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Examining Health Care Providers' Perceptions of the Bundled Payments for Care Improvement Initiative

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Abstract

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MHA, Walden University, 2014

BS, John Brown University, 2012

Dissertation Submitted in Partial Fulfillment

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Doctor of Philosophy

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Abstract

The goals of the modern health care system are in transition from volume of care to quality of care; as a result, the existing fee-for-service model may be outdated, and value-based systems such as bundled payment models should be evaluated. Accordingly, the purpose of the current study was to explore the perceptions of physicians and nurse practitioners regarding the effects of the Bundled Payments for Care Improvement (BPCI) initiative on the procedures for patient selection, care implementation, and quality measurement. The study was guided by a qualitative approach, a phenomenological design, three research questions, and the Donabedian framework for measuring quality of care. The methodology consisted of face-to-face interviews with a sample of 12 physicians and nurse practitioners. Based on the results of the thematic data analysis, the majority of participants stated that BPCI will have some effect on patient selection. The participants also spoke directly to the changes to care implementation that might results from the transitions to BPCI care. The participants all agreed regarding the importance and implementation of quality measurements, but they expressed differing opinions on the usefulness or quality of such measures. These findings revealed the possibility that patients with complex health issues may be the population that is most significantly affected by the bundled payment system. More flexibility is needed within the bundled payment system to account for the limitless variance possibilities when dealing with the treatment of health issues.

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Dedication

I dedicate this dissertation to the memory of my late parents (Sir Samuel Chukwukere Duru and Madam Harriet Chinyere Duru) whose perseverance and courage were the bed rock for my life journey. To my one-half, my lovely wife Ozioma Hope (Nwanyioma) and my children Samuel, Ikechi, Tobe and Amaka thank you all for your unwavering support throughout this my dissertation journey.

To my lovely wife, Ozioma Hope (Nwanyioma), no amount of thanks can ever be enough for your relentless support, patience, encouragement and love throughout this dissertation journey. You believed in me and stood by me as always throughout this challenging academic process, especially at times when I had doubts believing in myself. Your love, thoughtfulness and steadfastness were the very source of my inspiration throughout this long academic journey and I will forever be grateful!

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Table of Contents

List of Tables

Chapter 1: Introduction to the Study

The changing goals and structure of the U.S. health care system led to the implementation of other payment methods other than the fee-for-service model, namely bundled payment models. Although bundled payment models are gaining popularity in health care, research aimed at evaluating these models is in its infancy. As a result, additional research focusing on the effects of bundled payments methods on the provision of health care services is needed (Shrank et al., 2017). Physicians' perceptions of payment methods are crucial to providing sufficient care to patients; therefore, research on how physicians view the bundled payments models is needed (Yoo et al., 2014).

The current study identified outcomes of the Bundled Payments for Care Improvement (BPCI) initiative and how it affects the way that patients are selected, how patient care is implemented, and how quality is measured based on the perceptions of physicians and nurse practitioners. This study could significantly contribute to the current body of knowledge by offering valuable insight into the perceived barriers and concerns of medical providers regarding the BPCI initiative. By providing a better understanding of the effects that the BPCI has on how medical providers select patients, implement care, and measure quality at the patient level, politicians and medical service providers may be influenced to change certain aspects of how reimbursements are adjusted.

This chapter will provide a collection of selected literature to describe the background of the study and clearly present the problem statement. In addition, the purpose statement, research questions, conceptual framework, and nature of the study will be presented. Concise definitions of key concepts or constructs will also be provided in this chapter to clarify the meaning of the two main reimbursements discussed in this study, namely the fee-for-service model and the value-based model. Assumptions, scope, delimitations, as well as limitations of specific aspects of the research that were critical to the meaningfulness of the study are briefly discussed. The significance of the study section will involve an identification of potential contributions of the research to the community, society, and public health practice. A concluding summary will highlight the main points covered and provide a transition to the study's next chapter.

Background of the Study

In 2010, the Patient Protection and Affordable Care Act established the BPCI initiative aimed at improving patient care while also lowering the implementation cost of health care plans (Chen & Ackerly, 2014; Delisle, 2013). The BPCI initiative was structured to combine health care costs among various providers for episodes of patient care in lieu of a single doctor visit (Delisle, 2013). The goal of the initiative was to resolve the inefficiency and inappropriate incentives associated with the fee-for-service payment model by transitioning to a value-based model focused on good outcomes (Delisle, 2013; Flodgren et al., 2011; Francis & Clancy, 2016).

The fee-for-service model puts an emphasis on the volume of care instead of on efficient care, whereas the bundled-payment model emphasizes value (Adida et al., 2016; Shih et al., 2015). Previous research by Adida et al. (2016) indicated that fee-for-service models promote excessive service delivery, while disregarding patient outcomes. The fee-for-service payment model has been criticized because it emphasizes increased utilization of services (which is not beneficial for patients) and also because it greatly increases medical spending (Rana & Bozik, 2015).

Unlike the fee-for-service model, which emphasizes quantity over quality, the pay-for-performance models place value over volume (Francis & Clancy, 2016; Goldman & Kates, 2017). The goal of the initiative was to resolve the inefficiency and inappropriate incentives associated with the fee-for-service payment model by transitioning to a value-based model, which streamlines the reimbursements for multiple episodes of care. This transition may help to increase financial savings (particularly to Medicare) and quality of care (Centers for Medicare and Medicaid Services [CMS], 2017; Delisle, 2013; Flodgren et al., 2011; Francis & Clancy, 2016; Goldman & Kates, 2017). For example, the BPCI initiative attaches value to a procedure, while leaving the task of reducing costs and improving quality to the clinicians (Goldman & Kates, 2017). Under the BPCI, payments are adjusted according to quality metrics, such as administration of antibiotics rates, patient mortality, and avoidable complications.

Unfortunately, by adjusting payments according to the outcome of the entire procedure, the BPCI initiative places clinicians and health systems at significant financial risk, where they are reimbursed less for providing more services compared to fee-for-service reimbursement. Ultimately, the financial risks associated with the BPCI could potentially cause clinicians to cherry-pick patients in attempt to prevent financial loss (Goldman & Kates, 2017). Bundled payment models may put physicians at an increased risk financially because providers are only reimbursed for the services as a whole, in a single payment, rather than being reimbursed for each service individually (Francis & Clancy, 2016; Goldman & Kates, 2017).

The Four Models of the BPCI Initiative

There are four models of the BPCI initiative (CMS, 2016; CMS, 2017; Hancock et al., 2014). Model 1 defines an episode of care (where payments are linked) as the services provided to a patient during the entire inpatient hospital stay (CMS, 2016; CMS, 2017; Hancock et al., 2014). Medicare savings may be more prominent under BPCI because there is a discounted reimbursement rate when making payments to participating facilities or organizations (CMS, 2017). However, under Model 1, Medicare still reimburses physicians separately due to the Medicare Physician Fee Schedule (CMS, 2016; CMS, 2017).

In Models 2 and 3, there is a bundled payment arrangement made in advance, where reimbursements are reconciled to a target price for a single episode of care (CMS, 2016; CMS, 2017; Hancock et al., 2014). Models 2 and 3 differ based on how they define an episode of care. In Model 2, an episode is defined as the inpatient, acute care hospital stays combined with postacute care and any related services within 90 days of being discharged. In Model 3, an episode of care does not include the inpatient, acute hospital stays, but instead includes postacute services at a nursing facility, inpatient rehabilitation facility, or a long-term hospital or home health facility (CMS, 2017). Models 2 and 3 involve retrospective fee-for-service payments by Medicare; however, the total reimbursements for the episode of care are reconciled with a bundled target price, which is determined by CMS (CMS, 2016; CMS, 2017). Afterward, a payment is made by

Medicare that reflects the total reimbursements compared to the target cost (CMS, 2016; CMS, 2017). According to Hancock et al. (2014), most organizations who participate in BPCI use Model 3 or Model 2.

In Model 4, the hospitals receive a previously arranged bundled reimbursement from CMS (CMS, 2016; CMS, 2017; Hancock et al., 2014). This payment includes all services provided to the patient by that hospital, the physicians, or other practitioners. Here, an *episode of care* is defined as the services received during an entire inpatient stay. When physicians or other practitioners provide care, they submit a claim to Medicare and are reimbursed by the hospital, which uses funds from the bundled payment arrangement (CMS, 2016; CMS, 2017).

Potential Outcomes of the BPCI Initiative

Because of the changing nature of our health care system, payment models also need to change for benefits to be received throughout the health care system (Althausen & Mead, 2016; Rana & Bozik, 2015). For instance, the fee-for service approach was related to fragmented care, less incentives, and less coordination or communication across multiple providers (Shih et al., 2015). The bundled payments model makes medical settings and providers financially responsible for postdischarge care and emphasizes gainsharing where there is an arrangement between medical settings and providers to share in the costs of services to make care more effective and efficient without increasing the cost of care. Much of the previous research and evaluation on bundled payments is in the early stages, and future research is needed to more thoroughly examine outcomes of this alternative payment model (Rana & Bozik, 2015).

The clinical measures associated with quality of care under pay-for-performance models, such as BPCI, include reducing 30-day readmission rates, postoperative complications, length of stay, and nosocomial infections (Goldman & Kates, 2017). As such, to be profitable with the pay-for-performance model, it is imperative that medical providers minimize medical complications and focus on structure, process, and outcome measures, which is a priority for BPCI (Goldman & Kates, 2017). Under the BPCI models, organizations that participate agree to financial and performance responsibilities for providing care, which may help to increase the quality of health care services (CMS, 2017). The BPCI initiative is said to add value to a procedure, while leaving the task of reducing costs and improving quality to the clinicians (Goldman & Kates, 2017). Under the BPCI, payments are adjusted according to quality metrics, such as administration of antibiotics rates, patient mortality, and avoidable complications (Goldman & Kates, 2017).

Despite these benefits, adjusting payments according to the outcome of the entire procedure based on the BPCI initiative places clinicians and health systems at significant financial risk. The risk associated with BPCI includes a repayment from health care providers to CMS if the cost of services is greater than the target price, which is predetermined by CMS (CMS, 2018). Notably, these cost reconciliations may be adjusted based on quality of care and performance (CMS, 2018). Ultimately, the financial risks associated with the BPCI could potentially cause clinicians to cherry-pick patients in an attempt to prevent financial loss (Goldman & Kates, 2017). However, incentives have been created for physicians that meet certain patient thresholds while participating in

BPCI for 1 year. Specifically, eligible providers will receive a 5% reimbursement increase for years 2019-2024 (CMS, 2018). Therefore, quality of care and participating in BPCI for at least 1 year can be advantageous to providers and decrease their financial risk (CMS, 2018).

Because patient outcomes and costs are directly related to the decisions made through the collaboration between patients and clinicians, measuring quality of care should occur at both the clinical and the individual levels (Francis & Clancy, 2016). While clinical quality of care outcome measurements and definitions are straightforward, measuring quality as it relates to individual patient encounters is more difficult (Francis & Carolyn, 2017). Measurements related to patients' satisfaction with outcomes are also particularly problematic, especially when considering that many of the scales used to measure patient experience do not take into account other comorbid diagnoses the patient may have, such as depression (Goldman & Kates, 2017).

Understanding the effects of BPCI is complicated because research is limited regarding the effectiveness of the bundled episode payment reforms at controlling costs while improving the quality of care. Although the use of bundled payments models is growing in the health care industry, evaluation of the effects of BPCI is still in its beginning stages (Shrank et al., 2017). The idea behind the creation and implementation of BPCI was that it would benefit the patient; however, little is known about the benefits or challenges posed to physicians and nurse practitioners.

In this study, I sought to address the gap in the previous literature regarding the implementation of the BPCI initiative and its effects on how patients are selected, how patient care is implemented, and how quality is measured. This study is needed to advance knowledge regarding the provision of quality health care services and the identification of the barriers in the implementation of the BPCI initiative. In addition, the results from this study could significantly contribute to the previous body of knowledge on bundled payments by offering valuable insight into the perceived barriers and concerns of medical providers regarding the implementation of the BPCI initiative. Research exploring the BPCI initiative from the perspective of physicians and nurse practitioners using it is lacking. By considering physician and nurse practitioner perspectives of the BPCI initiative, this study may help improve policies involving health care reimbursement models.

Problem Statement

The problem is that the implementation of the BPCI initiative in terms of how patients are selected, how patient care is implemented, and how quality is measured is still not clearly understood and supported by the previous research. Because the BPCI initiative is still in the pilot phase, evidence regarding the effectiveness of the bundled episode payment reforms to control costs while improving the quality of care is mixed and limited (Shrank et al., 2017). This lack of evidence has resulted in numerous experts requesting more research focused on answering questions related to how these reforms affect outcomes in various contexts (Francis & Clancy, 2016; Shrank et al., 2017). Nevertheless, the different perspectives and purposes of health care stakeholders on the types and amount of evidence need to be explored to adequately address whether or not specific reforms, such as the bundled episode payments, make defining *success* difficult (Shrank et al., 2017).

In light of the disparate definitions regarding what constitutes *relevant evidence*, Shrank et al. (2017) recommended that studies be designed to align with health care stakeholder needs. Because what constitutes as a successful reform varies according to which health care stakeholders' perspectives are being assessed, physicians and nurses are in a unique stakeholder position that allows them to give valuable insight into how they perceive the effects of the BPCI initiative on patient outcomes. According to Francis and Clancy (2016), there is a dearth of literature mentioning important qualitative details related to implementing pay-for-performance models. Francis and Clancy (2016) further argued that more qualitative research focused on the implementation of BPCI is the key to understanding what makes an initiative successful. The research gap will be filled by this study by exploring the perceptions of physicians and nurse practitioners regarding the effects of the BPCI initiative on how patients are selected, how patient care is implemented, and how quality is measured.

Purpose of the Study

The purpose of the current study was to explore the perceptions of physicians and nurse practitioners regarding the effects of the BPCI initiative on how patients are selected, how patient care is implemented, and how quality is measured. There was a need to understand the detailed aspects of BPCI implementation and the effects on patients, and whether or not practitioners and nurse providers experience concerns or barriers to implementing patient care. To this end, the current study focused on the perspectives of physicians and nurse practitioners that were employed at the Washington Regional Medical Center in Fayetteville, Arkansas.

Research Questions

To gain a better understanding of how physicians and nurse practitioners perceive the effects of the BPCI on the implementation of patient care, the current study was informed by the following research questions:

RQ1: What effect does the BPCI initiative have on patient selection from the perspectives of physicians and nurse practitioners?

RQ2: What effect does the BPCI initiative have on how care is implemented at the patient level from the perspectives of physicians and nurse practitioners?

RQ3: What effect does the BPCI initiative have on how quality is measured at the clinical and patient level from the perspectives of physicians and nurse practitioner?

Conceptual Framework

The conceptual framework that informed the current study was Donabedian's (1988) quality framework. The source of the Donabedian's quality framework can be traced to the work of Donabedian (1988) at the University of Michigan. Despite the presence of other models developed by the World Health Organization and other organizations, the Donabedian (1988) quality framework remains the dominant paradigm in the assessment of quality of health care. The Donabedian framework, which is also known as the Donabedian SPO model, fits the current study because I used measures of structures, processes, and outcomes to evaluate the quality of care following the implementation of the BPCI initiative in an Arkansas hospital facility. I discuss the background, key constructs, and alignment with the current study in more detail in the following sections.

Background and Theoretical Propositions

The Donabedian (1966) framework for measuring quality of care led the current study's interview and research questions and analysis. The Donabedian framework has been a useful framework for evaluating quality of care in many previous research studies (Kunkel et al., 2007; Liu et al., 2011; Morris & Bailey, 2014). The framework is based on three interrelated indicators, or approaches, to evaluate how health care is provided, and is known as the SPO model: structures of care, processes of care, and health outcomes (Carayon et al., 2006; Donabedian, 1966; McDonald et al., 2007). The SPO model assumes that the three indicators influence each other (Kunkel et al., 2007; Liu et al., 2011). According to Carayon et al. (2006), the focus of the Donabedian model is on "care process(es)—that is, how care is provided, delivered and managed" (p. 53). The structures of care aspect involve the overall physical characteristics of the organizational setting, such as the specific operational and financial aspects of health care service providers (Donabedian, 1966; Kunkel et al., 2007; McDonald et al., 2007). The processes of care concept relate to how the structures of care affect the ways in which physicians and support staff deliver care to patients (Donabedian, 1966; Kunkel et al., 2007; McDonald et al., 2007). Finally, the health outcomes concept involves how the structural and implementation processes influences patient outcomes (Donabedian, 1966; Kunkel et al., 2007; McDonald et al., 2007). These three components work together to form the system of care, although Donabedian (1966) initially intended the components to be linear, moving from structure to process to outcome. I will discuss these components in greater detail in the theoretical framework section.

The Donabedian quality framework specifically suggests that the overall effect the coordination of care has on patient outcomes is influenced by a myriad of structural factors and do not occur within a vacuum. Beyond the basic tenets of Donabedian’s framework, a further look at the link between what physicians have control over and patient outcomes should not be undervalued. This link is of particular interest when considering that better coordination of care is only beneficial if the structures influencing care delivery and health outcomes are optimized as well (McDonald et al., 2007). I will provide a more detailed explanation of the theoretical propositions of Donabedian in Chapter 2.

Relation Between Donabedian Quality Framework and this Study

The Donabedian SPO model was utilized to guide the evaluation of the structures, processes, and outcomes of the BPCI initiative. Specifically, the structures of care from Donabedian’s model were explored by focusing on how the BPCI affects patient selection, which may be influenced by the way reimbursements are structured. Next, the processes of care aspect of Donabedian’s model was addressed by exploring how care is implemented. Finally, the health outcomes component of Donabedian’s model was addressed by gaining insight into whether the BPCI has affected the ways in which clinicians’ measure qualities of care. By exploring the implementation process of the BPCI initiative, valuable insight has been gleaned from physicians and nurse practitioners regarding the effects that the BPCI initiative has on the overall value of care.

In this study, I examined whether or not the BPCI initiative affects quality of care, namely the structure, processes and outcomes, from the viewpoints of providers. Understanding the BPCI initiative's effects on quality of care are crucial because of its increase in prevalence across the United States, Donabedian's SPO framework provided a way to evaluate a system; although health care reimbursement is not specifically part of the SPO framework, the BPCI is a system that can be evaluated using the SPO framework. Kunkel et al. (2007) found that the SPO framework is effective for evaluating the quality of a single system as well as comparing the quality of multiple systems; in the case of this study, the SPO model has been utilized to examine the health care system of one hospital facility; the results from this study can then be used to help compare the effects of BPCI with other systems. In this study, the system where quality has been evaluated was BPCI. In addition, Liu et al. (2011) noted that the definition of quality itself can vary depend on the setting, but the SPO model is effective for evaluating quality of care in the hospital setting.

