question 2 asked, “Do health care executives believe that service quality is the primary driver of their organization?” 82.2% of the hospital healthcare executives who responded in this study agreed or strongly agreed that service quality is the primary driver of their organization. Only 15.9% of the survey respondents disagreed or strongly disagreed.

This indicates that hospital healthcare executives do believe that service quality is the primary driver of their organization and that they agree that their hospital should be focused on delivering high levels of service and quality to their patients. This question had the highest level of similarity between healthcare executives, which also tells me they are aligned with the vision that the purpose of their hospital is to provide quality levels of service to their community. Hospital health care executives do believe that the role of their hospital in providing quality health care to their patients. This is important to note as hospitals are also large businesses and even though almost 90% of the hospitals are non-profit, these health care executives have to manage their hospital as a business while simultaneously driving up service quality to their patients.

Research Question 3

Research Question 3 asked, “Do health care executives believe HCAHPS is the proper tool to measure service quality levels?” 73.2% of the hospital health care executives who responded in this study agreed or strongly agreed that HCAHPS is the proper tool to measure service quality. Twenty three percent of the survey respondents disagreed or strongly disagreed with this question.

This question is where the executives' responses start to differ. While almost three quarters of the executives believe HCAHPS is the proper tool to measure service quality levels, nearly one fourth of the respondents disagrees or strongly disagrees with the idea of using HCAHPS. The pattern starts to emerge where executives like the idea of providing quality levels of service but do not want to be measured on the perception of service quality by the patient.

This researcher believes that the HCAHPS survey provides a baseline unit of analysis for measuring the perception of hospital health care and that because there was no prior consistent baseline unit of measurement before HCAHPS, hospital health care executives are forced to be held accountable to a new standard they were not using prior to HCAHPS. As a result, it is not a surprise that nearly a quarter of the respondents did not want to use HCAHPS as the tool to measure service quality.

Research Question 4

Research Question 4 asked, "Do health care executives believe that having HCAHPS data publicly shared is positive?" 61.1% of the hospital healthcare executives who responded in this study agreed or strongly agreed that having HCAHPS data publicly shared is positive. Thirty five percent of the survey respondents disagreed or strongly disagreed with this survey question.

These results indicate that while hospital executives believe service quality is important and that HCAHPS is a good tool, they are less inclined to have the data shared with the public. The pattern continues to show that executives like the idea of providing quality levels of service but are less favorable on being measured on the perception of

service quality by the patient and even less likely to want these results shared with the public.

As mentioned earlier, this researcher believes that the HCAHPS survey provides a baseline unit of analysis for measuring the perception of hospital health care and that because there was no prior consistent baseline unit of measurement before HCAHPS, hospital health care executives are forced to be held accountable to a new standard they were not using prior to HCAHPS. As a result, it is not a surprise that over a third of the respondents did not want to use HCAHPS data released to the public.

Research Question 5

Research Question 5 asked, “Do you believe HCAHPS should be used to justify CMS reimbursement?” Only 56.7% of the hospital healthcare executives who responded in this study agreed or strongly agreed that HCAHPS should be used to justify CMS reimbursement. Thirty eight percent of the survey respondents disagreed or strongly disagreed with this survey question.

This question really hits the crux of the problem for hospital healthcare executives. They want CMS reimbursements tied to their HCAHPS score if their scores are in the top half of the results. If the hospitals have low HCAHPS scores, they do not want their CMS reimbursements tied to HCAHPS. The pattern is very consistent for all of the questions. Executives like the idea of providing quality levels of service but are less favorable on being measured on the perception of service quality by the patient. These same executives are even less likely to want these results shared with the public and only 56% want their HCAHPS scores tied to CMS reimbursements.

Additional Findings

The other remaining six questions on the survey helped validate some of the conclusions I have listed above. Specifically, higher aggregated scores were related to a higher Hospital's HCAHPS Overall Rating and the position of the hospital health care executive. Thus, the higher the HCAHPS score, the more likely the executive was to want to use HCAPS to justify CMS reimbursements. This makes perfect sense as the hospitals that have good scores want to be rewarded for their service quality levels.

Additionally, CEOs were more likely to support using HCAHPS whereas COOs were the least likely. This researcher believes this to be the case where the CEOs see the value of having a standardized tool to measure patient satisfaction to even the playing field amongst all of the hospitals. However, COOs are the ones who are being held accountable for the operations so they are the least likely to want to use a standardized test as they are measured against their peers.

Hospitals located in the West region as well as hospitals that identified themselves as being rural also showed significant correlation on wanting to use HCAHPS as the tool to measure service quality levels and receive CMS reimbursements. This researcher believes that the higher results of the West is more of an anomaly than anything as the overall HCAHPS scores are virtually similar in all of the regions listed in the survey. There is the possibility that the results were skewed for the hospitals in the West due to their familiarity with this researcher and my work over the past eight years as the Finance Director for my employer, a third party provider of health care services including food and nutrition services, environmental services and clinical technology services.

Additionally, these hospitals in the West may be more familiar with Pepperdine University which is located in Malibu, CA.

However, the rural hospitals wanting to use HCAHPS are completely logical and ties to the literature review. The three states with highest HCAHPS scores are South Dakota, Montana and Idaho which are predominately rural areas. Wilson (2009) discovered a pattern in patient satisfaction scores and wrote that patients in small or rural communities were more likely to know their caregivers personally. Since many patient satisfaction questions revolve around effective communication between caregiver and patient, hospitals in small communities were more likely to score higher than peers in metropolitan areas.