Nature of the Study

Rationale for the Research Design

Because I have gathered information on the diverse experiences regarding the impacts of the BPCI initiative on patient selection, care implementation, and quality care measurement from physicians and nurse practitioners, this study was best served by the use of qualitative methodology. The specific method of inquiry was a descriptive phenomenological approach. As noted by Giorgi et al. (2012), phenomenology is a complicated, holistic, and detailed philosophy that categorizes consciousness and its functions. Descriptive phenomenology has been shown to be useful when seeking to gain insight into a phenomenon of interest from the perspectives of individuals who have experienced it (Giorgi et al., 2012; Laverty, 2003) and to describe the conscious experiences of individuals devoid of presuppositions (Reiners, 2012), to uncover the “hidden” aspects of one’s experiences (Matua et al., 2015).

A basic tenet of descriptive phenomenology is the belief that human consciousness is intentional and guided by interactions with the world, a concept known as intentionality (Laverty, 2003). Furthermore, intentionality is said to be a key component of an individual’s understanding or mind (Laverty, 2003). Along with intentionality, a phenomenological design takes into account individuals’ lived experiences. In this study, the researcher seeks to examine factors and experiences that would be missed by categorization or quantitative research; therefore, a phenomenological design is appropriate (Laverty, 2003). The use of phenomenological methodology will be useful when examining the meaning of a specific experience (in this case, the participation in the BPCI initiative), rather than causes of outcomes.

Description of the Phenomenon

The key phenomenon that was under investigation for the current study were the effects of BPCI on patient selection, care implementation, and how quality of care is measured. This study utilized a descriptive phenomenological design to collect information regarding how physicians and nurse practitioners, at the Washington Regional Medical Center in Fayetteville, Arkansas, perceive the effects of the BPCI initiative on how patients are selected, how patient care is implemented, and how quality is measured. A descriptive phenomenological approach was optimal for this study because it allowed for the examination of health care providers' perceptions of the initiative while leaving room for flexibility, detail, and depth in participant responses that would not be possible in a quantitative approach (Stake, 2005). By using a semistructured interview as a guide, recording interviews, and frequently clarifying participants' responses, I sought to reduce bias and extract honest and detailed information about BPCI. Methods of data collection and for reducing bias are discussed in further detail in the limitations section of this paper.

In the current study, a descriptive phenomenological approach was appropriate because I did not want to look at the impacts of BPCI as dichotomous (i.e., successful or unsuccessful) or as an isolated variable; instead I sought to describe which components were successful, which components were unsuccessful, and how care implementation was impacted, from the perspective of physicians and nurse practitioners. Laverty (2003) suggested that phenomenology is an efficient research design to gain insight on context and variables that would be missed by an experimental or quantitative design, and this type of detail was critical for understanding experiences with BPCI.

Description of the Research Methodology

The population included physicians and nurse practitioners in the Washington Regional Medical Center in Fayetteville, Arkansas. For data collection purposes, semistructured interviews, a demographic questionnaire, observation notes outside of the interviews, and field notes during the interviews were all utilized. The involvement of participants was primarily confined to individual semistructured interviews, which allowed the researcher to stay on track while also obtaining detailed responses from participants. Interviews were recorded with the participants' permission; participants were notified that the recording would only be used to transcribe their interview and would not be shared with others. Prior to beginning the interview, participants completed a brief demographic questionnaire. During the interview, field notes were recorded on paper to supplement the data obtained from the recording of the interview. Field notes included information such as the researcher's thoughts and notable behaviors or comments made by the participants during the interview. Observation notes were recorded during time outside the time span of the interview, such as waiting in the facility before the interview started or after interviews had ended. Observation notes included notes about the facility, such as the layout, size, and interactions among providers, nurses, administration and patients; this data was used to assess whether themes emerge among certain groups of participants and were used to describe the setting of the location where the study took place when making conclusions. All research questions were coded using formal coding and analyzed using computer-assisted theoretical thematic analysis, which is a data analysis technique commonly utilized in qualitative studies (Vaismoradi et al., 2013).

Theoretical thematic analysis is the systematic method of uncovering the meaning of a given set of qualitative data by searching for themes and patterns (Braun & Clark, 2006; Vaismoradi et al., 2013). This involved coding each line or segment of text in the interview transcripts to answer the predetermined research questions. For this study, NVivo, version 11.4.1, was the software that was used for coding responses, and this process is known as computer-assisted qualitative analysis (Welsh, 2002). Then, codes and possible subcodes were reviewed for emergent themes. Computer-assisted qualitative analysis helps the analyst to generate themes from individual codes as well as a group of codes while also showing the entire analysis process, which had been a missing component of qualitative methods until the introduction of computer-assisted qualitative analysis (Welsh, 2002).

Definitions

Fee-for-service model. This term refers to a payment method in the health care setting where a payment is made to a primary care provider for every care item or care service that is made (Francis & Clancy, 2016; Goldman & Kates, 2017; Gosden et al., 2000). In 2016, the fee-for-service reimbursement model was the dominant reimbursement model in the United States. However, this model has been criticized for rewarding providers for the quantity rather than the quality of health care services, for hindering improvements to quality care, and for actually increasing costs (Porter & Kaplan, 2016).

Value-based model. This term refers to a payment model in the health care setting that is based on separate payments for a set of comprehensive services for an entire episode of treatment, and includes the BPCI initiative (Francis & Clancy, 2016; Goldman & Kates, 2017). Characteristics of value-based care includes better care at lower cost (Adler-Milstein et al., 2017), pay-for-performance models for physicians (Chen et al., 2017), better health outcomes (Gupta et al., 2016), and a system of care with physicians acting in their patient’s best interest (Mostashari, 2016).

Assumptions

I assumed that all of the participants would be truthful and honest during the one-on-one interview. This assumption was significant to the study because the perceptions of the participants served as the foundation of the data. The findings are only meaningful if the data were truly reflective of the actual experiences and perceptions of the participants. In addition, I assumed that the participants would have a sincere appreciation for the current study and would not be influenced by other motivations. Another assumption that applied to this study was that the inclusion criteria were appropriate to examine the impacts of the BPCI model as they pertained to care implementation, patient selection, and quality of care.

Scope and Delimitations

Scope

The scope of the study was on the evaluation of a value-based performance model, the BPCI initiative. This evaluation was guided by the Donabedian quality framework (1988) because it serves as an avenue for evaluating a system. It was not possible for a single study to fully evaluate every component of BPCI, so this research study narrowed its scope. Specifically, this study examined the impact of BPCI on patient selection, care implementation, and quality of care as reported by physicians and nurse practitioners. These topics were selected because of the research gap involving the evaluation of BPCI; little previous research had examined BPCI from physicians' or nurse practitioners' viewpoints, and it was unclear whether BPCI affected patient selection, care implementation, and quality of care. The study only focused on the perceptions and experiences of physicians and nurse practitioners from a single hospital facility regarding the BPCI initiative.

Furthermore, the perceptions and experiences of physicians and nurse practitioners were examined using the phenomenological research design. This qualitative study focused on a single homogenous group of individuals (physicians and nurse practitioners) to describe their experience of the same phenomenon and generate themes and conclusions from their responses (Moustakas, 1994). The inclusion criteria for this study were the following: (a) current physicians in Washington Regional Medical Center; (b) have exposure to the BPCI value-based model; (c) have at least 2-year professional experience after completing their residency or after graduating from their medical program; (d) are licensed to practice medicine in Arkansas; (e) are actively practicing/are not retired; (f) are from the United States; and (g) can bill for services they provide to patients. Only physicians and nurse practitioners who completely met those criteria were eligible to be part of the study. These criteria assisted me in gaining valuable insight to evaluate the impacts of the BPCI initiative on patient selection, care implementation, and measurement of quality care, but, due to strict criteria, the results may not be transferable to other populations.

Delimitations

One delimitation of the study was the use of a narrow population, namely physicians and nurse practitioners. Participants in this study included physicians and nurse practitioners from Washington Regional Medical Center with current unencumbered licenses that treat clients in the United States. Age, gender, and ethnicity were not delimitating factors in this study; furthermore, results from this study are transferable to other qualitative studies involving physicians and nurse practitioners in the same geographic location as the current study who utilize the BPCI initiative. Specifically, physicians and nurse practitioners using BPCI and in a similar location will be able to make connections between the results from this study and their own personal experiences.

Health care administrators were excluded in this study because they are not primary care providers. One of the potential issues with BPCI that was examined in the study is that it puts primary care physicians and nurse practitioners at a financial risk because Medicare reimburses as a discounted rate (CMS, 2017). Physicians and nurse practitioners also have more direct experience with payment models compared with other health care professionals, in that they submit reimbursements for the services they provide to patients. The rationale for only including physicians and nurse practitioners was that they serve patients and can bill for the services they provide; furthermore, the population of focus for this study helped to address the research questions from the perspective of physicians and nurse practitioners who use BPCI. To address this study’s transferability, or the external validity of the results (Guba & Lincoln, 1982), I have provided a thick description of the research context and a detailed description of the sample. The delimitating factors pertaining to the sample helped to describe the applicability of the results to other samples.

Another delimitation of the study involved the research questions. It was outside the scope of this study to evaluate all components of BPCI; therefore, the health care components that were of focus were patient selection, care implementation, and quality of care measurement. These variables were selected for the current study because of the research gap regarding how they have been affected since the implementation of BPCI. The current study describes how patient selection, care implementation, and quality of care measurement have changed under the BPCI initiative, but this study did not examine relationships between variables due to the qualitative nature of the data. An additional delimitation is the theoretical stance that I chose. This study was guided by the Donabedian framework. I examined the effects of the structures, processes and outcomes of BPCI on patient selection, care implementation, and quality care measurement.

Limitations

Limitations are factors that can compromise the credibility or accuracy of the findings (Leedy & Ormrod, 2015); furthermore, it is crucial to address limitations so that results from the study are not misconstrued. Identifying limitations helped the researcher familiarize himself with the data, increased the understanding about the conclusions drawn from the results, and helped in identifying alternative explanations for the results of the study (Taylor-Powell & Renner, 2003). The first potential limitation was the recruitment from a single hospital facility. In this study, (after IRB approval was secured) participants were recruited from a convenience sample from a local hospital; therefore, if it was beyond the scope of the study to generalize results to other hospitals or states. Another limitation was that participants may have had varying levels of understanding and knowledge around BPCI; the focus of this study was to evaluate its effects on patient selection, care implementation, and how quality of care is measured with the understanding and knowledge that participants have currently. To address this potential limitation, I provided a detailed description of the sample and each participant's knowledge of BPCI.

Interviewer bias may have also affected the study by inadvertently influencing the responses of the participants during the interview. I refrained from expressing personal opinions and paraphrased responses from participants to clarify whether the researcher understood them correctly. I also used a nonbiased open-ended interview guide to help me avoid asking biased questions or asking questions in a biased manner. Researcher bias may have impacted the strength of the study by personal preconceived notions about BPCI and the value-based model. To address this, I noted limitations and other possible reasons and explanations for the results of this study. Reporting bias may have affected the quality of the study by the error in the presentation of the findings. To avoid this, I did not attempt to generalize the findings to other settings, because that was outside the scope of this study.

Another limitation that was possible was the chance of a small sample size. It was difficult to recruit a large number of participants with the inclusion criteria involved in this study; however, the criteria were necessary to investigate the phenomenon of focus. To address this limitation, I used various recruitment methods including flyers and emails and made it as simple as possible for physicians and nurse practitioners to participate in the study by conducting interviews at their place of work. Notably, other limitations for the study in general were the time constraints (there was not an infinite amount of time to collect and analyze data), intensive data analysis, and the lack of funding to access materials and provide incentives for participation.

The lack of previous research evaluating BPCI in a general hospital setting was another limitation of this study. The BPCI initiative has been examined in specialty areas or in cost-effectiveness studies. There was a research gap regarding BPCI affects care implementation, patient selection, and quality of care in the general hospital setting, especially from the perspective of physicians and nurse practitioners. The current study aimed to fill this research gap, but the lack of empirical evidence on evaluation methods for BPCI was a challenge when creating the research design.

Significance

This study was significant in terms of expansion of knowledge in the field, contribution to the practice, and implications for positive social change. The first subsection focused on the identification of the potential contributions of the study to advance the knowledge in the discipline. The second subsection focused on the identification of potential contributions of the study in the advancement of practice and policy. The third subsection focused on the potential implications for positive social change that are consistent with and bounded by the scope of the study.

Significance to the Literature and Theory

The current research has potential contributions in the advancement of knowledge in the discipline of quality of health care services. This study uniquely addressed the literature gap regarding the effectiveness of the BPCI initiative to meet its goal of improving the quality of care by investigating physicians’ and nurse practitioners’ perceptions of the BPCI initiative's affects patient selection, care implementation, and quality measurements. This study could significantly contribute to the current body of knowledge by offering valuable insight into the perceived barriers and concerns of medical providers regarding the BPCI initiative.

The research is also significant to the possible theoretical expansion of the Donabedian quality framework. Research has shown that patient experience was shown to impact strategic planning of health plans for quality improvement (Al-Abri & Al-Balushi, 2014), which also aligns with the Donabedian quality framework. The results of the study can be instrumental in providing evidence that the Donabedian quality model can be used to examine the effectiveness of value-based payment model based on the perspectives of physicians.

Significance to Practice

The current research has potential contributions to practice by providing empirical evidence that can support or discourage the practice of BPCI as a value-based model that can resolve the inefficiency and inappropriate incentives associated with the fee-for-service payment model (Delisle, 2013; Flodgren et al., 2011; Francis & Clancy, 2016). By providing a better understanding of the perceived effect of BPCI on how medical practitioners select patients, implement care, and measure quality at the patient level, certain aspects of how reimbursements are adjusted can be improved.

The decision-making process of providers was critical for the current study because if their thoughts and actions are not in alignment with the payment model being used, namely the BPCI initiative, then there may be negative outcomes (Donabedian, 2003). For instance, if providers believe that they are under harsh scrutiny or stress while providing care under the BPCI initiative, they may act in ways that are not beneficial for the practice or for the patient such as providing low quality care for the sake of shortening the episode of care that they are reimbursed for; if the cost of care ends up being greater than the target price, as set by CMS, the provider is responsible for reconciling the negative differential (CMS, 2018). Furthermore, it was important to examine both provider and patient-level factors involved in providing quality care because multiple factors, namely the structures, processes and outcomes, are interconnected and influence the care process; there is not a single determinant or definition of quality health care.

Significance to Social Change

The results of the study can be instrumental for positive social change because of improved human or social conditions by promoting the worth, dignity, and development of patients. Patients can benefit from the results of the study because of the possible reconfiguration of health care payment systems that focus more on quality as opposed to monetary factors. If the results of the study lead to a wider adoption of the BPCI initiative, organizational efficiency may be enhanced, patient satisfaction may be increased, and societal responsibility may be encouraged.

Another possible contribution of the current study that can facilitate positive social change is a more responsible health care system that takes into consideration the needs of patients. The results of the study can lead to a wider acceptance of the BPCI initiative as an effective payment model in the health care system. Not only would a more efficient system be in place, but patients are more likely to have a wider access to quality care. This study may also shed light on some of the differences in structures, processes and outcomes of the four models of the BPCI initiative.

This study may also have positive impacts on society by increasing the public's awareness of the outcome of BPCI. This study may also help determine whether the BPCI model aligns with the values of society's physicians and nurses; this alignment is crucial for successful care implementation and can in turn impact the quality of care patients receive. In addition, the results of this study may shed light on some of the differences in structures, processes, and outcomes of the four models of the BPCI initiative. This increased awareness and understanding of the outcomes of models of the BPCI initiative could then be translated into policy recommendations to improve the current system; for instance, concrete methods of consistently monitoring quality of care could be included in the policy.

Summary

The BPCI initiative was structured to resolve the inefficiency and inappropriate incentives associated with the fee-for-service payment model by transitioning to a value-based model focused on good outcomes (Delisle, 2013; Francis & Clancy, 2016). The problem was that empirical evidence regarding the effectiveness of the bundled episode payment reforms to control costs while improving the quality of care is mixed and limited (Shrank et al., 2017). The purpose of this study was to explore the perceptions of physicians and nurse practitioners regarding the impacts of the BPCI initiative on how patients are selected, how patient care is implemented, and how quality is measured.

The conceptual framework of the study was based on the Donabedian's quality framework, which is rooted on three interrelated concepts associated with how health care is provided: structures of care, processes of care, and health outcomes (McDonald et al., 2007). The current research has potential contributions in the advancement of knowledge in the discipline of quality of health care services. The current research has potential contributions to practice by providing empirical evidence that can support or discourage the practice of BPCI as a value-based model that can resolve the inefficiency and inappropriate incentives associated with the fee-for-service payment model (Delisle, 2013; Francis & Clancy, 2016).

The next chapter will be a critical evaluation of the literature review. Topics relevant to BPCI initiative and the conceptual framework will be the core of the literature review. The literature review will begin by discussing payment models such as BPCI and fee-for-service broadly. Then, the literature review will narrow in scope to focus on specific gaps in the research that will give credence for the research problem and the purpose of the study.

Chapter 2: Literature Review

Introduction

Research regarding the effects of BPCI is still in its infancy; however, research has indicated that there is a need to better understand the qualitative aspects of physicians' and nurse practitioners' experiences with the BPCI implementation process and its effect on patients (Adida et al., 2016). In 2010, the Patient Protection and Affordable Care Act established the BPCI initiative aimed at improving patient care while also lowering the implementation cost of health care plans (Chen & Ackerly, 2014; Delisle, 2013). Furthermore, BPCI may have promising effects on provider and patient experiences. The purpose of the current study was to explore the effects of the BPCI initiative on how patients are selected, how patient care is implemented, and how quality is measured based on the perceptions of physicians and nurse practitioners.

In the next section, I will explain the literature search strategy. Then, the history of the Donabedian (1966) framework will be discussed. I will also discuss the individual constructs associated with the Donabedian (1966) framework that align with the phenomenon of focus in this study, including structures, processes of care, and health outcomes. Then, issues related to data collection and the use of standards to measure quality of care under the BPCI will be addressed using the Donabedian (1966) framework. In the literature review, I will discuss history and characteristics of fee-for-service and bundled payments models, while identifying the need for more research on bundled payments. Then, the literature review will include research on the importance of health care providers' perspectives as well as provider-level and patient-level impacts.

The literature review will conclude by detailing the research gap and the subsequent focus of this study.