Wilson (2009) also wrote that as hospital size increased, overall patient satisfaction decreased. This assessment agrees with the final significant correlation where a hospital's number of licensed beds was significantly correlated with the four research questions. The survey results indicate that the less beds a hospital has, the more likely the hospital healthcare executive in wanted to use HCAHPS. I believe that the larger hospitals face a continual challenge to personalize the inpatient experience. At larger facilities, a degree of intimacy may be lost for patients. These institutions are more challenging to navigate and understand. Larger hospitals may have more situations in which individual patients feel lost in the shuffle. These attributes contribute to a lower perception of service quality by the patient.

The respondent executives display a great deal of ambivalence concerning the use of HCHAPS for measuring patient satisfaction and to justify CMS reimbursement rates. While health care executives view HCAHPS as intrusive, they express an understanding

of the benefits of having a single tool to measure patient satisfaction. Generally speaking, those health care executives with high HCAHPS scores think it is the proper tool to measure patient satisfaction and justify CMS reimbursement whereas those health care executives with low HCAHPS think that HCAHPS is not the correct tool.

Researcher's Observations and Recommendations

There is no doubt in my mind that the use of HCAHPS to measure patient satisfaction and justify CMS reimbursement will increase competition among hospitals. Hospital preference is very important because there is strong competition among health care institutions. Hospitals will be forced to review their staff and ensure they have the right employees who have both the clinical knowledge necessary for the job but also the ability to effectively communicate to the patient and their families.

According to Johansson et al. (2002), health care is considered to be a competitive market in which the patient is a customer and consumer. But what differentiates two competing hospitals is not only their scores on quality measures; it is also their reputations in the community and the loyalty of their patients. These factors influence not only consumer choice but also where physicians send their patients and whether current employees recommend their hospital for employment. There are multiple returns from improving patient satisfaction: enhanced community reputation, increased patient loyalty, reduced malpractice claims, improved efficiency, and greater employee and physician satisfaction (Johansson et al., 2002).

Hospital reputations are built over time as word of mouth spreads through a community. The use of HCAHPS and having the data publically shared will impact a hospital's reputation. The higher the patient satisfaction scores and perceived quality of

care will help a hospital. A major study analyzed patient satisfaction in 1999 and then the subsequent changes in patient volume experienced between 2000 and 2004. The results showed that hospitals with patient satisfaction in the 90th percentile experienced nearly a one-third increase in patient volume or, on average, an additional 1,382 patients per year. For hospitals with patient satisfaction in the bottom 10th percentile, the average volume loss was 17% (HFMA, 2006).

Press Ganey Associates (2009) has also provided research that indicates that organizations with high satisfaction ratings are the most successful financially. Satisfied patients are more likely to recommend the facility to family and friends, thus increasing market share. An enhanced community reputation also leads to greater patient volumes. Better staff buy-in to improvement efforts leads to a more positive atmosphere for patients and better care.

The fact that hospitals with consistently high levels of patient satisfaction are also consistently among the most fiscally successful is not a coincidence. According to study by Garman et al. (2004), the most profitable hospitals generally have the highest levels of patient satisfaction, while the least profitable hospitals often have the lowest. Patient loyalty translates into serious revenue gains. By improving patient satisfaction, providers increase future patient volumes through existing patients and their personal networks. On the flip side, for every patient who complains, 20 dissatisfied patients do not. Of those dissatisfied patients who do not complain, 90% will not return (Garman et al., 2004).

Hospitals should have greater motivation to improve patient experiences as consumers now have access to data that previously was unavailable to them. If consumers see that a hospital has higher HCAHPS scores than a competing hospital in

the area, then the hospital with the higher HCAHPS scores should attract more patients to that hospital. The results of this study provide a research base of information not available prior to this study. This information can be used as comparative data for other surveys conducted by special interest groups or government officials seeking to validate the effectiveness of the HCAHPS survey.

Recommendations for Future Research

There are two areas that come to mind that could produce additional information and useful results if explored by anyone doing more research about the use of HCAHPS to measure patient satisfaction and justify CMS reimbursement. These unexplored areas are as follows:

1. I would add a comments section to my electronic survey so that the hospital health care executive could provide their candid and anonymous feedback on the use of HCAHPS. Due to the nature of my survey, I was more focused on obtaining a significant sample size (314 responses) than on garnering additional insight and information from the hospital health care executives. If this topic was researched further, it is possible that the hospital health care executives would have provided additional significant opinions and alternatives that this researcher had not considered. Perhaps this information would be useful for government officials including redesigning the HCAHPS survey or justifying CMS reimbursement that would be more appropriate for different geographical regions of the country or hospital bed size or for rural or urban hospitals. These ideas may foster more consistency in the application of the use of HCAHPS and CMS reimbursement rates.

2. I would also work to obtain a larger sample size from the population by personally attending and presenting at the quarterly American College of Healthcare Executives (ACHE) meetings. Many times, individuals do not fill out a survey because they don't know the researcher, don't trust the researcher or think that their opinion is not going to matter. By attending these ACHE meetings, I believe I could have positively impacted the number of surveys received as well as been able to glean more insight from the hospital health care executives in impromptu meetings. Hospital health care executives are very adept at formulating strategies and developing ideas to improve their hospitals. I would have liked to have had resources to be able to attend these ACHE meetings and meet more of the health care executives for whom my dissertation research is predicated on.

The purpose of this study was to survey hospital health care executives' attitudes and beliefs on the impact that the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey has on service quality levels and hospital reimbursements from Centers for Medicare and Medicaid Services. To repeat an important thought from this researcher, it should be emphasized to the reader that most hospital health care executives are honest, hard working people who are deeply committed to providing quality health care to those patients they serve. These executives have their patients' best interests in mind.