Literature Search Strategy

This literature review was conducted by using Internet Explorer to search four search engines: ERIC, Google Scholar, PubMed, and Walden University Library. This section will describe the literature search process and will include a list of some of the search terms utilized in the search strategy. First, the term *Bundled Payments for Care Improvement* was entered into each search engine to generate the broadest literature and increase understanding of the types of literature specifically related to BPCI. Next, *Bundled Payments for Care Improvement*, in combination with terms such as *value-model, physician perception, patient satisfaction, health care outcomes, fee-for-service model, patient selection, health care implementation, pay-for-performance model, health care quality measurement descriptive phenomenological approach, qualitative methods, stratified purposeful sampling, specialties, sub-specialties,* and *Donabedian framework* were entered into each search engine. Afterward, the second set of key words (for example, *value-based model, physician perception*) was searched in isolation to gather more background information on these topics. This step was necessary due to the limited amount of research specifically involving BPCI (see Appendix A for a full list of search terms).

The literature search was terminated once there was a pattern of irrelevant sources. This search strategy was modeled after the guidelines proposed by Bourne (2013) and Booth (2016) and included mostly research studies and literature reviews.

When searching BPCI in isolation: ERIC yielded zero sources; Google Scholar yielded 992 sources; PubMed yielded 82 sources; and Walden University Library yielded 587 sources. This broad search was conducted to develop an understanding of the types of sources related to BPCI (see Appendix A for a full, ordered list of search terms and outcomes of each search, including search terms that yielded the most sources). Overall, the search terms that focused on *BPCI and value-based model, physician perception, patient satisfaction, health care outcomes, fee-for-service model, patient selection, health care implementation, pay-for-performance model, health care quality measurement, descriptive phenomenological approach, qualitative methods* or *Donabedian framework* yielded the most relevant results for this study.

The literature review process was completed in the course of 12 weeks, with the most time being spent on the planning and search process and deciding which sources to include in this study. Because of the lack of research on BPCI in combination with the other terms, the inclusion criteria were initially broad, then more refined to narrow in on necessary details and literature gaps. Studies that were conducted in the United States were given priority, as were studies that dealt with physicians and nurses rather than other health care professionals. Theses, dissertations, and books were included in the literature review due to the need for more detail directly related to payment models in the health care industry.

When possible, relevant, peer-reviewed articles dated 2014 to present were included in the present literature review. A total of 90 articles were used to support the current study. Seventy-five (86%) of articles were published between 2014 and present, and 12 (14%) of articles were published prior to 2014. The noncurrent articles (articles that were written prior to 2014) were examined carefully and if the articles contained any of the search terms previously listed, they were included in the current study; this was due to the fact that bundled payments evaluation research is still in its infancy. Older research was used when more information on etiology and backgrounds of theories and reimbursement models was needed; only including recent research would have limited the study. Note that three additional articles were used to guide search strategy methodology.

Conceptual Framework

Introduction to the Donabedian Framework

The conceptual framework informing the current study was the Donabedian (1966) quality framework that is used to help evaluate the quality of care. Specifically, the BPCI is the system of focus and the Donabedian SPO model is used to better understand its structures, processes, and outcomes that ultimately impact patient selection, care implementation, and quality of care. Donabedian was a physician during the mid- to late-1900s. He came from the University of Beirut to the United States to study health administration and epidemiology at Harvard (Berkowitz, 1998). He later went on to teach and conduct research at New York Medical College before moving to Michigan for the rest of his professional career. Although Donabedian did not practice as a physician in the United States, he became an awarded professor and researcher (Berkowitz, 1998).

The Donabedian (1966) framework came about because quality assessment in the health care setting was costly, time consuming, and laborious. Donabedian (1966) set his framework by defining quality, addressing how to assess quality, addressing how to collect data to measure quality, sampling, scaling, using standards, and addressing reliability, bias, and validity of quality assessments. Donabedian (1966) identified three methods to assess quality of care in the clinical setting: structure, process, and outcome. These three components became critical to the Donabedian (1996) model. Importantly, this framework helps to evaluate health services and the quality of medical care process at the level of physician-patient interaction (Donabedian, 1966). In the next section, I will discuss the main constructs of the Donabedian (1966) framework that led the current study. The Donabedian quality framework (1966) is based upon three interrelated constructs associated with how health care is provided: structures of care, processes of care, and health outcomes (Carayon et al., 2006; Donabedian, 2005; McDonald et al., 2007; Zidarov et al., 2016).

Constructs in the Donabedian Framework

Structure. Structure refers to factors that influence the setting where care is implemented, which includes factors such as staff training, method of delivery, facility resources, and payment methods (Donabedian, 1966; Donabedian, 1988; Zidarov et al., 2016). Essentially, structure measures of quality of care pertain to the environment where the care is implemented (Dimick, 2010). Structures can influence physicians and their patients and is an important component when evaluating quality of a health care model, namely BPCI (Donabedian, 1966; Donabedian, 1988). This construct of the Donabedian framework was used to guide the evaluation of BPCI; for instance, interview questions included those about the structures of care under the BPCI initiative and how they impact the quality of services. By identifying the structures in place, I gained insight on the impacts and components of BPCI in the hospital setting. Processes of care are also important when examining the Donabedian framework and will be discussed in the next section.

Processes of care. Donabedian (2003) noted that research is needed on the interconnectedness of the provider and the process of care. *Process* refers to the actions of delivering health care, including but not limited to diagnosis, treatment, patient education, and preventive care (Donabedian, 1966; Zidarov et al., 2016). Processes may also include actions made by the patients and their families (Donabedian, 1988). Importantly, the process component considers all actions made while health care is delivered to evaluate quality of care. The previous literature has indicated that interviews with physicians are effective ways to gather information on the process component given that these processes are not easily measured by categorical or other quantitative measures (Donabedian, 1988; Donabedian, 2003).

To evaluate the quality of services under the BPCI initiative, the researcher must consider structures, such as the setting of care, as well as processes, such as diagnoses and patient actions. The hospital setting is not the only factor that can influence quality of care. In this study, I examined how BPCI impacts patient selection, care implementation, and the way that quality is measured. Research has been lacking thus far on how the BPCI impacts these processes. Further, a patient’s experience with the health care system is not solely comprised of one process or one outcome; there are many processes including but not limited to patient examination and assessment, diagnosis, therapy, surgery, medications, follow-ups, and each of these processes have an outcome. Health care outcomes will be discussed in the next section.

Health outcomes. Health outcomes refer to changes in health status or increase in health knowledge and even patient satisfaction (Donabedian, 1966; Zidarov et al., 2016). One of the common indicators of care in the health care setting is improving or restoring levels of well-being and functioning, which is ultimately one of the goals of BPCI. An indicator such as this has advantages; for instance, it is an outcome that is easy to measure and can be measured consistently (Donabedian, 1966; Zidarov et al., 2016). Outcomes are often the easiest to measure and regarded as the most important (Donabedian, 1988), although previous research has been lacking regarding what factors, individually or in combination, improve health outcomes under the BPCI initiative.

Directionality of the SPO Constructs

Donabedian (1988) proposed that all components need to be examined as interrelated components, rather than constructs to be examined in isolation. Although Donabedian (1988, 2003) suggested that the components for evaluating health care quality be considered as interconnected rather than linear (Donabedian, 1988; Donabedian, 2003), there are still concerns that this model evaluates quality to linearly (Mitchell et al., 1998). Other research has also suggested that the three main indicators of the SPO models influence each other (Kunkel et al., 2007; Liu et al., 2011); essentially, a system cannot have one construct without the other two. The interrelatedness of the indicators in the SPO model is important because in the health care setting these indicators do not exist in isolation and do influence each other and ultimately influence the quality of care (Dimick, 2010; Kunkel et al., 2007; Liu et al., 2011). Previous research has examined the relationship between the indicators in the SPO model (Moore et al., 2015). Results indicated that structure and process were significantly positively correlated, and process and outcome were significantly negatively correlated (Moore et al., 2015).

Although procedural endpoints are often examined as an indicator of quality of care (Donabedian, 2003), it is still important to consider the other factors that may affect such outcomes rather than focusing on health outcomes alone. In summary, the process of care is complex; therefore, measuring quality of care needs to include measurement from different angles and viewpoints, which this qualitative study sought to do. The current study examined structures, processes and health outcomes that were included in the BPCI initiative, how these constructs have been impacted, and how they are connected.

The Donabedian framework does consider efficiency as another important factor when looking at quality of care, although it is not a main component (Donabedian, 1966; Donabedian, 2003). Donabedian (1966, 2003) posited that information or logic is used to generate decision making, and that is referred to as logical efficiency. For instance, this may include when providers use logic surrounding a patient’s condition to decide on the most beneficial therapy for that patient and may even impact patient selection. Furthermore, provider decision making is an important component of the process of care (Donabedian, 2003; Gupta, Karst, & Mendelson, 2016). Economic efficiency involves examining what relationship exists between components of the process of care and outcomes. Economic efficiency also helps to determine if outcomes are cost-efficient or are produced with the least cost (Donabedian, 2003). Economic efficiency is less patient-centered and applies more to the comprehensive system of care. This component of the Donabedian (1966) framework related to two variables in the current study, namely care implementation and quality of care, because efficiency may play a role in both. The next section describes quality of care in more depth using the Donabedian framework.

Alignment of Donabedian Framework to the Current Study

The Donabedian (1966) framework was created to evaluate health services and quality of care in the clinical setting, which makes it a promising framework for this study. The SPO model has been a useful framework for evaluating quality of care in many previous research studies regarding health care (Gardner, Gardner, & O'Connell, 2013; Kunkel, Rosenqvist, & Westerling, 2007; Liu, Singer, Sun, & Camargo, 2011; Moore et al., 2015; Morris & Bailey, 2014). In this study, the system of focus was the BPCI initiative. This framework led the current study as it evaluates the structures (such as physical hospital environment and provider skill set), processes (such as treatment methods), and outcomes (such as treatment success rates) that impact patient selection, care implementation and quality of care under the BPCI initiative.

The current study used interviews with providers to gain insight on and evaluate the BPCI initiative. Donabedian (2003) suggested that interviews are an efficient way to obtain information when evaluating quality of care with the SPO model. Research has noted that evaluating quality of care by using a combination of measures of structure, process and outcomes is crucial because these measures are interconnected (Dimick, 2010; Donabedian, 2005). Therefore, the current study used interview questions that represent measures of structure, process and outcomes to identify the impact of BPCI on quality of care, which included patient selection, care implementation, and how quality of care is measured.

Patient selection in the current study. Research is needed regarding BPCI and its impacts on patient selection. Therefore, the current study utilized the SPO model to evaluate how structure, processes and outcomes of the BPCI initiative impact patient selection. Patient selection has been identified as a potential barrier to receiving health care under the BPCI initiative because it may promote the selection of patients that will put the provider at less of a financial risk; unfortunately, it has been suggested that the patients that would not be selected are those that need health services the most (Adida et al., 2016). For instance, if providers foresee the total cost of services exceeding the target price, the providers are at risk for being financially responsible for reconciliation (CMS, 2018). Some previous research has linked patient selection to value-based reimbursement methods (Burns, Orsini, & L'Italien, 2013; Chen, Harty, & Bosco, 2017; Serena et al., 2017; Snyder, Pitcavage, & Block, 2015; Sodhi et al., 2018). Other research has linked patient selection to bundled payments specifically (Adida et al., 2016; Ellimoottil et al., 2016a; Ellimoottil et al., 2016b).

Patient selection can be impacted by a variety of different factors, depending on the health care setting (Manning et al., 2017; Whittaker & Albee, 1996). Manning et al. (2017) found that board certification, expertise in a specific health care setting, and in-network insurance were major factors influencing patient selection by providers in an orthopedic sports medicine clinic. Additionally, Whittaker and Albee (1996) found that the presence of resources and information, as well as social and family support, was instrumental in influencing patient selecting in a dialysis setting.

Research suggests that patient-provider relationships may be influenced by payment methods (Kao, Green, & Zaslavsky, 1998). Patient selection can also be influenced by payment or reimbursement methods (Luft & Miller, 1988). Future research is needed to evaluate how the BPCI impacts providers’ patient selection process in order to better understand and lessen the financial risks faced by providers. Furthermore, it would be beneficial to examine what structures, processes and outcomes of the BPCI initiative impact patient selection, which is what the current study sought to do.

Previous research by Adida et al. (2016) indicated that patient selection may be influenced by the implementation of the BPCI initiative. This study examined the structures, processes, and outcomes of BPCI that influence providers’ patient selection process. Patient selection is a process of service delivery, and it is previously unknown how the BPCI initiative impacts this process. The patient selection process relates to logical efficiency, or the use of logic and information to come up with decisions as suggested by the Donabedian (2005) framework; this study provides insight on the decision-making processes that providers go through when selecting how care is implemented and who care is delivered to under the BPCI initiative. Processes are directly related to the Donabedian SPO model and are considered a measure of quality of care.

Care implementation in the current study. Previous research has indicated that the BPCI initiative emphasizes the importance of patient-centered care by bundling payments for a patient’s entire episode of care and incentivizing physicians to implement this model (Curry & Fee, 2016; Dummit et al., 2016; Flordgren et al., 2011; Konetzka, Stuart, & Werner, 2016). Care implementation and service delivery are crucial aspects of the SPO model’s process component. Furthermore, the values, preferences and needs of the patient are said to be key factors of service delivery in BPCI (Curry & Fee, 2016; Dummit et al., 2016; Flordgren et al., 2011; Konetzka et al., 2016). Yoo et al. (2014) examined the change in Medicare’s hospital policies; recently, Medicare initiatives have been aimed at increasing quality of care for the patient but also reducing medical costs.

The episode-based payment system, also known as bundled payments, came about from the changes in Medicare’s health care policy. The episode-based model also stresses that providers need to be more patient-centered compared to disease-centered like in the past. The goal of bundled payments is to offer strong financial incentive for efficient care, rather than care spread out over a number of appointments, because the bundles include inpatient, outpatient and physician services of care for an entire episode of care. Preliminary research involving diabetes patients found that the BPCI initiative was associated with better care coordination (de Bakker et al., 2012). Other research has linked care implementation to bundled payments methods (Busetto et al., 2015; Hill, 2018; McClellan et al., 2014; McClellan et al., 2017). However, further research is needed on the outcomes of the BPCI specifically and its impact on care implementation.

The Donabedian (2005) framework aligns with the current study because the current study sought to examine how the structures, processes, and outcomes of BPCI impact care implementation. Additionally, provider feedback and perspectives are the main component of the current study which will help to gain a better understanding of how engagement, incentives and value-based payments are integrated into the larger system of care. The current study sought to examine quality of care at both the clinical and the individual level, which was a research need (Francis & Clancy, 2016) because gaining more information on the physician perspective of patient-level impacts of BPCI is important to the success of BPCI. The study also examined what impact the BPCI initiative has on how care is implemented at the patient level from the perspectives of physicians. This aligned with the Donabedian (2005) framework because it focused on how quality care is provided and not just if quality care is provided.

Quality of care in the current study. Previous research has examined the quality of care after changes in health policies and implementation of BPCI. The Donabedian (1966) framework has been shown to help patients, physicians, and stakeholders evaluate the quality of care (Zidarov, Visca, Gogovor & Ahmed, 2016). Moreover, Donabedian’s quality framework specifically highlights how the overall effects that the coordination of care has on patient outcomes are influenced by a myriad of structural factors and do not occur within a vacuum (McDonald et al., 2007). Beyond the basic tenets of Donabedian’s framework, a further look at the connection between what physicians have control over and patient outcomes should not be undervalued. This connection is of particular interest when considering that better coordination of care is only beneficial if the structures influencing care delivery and health outcomes are optimized as well (McDonald et al., 2007).

A specific example of how the Donabedian framework (2005) has been used to help define quality of care and identify indicators of quality of care is a study by Zidarov and colleagues (2016) which examined providers’ ability to care for patients who experienced chronic pain. In their literature review, the researchers examined a variety of articles to qualitatively identify indicators of quality of care. Notably, the indicators were in alignment with the Donabedian (2005) framework in order to identify which indicators or measures were more beneficial for measuring quality of care. The specific research question involved identifying the patient, organizational, and system level indicators utilized for measuring quality of care across the system of care for individuals with chronic non-cancer pain. The indicators included the patient’s experience of care, improving health of patients, and providing health care in a cost-effective manner (Zidarov et al., 2016). The current study was not the first to use the Donabedian framework (2005) as a framework for health care research; however, the current study helped to generalize the Donabedian (2005) framework to other health care settings and may help to increase understanding of how the Donabedian (2005) framework applies to alternative payment methods in the health care setting.

Previous research evaluating the BPCI initiative’s impact on outcomes and quality of care has been mixed and limited. Measurement of quality of care was indicated by Donabedian (2005) to be an important need for future research to examine. In this study, providers were asked about the structures, processes, and outcomes of BPCI in order to evaluate how it impacts quality of care and measurement of quality of care. Research by Dimick (2010) suggested that even though there are hundreds of measures to evaluate quality of care, the majority of them fall into one of the categories (i.e., structure, process, and outcome) from the Donabedian (2005) SPO model.

The Agency for Health care Research and Quality (2011) support the use of measures of structure, process and outcome, from the Donabedian (2005) SPO model, as valid ways to measure and compare the quality of health care**.** Additionally, recent research by Moore, Lavoie, Bourgeois and Lapointe (2015) evaluated quality of care in a trauma facility in Canada using the Donabedian (2005) SPO model. The researchers evaluated whether improvements in structures and processes of care lead to better patient outcomes. Data from a total of 63,971 patients from 57 facilities was included in the study. The researchers found significant correlations between structure and process measures as well as process and outcome measures, which in this case, included mortality, complications, readmission and length of stay. The results were in alignment with the researchers' predictions, suggesting that the Donabedian SPO model is an efficient way to evaluate patient outcomes and care (Moore et al., 2015).

Gardner and colleagues (2013) examined the quality of care provided by nurse practitioners using the SPO model, which is similar to the scope of the current study (which also includes health care providers). Using a mixed method design and the SPO framework, the researchers evaluated the safety and quality of services provided by nurse practitioners. This study involved stakeholder surveys and in-depth interviews with 11 patients and 13 nurse practitioners. Results showed that the SPO framework is a valuable and validated approach to examining safety and quality of care (Gardner et al., 2013). Importantly, other research by Campbell, Reeves, Kontopantelis, Sibbald and Roland (2009) showed that under the pay for performance model, quality of primary care was negatively impacted; therefore, it is critical that research be conducted on the impact of the value-based reimbursement model. Other research has linked care quality of care measurements to bundled payments (Blumenthal, Abrams, & Nuzum, 2015; Press, Rajkumar, & Conway, 2016). The current study built upon this research by using the SPO framework to assess the measurement of quality of care, according to nurse practitioners and physicians.

Limitations of the SPO model. The Donabedian (1966) framework is not without limitations (Mitchell, Ferketich & Jennings, 1998). First is the lack of consideration for personal characteristics and environmental factors in the Donabedian (1966) model (Agency for Health care Research and Quality, 2013). For instance, improving health outcomes may be strong indicator for evaluating a health care initiative, but health outcomes can be influenced by many other factors that are not considered in the Donabedian framework, including patient characteristics and environmental factors. Patient characteristics that may influence health outcomes include beliefs or attitudes related to health as well as genetics. Environmental factors such as the geographic location where clients live, or work may also influence health outcomes (Agency for Health care Research and Quality, 2013). Furthermore, health care services that meet standards in one health care setting may not in another setting. (Donabedian, 2005). In other words, the Donabedian (1996) framework does not encompass every factor that may influence quality of care.

Introduction to Health care Reimbursement Models

Fee-for-service models. A predominant reimbursement model used within the United States is the fee-for-service model. Under this model, the Centers for Medicare & Medicaid Services (CMS) and a state enter into an agreement through which the state would be eligible to benefit from savings, resulting from initiatives that improve quality and reduce costs for both Medicare and Medicaid (CMS, 2018). In 2016, the fee-for-service reimbursement model was the dominant reimbursement model in the U.S. However, this model has been criticized for rewarding providers for the quantity rather than the quality of health care services, for hindering improvements to quality care, and for actually increasing costs (Porter & Kaplan, 2016).

Specifically, the fee-for-service model involves reimbursement to the primary care provider for each unit of service provided after the service has been provided (Adida et al., 2016; Gosden et al., 2000). Therefore, the fee-for-service model may encourage providers to provide more units of care (regardless of whether it is necessary) to increase their financial intake (Gosden et al., 2000). This model also does not focus on the needs of the patient or the delivery of health care (Porter & Kaplan, 2016). Research indicates that the fee-for-service model puts an emphasis on the volume of care instead of on efficient care, whereas the bundled-payment model emphasizes value (Adida et al., 2016; Shih et al., 2015).

Value-based models. Characteristics of value-based care includes better care at lower cost (Adler-Milstein et al., 2017), pay for performance models for physicians (Chen et al., 2017), better health outcomes (Gupta et al., 2016), and a system of care with physicians acting in their patient’s best interest (Mostashari, 2016). The clinical measures associated with quality of care under the pay-for-performance model include reducing 30-day readmission rates, postoperative complications, length of stay, and nosocomial infections (Goldman & Kates, 2017). Value-based care can help increase the quality of and decrease the cost of quality care (Adler-Milstein et al., 2017), but may create more information technology-related demands for the organization. Furthermore, organizations technology infrastructures and capabilities need to be supported in order to successfully provide value-based care.

Performance-based models. Characteristics of the pay-for-performance model include cost effectiveness (Eijkenaar, Emmert, Scheppach, & Schoffski, 2013; Maltarich, Nyberg, Reilly & Martin, 2017), higher quality health care (Figueroa, Tsugawa, Zheng, Orav, & Jha, 2016), and incentives for physicians (McKethan & Jha, 2014; Ogundeji, Bland, & Sheldon, 2016; Ryan, Burgess, Pesko, Borden, & Dimick, 2015; Schwartz, Burgess, & Zhu, 2016). The clinical measures associated with quality of care under the pay-for-performance model include reducing 30-day readmission rates, postoperative complications, length of stay, and nosocomial infections (Goldman & Kates, 2017). As such, to be profitable with the pay-for-performance model, it is imperative that medical providers minimize medical complications by focusing on patient satisfaction and positive health outcomes (Goldman & Kates, 2017).

Pay-for-performance methods have become increasingly widespread in today’s health care settings (Li, Hurley, DeCicca, & Buckley, 2014). The researchers of this study sought to explore the impact of pay for performance on primary care services and on physicians (Li et al., 2014). Specifically, this study examined if the impact on physicians differed based on age, size of medical setting and level of compliance exhibited by the physician. Findings were mixed; physicians were impacted by some of the incentives of the pay for performance model, but not all. These results were found to be related to the cost and the strength of the evidence that linked quality to the service being provided (Li et al., 2014). Pay for performance methods have been shown to increase job satisfaction and motivation (Baard, Deci, & Ryan, 2004; Gagne & Forest, 2008); however, research suggests that only private sector industries may benefit, not those in the public sector (Park, Min, & Chen, 2016).

Bundled payments models. The changing goals and structure of the health care system led to the implementation of other payment methods than the fee-for-service model. Due to the conflicts between the newly evolved health care system and fee-for-service payment models, bundled payment models were introduced as an alternative for the fee-for-service model. In a general sense, bundled-payments is a type of value-and performance-based payment and refers to the single payment or reimbursement for an entire condition, procedure or episode of health care services (Scott & Eminger, 2016).

Although previous literature has showed that over the course of a few months, participation in the value-based, bundled payment approach has greatly increased (Chen, Meara, & Birkmeyer, 2015), but research on the impacts of bundled payments has shown mixed results (Cram, Lu, & Li, 2015; Figueroa et al., 2016; McKethan, & Jha, 2014; Shih et al., 2014; Sutherland, & Borden, 2015). For example, Cram, Lu, and Li (2015) examined data from 167,186 patients who went through total knee arthroplasty TKA in 2009. Results showed that bundled payments for primary TKA differed greatly and was dependent upon patient demographics (especially age) and condition comorbidity. Since similar patients tend to be clustered within hospitals, bundled payments could unexpectedly put some hospitals at risk while rewarding other hospitals.

Scott and Eminger (2016) noted that bundled payments include inpatient acute care as well as post-acute outpatient care services and are present in a variety of medical settings, including but not limited to home health care, rehab facilities, and long-term facilities. Bundled payments have been shown to be a valuable tool to manage health care costs and maintain market share (Scott & Eminger, 2016). The use and access to data and analytics will also be increasingly important as the implementation of bundled payments becomes more widespread so that medical settings are able to accurately monitor their spending and performance (Scott & Eminger, 2016).

In conclusion, further research is needed on the outcome of bundled payment implementation in other health care settings; bundled payments may be more beneficial for certain populations or patients with certain conditions (Cram, Lu, & Li, 2015). As a result, this study focused on the BPCI initiative, which is a type of value- and performance-based bundled payment model; the next section will describe the BPCI initiative’s etiology, goals, key features, successes, and challenges. Table 1 shows a summary of the different health care reimbursement models based on several key characteristics.

Table 1

Summary of the Different Models

Key Characteristics	Value-Based Model	Performance-Based Model	Fee-For Service	Bundled Payment
Infrastructure	High technology Infrastructure	Moderate IT structures	Limited IT	High IT
Cost	Cost Effective	Cost Effective	Expensive	Cost Effective
Patient Outcomes	Enhanced care	Private sector	Enhanced care	Depends on condition
Advantages	Integrated Cost Efficient	Integrated Cost Efficient	Flexibility No delay	Integrated Cost Efficient
Disadvantages	Pressure from providers	Pressure from providers	Expensive Paperwork	Rural areas Unreliable data

Etiology of BPCI

Moore (2016) discussed the history behind bundled payment implementation. There are two main components of health care: improving health and paying those that work to improve health. Recently, there has been an increase in health care costs, calling for a reorganization of the health care system and highlighting the need to incentivize those that provide services. Bundled payments have become increasingly popular due to this reorganization, although bundled payments have been around since the 1970s. Furthermore, BPCI aims to increase care coordination, increase efficient care delivery, increase the quality of care, and improve positive patient outcomes at a lower cost to

Medicare (Moore, 2016). Moore (2016) also sought to describe how rehabilitation providers can implement the bundled payment approach. First, providers are suggested to adopt a standardized process of data collection, which includes patient assessments and reporting outcomes. Providers are also urged to use clinical practice guidelines as a critical component of the care pathway. Additionally, providers should develop system-level skills to participate in team-based care as well as skills to better understand the costs associated with providing resources and care (Moore, 2016).

Since the BPCI initiative is still in the pilot phase, evidence regarding the effectiveness of the bundled episode payment reforms to control costs while improving the quality of care is mixed and limited (Shrank et al., 2017). Shrank et al. (2017) contended that it is necessary for future research on the BPCI initiative to align with health care stakeholder needs, and medical physicians are in a unique stakeholder position that allows them to give valuable insight into how they perceive the impacts of the BPCI initiative on patient outcomes. After the passing of the Affordable Care Act in 2010, many changes have occurred in the U.S. health care system. One of these changes included the implementation of bundled payments. However, research on the outcomes of bundled payments is in its infancy (Shrank et al., 2017).

Prominent Goals of BPCI

Overall, the goal of BPCI is to improve patient care, lower the cost of health care plans (Althausen & Mead, 2016; Bolz & Iorio, 2016; Center for Medicare & Medicaid Services, 2016; Chen & Ackerly, 2014; Chen, Meara, & Birkmeyer, 2015; Delisle, 2013; Dummit et al., 2016; Greenwald et al., 2016; Haas et al., 2015; Iorio, 2015; Nygren &

Suponcic, 2016; Press, Rajkumar, & Conway, 2016; Shih et al., 2015; Stachura et al., 2017; Thakore et al., 2015). Froimson et al. (2013) noted that another goal of the use of bundled payments is to provide more coordinated and comprehensive care and to increase quality while reducing cost, which supports the propositions made by other researchers (Scott & Eminger, 2016). The researchers also noted that there is particular interest in determining whether bundled payments foster collaboration and promotes efficient care throughout the entire process of a patient's care. The researchers also noted that BPCI is still in its beginning phase but there is a need for future research to evaluate whether cost savings are achieved under the BPCI without compromising quality of care. However, because of the political and economic changes in the United States, health care reform will continue to favor the use of value-based care with an emphasis on increasing quality and reducing cost, so the bundled payments model is a feasible alternative to the fee-for-service model (Froimson et al., 2013).

Key Features of BPCI

Research by Adida et al. (2016) showed that fee-for-service models offer physicians more incentives to provide excessive treatment and lower system outcomes, but that BP models lead to mixed impacts; patient selection may be impacted by the provider's perception of financial risk for that patient's services. Researchers have also argued that the bundled payments method is more efficient than the fee-for-service payment model which emphasizes volume (Delisle, 2013; Chen & Ackerly, 2014; Edwards, Mears, & Barnes, 2017; Flodgren et al., 2011; Francis & Clancy, 2016;

Huckfeldt et al., 2017; Kamath et al., 2015; Mohammed, et al., 2016; Sutherland & Borden, 2015).

Suskind and Clemens (2014) discussed bundled payments, pay-for-performance models of care, and value-based models of care that stemmed from the implementation of the Patient Protection and Affordable Care Act (PPACA) in 2010 because they promote and incentivize high quality care and reduce inefficiencies and wasteful care efforts. Similarly, value-based care stresses reducing quality and reducing costs. Also becoming increasingly important are patient-centered medical homes and the use of clinical data registries (and other health information technologies) to help increase collaboration and coordination of care. Further research is needed on these components of the newly evolved health care field in order to adapt and advance (Suskind & Clemens, 2014).

Initial Successes of BPCI

The use of bundled payments is rapidly increasing. For instance, Murphy et al. (2016) examined the change from fee-for-service to bundled payments in health care has led to the need for innovation and leadership among providers in order to effectively adapt to the changing nature of health care payments. This study sought to examine the process of implementing bundled payments in a health care setting. 16 medical companies were offered to use the bundled payments model, and companies independently evaluated whether it would be beneficial to implement the bundled payment approach. Less than half of the companies (n=7) decided to implement BPCI; however, the gains experienced by these companies was very noteworthy. In the first quarter alone, companies saved between 9-17%. The bundled payments approach helped to optimize care delivery, making this approach effective for companies and patients (Murphy et al., 2016). Thus, the bundled payments model has been shown to be a promising alternative to fee-for-service payments.

Although research on outcomes of BPCI is in its beginning stages, preliminary results have been promising. Orszag (2016) discussed the ways in which the Affordable Care Act (ACA) promotes expanding coverage and controlling cost of health care, and there have been many positive outcomes of BPCI (which was implemented more heavily after the passing of the ACA). One of the outcomes noted was the increase in quality of services among hospitals. For instance, readmissions rates have significantly declined since 2010 and the passing of the ACA. Hospitals have been aiming to reduce readmissions because it is beneficial for the patient, but also because it rewards the hospitals; providers are incentivized to provide higher quality of care and reduce rehospitalization (Orszag, 2016). Future research that evaluates bundled payments is necessary because it is projected that half of Medicare payments will be value-based by 2018. Because of the passing of the ACA and the implementation of value-based, patient-centered care models such as bundled payments, health care coverage has increased, and the health care system has been positively reformed (Orszag, 2016).

BPCI and specialty care. Research has shown that bundled payments can provide incentives for providers to work closely together across all specialties and settings (CMS, 2018). However, there has been research examining the specialties and sub-specialties that are most frequently selected for bundled payments. These include major joint replacement, congestive heart failure, simple pneumonia and respiratory infection, chronic obstructive pulmonary disease/asthma/bronchitis, and hip/femur replacement (CMS, 2015).

For instance, research by Ellimoottil et al. (2016) examined outcomes of bundled payments in joint-replacement procedures. Ellimoottil et al. (2016) discussed the Comprehensive Care for Joint Replacement (CJR) model that sought to reduce spending for joint replacement. The researchers examined 23,251 Medicare patients that experienced lower extremity joint replacement procedures in 60 different hospitals in Michigan from 2011 through 2013. Results showed that there was a negative correlation between patient complexity and reconciliation payments; reconciliation payments decreased by $827 per episode for each standard deviation increase in a patient’s treatment need complexity. Risk adjustment was found to potentially increase reconciliation payments to some hospitals by $114,184 per year. In fact, these gains were comparable to the incentive payments received by hospitals that implement value-based models. These results indicated that future bundled payment for care improvement initiatives would benefit from using the CJR program, which is beneficial information for policy makers and hospital coordinators and supports findings from other researchers (Orszag, 2016). Overall, this study showed that risk adjustment is critical for bundled payment initiatives that are based on regional spending benchmarks, such as the CJR model (Ellimoottil et al., 2016).

Similarly, previous research by, Dummit et al., (2016) examined Medicare patients that had lower body joint replacements at a hospital that implemented BPCI between a baseline period (October 2011 through September 2012) and the intervention period (October 2013 and June 2015). There were a total of 294,411 patients studied in the baseline period and 31,700 patients studied in the intervention period. The researchers measured Medicare payments, utilization, and quality, which included unexpected rehospitalizations, emergency department visits, and mortality that occurred within the 90-day post-hospital discharge period. Results showed that the average Medicare payment significantly decreased from baseline to intervention for BPCI episodes. However, quality did not significantly differ from baseline to intervention among BPCI episodes and comparison episodes (Dummit et al., 2016).

Summary. In sum, although research evaluating the bundled payments model is still in its beginning stages, preliminary results have been promising (Orszag, 2016; Shih et al., 2015). For instance, bundled payments have led to the increase in quality of care (Orszag, 2016) and rewards providers more for providing higher quality care in fewer visits (Orszag, 2016). BPCI use has also been linked to great savings for hospitals (Shih et al., 2015; Statura et al., 2017), less reconciliation payments (Ellimoottil et al., 2016), and lower readmissions rates (Stachura et al., 2017). Impacts of BPCI have also been promising among specialties and sub-specialties (e.g. CMS, 2015; Dummit et al., 2016).

Barriers to the BPCI Initiative

Although research thus far has been promising, further research is needed to evaluate the impacts of BPCI. For instance, research by Shih, Chen, Brahmajee and Nallamothu (2015) suggested that BPCI were especially effective at reducing cost for cardiovascular care settings; however, results also indicated that bundled payments may be most effective in surgical settings and may be difficult to implement without effective integration into the health care system (Shih et al., 2015).

Additionally, some studies have shown that pay for performance models have mixed outcomes, indicating that the benefits of BPCI are not clear (Shih et al., 2014). For instance, Shih et al. (2014) found that surgical outcomes were not improved through pay for performance models. Additionally, the potential for cost reconciliation by providers under BPCI may put them at a financial risk (CMS, 2018). Other research has indicated that impacts of BPCI may differ based on the setting; for instance, cost savings was found when examining orthopedic surgery patients but not cardiovascular surgery patients (Daly, 2016). Most of the research thus far has been limited to specialty types of medical settings, and further research on the BPCI model is needed now that it is moving out of the implementation phase and being adopted at a larger scale in the U.S.

Notably, research has indicated that there are incentives for alternative payment methods, but they are not simply passed onto physicians, or as easily accessible to physicians as many would believe (Friedberg et al., 2015); this could be a major drawback to the BPCI initiative. Because of this, providers are often given non-financial incentives. In sum, this study highlighted the issues with alternative payment methods and finding ways to produce practice and provider buy-in Friedberg et al. (2015). Furthermore, evaluating BPCI from the perspectives of health care providers may be critical in obtaining that buy-in.

Nygren, and Suponcic (2016) examined the impact of post-hospital interventions the bundled payment approach and re-hospitalization rates associated in patients who went through COPD care. The researchers evaluated health plan data covering inpatient admissions, outpatient services, and outpatient treatment. The researchers also examined initial hospitalization, post-hospitalization services/ outcomes and specific types of interventions. Results of this study indicated mixed results. The bundled payment for care improvement model may be influenced by other factors such as differences in patient groups and throughout different time points of care (Nygren & Suponic, 2016). There are administrative and logistical challenges to bundled payments; these include establishing provider networks that share and distribute risk, framing the legal and regulatory framework to support these arrangements, and modernizing information and billing systems to align with episodes of care (Chen, Meara, & Birkmeyer, 2015).

The BPCI Research Gap

Perspectives of physicians and nurse practitioners. Practitioners and nurse practitioners are important to the patient experience of health care; therefore, their perspective on the health care system is critical. For instance, Thakore et al. (2015) examined communication patterns between physicians and patients, including how well physicians communicate with patients, help them manage pain and respond to needs, communicate medical options, and providing option related to discharge from the medical setting. This article described a health care setting that is value-based and considers patient experience as a unique and critical component of hospital quality (Thakore et al., 2015).