Health care is an important function of our economy. Health care in the United States is one of the nation's largest businesses, consuming more than 14% of the gross national product. Both for taxpayers and for individuals, it is critical to find ways to

improve healthcare quality while simultaneously keeping healthcare affordable. If the public's confidence is to be earned, healthcare institutions must make changes that are significant and transparent. The HCAHPS survey provides a consistent method of comparison of patient satisfaction and allows for all patients to review the patient satisfaction scores for each hospital. These satisfaction scores are then utilized to justify CMS reimbursement for Medicare and Medicaid patients. Based on the consistency and transparency of the HCAHPS survey, as well as the feedback from the hospital health care executives who participated in this study, this researcher believes that HCAHPS is the proper tool to measure patient satisfaction while justifying CMS reimbursement for each hospital.

REFERENCES

- Agency for Healthcare Resource and Quality. (2008). *Hospital survey on patient safety culture*. Retrieved from <http://www.ahrq.gov/qual/hospculture/>
- American Association of Colleges of Nursing. (2010). *Fact sheet: Nursing shortage*. Retrieved from www.aacn.nche.edu/media/factsheets/nursingshortage.htm
- Barr, J., Giannotti, T., Sofaer, S., Duquette, C., Waters, W., & Petrillo, M. (2006). Using public reports of patient satisfaction for hospital quality improvement. *Health Services Research, 41*(3), 663-682. Retrieved from <http://www.hsr.org/>
- Black, H. C. (1979). *Black's Law Dictionary* (5th ed.). St Paul, MN: West Publishing Company.
- Bloche, M. G. (2000). Fidelity and deceit at the bedside. *Journal of American Medical Association, 283*(14), 1881. doi:10.1001/jama.283.14.1881
- Boscarino, J., & Adams, R. (2004). Public perceptions of quality care and provider profiling in New York: Implications for improving quality care and public health. *Journal of Public Health Management Practices, 10*(3), 241-250. Available from <http://journals.lww.com/jphmp/pages/default.aspx>
- Bredart, A., Robertson, C., & Razavi, D. (2003) Patients' satisfaction ratings and their desire for care improvement across oncology settings from France, Italy, Poland and Sweden. *Psychooncology, 12*, 68-77. Available from <http://www.apos-society.org/about/membership/journal.aspx>
- Bucy, P. H., Hopson, M. D., Kalb, P. E., & Fabrikant, R. (2000). *Health Care Fraud Enforcement and Compliance* (release 7). New York, NY: Law Journal Press.

- Carr-Hill, R. A. (1992). The measurement of patient satisfaction. *Journal of Public Health Medicine, 14*, 236-249. Available from <http://www.ingentaconnect.com/content/oup/pubmed>
- Cartwright, K. K., Kole, S. M., & Forsyth, J. C. (Ed.). (2000). *Health care fraud and abuse compliance manual*. Gaithersburg, MD: Aspen Health Law Center.
- Cliff, B. (2010). The leadership journey of patient-centered care. *Frontiers of Health Service Management, 26*, 35.
- Collins, K., & Nicolson, P. (2002). The meaning of 'satisfaction' for people with dermatological problems: Re-assessing qualitative approaches in health psychology. *Journal of Health Psychology, 7*(5), 615-629.
doi:10.1177/1359105302007005681
- Corrigan, J., Donaldson, M., & Kohn, L. (2001). *Crossing the quality chasm*. Washington, DC: National Academy Press.
- Cox, J. (1996). *Your opinion please: How to build the best questionnaires in the field of education*. Thousand Oaks, CA: Corwin Press.
- Creswell, J. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage Publications.
- Crow, R., Gage, H., Hampson, S., Hart, J., Kimber, A., & Storey, L. (2002). The measurement of satisfaction with healthcare: Implications for practice from a systematic review of the literature. *Health Technology Assessment, 6*, 1-244.
- Cunningham, J. (2008). *Understanding HCAHPS patients safety and public reporting*. Retrieved from www.mtha.org/mpdf/c18.pdf [Slide 20]

- DerGurahian, J., & DoBias, M. (2008). Comparative satisfaction. *Modern Healthcare*, 38(13), 7.
- Do profits come first at hospitals? (1997, September 30). *Los Angeles Times*, pp. A 1-3.
- Dranove, D., Reynolds, K. S., Gillies, R. R., Shortell, S. S., Rademaker, A. W., & Huang, C. F. (1999). The cost of efforts to improve quality. *Medical Care*, 37(10), 1084-1087. Available from <http://journals.lww.com/lww-medicalcare>
- Elliott, M., Lehrman, W., Goldstein, E., Hambarsoomian, K., Beckett, M., & Giordano, L. (2010). Do hospitals rank differently on HCAHPS for different patient subgroups? *Medical Care Review*, 67(1), 67-73. doi:10.1377/hlthaff.2009.0876
- Fitzpatrick, R. (1993). Scope and measurement of patient satisfaction. In R. Fitzpatrick & A. Hopkins (Eds.), *Measurement of patients' satisfaction with their care* (pp. 1-17). London, United Kingdom: Royal College of Physicians of London.
- Frampton, S., & Charmel, P. (2009). *Putting patients first: Best practices in patient-centered care*. San Francisco, CA: Jossey-Bass.
- Garman, A. N., Garcia, J., & Hargreaves, M. (2004). Patient satisfaction as a predictor of return-to-provider behavior: Analysis and assessment of financial implications. *Quality Management in Health Care*, 13(1), 75-80. Available from <http://journals.lww.com/qmhcjournal/pages/default.aspx>
- Giordano, L., Elliott, M., Goldstein, E., Lehrman, W., & Spencer, P. (2010). Development, implementation, and public reporting of the HCAHPS survey. *Medical Care Review*, 67(1), 27-37. doi:10.1177/1077558709341065

Goldstein, E., Elliott, M., Lehrman, W., Hambarsoomian, K., & Giordano, L. (2010).

Racial/ethnic differences in patients' perceptions of inpatient care using the HCAHPS survey. *Medical Care Review*, 67(1), 74-92. doi:10.1177/1077558709341066

Government Accountability Office. (n.d.). *Welcome to GAO*. Retrieved from

www.gao.gov

Haggerty, J. L., Pineault, R., Beaulieu, M-D., Brunelle, Y., Gauthier, J., & Goulet, F.,

(2008). Practice features associated with patient-reported accessibility, continuity and coordination of primary health care. *Annual Family Medicine*, 6, 116-23. doi:10.1370/afm.802.

Hall, M. F. (2008). *Looking to improve financial results? Start by listening to patients*.

Retrieved from <http://www.hfma.org/Publications/hfm-Magazine/Archives/2008/October/Looking-to-Improve-Financial-Results--Start-by-Listening-to-Patients/>

Hargraves, J. L., Wilson, I. B., & Zaslavsky, A. (2001). Adjusting for patient

characteristics when analyzing reports from patients about hospital care. *Medical Care*, 39, 635-641. Available from journals.lww.com/lww-medicalcare

Health Care Financing Administration. (1999). *Medicare part B carriers manual*.

Retrieved from http://medicare.fcso.com/Publications_B/1998/138102.pdf

Healthcare Financial Management Association. (2006). *Tackling the capacity crisis:*

Successful bed management strategies. Retrieved from www.hfma.org/NR/ronlyres/E581803B.../hfma_bedmgmt.pdf

Hospital Consumer Assessment of Healthcare Providers and Systems. (2008). *Fact sheet*.

Retrieved from www.hcahpsonline.org/files/FINAL-HCAHPS%20Fact%20Sheet_3-26-08.pdf

Hudak, P. L., McKeever, P. D., & Wright, J. G. (2004). Understanding the meaning of satisfaction with treatment outcome. *Medical Care*, 42(8), 718-725. Available from journals.lww.com/lww-medicalcare

Huppertz, J., & Carlson, J. (2010). Consumers' use of HCAHPS ratings and word-of-mouth in hospital choice. *Health Services Research*, 45(6), 1602-1613. doi:10.1111/j.1475-6773.2010.01153.x

Institute of Medicine. (2001). *Crossing the quality chasm: A new health system for the 21st century*. Washington, DC: National Academy Press.

Isaac, S., & Michael, W. B. (1995). *Handbook in research and evaluation*. San Diego, CA: Educational and Industrial Testing Services.

Jha, A., Orav, J., Zheng, J., & Epstein, A. (2008). Patients' perceptions of hospital care in the United States. *New England Journal of Medicine*, 359(18), 1921-1931. Available from www.annals.org

Johansson, P., Oleni, M., & Fridlund, B. (2002). Patient satisfaction with nursing care in the context of health care: A literature study. *Scandinavian Journal of Caring Science*, 16, 337-344. doi:10.1046/j.1471-6712.2002.00094.x

Kaiser Family Foundation. (2009). *Payments on medical malpractice claims*. Retrieved from <http://statehealthfacts.kff.org/comparemaptable.jsp?ind=437&cat=8&sub=102&yr=92&typ=4&sort=697&o=a>

- Kaldenberg, D. O., & Trucano, M. (2007). The relationship between patient perceptions of hospital practices and facility infection rates: Evidence from Pennsylvania hospitals. *Patient Safety & Quality Healthcare*. Retrieved from <http://www.psqh.com/enews/0807feature.html>
- Kirchheimer, B. (2007). *Hospitals to report survey data or face financial hit*. Retrieved from www.ModernHealthcare.com
- Larkin, M. (2010). *Quality: Is HCAHPS enough?* Retrieved from <http://www.healthleadersmedia.com/content/MAG-207490/Department-Focus-QualityIs-HCAHPS-Enough#%23>
- Laschinger, H. S., Hall, L. M., Pedersen, S., & Almost, J. (2005). A psychometric analysis of the patient satisfaction with nursing care quality questionnaire: An actionable approach to measuring patient satisfaction. *Journal of Nursing Care Quality*, 20, 220-230. Available from www.editorialmanager.com/jncq/
- Larsson, B. W., Larsson, G., & Starrin, B. (1999). Patients' views on quality of care: A comparison of men and women. *Journal of Nursing Management*, 7, 133-139. doi:10.1046/j.1365-2834.1999.00121.x
- Lauer, C. (2008). HCAHPS no hiccup. *Modern Healthcare*, 38(15), 25. Available from www.modernhealthcare.com/
- Lewis, D. (2009). *Five key initiatives which will dramatically improve your HCAHPS scores*. Retrieved from <http://ezinearticles.com/?Five-Key-Initiatives-Which-Will-Dramatically-Improve-Your-HCAHPS-Scores&id=2157154>

- Linder-Pelz, S. (1982). Toward a theory of patient satisfaction. *Social Science and Medicine*, 16, 577–582. Available from journals.elsevier.com/02779536/social-science-and-medicine/
- Love, T., & Burton, C. (2005). General practice as a complex system: A novel analysis of consultation data. *Family Practice*, 22, 347-52. Available from www.jfponline.com/
- Lumby, J., & England, K. (2000). Patient satisfaction with nursing care in a colorectal surgical population. *International Journal Nursing Practitioner*, 6, 140-145. Available from www.npjjournal.org/
- Maugh, T. II. (1999, October 25). Doctors in study back lying to aid HMO patients. *Los Angeles Times*, pp. A1, A13.
- Mayer, T. A., Cates, R. J., Mastorovich, M. J., & Royalty, D. L. (1998). Emergency department patient satisfaction: Customer service training improves patient satisfaction and ratings of physician and nurse skill. *Journal of Health Management*, 43(5), 427-440. doi:10.1001/jama.282.13.1281
- McGlynn, E., Asch, S., & Adams, J. (2003). The quality of health care delivered to adults in the United States. *New England Journal of Medicine*, 348, 2635-2645. doi:10.1056/NEJM200311063491916
- McMillan, J. H. (1996). *Research fundamentals for the consumer* (2nd ed.). New York, NY: HarperCollins Publishers.
- Merkouris, A., Papathanassoglou, E. D. E., & Lemonidou, C. (2004). Evaluation of patient satisfaction with nursing care: Quantitative or qualitative approach?