Baxter and colleagues (2015) conducted a literature review to better understand health care leaders’ perspectives of the implantation process of activity-based funding and pay for performance funding. The researchers analyzed articles between 1982 and 2013 for themes. Regardless of the payment form, health care leaders highlighted that implementing care is a complex process, and health care leaders argued that organizational commitment, adequate facility infrastructure, human resources, financial resources, health information technology, willingness to change, and a personal commitment to quality care were needed for success. This study highlighted the importance of health care leaders in the implementation of any form of care (Baxter et al., 2015).

Previous literature is lacking on medical professionals' view on BPCI implementation and research has yielded mixed outcomes on the BPCI's impact on patient outcomes (Mohammed et al., 2016). Since the BPCI initiative is still in the pilot phase, evidence regarding the effectiveness of the bundled episode payment reforms to control costs while improving the quality of care is mixed and limited (Shrank et al., 2017). Different perspectives of health care stakeholders are necessary to determine whether or not specific reforms, in this case, the bundled episode payments, make defining success in the medical settings difficult (Shrank et al., 2017).

Physician and nurse practitioner perspective on BPCI. Research on BPCI implementation and outcomes is limited, especially from providers' perspectives. Future research on providers' views of the BPCI initiative is needed because providers' experiences will help pave the way for effective implementation and high quality of care (Froimson et al., 2013). As proposed by Thakore and colleagues (2015), the perspectives of the patients and providers are important to today's health care system, which aligns with the Donabedian framework and the bundled payments method. Additionally, Froimson and colleagues (2013) suggested that the goal of the use of bundled payments is to provide more coordinated and comprehensive care while increasing quality and decreasing cost. The perspective of providers is important because they may benefit from aligning the goals of the BPCI initiative with the goals of their own practice.

Patient selection under BPCI. Of particular interest to the current study, as mentioned previously, are the providers' perspectives on patient selection under the BPCI initiative, although research on this topic is quite limited. Adida et al. (2016) examined the different impacts of fee-for-service and bundled payments on the presence and extent of patient selection. The researchers noted that the way that providers perceive the cost profile of potential patients can impact the selection of patients. The researchers also examined treatment intensity, the level of risk faced by providers and the total payoff. Under the fee-for-service model that was the focus prior to the Affordable Care Act, the incentive for providers was to select patients and treatment options that would require a greater frequency of services/visits, which does not equate to greater quality of care. Since the bundled payments method offers a lump sum for an entire episode of care, if the cost of the episode of care is lower than the lump sum, the provider makes a profit.

Research has indicated that fee-for-service reimbursement models may be beneficial for providers, while ignoring the importance of patient value and quality of care delivered (Porter & Kaplan, 2016). In another study, Adida et al. (2016) argued that based on providers' perceptions of the risk of the payment method used, providers may be more inclined to deny patients that are high-risk and likely to develop complications needing further treatment, patients that will need many procedures, or patients that need high-cost procedures. If the cost of the episode of care is not less than the lump sum, the provider is at risk for financial loss which can then lead providers to select certain patients presenting with certain conditions (Adida et al., 2016). Results from a literature review by Adida et al. (2016) indicated that under the bundled payments model, high risk aversion does not lead to high intensity of treatment; providers may increase treatment intensity to increase quality/likelihood of success while increasing potential financial risk or providers may decrease treatment intensity to decrease the financial risk even though the quality of treatment and likelihood of success may also decrease. Fee-for-service, on the other hand, was shown to lead to reverse patient selection and excessive treatments and higher costs. In conclusion, the implementation of bundled payments needs to be carefully implemented so that it aligns with providers' viewpoints, and simple adjustments to the bundled payments could help lead to success (Adida et al., 2016).

In addition, future research on the perspective of providers and nurse practitioners is important because many practice leaders indicated they were concerned for how their practice would do after implementing alternative payment models (Friedberg et al., 2015). Furthermore, research has shown that physicians that can listen, engage and lead, are important qualities for physician engagement and physicians with these qualities are more likely to adopt and successfully implement an alternate payment model (Engelman & Benjamin, 2017). In addition, patient selection may be impacted by the use of alternative payment models such as the bundled payments initiative; therefore, obtaining provider feedback and aligning the payment models with the perspectives of the providers is crucial for health care success and provider satisfaction (Adida et al., 2016). Lastly, physician feedback on the BPCI model is critical for improving health care processes and helps to better understand how the BPCI model is implemented, in comparison to simply evaluating providers under the BPCI model to see if the initiative works. This component is critical to the current study, which is based on the perspectives of providers with the focus on how the BPCI model is implemented and how it is effective.

The Physicians Foundation (2016) examined characteristics of providers and trends in practice. About 31% of participating providers stated that they used bundled payments; about 43% stated they did not and the remainder of the providers was unsure. Patient selection may also be impacted by providers' perceptions of the ACA. Providers indicated whether they would see all Medicare/Medicaid patients, limit these patients, or do not see any of these patients. About 73% of providers noted that they would see all Medicare patients, but only 63% said they would see all Medicaid patients. Furthermore, 13% stated they would limit the amount of Medicare patients and 20% stated that they would limit the amount of Medicaid patients; therefore, more BPCI may impact patient selection. This study showed that there is a trend towards provider disagreement with the ACA and ultimately the initiatives that result from it; therefore, alignment with providers' perspectives and engagement of providers is extremely crucial for health care success (The Physicians Foundation, 2016).

Care implementation and quality of care under BPCI. Previous research has highlighted the importance of medical professionals' viewpoints on health care implementation (Froimson et al., 2013), but research regarding providers' perspectives of BPCI is limited (Anoushiravani & Nunley, 2017; Baxter et al., 2015; Engelman & Benjamin, 2017; Shrank et al., 2017; The Physicians Foundation, 2016). For instance, gainsharing (or incentivizing providers for their work when providers agree to participate in bundled payments) is an important component of BPCI and involves the perspectives of the providers (Anoushiravani & Nunley, 2017). Providers need to work to align their practices to the health care system through gainsharing (Anoushiravani & Nunley, 2017). Additionally, physician engagement is crucial to success and may be of particular importance to the BPCI model (Engelman & Benjamin, 2017). Research indicates that monetary incentives are likely perceived by providers to be less important than their inherent desire to perform and provide sufficient care to their best ability (Francis & Clancy, 2016).

Similar to the research of Francis and Clancy (2016), Engelman and Benjamin (2017) proposed that physician perspective and engagement is crucial for success of an alternate payment model, such as bundled payments. The researchers examined physicians within one hospital that was implementing BPCI. Results showed that physicians, who can listen, engage, and lead, are important qualities for physician engagement and physicians with these qualities are more likely to adopt and successfully implement an alternate payment model This supports the notion that providers are critical for the successful implementation of bundled payments (Engelman & Benjamin, 2017).

The implementation of quality care under the BPCI initiative can also have some challenges (Engelman & Benjamin, 2017; Francis & Clancy, 2016). Francis and Clancy

(2016) proposed that providing value-based incentives to physicians in a value-based model such as BPCI is not enough to measure quality of care because physicians’ actions and opinions are impacted by other factors than incentives. For instance, if providers feel they are under scrutiny or stress, they may act in ways that are not beneficial for their practice or the patient. Providers have also been shown to react negatively to and resent being held responsible for aspects of care that are outside their control and realistically impossible for them to control (Francis & Clancy, 2016). These researchers also identified the importance of considering viewpoints of obtaining feedback from physicians and not just evaluating performance; the emphasis of future research should be on how the BPCI model’s incentives make a different to physicians in clinical practice; simply examining if incentives make a difference is not enough. This includes the need to examine how the BPCI model was implemented, how the physician was engaged, and how improvements were made to promote positive change and decrease the chance of negative outcomes (Francis & Clancy, 2016).

Evaluation BPCI with the SPO framework. As suggested by Donabedian (2005), future research is needed to add to the previous literature involving the definition of quality care; the current study sought to do this specifically in the context of quality care in settings that implement the BPCI initiative. Donabedian (2005) also notes that research is needed on the interconnectedness of the provider and the process of care because the process of care is a complex process with multiple interconnected outcomes occurring within a single episode of care; this was a major strength of this study. Future research is also needed that involves using economic efficiency to determine whether quality care is provided in a cost-effective manner (Donabedian, 2005). The weakness of this study's approach was that the results may not be generalizable to other providers in other settings and locations.

Summary and Conclusions

The BPCI initiative is still in its early phases (Shrank et al., 2017). After the passing of the Affordable Care Act in 2010, many changes have occurred in the U.S. health care system (Shrank et al., 2017). The changing goals and structure of the health care system led to the implementation of other payment methods than the fee-for-service model, namely the bundled payments model. The fee-for-service model puts an emphasis on the volume whereas the bundled-payment model emphasizes value (Adida et al., 2016; Shih et al., 2015). The use of bundled payments is growing (Murphy et al., 2016), and research has shown some promising results (Ellimoottil et al., 2016; Orszag, 2016; Statura et al., 2017). Although research on providers' perspectives of impacts and outcomes of implementing bundled payments models is mixed, research has shown that it is important for it could lead to unsuccessful health care and patient selection (Adida et al., 2016).

This study explored the perceptions of physicians and nurse practitioners regarding the impacts of the BPCI initiative on patient selection, care implementation, and quality care measurement. The perceptions of medical service providers regarding how the BPCI initiative influences their decisions and overall quality of patient care could potentially be instrumental in changing the proposed system while it is in a beginning phase. This study was led by the Donabedian (1966) framework that proposed that structures, processes, and outcomes are key components when evaluating health services and payment models.

The next chapter will describe the research methods of the study. The next chapter will describe the research questions, study design, rationale for the descriptive phenomenological design, the role of the researcher, and methodology. Discussion of the methodology will include recruitment and participant criteria, data collection, and data analysis. Potential limitations such as transferability, credibility, and biases will also be addressed in the next chapter.

Chapter 3: Research Method

Introduction

The purpose of the current study was to explore the perceptions of physicians and nurse practitioners regarding the impacts of the BPCI (BPCI) initiative on patient selection, care implementation, and quality care measurement. Although some previous studies have found promising results from the BPCI initiative (Ellimoottil et al., 2016; Orszag, 2016; Statura et al., 2017), the extent of its impacts was previously unclear. This research was needed because the use of BPCI is growing in today's health care settings (Murphy et al., 2016), but research was needed to identify its impacts on patient selection, care implementation, and quality care measurement. The results from this research may help increase researchers' and health care professionals' understanding of the impacts of the BPCI initiative. Evaluating the BPCI initiative from a new perspective (i.e., the view of physicians and nurse practitioners) may offer critical information about how BPCI impacts health care, with a particular focus on patient selection, care implementation and measuring quality of care.

This chapter will include a detailed discussion of the study design and research methods, including a description of the study's research questions. The chapter will commence with a discussion of the rationale for the selection of the phenomenological research design. The role of the researcher, including professional background and personal biases, will be identified. The methodology will be discussed, focusing on the logic for the recruitment of participants and the study's measures. A section on the recruitment, participation, and data collection plan will be discussed. Then, the thematic coding strategy data analysis methods will be discussed. Issues of trustworthiness and bias will be addressed, and the strategies of credibility, transferability, dependability, and confirmability will be described. The specific procedures that have been implemented to enhance the ethical validity of the study will be discussed. The chapter concludes with a summary of the important processes and procedures of the research methodology.

Research Questions and Design

In this phenomenological study, interviews were conducted with a sample of primary care physicians and nurse practitioners who have experience with the implementation of the BPCI initiative. This study included an evaluation of how the structures, processes, and outcomes of BPCI impact patient selection, care implementation, and measurement of quality of care, from the perspectives of physicians and nurse practitioners. To gain a better understanding of how physicians and nurse practitioners perceive the effects of the BPCI on the implementation of patient care, the current study was informed by the following research questions:

RQ1: What effect does the BPCI initiative have on patient selection from the perspectives of physicians and nurse practitioners?

RQ2: What effect does the BPCI initiative have on how care is implemented at the patient level from the perspectives of physicians and nurse practitioners?

RQ3: What effect does the BPCI initiative have on how quality is measured at the clinical and patient level from the perspectives of physicians and nurse practitioner?

Descriptive Phenomenology

The phenomenon of focus for the current study were the impacts of the BPCI imitative from the perspective of physicians and nurse practitioners. Specifically, this study examined how patient selection, care implementation, and quality of care are impacted by the BPCI initiative. Furthermore, the BPCI initiative was evaluated using the SPO model. Using a descriptive phenomenological approach, I sought to gain insight into a phenomenon of interest from the perspectives of individuals who have experienced the said phenomenon (Laverty, 2003). In addition, according to Reiners (2004), descriptive phenomenology is the process of describing the conscious experiences of individuals devoid of presuppositions.

Researchers used a descriptive phenomenological approach to gain insight into a phenomenon of interest from the perspectives of individuals who have experiences with said phenomenon (Laverty, 2003). A basic tenet of descriptive phenomenology is the belief that human consciousness is intentional and guided by interactions with the world, a concept known as intentionality (Laverty, 2003). Furthermore, intentionality is said to be key component of an individual’s understanding or mind. Along with intentionality, a phenomenological design takes into account individuals’ lived experiences (Laverty, 2003). Another important aspect of descriptive phenomenology is bracketing, which involves the researcher identifying any preconceived notions and setting them aside so as to not influence the research process (Laverty, 2003).

According to Reiners (2004), descriptive phenomenology is the process of describing the conscious experiences of individuals devoid of presuppositions. As such, a descriptive phenomenological approach was an appropriate choice for the current study because I sought to gain insight into physicians' perspectives of the BPCI initiative rather than isolating variables to identify correlations. More specifically, I did not want to look at the impacts of BPCI as dichotomous (i.e., successful or unsuccessful) or as an isolated variable; instead I wanted to describe which components are successful, which components are unsuccessful, and how care implementation was impacted, from the perspective of physicians and nurse practitioners. Laverty (2003) suggested that phenomenology is an efficient research design to gain insight on context and variables that would be missed by an experimental or quantitative design.

A descriptive phenomenological research design was an appropriate selection for the current study because I sought to gain insights into the perspectives of physicians and nurse practitioners regarding the BPCI initiative. Descriptive phenomenology was appropriate for this study because the essence of a phenomenon will be directly based on the unique experiences and perceptions of the participants and not on the preconceived knowledge of the researcher (Giorgi, 1986). Through the researcher's empathy and effort to understand the experiences of the participants, a description of the phenomenon can be achieved (Giorgi, 1986). A qualitative descriptive phenomenological approach was optimal for this study because it allowed for the examination of health care providers' perceptions of the initiative while leaving room for flexibility, detail, and depth in participant responses that would not be possible in a quantitative approach (Stake, 2005).

Role of the Researcher

In qualitative studies, the researcher is often considered an integral component of the research (Bresler, 1995; Jamshed, 2014). The role of the researcher is often different in qualitative studies compared to quantitative studies because of the more involved responsibilities necessary for the use of interviews compared with questionnaires (Jamshed, 2014). In this study, I served as the observer-participant during the interview process; I interacted with the participants to prompt them for feedback while also acknowledging and clarifying their responses. I also served as an observer because I was collecting observation notes pertaining to the description of the hospital facility.

In addition, I acted as an observer when describing the participants' behaviors during the interviews, the hospital facility, and interactions among staff. When observing the hospital setting and behaviors of staff, I was not interacting with others or attempting to influence the environment.

I assumed a more hands-on role when interviewing participants because the nature of interviews involves making participants feel comfortable, using active listening, and keeping the participant engaged. Building rapport with participants was crucial to having open, honest, and detailed discussions during the interview process, which is another reason why I took on a participant role. Establishing this trust with the participants was important because I was guided by and also learned from them; essentially, this trust and level of comfort helped to encourage the participants to lead the discussion rather than the researcher. The role of the researcher in the current study was mixed with the roles of observer as well as participant because this study called for the in-depth interaction and conversation with interview participants.

I sought participants from Washington Regional Medical Center in Fayetteville, Arkansas. The researcher did not work for this facility and was not expected to have any personal or professional relationships with any of the participants. Furthermore, the researcher was a student that was not affiliated with any hospital facility. Therefore, the researcher did not expect any hierarchical or power relationships to be present between him and the participants, which lessened the likelihood of the participants feeling coerced to participate in the study. I provided all potential participants with sufficient time to process the purpose of the study and deeply consider whether or not they wanted to be included in the interviews. Piloting the instruments, member checking, and triangulation helped to reduce researcher bias in this study; these processes will be discussed in more detail later in this section. Additionally, no monetary incentives were utilized to avoid any unethical transactions that may occur as a result of expectations regarding compensation. There were no expected ethical issues or power differentials in this study and the researcher did not have any conflicts of interest.

Methodology

Participant Selection Logic

The population consisted of independent practitioners that were gainfully employed at the Washington Regional Medical Center in Fayetteville, Arkansas. These practitioners included both physicians and nurses. The physicians and nurses from this population served as the source of the participants in the sample for this study.

Sampling. Patton (1999) proposed that stratified purposeful sampling is conducted by selecting particular units or cases that vary according to a key dimension.

Palinkas et al. (2015) stated that there are three different types of purposeful sampling; however, this study used the type of purposeful sampling that involved in identifying and selecting cases that meet a specific, predetermined set of criteria. This involved identifying and selecting individuals or groups of individuals that were especially knowledgeable about or experienced with a phenomenon of interest (Palinkas et al., 2015; Patton, 1999).

Studies that utilize this sampling method often have small sample sizes; this can be beneficial for collecting quality data, however, can hinder the researcher's ability to generalize study results to other populations (Patton, 1999). Additionally, a stratified purposeful sampling approach has been found to increase credibility of research results, particularly in studies that aim to identify characteristics surrounding a particular phenomenon (Palinkas et al., 2015). Purposeful sampling is often used in implementation research (Palinkas et al., 2015); this directly aligned with the current study because of the focus on the implementation of BPCI. This study sought to recruit 20 participants by purposefully seeking out physicians (generalists and specialists) and nurse practitioners working at the hospital and providing them the opportunity to refer other physicians and nurse practitioners to participate in the study.

The inclusion criteria to be an eligible participant for this study were the following: (a) physicians or nurse practitioners in Washington Regional Medical Center with currently valid licenses, (b) have chosen to participate in and are reimbursed through the BPCI value-based model, (c) have at least two years of professional experience after receiving their medical license or two years of professional experience practicing medicine as an independent practitioner, (d) licensed to practice medicine in Arkansas, (e) actively practicing/are not retired, (f) are from the United States or foreign born physicians and nurse practitioners who are legally licensed to practice medicine in state of Arkansas, and (g) can bill for services provided to patients including Medicare and Medicaid. Only physicians and nurse practitioners who met these criteria were eligible to participate in this study.