- International Journal of Nursing Studies*, 41, 355-367. Available from www.journalofnursingstudies.com/
- NRC Picker. (n.d.). *Path to patient-centered care*. Retrieved from <http://www.nrcpicker.com/Events/Pages/PathtoPCCWebinarSeries.aspx>
- Nurse.com. (2007). *HCAHPS is all about patient satisfaction*. Retrieved from www.nurse.com/ce559/hcahps-is-all-about-patient-satisfaction/
- O'Connell, B., Young, J., & Twigg, D. (1999). Patient satisfaction with nursing care: A measurement conundrum. *International Journal of Nursing Practice*, 5, 72-77. doi:10.1046/j.1440-172X.1999.00158.x
- O'Leary, M. R. (1994). *Lexicon: Dictionary of health care terms, organizations, and acronyms for the era of reform* (1st ed.). Oakbrook Terrace, IL: Joint Commission Accreditation of Healthcare Organizations.
- Önsüz, M. F., Topuoğlu, A., Cöbek, U. C., Ertürk, S., Yilmaz, F., & Birol, S. (2008). Satisfaction levels of hospitalized patients in a university hospital in Istanbul. *Marmara Medical Journal*, 21, 33-49. doi:10.1111/j.1442-2018.2009.00511.x
- Pascoe, G. C. (1983). Patient satisfaction in primary health care: A literature review and analysis. *Evaluation and Program Planning*, 6(3-4), 185-210. doi:10.1136/gut.2003.034322
- Press Ganey Associates. (1997). *One millions patients have spoken: Who will listen?* South Bend, IN: Author.
- Press Ganey Associates. (2009). *Authoritative report on patient perspectives of hospital care released by Press Ganey*. Retrieved from <http://www.pressganey.com>

/pressroom/pressroom_2009/091209/Authoritative_Report_on_Patient_Perspectives_of_Hospital_Care_Released_by_Press_Ganey.aspx

Press Ganey Associates. (2010). *Driving performance excellence in health care*.

Retrieved from www.pressganey.com/index.aspx

Press, I. (2002). Patient satisfaction: Defining, measuring, and improving the experience of care. *Chicago Health Administration Press*, p. 21.

Quality Net. (2009). *CAHPS® hospital survey (HCAHPS)*. Retrieved from

<http://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier2&cid=1140537251096>

Quintana, J., Gonzalez, N., & Bilbao, A. (2006). Predictors of patient satisfaction with hospital health care. *BMC Healthcare Services Res*, 6, 102. doi:10.1186/1472-6963-6-102

Radwin, L. E. (2003). Cancer patients' demographic characteristics and rating of patient-centered nursing care. *Journal Nursing Scholarship*, 35, 365–370.

doi:10.1111/j.1547-5069.2003.00365.x

Rafii, F., Hajinezhad, M. E., & Haghani, H. (2008). Nurse caring in Iran and its relationship with patient satisfaction. *Journal of Advanced Nursing*, 26, 75-84.

Available from www.journalofadvancednursing.com/

Rave, N., Geyer, M., Reeder, B., Ernst, J., Goldberg, L., & Barnard, C. (2003). Radical systems change: Innovative strategies to improve patient satisfaction. *Journal of Ambulatory Care Management*, 26(2), 159-174. Available from

www.editorialmanager.com/jacm/mainpage.html

- Reese, S. (2009). Patient experience correlates with clinical quality: Measure your HCAHPS. Retrieved from <http://managedhealthcareexecutive.modernmedicine.com/mhe/Quality+Strategy/Patient-experience-correlates-with-clinical-qualit/ArticleStandard/Article/detail/595838>
- Richardson Pelliccioni, L. S. (1997, May). The anatomy of Medicare fraud. *National Institute on Health Care Fraud*, 2-15. Available from www.nhcaa.org/
- Risser, N. (1975). Development of an instrument to measure patient satisfaction with nurses and nursing care in primary care settings. *Nursing Research*, 24, 45-52. Available from www.nursing-research-editor.com
- Rodriguez, H. P., Scoggins, J. F., von Glahn, T., Zaslavsky, A. M., & Safran, D. G. (2009). Attributing sources of variation in patients' experiences of ambulatory care. *Med Care*, 47(8), 835-841. doi:10.1097/MLR.0b013e318197b1e1
- Rosenberg, M. (1968). *The logic of survey analysis*. New York, NY: Basic Books.
- Sandrick, K. (2008). *Outpatient imaging centers grow by adding new services: Strategies target national as well as local trends, paying close attention to needs of referring physicians and finding new ways to increase patient satisfaction*. Retrieved from <http://www.diagnosticimaging.com/pet-ct/content/article/113619/1354173?pageNumber=2>
- Schneider, H., & Palmer, N. (2002). Getting to the truth? Researching user views of primary health care. *Health Policy Plan*, 17, 32-41. doi:10.1093/heapol/17.1.32
- Sitzia, J., & Wood, N. (1997). Patient satisfaction: A review of issues and concepts. *Social Science and Medicine*, 45(12), 1829-1843. doi:10.1093/heapol/17.1.32