To assess knowledge of BPCI, the research created a set of criteria that participants needed to possess. There was no formal measure or questionnaire for BPCI knowledge, but for this study, adequate knowledge of BPCI was defined as: 1. the ability to describe the purpose of BPCI; 2. the ability to describe the different components of BPCI; 3. the ability to describe how they use BPCI in their practice; and 4. the ability to describe impacts of BPCI. These criteria addressed different questions than the questionnaire that was used for primary data collection in this study and was only used to decide whether individuals should participate.

Eligibility was determined by participants’ self-report and proof of identification and certification and employment at the hospital facility. There were no exclusion criteria based on gender, race, or ethnicity. Lastly, participants needed to be knowledgeable of the BPCI initiative which was determined through a screening process during the recruitment stage. Participants needed to be able to briefly describe what BPCI is and their previous experience in the implementation of the said initiative prior to the interview process.

Sample size. Previous researchers noted that including 10 to 20 participants is sufficient for phenomenological studies (Atran, Medin, & Ross, 2010; Francis et al., 2010; Laureate Education, Inc, 2013; Mason, 2010), whereas some researchers indicated that 15 or fewer participants is sufficient (Pietkiewicz & Smith, 2014). For this study, 20 participants were the target, with the goal of interviewing 10 physicians (five generalists and five specialists) and 10 nurse practitioners, although incremental sampling and data analysis continued until theoretical saturation was achieved.

Participant contact and recruitment. I identified and contacted potential participants through the Washington Regional Medical Center in Fayetteville, Arkansas. The written permission to recruit participants from the hospital and conduct interviews inside the facility from the administrators of the hospital's specialty care clinics are attached in Appendix B. Approval from the university and hospital facility's Internal Review Board (IRB) was secured prior to the recruitment of participants. I contacted hospital administrators to determine who I should contact to ask permission to conduct this study. The recruitment of participants commenced once permission from the research site had been secured and the approval from IRB had been attained.

Research indicated that flyers and face-to-face recruitment methods are common for reaching participants for qualitative research (Namageyo-Funa et al., 2014), and these methods were used in the current study. I created flyers with a description of the study, time span estimate of the study, eligibility criteria, and the researcher's contact information (see Appendix D for an example flyer). Immediately after obtaining IRB approval, I posted the recruitment flyers in areas where health care providers congregate and solicit participants in these same areas. These areas included bulletin boards throughout the hospital, on all floors and all wings or sections. Flyers were also offered in an electronic copy that was emailed to providers and nurse practitioners. I obtained hospital approval of the flyers before they are posted. My name, phone number, and email address were included in the advertisements so that interested participants could communicate directly with the researcher. Participants were able to contact me by email or phone, and then I communicated with interested participants through email or by phone within 24 hours of indicating interest in the study.

Participants were only considered for inclusion if they satisfied all of the delimiting factors and were willing to participate. I set up a time to meet with them in person to go over the informed consent, which took approximately five minutes. The flyers were posted until at least 10 physicians and 10 nurse practitioners had been interviewed, and then I removed all flyers. I also encouraged participants to refer other physicians and nurse practitioners for the study.

Relationship between saturation and sample size. Data saturation is a critical component of determining sample sizes in qualitative research (Hannink, Kaiser, & Marconi, 2017; Rolands, Waddell, & McKenna, 2016). To assist in determining the optimal size for this phenomenological study, the concept of data saturation was considered. However, data saturation is not a fixed number and depends on the specific condition of every study such as the ability of the participants to provide relevant data (Guest, Bunce, & Johnson, 2006). Fusch and Ness (2015) suggested that data saturation has been achieved when the researcher has identified all the core components of a phenomenon based on the descriptions of multiple individuals; however, there is no standard number that applies to all research designs. Previous researchers noted that including 10 to 20 participants is usually sufficient for phenomenological studies to reach data saturation (Francis et al., 2010; Mason, 2010). Therefore, at least 10 providers (five generalists and five specialists) and 10 ten nurse practitioners were recruited for this study for a total of 20 participants. Data saturation was assessed multiple times, or until no new codes needed to be generated or until no new themes emerged. If participants are eligible but do not sign the informed consent form, or drop out of the study, more recruitment efforts will take place to replace those participants.

Instrumentation

The main data collection source for this study was an interview guide, which was created by reviewing the literature and asking questions that were anticipated to tap into the phenomenon of the study. The interview guide contained several open-ended questions that were specifically formulated to provide information regarding how physicians and nurse practitioners at the Washington Regional Medical Center in Fayetteville, Arkansas perceive the impacts of the BPCI initiative on how patients are selected, how patient care is implemented, and how quality is measured. The questions in the interview guide were formulated with the goal of eliciting answers that directly addresses the study’s research questions.

Interviews provide the best source of data in qualitative and phenomenological studies because of the range and scope of questions that can be asked. As opposed to standardized instruments that have limited range of possible answers, the responses that can be attained from interviews are wider in scope and deeper in content (Mojtahed et al., 2014). Interviews also provide an opportunity for a richer dialogue that does not limit the possible ideas that can be introduced during the data collection process. The use of semi-structured interviews was integral in capturing the experiences and perceptions of physicians and nurse practitioners because of the level of flexibility and freedom in the types of questions that can be asked during the interview (Mojtahed et al., 2014). Additionally, the interview guide provided a set of core questions to answer the research questions of the study, but also served to prompt the participant to have more broad and open discussions; the participant led the discussion and taught the researcher about their experiences with BPCI.

The interview guide was developed by the researcher initially, who conducted a literature review to generate a pool of potential questions that sought to answer the research questions. Similar to previous research (Storli et al., 2016), this study used the Donabedian SPO framework to guide the creation of interview questions. For this study, the first research question involved asking about the participant's experiences with BPCI and other payment models. The interview guide also included questions assessing participants' knowledge of patient selection, care implementation, and quality care measurement as well as questions to assess social desirability bias. Social desire ability bias occurs when participants respond in ways that will make them appear favorable to the interviewer (Paulhus, 2017).

In order to assess social desirability, the short form of the Marlowe-Crowne Social Desirability Scale (MCSDS; Crowne & Marlowe, 1960) was used, which asks questions such as “I have never deliberately said something that hurt someone’s feelings.” For this scale, individuals who score high (1.5 standard deviations above the mean) have a greater need to portray themselves positively (Crowne & Marlowe, 1960). Research by Loo and Thorpe (2000) has indicated that this scale has acceptable reliability (r=0.74-0.82).

I defined structures, as they relate to the SPO framework, and inquired about the structures of BPCI. I then defined processes, as they related to the SPO framework, and inquire about the processes involved in BPCI. Next, I defined outcomes, as they related to the SPO framework, and inquire about outcomes of BPCI. Afterwards, I asked questions about how patient selection, care implementation, and the way quality of care is measured are influenced by the structures, processes and outcomes of BPCI. Additionally, the Brief Social Desirability Scale (BSDS), which was developed by Haghighat (2007), was used to assess the honesty of participants’ responses.

The credibility of the semi-structured interview guide was established by being reviewed by a panel of experts. This review of panel of experts took place immediately after securing IRB approval to move forward with the study. The experts included independent practitioners, qualitative researchers, and health care staff who have knowledge of reimbursement models to assist with establishing face and content validity.

I also ensured that the interview questions were understood the same way by all panel members. This process also helped to identify questions that were not easily answered by noting panel members’ body language and hesitation. If questions were not easily understood or are confusing, the panel can work together to help to re-word the question. Interview questions will be based on the research questions of the study and will also involve the SPO framework constructs. Because the instrument is intended for qualitative research, the feedback is expected to be a short narrative or description in nature. I will make necessary changes based on the panelists' feedback and send a second draft for further review. If there are further changes suggested by panelists, I will make revisions and send the semi-structured interview guide back for review until a final draft is complete.

To supplement the main data collection tool of semi-structured interviews, field notes and hospital staff meeting minutes and memos pertaining to reimbursement will also be used. Field notes will include notes pertaining to the mannerisms, behaviors, and notable comments of the participant before, during, or after the interview because it will help provide context to the participant's responses. Field notes will also include observation of the interactions among providers, staff, and patients in the hospital setting because it will provide insight into the atmosphere of the facility. Direct observation of the facility could also help to generalize findings to other similar settings, including those settings similar in layout, size, and number of physicians.

A demographics questionnaire, produced by the researcher, was also e completed in order to identify whether there are trends in responses to interview questions and to describe the participants and the hospital facility. The purpose of this measure was to make sure that the participants met all of the necessary inclusion criteria for this study. This measure included questions such as age, gender, race, ethnicity, years spent practicing medicine post-residency, and other questions regarding personal characteristics of participants that were important to document based on the previous literature. These data also helped describe the participants and the setting where they practice. Additionally, these data could help generalize findings to other similar settings.

Data was audio-recorded using a digital recorder app, called Voice Recorder & Audio Editor by Tap Media Ltd., a Samsung Droid Smartphone to preserve the accuracy of the exchange between me and the participants. The recorder application in an Apple laptop was also used as a backup in case there were any malfunctions with the phone recording. Recordings were transcribed within 48 hours of the interview by Transcribe-Speech to Text DENIVIP. The recordings aided in capturing all the data and did not rely on written or typed notes during the interviews. Recordings also helped to keep the conversations moving because detailed note-taking were not made.

Pilot study. After developing the interview guide, all questions were pilot tested by conducting mock interviews with health care providers who had similar credentials and experiences as the research sample. This process helped to identify any weaknesses in the interview design prior to conducting real interviews (Turner III, 2010). I will recruit three participants using the same inclusion criteria that will be used in the actual study in order to assess the design of the interview guide for my target population. Three mock interviews will be conducted with individuals who were not part of the instrument development process in order to gain a new perspective on the usefulness of the instrument. This process is estimated to take less than one month. I will use feedback obtained from the pilot study to make final revisions to the semi-structured interview guide.

Procedures for Participation and Data Collection

Data will be collected from 10 physicians and 10 nurse practitioners in the Washington Regional Medical Center in Fayetteville, Arkansas. The inclusion of 20 participants is sufficient number for the purpose of this study, as indicated by researcher by Francis et al. (2010) and Guest et al. (2006). I will be responsible for the collection of data, which means I will conduct the one-on-one semi-structured interviews. Data collection will only occur during the actual interview and in the member checking phase of the study after the initial analysis has been completed.

Each interested participant will be screened using the eligibility criteria. If participants reach out to the researcher by email, I will then call them and go through the eligibility criteria, which will be addressed by the participant's self-report. If eligible, the participants will be read the informed consent and have the opportunity to ask any questions they may have. The informed consent will be emailed to the participant for them to complete and return prior to the interview, or I will meet with the participants individually at the hospital facility to provide them a hard copy of the informed consent. The informed consent will include information such as the purpose of the study, any risks associated with the study, the expected duration of the study, the IRB approval number and the researchers contact information. This will be included in the Appendix once this form is finalized.

A master log of participants will be created with all the individuals who will sign the informed consent. This log will contain their name and unique identifier. The unique identifier will not contain any personal information (such as birthdays) and will be assigned based on the order of the participants and the date of the interview. For instance, if the date is January 2, 2017, and the participant is the third participant to complete the interview that day, the unique identifier would be 01020217-3. After the researcher received the participants' signed informed consent forms, he will email or call the participant to set up a time to complete the interview at a time that is conducive to both of their schedules. At this time, the interview questions were sent to the participants through email to better prepare them for the interview.

At the beginning of the interview, I will read the unique ID for that participant so that this ID is on the audio file. The contents of the audio recordings will not include any personal information such as names that can lead to the identification of the participants. The participants will be asked to complete the demographics survey prior to beginning the interview. After the interview, participants will be debriefed and will be encouraged to ask the researcher any questions they may have. The involvement of participants will primarily be confined to individual semi-structured interviews, which are expected to be completed in 45 to 60 minutes. The interviews will be conducted in a private conference room within the premises of the hospital to make the data collection as convenient as possible. Permission from the hospital administrator will be secured to use their premises for the data collection (see Appendix C).

Data will be audio-recorded using a digital recorder app on a Samsung Droid Smartphone to preserve the accuracy of the exchange between the researcher and the participant. The recorder app on the researcher's Apple laptop will also be used as a backup. I will inform the participant that the interview will be audio-recorded and that the data is confidential; I will remind the participant that the focus of the study is not on who makes statements but instead on the content of their statements. Before beginning the interview, I will review the informed consent that was previously signed by the participant and answer any questions that the participants have. The participants will be assured that the audio recordings will be kept confidential and that no personal information will be used when labeling the audio files. A random unique identifier will be assigned to each audio file to conceal the real identities of the participants.

Field notes will be recorded while the researcher is conducting interviews to supplement data obtained directly from the participants. Additionally, observation notes will be recorded outside the time span of the interviews, including when the researcher is waiting for interviews to begin. Direct observation of the hospital will be confined to what can be observed during the visits of the researcher during the recruitment and data collection such as the size of the facility, the level of organization, and the interactions between staff, providers and patients. I will make note of the interactions between hospital staff and other hospital staff, and patients and their families to better understand the generalizability of the study’s results. Participants will exit the study through a short debriefing process, where I will answer any questions that the participants have and thank them for the study. There may be a follow-up interview requested by the researcher if further detail is needed; I will inform the participant of this during the debriefing process, although the researcher expects to obtain enough detail during the allotted interview time. I will reach out to the participants one week after their interview to inform them of whether or not a follow-up interview will occur.

Data Analysis Plan

This phenomenological study’s research protocol included thoroughly reviewing interview transcripts, the coding of the data, categorization of the codes, and identification of themes. Heuristic coding was utilized, followed by qualitative analysis, since the data source for this study consisted of interviews, field and observation notes, and hospital meeting minutes and memos. After qualitative analysis, I reviewed the codes and data groupings for themes. A triangulation method was used involving the primary researcher and an independent researcher to promote credibility and dependability of results. A research protocol was developed, which included details on the process for coding, categorizing, and theming the transcribed data as well as data from other sources. This research protocol for data analysis will be discussed later in this section.

The software that was used for the analysis of data was NVivo version 11.4.1. NVivo is a type of qualitative analysis software that is generally used adjunctively in order to enhance orderliness and precision (Bazeley & Jackson, 2013). The software was primarily used to enhance the ability of the researcher to be organized in the management and storage of all the interview transcripts during the analysis phase of the study. My own analytical skills remained the central resource that was responsible for the determination of codes and themes.

The first step in the coding was the familiarization with the data (Braun & Clarke, 2006). This step entailed transcribing the interview in order to prepare the data for inspection. All transcripts were properly identified by unique and random identifiers assigned in the beginning of the audio file in order to conceal the identities of the participants. I reviewed the audio files and their transcripts at least twice to ensure that the transcripts adequately matched the audio file. At this phase of the analysis, I read the interview transcripts multiple times in order to have an understanding of the range of answers that emerged from the data collection. The recordings were then transcribed immediately after each interview, using a transcription app so that transcriptions could be used as a backup in case anything were to happen to the recordings. During this phase, the primary researcher and a secondary researcher examined the recordings and transcripts for evidence of personal bias (for instance, whether questions were asked in a judgmental way). This process of cross-checking will increase the credibility of the results (Patton, 1999).

The next component of the qualitative analysis process involved the actual coding process. Coding and analysis are not the same process, but coding is a crucial step of qualitative analysis (Basit, 2003). Coding refers to the process that allows researchers to link data with ideas (Richards & Morse, 2012). In contrast, qualitative analysis refers to the comprehensive examination of the codes, including deciding how to report the frequency of codes, how to compile the codes to answer the research questions, and how to report data that is not associated with a research question, such as demographic data (Basit, 2003). Theming results from the analysis and involves deciding on common themes among and/or within codes; themes may apply to specific research questions, or may be broader (Hsieh & Shannon, 2005).

The coding technique that was used in the study is heuristic. Heuristic coding is the process of discovering the meaning of portions of text in a data set through exploration (Saldaña, 2015). Through heuristic coding, data can be reduced into smaller units, which is instrumental in the analysis and interpretation of data (Saldaña, 2015). I was sure to avoid exhaustive coding, or coding too much material when the code does not really apply. This computer-assisted coding process was conducted in NVivo, version 11.4.1. Even though computer software was used to assist the researcher, he was still responsible for creating categories and codes and segmenting (Basit, 2003).

Heuristic coding is commonly used in psychology, human sciences and social sciences, and is used to aid in the exploration and discovery of patterns in qualitative data (Kleining, Gerhard & Witt, 2000). The first rule when using heuristic coding was that I would not have strict opinions or expectations of the data and would be open to changing preconceptions if the data contradicted them. The second rule involved a preliminary topic that may have changed (or additional topics may be added) if it was deemed necessary, throughout the research process. The third rule involved using open-ended questions or avoiding one-sided or one-word questions/answers (Kleining et al., 2000). The fourth rule required the researcher to seek similarities, patterns or trends in the data (Kleining et al., 2000). In this study, I was open to changing preconceptions if the data did not support them, considered additional topics if they were discussed by participants, used open-ended questions rather than categorical or one-word answers, and sought patterns and themes in the data. Therefore, heuristic coding was appropriate for this study.

The next step involves theoretical thematic analysis. Thematic analysis is a data analysis technique commonly utilized in qualitative studies (Hsieh & Shannnon, 2005;

Vaismoradi, Turunen, & Bondas, 2013), and has been referred to as the systematic method of uncovering the meaning of a given set of qualitative data by searching for themes and patterns (Vaismoradi et al.., 2013). Specifically, theoretical thematic analysis was used to analyze manually coded data from the interview responses.

The individual text segments, sentences, and free text responses from the interviews were the units of analysis (Braun & Clark, 2006; Woodham, Ellaway, Round, Vaughan, Poulton & Zary, 2015). This approach was the most useful for the current study because this study had predetermined research questions. The analysis addressed these research questions and was not exploratory in nature; therefore, inductive theming was not appropriate (Braun & Clark, 2006; Woodham et al., 2015). When conducting qualitative analyses, the researcher must assume that text can be broken up and segmented (Pierre & Jackson, 2014). Next, the researcher created the preliminary codes (Braun et al., 2006; Pierre & Jackson, 2014). This phase of coding entailed performing both data reduction and complication. Data reduction was the process of simplifying a portion of data into codes. Data complication was the process of expanding the essence of codes to a particular concept or theory so that the codes exist within the framework of the professional literature. Preliminary codes were created based on categories related to the research questions, for instance, “patient selection.” Additional sub-codes may emerge throughout the coding process. All codes were organized alphabetically and defined in a code book.