- Snowday, H. (2010). Walking in the patients' shoes. *Health Management Technology*, 31, 28. Available from www.healthmgttech.com/
- Sofaer, S., Crofton, C., Goldstein, E., Hoy, E., & Crabb, J. (2005). What do consumers want to know about the quality of care in hospitals? *Health Services Research*, 40(2), 2018-2036. doi:10.1111/j.1475-6773.2005.00473.x
- Staniszewska, S., & Ahmed, L. (1999). The concepts of expectations and satisfaction: Do they capture the way patients evaluate their care. *Journal of Advanced Nursing*, 29(2), 364-372. Available from www.journalofadvancednursing.com
- Steine, S., Finset, A., & Laerum, E. (2001). A new, brief questionnaire (PEQ) developed in primary health care for measuring patients' experience of interaction, emotion and consultation outcome. *Family Practice*, 18(4), 410-418.
doi:10.1093/fampra/18.4.410
- Stelfox, H. T., Gandhi, T. K., Orav, E. J., & Gustafson, M. L. (2005). The relation of patient satisfaction with complaints against physicians and malpractice lawsuits. *American Journal of Medicine*, 118(10), 1126-1133. Available from www.amjmed.com
- Strasser, S., Aharony, L., & Greenberger, D. (1993). The patient satisfaction process: Moving toward a comprehensive model. *Medical Care Review*, 50(2), 219-248.
doi:10.1177/107755879305000205
- Studer, Q. (2010). The age of HCAHPS: Four reasons why those 27 survey questions will change healthcare forever. *StuderGroup Perspective*, 1(1), 1. Available from www.studergroup.com

- Taner, T., & Antony, J. (2006). Comparing public and private hospital care service quality in Turkey. *Leadership Health Services, 19*, 1-10.
- Taylor, B., Marcantonio, E. R., Pagovich, O., Carbo, A., Bergmann, M., & Davis, R. B. (2008). Do medical inpatients who report poor service quality experience more adverse events and medical errors? *Medical Care, 46*, 224-228. Available from journals.lww.com/lww-medicalcare
- Teleki, S., Kanouse, D., Elliott, M., Hiatt, L., de Vries, H., & Quigley, D. (2007). Understanding the reporting practices of CAHPS sponsors. *Healthcare Finance Review, 28*(3), 17-30. Available from Medline database
- Tengilimoğlu, D., Kisa, A., & Dziegielewska, S. F. (1999). Patient satisfaction in Turkey: Differences between public and private hospitals. *Journal Community Health, 24*, 73-91. doi:10.1023/A:1018769316379
- Thi, P. L. N., Briançon, S., Empereur, F., & Guillemin, F. (2002). Factors determining inpatient satisfaction with care. *Social Science Medicine, 54*, 493-504. doi:10.1016/S0277-9536(01)00045-4
- Thomson, E. (2000). Gaming the system. *Modern Healthcare, 30*, 26. Available from Academic Search Elite database
- Thompson, J., Ryan, K., Pinidiya, S., & Bost, J. (2003). Quality of care for Medicaid managed care. *Journal American Medical Association, 290*(11), 1617-1621. Available from www.jama.ama-assn.org
- Tokunaga J., & Imanaka, Y. (2002). Influence of length of stay on patient satisfaction with hospital care in Japan. *International Journal Quality Health Care, 15*, 493-502. Available from www.isqua.org

U.S. Department of Health and Human Services. (2010). *Hospital compare database*.

Retrieved from www.hospitalcompare.hhs.gov
<http://www.hospitalcompare.hhs.gov/staticpages/help/hospital-resources.aspx>

Vogt, W. P. (1993). *Dictionary of statistics and methodology*. Newbury Park, CA: Sage.

Wennberg, J., Baker, L., & Fisher, E. (2005). Evaluating the efficiency of California providers in caring for patients with chronic illnesses. *Health Affairs*, 24, 526-543. Available from www.healthaffairs.org

Wilson, L. (2009). Happy patients. *Modern Healthcare*, 20-22. Available from www.modernhealthcare.com

Wynia, M., Cummins, D., VanGeest, J., & Wilson, I. (2000). Physicians' manipulation of reimbursement rules for patients: Between a rock and a hard place. *Journal of American Medical Association*, 283(14), 858. Retrieved from <http://jama.ama-assn.org/content/283/14/1858.full.pdf>

APPENDIX A

HCAHPS Mail Survey (English)

SURVEY INSTRUCTIONS

- ◆ You should only fill out this survey if you were the patient during the hospital stay named in the cover letter. Do not fill out this survey if you were not the patient.
- ◆ Answer all the questions by completely filling in the circle to the left of your answer.
- ◆ You are sometimes told to skip over some questions in this survey. When this happens you will see an arrow with a note that tells you what question to answer next, like this:

0 Yes

0 No ⇒If No, Go to Question 1

You may notice a number on the survey. This number is ONLY used to let us know if you returned your survey so we don't have to send you reminders.

Please note: Questions 1-22 in this survey are part of a national initiative to measure the quality of care in hospitals. OMB #0938-0981

Please answer the questions in this survey about your stay at the hospital named on the cover letter. Do not include any other hospital stays in your answers.