Previous research using theoretical thematic analysis has suggested reviewing data six times in order to see if any new codes or themes have been identified (Woodham et al., 2015). Qualitative analyses are beneficial for offering rich understanding of perspectives and experiences of participants and are great for applied research studies like the current study (Braun & Clarke, 2006). This study conducted computer-assisted thematic analysis using NVivo, version 11.4.1, and I reviewed the codes and segments of data to generate themes as they pertained to the research questions (Pierre & Jackson, 2014). The specific steps that were used to implement thematic analysis will be discussed in this section. A crucial part of analysis was to avoid looking for themes that do not really exist (Pierre & Jackson, 2014). Themes needed to be clear and supported by data within the transcripts. This process also involved triangulation in that a colleague also reviewed the data, codes, and themes to determine if the interpretation of the data was agreed upon. This helped to establish internal validity, which will be described in more detail in the next section.

The next step involved the review of final themes (Braun & Clarke, 2006). The first part of the stage entailed reviewing the codes that represent the themes in order to ensure that themes were supported by data. The fifth step involves reviewing the names and definitions of the themes (Braun & Clarke, 2006), in order to differentiate one theme from another. This process also entailed determining the main theme and the corresponding sub-themes and their description using a few key words. The process of naming and defining themes and the sub-themes was instrumental in capturing the essence of the data in a clear and succinct manner.

Issues of Trustworthiness

Credibility and Confirmability

Credibility, also known as internal validity, refers to the extent to which the study findings can be considered accurate and reflective of the true perceptions or experiences of participants regarding a specific phenomenon (Houghton et al., 2013). During the presentation of findings, detailed quotes from the participants have been used to strengthen the assertions made by the researcher based on the analysis of data. Other strategies that were used to establish the study's credibility were done so through member checking, inter-rater reliability, and intra-rater validity. These strategies will be discussed later in this sub-section.

Confirmability refers to the extent to which the results can be considered objective (Guba & Lincoln, 1982). The strategy that was used to establish the study's confirmability was through the process of reflexivity. Reflexivity is the process of divulging information about the researcher to ensure that personal background that may lead to bias is properly documented (Houghton et al., 2013). There are no personal and professional conflicts that can affect the objectivity of the study. The researcher has no personal or professional relationship with any of the target participants. Personal biases was avoided because recruitment of participants did not occur within the researcher's own work environment.

Inter-rater reliability was also used to establish credibility and confirmability. Inter-rater reliability refers to the process of using multiple researchers to assess the same data and is a common practice when thematic analyses and coding are used (Hallgren, 2012). Inter-rater reliability depicted where there was agreement in the coding process and ultimately the conclusions drawn from qualitative analyses. This process also helped to increase power of the analyses (Hallgren, 2012). I created the codebook. Then, both researchers independently coded the transcriptions, identified themes, and identified interpretations of the themes in order to assess whether the conclusions from the data were credible. Throughout the interviews, member checking was carried out to ensure that the research had obtained informant feedback and validation in order to determine that the data was credible. Furthermore, member checking is a tool that can help increase the trustworthiness of qualitative data (Birt et al., 2016). In this study, I shared the results with the participants to assess whether results were accurate.

Transferability

Transferability refers to the external validity of the results, which means that the findings can be applicable in other situations outside the study (Guba & Lincoln, 1982). The primary strategy that was used to establish the study's transferability was the generation of a thick description of the research context and a detailed description of the sample. Having a thick description of the research context was an important strategy to enhance the level of a study's transferability (Koch, 2006). A thick description of the research context will allow other researchers to assess and evaluate the applicability of the findings in their own studies. If enough contextual similarities are present based on the assessment of other researchers, the findings may be deemed transferable by other researchers.

Dependability

In qualitative research, dependability refers to the extent to which the results can be repeated or replicated in other studies and conditions over time (Guba & Lincoln, 1982). The main strategy that was used to establish the study's dependability was the generation of descriptive audit trails. Audit trails allow other researchers to arrive with comparable conclusions (Grbich, 1999). The generation of audit trails entails generating a document that can account for every choice that was made pertaining to the study's methodology and the study's conclusions (Koch, 2006). The availability of an audit trail can establish dependability because the researcher allows an independent reviewer to clearly understand and assess how the findings were derived. An audit trail explicitly connects the rationale of the researcher with specific decisions made for key stages of the study.

An interview guide was also used to enhance the stability of the study. The interview guide contained several pre-determined open-ended questions that directly accounted for each research question of the study. The interview guide was primarily used as a tool for the researcher to be consistent and mindful of the important questions that needed to be asked in order to generate the critical information that would be important in answering the research questions (Yin, 2013). This guide also served as a prompt for the researcher and helped to keep the participants on track when providing responses.

Additionally, intra-rater reliability was also used as part of a triangulation method to enhance the credibility of the findings (Campbell et al., 2013). Intra-rater reliability involves the repeated analysis of data by the same individual (Gwet, 2014). For this study, intra-rater reliability was implemented by conducting an analysis of the same data set a month apart from each other. I took note of possible discrepancies in order to finalize the analysis and the findings. Additionally, as part of establishing intra-rater reliability, I completed the first round of analyses, then waited a week and completed the analyses again; results from these two periods of analysis were compared to identify areas where the results were consistent. I then had to examine the areas where differences in results occurred in more depth. Inter-rater reliability was also established as part of a triangulation approach; this involved analysis by at least one other researcher. Similarities between results obtained by both researchers helped to confirm that the results were dependable, and I elaborate on differences in the discussion.

Ethical Procedures

Permission from the Institutional Review Board (IRB) of the Walden University was secured before any research activity began. I prepared all the documents required in order to be eligible for IRB application. Central focus was given to the specific procedures that were used to protect the participants. Once accepted, the IRB form number was included in the paper.

Ethical concerns related to recruitment involved securing the appropriate agreement forms from the research sites to gain access to the participants and the use of informed consent forms. Before recruitment begins, I made sure that there was an approval letter signed by one of the leaders from the research site. No data was collected until the approval from the research site had become official.

With regard to ethical concerns relation to data collection, participants were advised that voluntary participation was their right. Withdrawal or early exit was an option that would be available regardless of circumstances or reasons. Participants could withdraw from the study even if initial consent were given, without expecting any penalty or negative consequence that may affect their personal or professional lives. Lastly, I did not have any conflicts of interest relevant to this research and I did not provide incentives to the participants.

All data was kept confidential to protect the rights of the participants to be known publicly. All electronic data was stored in a private computer where access was not readily available without the possession of a password. All non-electronic data such as signed informed consent forms and personal notes were kept in a small, locked cabinet. Only I had access to these data. All electronic and non-electronic data will be destroyed seven years after the dissertation had been officially approved.

Summary

This study involved the use of a qualitative descriptive phenomenological research design in order to collect information regarding how physicians and nurse practitioners at the Washington Regional Medical Center in Fayetteville, Arkansas perceive the impacts of the BPCI initiative on how patients are selected, how patient care is implemented, and how quality is measured. Given that the focus of the study was on the detailed perceptions and experiences of physicians and nurse practitioners about the BPCI initiative, qualitative methods were the appropriate approach. A descriptive phenomenological research design was an appropriate selection for the current study because the researcher sought to gain insights into the lived experience of individuals regarding implementation of the BPCI initiative.

The population included physicians in the Washington Regional Medical Center in Fayetteville, Arkansas, once IRB approval was secured. The sampling strategy that was used was stratified purposeful sampling (Patton, 1999). The sample size for this study was 20 participants, all be physicians (five generalists and five specialists) and nurse practitioners. The rationale for setting the sample size at 20 participants was primarily influenced by the literature on data saturation, a condition wherein no new information was uncovered as a result of repetition (Francis et al., 2010). Additionally, including a sample of generalists, specialists and nurse practitioners were beneficial because they may have unique experiences regarding BPCI and its impacts.

Data was collected using semi-structured interviews. The involvement of participants were primarily confined to individual semi-structured interviews, which lasted between 45 minutes and one hour. All research questions were analyzed using thematic analysis, which is data analysis technique commonly utilized in qualitative studies (Vaismoradi et al., 2013). Thematic analysis was the systematic method of uncovering the meaning of a given set of qualitative data by searching for themes and patterns (Vaismoradi et al., 2013). Data has been stored in a secure location only accessible by the researcher. Names or personal identifiers were not present on any of the data collection materials. Data will be stored for five years and will be shredded after the said time period has elapsed.

The next chapter will be the results of the thematic data analysis. The findings will be organized into several themes so that the essence of the experience of the participants can be clearly presented. The findings will also be supported by illustrative tables involving frequency counts and direct quotes from participants. These integrative data will reflect the lived experience of the sample as a group.

Chapter 4: Results

Introductions

More research is needed on the impacts of bundled payments methods on the provision of health care services (Shrank et al., 2017). Physicians' perceptions of payment methods are crucial to providing enough care to patients. To collect this information, more research on how physicians view the bundled payments models is needed (Yoo et al., 2014). This study filled this knowledge gap and provided more insight into effects of these plans. This study identifies the outcomes of the BPCI initiative and studies its impacts on the way that patients are selected, how patient care is implemented, and how quality is measured based on the perceptions of physicians and nurse practitioners.

Because the BPCI initiative is still in the pilot phase, evidence regarding the effectiveness of the bundled episode payment reforms to control costs while improving the quality of care is mixed and limited (Shrank et al., 2017). To explore the perceptions of physicians and nurse practitioners regarding the effects of the BPCI initiative on how patients are selected, how patient care is implemented, and how quality is measured the researcher crafted three main research questions.

- RQ1: What effect does the BPCI initiative have on patient selection from the perspectives of physicians and nurse practitioners?
- RQ2: What effect does the BPCI initiative have on how care is implemented at the patient level from the perspectives of physicians and nurse practitioners?

- RQ3: What effect does the BPCI initiative have on how quality is measured at the clinical and patient level from the perspectives of physicians and nurse practitioner?

This chapter includes a description of the implementation of the study procedures and a presentation of the findings. The following section includes a description of the data collection settings. Next, this chapter includes a description of the relevant demographic characteristics of the study participants, followed by descriptions of the implementation of the data collection and data analysis procedures. This chapter proceeds with a discussion of the procedures used to enhance trustworthiness, and then with a presentation of the results, which are organized by research question.

Pilot Study

The interview guide was field tested with one participant who met the inclusion criteria for the study. He is 58 years old and has been practicing general medicine for 18 years. The field test participant answered the questions in the original version of the interview guide, but his answers were not used as data. Instead, his answers were evaluated to determine whether or not they included the information the question was intended to elicit. The purpose of the field test was to refine the wording of the interview questions to ensure they clearly indicated the kind of information being sought, so the participant was also asked to comment on the wording of each interview question.

The wording of the questions elicited relevant data, and the participant described the questions as sufficiently clear. Thus, no changes were needed. The number of questions was found to be adequate for eliciting a sufficient amount of data because the semistructured interview format allowed probing follow-up questions to be asked when more information was elaboration or clarification were needed.

Setting

Interviews were conducted in a private setting to ensure confidentiality. Interviews with seven of 12 participants were conducted in the cafeteria at the Washington Regional Medical Center in Fayetteville, Arkansas (WRMC), at times when the cafeteria was not otherwise in use. One participant was interviewed in a private office at the WRMC. The remaining four participants were interviewed in their home offices. Interviews were conducted at a date and time chosen by the participant to ensure the participant had ample time to provide rich responses to the interview questions. No personal or organizational conditions arose that would influence the interpretation of the results.

Demographics

The sample of 12 participants included nine physicians (75%) and three nurse practitioners (25%) employed at the WRMC. Eight of the physicians were male and one was female. All three nurse practitioners were female. The average age of the participants was 53 years (SD = 7.9) with a mean of 16 years of experience (SD = 9.1). Each participant presented a verifiable work identification to prove their professional status. Table 1 is a summary of the demographic characteristics of individual study participants.

Table 1

Participant Demographics

Participant	Profession	Gender	Age (years)	Specialty	Years of experience
1	Doctor	Male	64	Internal medicine	31
2	Doctor	Male	58	Emergency medicine	28
3	Nurse	Female	59	Nurse practitioner	12
4	Doctor	Female	48	OBGYN	15
5	Nurse	Female	64	Nurse practitioner (psychiatry)	18
6	Doctor	Male	49	Internal medicine	11
7	Doctor	Male	40	Gastroenterology	8
8	Doctor	Male	54	Family medicine	10
9	Doctor	Male	49	Emergency medicine	9
10	Doctor	Male	46	Cardiology	8
11	Nurse	Female	66	Nurse practitioner (long-term care)	32
12	Doctor	Male	53	Cardiology	10

Data Collection

One semistructured, one-on-one, face-to-face interview was conducted with each of the 12 participants who were screened beforehand to ensure they met the inclusion criteria. Participants provided valid work identification to verify their professional status and their years of experience before being interviewed. The duration of data collection was eight months, from May 2019 through December 2019. Before each interview began, I reintroduced myself to my participant and refreshed their memory regarding the nature and purpose of the study. I then asked the participant to restate for the record their occupation and specialty in order to document their eligibility for participation in the study. Eligibility under all inclusion criteria had already been verified during the preliminary screening process. The data collection took longer than anticipated due to difficulties in getting appointments with participants who had busy schedules. The average length of the interviews was 30 minutes (SD = 7.9 minutes). All interviews were audio-recorded using a digital recording app (Voice Recorder) on a Samsung Android Smartphone device. The audio-recording of the interviews were transcribed within 24 hours after each interview. The transcriptions were done professionally and verbatim using the service of REV.COM.

I also made researcher observation notes for each interview. I did not make the notes during the interview, because I did not want to be distracted from the participants' words and miss potentially important subjects for follow-up questions. Instead, I made the notes immediately after each interview whenever possible, while the recollection was still fresh. All observation notes were made on the day of the corresponding interview if they could not be made immediately after. I typed the observation notes into Word documents.

There were no deviations from the data collection procedure and no unusual circumstances were encountered.

Data Analysis

Field notes and verbatim interview transcripts were analyzed thematically in NVivo 12 software using the six-step procedure described by Braun and Clarke (2006). In the first step of the analysis, the data were read and reread in full in NVivo so I could gain further familiarity with their contents. The second step of the analysis involved grouping data excerpts that expressed the same theme or idea into codes. In NVivo, this process consisted of grouping similar excerpts into a child node. Each child node represented one code. The codes identified during the second step of the analysis are indicated in Table 2.

In the third step of the analysis, I themed the data by grouping similar child nodes under a parent node. This step involved reviewing the codes created in the second step and their contents to identify larger patterns in the data and group the codes into a smaller number of categories that indicated those larger patterns. The themes identified during the third step of the analysis are indicated in Table 2. The fourth step of the analysis consisted of reviewing and refining the themes by rereading the data included in each theme and code to ensure it was appropriately categorized. When I found a data excerpt to be inappropriately placed, I moved it to the correct category in NVivo. In the fifth step of the analysis, I named and defined the themes. The sixth step of the analysis involved creating the presentation of the results that is provided in this chapter. Table 2 indicates the themes that emerged during data analysis, the codes that were grouped to form them, the number of participants who contributed data to each theme and code, and the number of data excerpts included in each theme and code.

Table 2

Data Analysis Themes and Codes

Theme (left-aligned and bolded) or code (indented)	*n* of participants contributing to code or theme	*n* of data chunks included in code or theme
Cost considerations limit the implementation of rehabilitation care	**10**	**33**
Improved model of care - better patient outcome	5	7
Good change overall	1	1
Increased costs but no better care	4	6
Lower cost of care	4	5
Lowered quality of care	5	10
No quality change	3	5
No difference in care provision	3	3
Cost considerations can influence practitioners to preferentially select patients with simple conditions	**10**	**21**
Higher risk of exclusion for some patients	9	20
Quality measures are cost-centered	**11**	**31**
Good quality measures already in place	1	1
Quality measured - bad for providers	8	9
More risk for providers	1	1
Quality measured - but no improvements for patients	6	10
Quality measurements - need time to adjust	5	10
Increased quality criteria for BPCI	1	1

Credibility

Credibility refers to the extent to which the study findings are accurate descriptions of the conditions they are intended to describe (Lincoln & Guba, 1985). Threats to credibility include the potential for participants to answer interview questions dishonestly or inaccurately, and the potential for data to be inaccurately recorded. To encourage participant honesty, participants were assured their identities would remain confidential. To ensure accurate recording of data, interviews were audio-recorded and transcribed verbatim by the REV.com transcription service. I also verified the transcripts by rereading them while listening to the recordings.

Confirmability

Confirmability refers to the extent to which the results represent the opinions and perceptions of the participants rather than those of the researcher (Guba & Lincoln, 1982). Confirmability has been enhanced in this study through the process of reflexivity, verbatim transcriptions of each interview to provide contextual and detail reach data. I took notes preceding each interview on the interview guide and during data analysis, underlining themes as they emerged. Also, the inclusion in the presentation of results in this chapter of evidence for all findings in the form of direct quotations from the participant's perspective. Reflexivity also required a mindful self-reflection ensued when the results were analyzed. This presentation of evidence will allow the reader to independently assess confirmability.

Transferability

Transferability refers to the extent to which the findings hold true of other samples or populations (Guba & Lincoln, 1982). The primary strategy that was used to assist future researchers in assessing the findings' transferability is the generation of a thick description of the research context and a detailed description of the sample. Having a thick description of the research context is an important strategy to enhance the level of a study's transferability (Koch, 2006). A thick description of the research context and methodology will allow other researchers to assess and evaluate the applicability of the findings in their own studies.

Dependability

In qualitative research, dependability refers to the extent to which the results can be reproduced in the same research context at a different time (Guba & Lincoln, 1982). To enhance the dependability of the findings in this study, descriptions of the study procedures are provided to allow future researchers to replicate the study if necessary.

Study Results

All data analysis was conducted using coding in NVivo software which allowed the researcher to uncover larger themes and patterns. All the themes were organized under the research question they directly respond to and presented below.

RQ1: What impact does the BPCI initiative have on patient selection from the perspectives of physicians and nurse practitioners?

The theme used to answer this research question was: Cost considerations can influence practitioners to preferentially select patients with simple conditions. Nine out of twelve research participants (75%) stated that BPCI will have some effect on patient selection. The respondents emphasized specifically that the patients with more complex health issues might be excluded or receive lower quality of care. Such patients might be perceived as an unnecessary economic burden for the provider, who needs to give them a higher level of care. Participant 1 stated: “some patients who may have more comorbid conditions may have more risk for higher cost of care to potentially be excluded.” Similarly, participant 3 stated:

> There is no distinct way of separating the fact that the provider already knows that after the time the patient is coming in, that there's a set price

> already on the care he's going to give. I'm sure for that, somehow it will bias and affect the level of care, especially when the facility is profit oriented or profit based.