YOUR CARE FROM NURSES

1. During this hospital stay, how often did nurses treat you with courtesy and respect?

10 Never
20 Sometimes
30 Usually
40 Always

2. During this hospital stay, how often did nurses listen carefully to you?

10 Never
20 Sometimes
30 Usually
40 Always

3. During this hospital stay, how often did nurses explain things in a way you could understand?

10 Never
20 Sometimes
30 Usually
40 Always

4. During this hospital stay, after you pressed the call button, how often did you get help as soon as you wanted it?

10 Never
20 Sometimes
30 Usually
40 Always
90 I never pressed the call button

YOUR CARE FROM DOCTORS

5. During this hospital stay, how often did doctors treat you with courtesy and respect?

10 Never
20 Sometimes
30 Usually
40 Always

9. During this hospital stay, how often was the area around your room quiet at night?

10 Never
20 Sometimes
30 Usually
40 Always

6. During this hospital stay, how often did doctors listen carefully to you?

10 Never
20 Sometimes
30 Usually
40 Always

7. During this hospital stay, how often did doctors explain things in a way you could understand?

10 Never
 20 Sometimes
 30 Usually
 40 Always

THE HOSPITAL ENVIRONMENT

8. During this hospital stay, how often were your room and bathroom kept clean?

10 Never
 20 Sometimes
 30 Usually
 40 Always

YOUR EXPERIENCES IN THIS HOSPITAL

10. During this hospital stay, did you need help from nurses or other hospital staff in getting to the bathroom or in using a bedpan?

10 Yes
 20 No ⇒ If No, Go to Question 12

11. How often did you get help in getting to the bathroom or in using a bedpan as soon as you wanted?

10 Never
 20 Sometimes
 30 Usually
 40 Always

12. During this hospital stay, did you need medicine for pain?

10 Yes
 20 No ⇒ If No, Go to Question 15

13. During this hospital stay, how often was your pain well controlled?

10 Never
 20 Sometimes
 30 Usually
 40 Always

14. During this hospital stay, how often did the hospital staff do everything they could to help you with your pain?

- 10 Never
- 20 Sometimes
- 30 Usually
- 40 Always

15. During this hospital stay, were you given any medicine that you had not taken before?

- 10 Yes
- 20 No ⇒ If No, Go to Question 18

16. Before giving you any new medicine, how often did hospital staff tell you what the medicine was for?

- 10 Never
- 20 Sometimes
- 30 Usually
- 40 Always

17. Before giving you any new medicine, how often did hospital staff describe possible side effects in a way you could understand?

- 10 Never
- 20 Sometimes
- 30 Usually
- 40 Always

WHEN YOU LEFT THE HOSPITAL

18. After you left the hospital, did you go directly to your own home, to someone else's home, or to another health facility?

- 10 Own home
- 20 Someone else's home
- 30 Another health facility ⇒ If Another, Go to Question 21

19. During this hospital stay, did doctors, nurses or other hospital staff talk with you about whether you would have the help you needed when you left the hospital?

- 10 Yes
- 20 No

20. During this hospital stay, did you get information in writing about what symptoms or health problems to look out for after you left the hospital?

10 Yes

20 No

OVERALL RATING OF HOSPITAL

Please answer the following questions about your stay at the hospital named on the cover letter. Do not include any other hospital stays in your answers.

21. Using any number from 0 to 10, where 0 is the worst hospital possible and 10 is the best hospital possible, what number would you use to rate this hospital during your stay?

00 0 Worst hospital possible

10 1

20 2

30 3

40 4

50 5

60 6

70 7

80 8

90 9

100 10 Best hospital possible

22. Would you recommend this hospital to your friends and family?

10 Definitely no

20 Probably no

30 Probably yes

40 Definitely yes

ABOUT YOU

There are only a few remaining items left.

23. In general, how would you rate your overall health?

- 10 Excellent
- 20 Very good
- 30 Good
- 40 Fair
- 50 Poor

24. What is the highest grade or level of school that you have completed?

- 10 8th grade or less
- 20 Some high school, but did not graduate
- 30 High school graduate or GED
- 40 Some college or 2-year degree
- 50 4-year college graduate
- 60 More than 4-year college degree

25. Are you of Spanish, Hispanic or Latino origin or descent?

- 10 No, not Spanish/Hispanic/Latino
- 20 Yes, Puerto Rican
- 30 Yes, Mexican, Mexican American, Chicano
- 40 Yes, Cuban
- 50 Yes, other Spanish/Hispanic/Latino

26. What is your race? Please choose one or more.

- 10 White
- 20 Black or African American
- 30 Asian
- 40 Native Hawaiian or other Pacific Islander
- 50 American Indian or Alaska Native

27. What language do you mainly speak at home?

- 10 English
- 20 Spanish
- 30 Some other language (please print):

Thank you. Please return the completed survey in the postage-paid envelope. [NAME OF SURVEY VENDOR OR SELF-ADMINISTERING HOSPITAL] [RETURN ADDRESS OF SURVEY VENDOR OR SELF-ADMINISTERING HOSPITAL]

Source: Centers for Medicare & Medicaid Services. (2011). *CAHPS hospital survey*. Retrieved from <http://www.hcahpsonline.org/home.aspx>

APPENDIX B

Sample Initial Cover Letter for the HCAHPS Survey

[HOSPITAL LETTERHEAD]

[SAMPLED PATIENT NAME] [ADDRESS]
[CITY, STATE ZIP]

Dear [SAMPLED PATIENT NAME]:

Our records show that you were recently a patient at [NAME OF HOSPITAL] and discharged on [DISCHARGE DATE]. Because you had a recent hospital stay, we are asking for your help. This survey is part of an ongoing national effort to understand how patients view their hospital experience. Hospital results will be publicly reported and made available on the Internet at www.hospitalcompare.hhs.gov. These results will help consumers make important choices about their hospital care, and will help hospitals improve the care they provide.

Questions 1-22 in the enclosed survey are part of a national initiative sponsored by the United States Department of Health and Human Services to measure the quality of care in hospitals. Your participation is voluntary and will not affect your health benefits.

We hope that you will take the time to complete the survey. Your participation is greatly appreciated. After you have completed the survey, please return it in the pre-paid envelope. Your answers may be shared with the hospital for purposes of quality improvement. [OPTIONAL: You may notice a number on the survey. This number is ONLY used to let us know if you returned your survey so we don't have to send you reminders.]

If you have any questions about the HCAHPS Survey, please call the toll-free number 1-800- xxx-xxxx. Thank you for helping to improve health care for all consumers.

Sincerely,

[HOSPITAL ADMINISTRATOR] [HOSPITAL NAME]

Note: The OMB Paperwork Reduction Act language must be included in the mailing. This language can be either in the cover letter or on the front or back of the questionnaire. The exact OMB Paperwork Reduction Act language is included in this appendix. Please refer to the Mail Only, and Mixed Mode sections, for specific letter guidelines.

APPENDIX C

Sample Follow-up Cover Letter for the HCAHPS Survey

[HOSPITAL LETTERHEAD]

[SAMPLED PATIENT NAME] [ADDRESS]
[CITY, STATE ZIP]

Dear [SAMPLED PATIENT NAME]:

Our records show that you were recently a patient at [NAME OF HOSPITAL] and discharged on [DATE OF DISCHARGE]. Approximately three weeks ago we sent you a survey regarding your hospitalization. If you have already returned the survey to us, please accept our thanks and disregard this letter. However, if you have not yet completed the survey, please take a few minutes and complete it now.

Because you had a recent hospital stay, we are asking for your help. This survey is part of an ongoing national effort to understand how patients view their hospital experience. Hospital results will be publicly reported and made available on the Internet at www.hospitalcompare.hhs.gov. These results will help consumers make important choices about their hospital care, and will help hospitals improve the care they provide.

Questions 1-22 in the enclosed survey are part of a national initiative sponsored by the United States Department of Health and Human Services to measure the quality of care in hospitals. Your participation is voluntary and will not affect your health benefits. Please take a few minutes and complete the enclosed survey. After you have completed the survey, please return it in the pre-paid envelope. Your answers may be shared with the hospital for purposes of quality improvement. [OPTIONAL: You may notice a number on the survey. This number is ONLY used to let us know if you returned your survey so we don't have to send you reminders.]

If you have any questions about the HCAHPS Survey, please call the toll-free number 1-800- xxx-xxxx. Thank you again for helping to improve health care for all consumers.

Sincerely,

[HOSPITAL ADMINISTRATOR] [HOSPITAL NAME]

Note: The OMB Paperwork Reduction Act language must be included in the mailing. This language can be either in the cover letter or on the front or back of the questionnaire. The exact OMB Paperwork Reduction Act language is included in this appendix. Please refer to the Mail Only, and Mixed Mode sections, for specific letter guidelines.

APPENIDIX D

Informed Consent Form

I authorize, Patrick Billiter, a doctoral student under the supervision of Dr. Kent Rhodes in the Education – Organizational Leadership program at Pepperdine University, to include me on the research project entitled Hospital Health Care Executives’ Attitudes and Beliefs on the Impact of the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) Survey on Service Quality and Hospital CMS Reimbursement. I understand my participation in this study is strictly voluntary.

I have been asked to participate in a research project which is designed to survey hospital health care executives’ attitudes and beliefs on the use of HCAHPS scores to improve service quality as well as justify hospital reimbursement from CMS.

My participation in this study will involve me completing an on-line survey containing ten (10) questions on HCAHPS. The survey will take approximately one minute of my time.

I have been asked to participate in this study because I am an executive at a hospital, either a Chief Executive Officer (CEO), Chief Operating Officer (COO), Chief Financial Officer (CFO), or Chief Nursing Officer (CNO).

My participation in this study will only require me to complete an on-line survey containing ten (10) questions on HCAHPS.

The survey was designed so that there are no identified risks associated with this study. I am aware that all information will remain confidential and that the survey does not ask for my name or my hospital to protect the anonymity of all respondents. In the event I do experience an issue, I am to contact Patrick Billiter at 20 Climbing Vine, Irvine CA or via his email at patrick.billiter@pepperdine.edu or via his cell at 714-402-0903 or that I may contact Dr. Kent Rhodes at krhodes@pepperdine.edu to get resolution to my issues.

I understand there is no direct benefit from my participation in this study.

I understand that I have the right to refuse to participate in, or to withdraw from, the study at any time without prejudice. I also have the right to refuse to answer any question I choose not to answer. I also understand that there might be times that the investigator may find it necessary to end my participation.

I understand that no information gathered from my study participation will be released to others without my permission, unless such a disclosure is required by law. If the findings of the study are published or presented to a professional audience, no personally identifying information will be released.

The data will be maintained in a secure manner for 3 years at which time the data will be destroyed.

I understand I will receive no compensation, financial or otherwise, for participating in study.

I understand that if I have any questions regarding the study procedures, I can contact Patrick Billiter at [REDACTED] or via his email at [REDACTED] or via his cell at [REDACTED] or that I may contact Dr. Kent Rhodes at [REDACTED] to get answers to my questions.

If I have questions about my rights as a research participant, I may contact Pepperdine University Graduate and Professional Schools Institutional Review Board (GPS IRB) at [REDACTED] or at [REDACTED].

I understand to my satisfaction the information in the consent form regarding my participation in the research project. All of my questions have been answered to my satisfaction. I have received a copy of this informed consent form which I have read and understand. I hereby consent to participate in the research described above.

Participant's signature

Date

I have explained and defined in detail the research procedure in which the subject has consented to participate. Having explained this and answered any questions, I am cosigning this form and accepting this person's consent.

Patrick Billiter

Date