Participants indicated that the higher risk of exclusion for patients with complex conditions was a result of pragmatic financial considerations on the part of the practitioner. A representative response from Participant 3 indicated, “Nobody wants to lose money at the end of it all.” This concern with the money and its effect on the patient selection has been described as dependent on the type of institution that participates in BPCI. Seven participants stated explicitly that if the health care institution is profit driven, they might consider costs when selecting patients, which might increase exclusion risks for some patients. For example, participant 1 explained during the interview:

> I have patients who go to the hospital and never ever get changed to inpatient. They stay in an observation mode for days. And even go to an intensive care unit as an observation patient because they don't want them admitted because of the BPCI. […] I think it's because they think it's a costly ... It counts against them if a patient's readmitted. And the Medicare will not pay as much for a readmission sometimes.

Participant 7 also stated that if it is the for-profit hospital, “they might prefer the other kind of payments” which means that they might also prefer other kinds of patients and exclude those who they believe would cost them more in the long term. Participant 4 also explained:

> We see all patients because I'm a hospital employee, but I would say that in private practices, if they're going to get paid the same amount or limited on what they can do, then yeah, I feel like higher risk people would probably have a harder time finding position, because it's going to be harder for them to provide care if they get the same lump sum, or they're not allowed to do all the testing and stuff that we previously had done.

Based on the responses, this preference for the patients with simple conditions has to do with the fact that those with more complex conditions stay in the hospitals longer. Patients might have several comorbid conditions requiring treatment, or they might need longer rehabilitative care. Length of stay has a direct impact on the profits for the health care providers, so decision-making can be reduced to a matter of “simple economics,” in the words of Participant 10:

> As I understand now, this is not on my unit but in the hospital in general, then they're already on them about getting the patients out sooner, getting patients out as soon as possible no matter what. I feel like if it's bundled, then they're not even getting paid and for their services. The longer you stay there basically the less the hospital makes. I mean, I think this is simple economics that you would want to limit how long the patient would stay there.

Similarly, participant 5 stated:

> The hospital may say, "We are not going to do surgery on this person because more than likely, they may not do well." But because there is a cap on how much we're going to receive, you know, so if this person doesn't do well and so they end up staying much longer, then we're going to be the ones to be short changed.

Participants also indicated that because of the high cost of caring for patients with complex conditions and the desire not to discriminate and provide care for everyone, many practices shortened rehabilitation times for patients to contain costs.

RQ2: What impact does the BPCI initiative have on how care is implemented at the patient level from the perspectives of physicians and nurse practitioners?

The theme used to answer this research question was: Cost considerations limit the implementation of rehabilitation care. Five participants expressed the perception that cost considerations negatively influenced the implementation of care by influencing providers to inappropriately limit services such as rehabilitation. Participant 10 stated, “Hospitals nowadays are run for profit, and so they're trying to maximize the profits in whatever way they can and getting patients out sooner rather than later is one of the ways that would be incentivized by the BPCI.” Higher costs were perceived as incentivizing limits on the care physicians implemented, even when these limitations were not in patients’ interests. Participant 11 observed, “Skilled care and therapy sometimes are so short of days that I don't think [patients] get all the therapy that they need, and they have to go home, or they go back to long-term care.” Participant 11 observed, “Sicker and sicker people coming out of the hospital” because of the shorter rehabilitation time imposed on providers by the lower payments of the BPCI plans. Participant 4 also stated that the bundled care is the problem, because it limits the services the patients receive: “If they bundle it and limit the amount of visits you get to the amount of testing, then yeah, people that needed better care are probably not going to get what we would have been traditionally giving.”

Five other participants agreed that cost considerations influenced providers to implement rehabilitative care more sparingly, but perceived fewer rehabilitation hours as a benefit to patients. For example, Participant 1 stated that BPCI prompted the practice to lower its use of rehabilitation hours, but Participant 1 perceived shorter rehabilitation times in the hospital as promoting better outcomes for patients. Participant 2 also added that this plan obligates the provider to “clear all complications so you cannot stand back from a patient” which then improves care for the patient as “all you need to do is arrive in a hospital and be seen in that hospital.” However, observation notes for this participant stated, “I began to suspect that he was very much a partisan of BPCI. His partisanship did not appear to be based on personal interest, but rather on agreement with the express principles on which the plan was based.” Although I could not do more than speculate about the source of Participant 2’s apparent bias, the bias itself was evident, and his responses may have been less objective than those of other participants. Participant 7 also agreed that cost considerations imposed by BPCI contribute to implementation of a higher quality of care because providers, “get the patient in, do the right thing the first time, do your best, and take your time with the patient.”

RQ3: What impact does the BPCI initiative have on how quality is measured at the clinical and patient level from the perspectives of physicians and nurse practitioner?

The theme used to answer this research question was: Quality measures are cost centered. The participants in this study all agreed that quality measurements were important and implemented, but they had differing opinions as to how useful or good these measurements are. Out of 12 participants, five believed that more time is needed to determine how the quality measurements have influenced quality of care. As participant 1 stated, “Only experience would say which ones should be excluded and which ones should be maintained and what new ones should be brought in.” Participant eight added: “It is going to take a lot of studying to know exactly what the quality of outcome for that patient is going to be.” Participant six was the only respondent who believed that the quality measures in place are good. He shared that length of stay is a good indicator of quality of care, and it is already in use. All others would need more time to be tested.

In order to meet its goals, the BPCI has set certain benchmarks to measure quality of care. However, six out of 12 participants believe that there have been no improvements at any level. For example, Participant 12 believed that cost-centered quality measures will eventually affect the quality of care, if cost savings are the primary measure of success:

> There are definitely certain services that will not be provided or prescribed because it will be deemed not medically necessary at that particular time or can be performed as an outpatient even though it may have been appropriate to have done it as an inpatient.

Because of the need to reduce costs, Participant 6 shared that what the quality measures have affected so far is the length of stay: “when you're looking at paying for episodes of care, you run the risk of administration pushing physicians to discharge patients within whatever is excused in the expected length of stay.” Participant 4 stated that because of the BPCI and the cost-centered quality measurements that come with it, the physicians are discouraged from providing care beyond the minimum, standardized requirements: “What every provider and hospital works toward is to get exactly what they were expecting and not to do anything anymore, anything beyond that point.” Participant 8 stated that quality measures look at, “the payment rather than the patient.” For that reason, he expressed concern about the cost-centered quality measurements.

Participant 10 indicated that cost-centered quality measures caused quality of care to be measured according to readmission rates after treatment, and that readmission rates might be more a reflection of the patient’s condition than of the physician’s effectiveness. Participant 10 stated, “I'm not sure if it would change the way the qualities are measured. I mean right now; they mainly do the like our skills is what it's called. But that's the main quality measure that people have is like readmission rates.” Cost-centered quality measures imposed by the NCBI could also transfer risk from the payer to the provider:

> Medicare saves money and there's a potential for provider or providers to make more money than what they typically were doing. They were at risk though; the Medicare was no longer at risk. The only ones at risk were those providers and particularly those that oversaw the health care dollar. (Participant 7)

The idea behind less testing and faster discharge for patients is also that they receive the care they need as soon as possible and that they do not return with the same issue. This, however, can impact the physicians negatively as, Participant 7 stated, less testing “might take some of your profit away.”

Summary

This chapter presents detailed overview of the participant population demographics, data collection and analysis procedures and study results. The primary data collection instrument for this study was interview guide. The researcher conducted twelve interviews which were recorded and later transcribed. The data participants include nine physicians and three nurse practitioners. All interviews included the same questions and each transcript was uploaded and analyzed in the NVivo software. All codes were grouped into themes and each theme was presented in this chapter under its corresponding research question.

Based on the detailed data analysis, nine out of twelve research participants stated that BPCI will have some effect on patient selection. The primary concern with how patients is selected has to do with the fact that they are all expected to be treated the same, regardless of their condition, which is not the same for the provider. The respondents emphasized specifically that the patients with more complex health issues might be excluded or receive lower quality of care.

The cost of care has not been changed but what is different with the BPCI is that the costs for providers have increased and therefore force some adjustments which doesn’t mean better care. These adjustments that must be made in some cases have been characterized as lowered standards of care by five out of twelve research participants. For example, participant eleven has observed “I don't even know what patients have truly been affected. But I do know that skilled care and therapy sometimes are so short of days that I don't think they get all the therapy that they need, and they must go home, or they go back to long-term care.”

Out of twelve participants, eleven of them spoke directly to the care implementation changes that might emerge out of the transitions to BPCI care. Three out of the eleven participants stated that they do not believe there are any changes that emerge out of this care provision model. They agreed that the one change that would emerge is in the cost, not the care implementation itself.

The participants in this study all agreed that quality measurements were important and implemented, but they had differing opinions as to how useful or good these measurements are. Out of twelve study, five believe that more time is needed to determine how the quality measurements that were selected and used so far have influenced quality of care. As participant one stated, they believe that “only experience would say which ones should be excluded and which ones should be maintained and what new ones should be brought in.”

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The problem is that the implementation of the BPCI initiative in terms of how patients are selected, how patient care is implemented, and how quality is measured is still not clearly understood and supported by research. The purpose of this descriptive phenomenological study was to explore the perceptions of physicians and nurse practitioners regarding the impacts of the BPCI initiative on how patients are selected, how patient care is implemented, and how quality is measured. As the BPCI is still being piloted, evidence on its effectiveness is limited and outcomes are mixed (Shrank et al., 2017).

The BPCI is part of the Affordable Care Act that was promulgated in 2010. The main aim driving the BPCI is improved patient care and lowering costs of health care plans, making health care more affordable (Chen & Ackerly, 2014; Delisle, 2013). In achieving this aim, the BPCI initiative addresses inefficient, inappropriate, and excessive service models linked with the fee-for-service model by introducing a value-based model with good outcomes (Adida et al., 2016; Delisle, 2013; Flodgren et al., 2011; Francis & Clancy, 2016). In contrast to the fee-for-service model, which places emphasis on quantity over quality, the pay-for-performance models place value over volume (Francis & Clancy, 2016; Goldman & Kates, 2017). The BPCI model was, therefore, aimed at reducing costs to the patient while increasing quality of care. This model places a monetary value for a procedure and leaves the decisions of how to lower the cost while providing patient care to the clinician (Goldman & Kates, 2017).

The approach of placing value on an entire procedure, the BPCI initiative places clinicians and health systems at significant financial risk, where they are reimbursed less for providing more services compared to fee-for-service reimbursement. In the final analysis, the financial risks associated with the BPCI could potentially cause clinicians to cherry-pick patients in attempt to prevent financial loss (Goldman & Kates, 2017). There is a dearth of literature on the implementation of BPCI leading to better understanding of this pay-for-performance model (Francis & Clancy, 2017). It is this gap in the literature that this study aimed to address.

A descriptive phenomenological design was used in conducting this research. A qualitative approach was deemed appropriate as I had to collect data from clinicians regarding their experience with BPCI on patient selection, provision of care, and measuring quality. Descriptive phenomenology allows the researcher to gain insight into the perspectives of participants who experienced a phenomenon (Giorgi et al., 2012). The outcomes of such a study is an unbiased description of the participants' conscious experiences that allows the researcher to explore the hidden aspects of their experiences (Matua et al., 2014). A phenomenological approach is useful in studying the meaning of a specific experience (in this case, the participation in the BPCI initiative), rather than causes of outcomes. I collected data from nine participating physicians and three nurse practitioners by means of audio recorded semistructured interviews. The semistructured interviews were supplemented by a demographic questionnaire, observation notes outside of the interviews, and field notes during the interviews. Data were coded using formal coding and analyzed using computer-assisted theoretical thematic analysis (Vaismoradi et al., 2013).

In this chapter, I discuss the findings of the research together with the related implications. A summary of my study and findings is followed by how the findings answered the research questions. A discussion of the theoretical framework used in the study and implications for practice will be followed by identification of the limitations of the study, and recommendations for future research.

Interpretation of the Findings

The interpretation of the findings will be dealt with per research question as was the case in the previous chapter. Overall, the findings pointed towards concerns by the participants on the expediency of the BPCI. The 12 participants discussed negative elements of the BPCI related to all three the research questions. There were, however, also positive aspects associated with the pay-for-performance model that the participants elaborated on.

The focus of this study is on the outcomes of the BPCI initiative by studying the influence thereof on the way that patients are selected, how patient care is implemented, and how quality is measured, based on the perceptions of physicians and nurse practitioners who participated in the research. The Donabedian (1966) quality framework that is used to help evaluate the quality of care, guided this study. The Donabedian SPO model was used to better understand the PBCI structures, processes, and outcomes that ultimately impact patient selection, care implementation and quality of care. According to the Donabedian SPO model, *structure* refers to the health care setting which includes the training of the health care professionals, care delivery and processes, resources and payment processes. In evaluating the BPCI model, structure is of importance because it can influence both health care providers and patients (Donabedian, 1966; Donabedian, 1988). Process includes the health care service delivery, such as diagnosis, treatment regime, and preventative care (Donabedian, 1966; Zidarov et al., 2016). Part of process is also the actions taken by the patient and their families (Donabedian, 1988). In terms of the BPCI, the process has been changed linked to the specific focus of the bundled payment model as physicians may now limit time spent on diagnostic measures such as tests, to save costs and complete care within budget. Outcomes of the treatment refer to health-related changes, increased knowledge on a condition, and patient satisfaction (Donabedian, 1966; Zidarov et al., 2016). An easily measured and common indicator of care within health care is improving or restoring levels of well-being and functioning (Donabedian, 1966; Zidarov et al., 2016). This is ultimately one of the goals of BPCI, although specific information on the influence of the BPCI measurements has not yet been clearly established. The three elements of the SPO model formed the basis of the research questions.

Research Question 1. Impact of the BPCI initiative *on patient selection* from the perspectives of physicians and nurse practitioners. In terms of the Donabedian (1966) model, the process followed by the physician to decide on a diagnosis and treatment regime is important, this is also the case in terms of the care process. In selecting patients according to the BPCI model, all patients have to be treated the same. In practice this is not the ideal situation as patients present with different health issues of which some are more complex than others. Physicians use logic in the decision-making process of selecting patients and the care model based on the patient's health complaints and comorbid conditions (Donabedian, 2005; Gupta et al., 2016). Participants indicated that the bundled payment model can potentially change the patient selection and care logic. Based on the differences in patients' health issues and the appropriate care, which is inevitably linked with costs, physicians may either exclude more complex cases or lower the care model. These perceptions and experiences of the participants confirmed the study by Adida et al. (2016) identifying patient selection as a potential barrier to receiving health care under the BPCI initiative. As a result of this, some participants observed that patients with complicated cases may find it difficult to receive appropriate care. In agreement with Adida et al., the outcomes of the current study linked selection of patients with decreasing financial risks to the provider. This outcome confirmed the suggestion that patients who would not be selected are those with complicated health needs that need health services the most (Adida et al., 2016), as patient selection is done with the bundled payment in mind (Ellimoottil et al., 2016a; Ellimoottil et al., 2016b). Practitioners may choose to manage the financial implications of a care protocol, where they might be held financially responsible for reconciliation (CMS, 2018), by shortening the rehabilitation period as was the observation of some participants.

In sum, participants' responses to research question one indicated that bundled payments for patients without complications or comorbidities did not have any implications for the selection of patients. This is, however, not the case when patients present with complicated issues and comorbidities. The diagnosis and treatment process for these patients is lengthier and therefore more costly. Participants observed that the bundled payment system aims to reduce costs by limiting diagnostic tests and treatment costs. The implication of the BPCI for patients is that those with complicated health issues will find that finding appropriate care is difficult as practitioners might be reluctant to take on such cases due to the cost implications. These scenarios are not to the benefit of the patient with complex health issues who is in need of medical care.

Research Question 2. Impact of the BPCI initiative on *how care is implemented at the patient level* from the perspectives of physicians and nurse practitioners. Linked to patient selection, is selecting the care protocol. Appropriate patient care was found to be at the center of the BPCI initiative in which the costs for an entire care episode are bundled, therefore incentivizing physicians to implement the BPCI model (Curry & Fee, 2016; Dummit et al., 2016; Flordgren et al., 2011; Konetzka et al., 2016). In addition, the BPCI initiative reportedly values the patients' needs and preferences in deciding on a care delivery process (Curry & Fee, 2016; Dummit et al., 2016; Flordgren et al., 2011; Konetzka et al., 2016; Yoo et al., 2014). The focus of Medicare initiatives was to provide more benefits to patients at a reduced cost. The SPO model also highlights the importance of implementing care and delivering services to patients.

In answering an identified research need regarding practitioners' perspectives on the influence of the BPCI initiative on patients' care needs (Francis & Clancy, 2016), participants agreed that patient care and rehabilitation was crucial. However, as hospitals are profit-driven entities, the decision on a care protocol is not made based upon medical grounds alone. Participants indicated that the duration of the rehabilitation may be shortened in some cases (e.g., complicated health issues) as a measure to reduce costs. One participant remarked that nowadays, patients who are discharged are sicker than they were before implementing the BPCI. Goldman and Kates (2017) identified clinical measures that could be linked with BPCI as reducing the length, which is corroborated by the findings of the current study. The participants emphasized that patient care per se would not be affected by bundled payments, but the costs associated with it influence care decisions. Under the BPCI, practitioners must find ways to reduce costs (Goldman & Kates, 2017), as participants indicated that the patients with more complicated medical needs may subsequently have a hard time finding appropriate care. This finding confirms those of Adida et al. (2016) that, based on the payment method, providers may tend to deny high-risk patients and those who are more likely to develop complications, increasing the risk for further treatment, and patients who are in need of complicated treatment.

Research Question 3. Impact of the BPCI initiative on *how quality is measured at the clinical and patient level* from the perspectives of physicians and nurse practitioner. Fee-for-service reimbursement models may benefit providers but ignore patient value and quality of care delivered (Porter & Kaplan, 2016). With the Affordable Care Act the BPCI initiative was developed to provide quality care to the patient at an affordable price. As noted in the preceding discussion of the participants’ responses, this may not be entirely practicable under the BPCI initiative. Both Froimson et al. (2013) and Takore et al. (2015) argued in favor of obtaining providers’ views and experiences of the BPCI initiative to achieve the envisaged quality of care. Obtaining the perspectives of providers and patients to achieve quality care is in alignment with the Donabedian (1966) framework. Previous researchers reported mixed results on the effectiveness of the BPCI to provide quality care within the bundled payment model (Mohammed et al., 2016; Shrank et al., 2017). Froimson et al. (2013) advised that the goal of the use of bundled payments is to provide more coordinated and comprehensive care while increasing quality and decreasing cost. The current research findings did not yield any outcomes related to more coordinated services to increase quality of care under the bundled payment system.

Prior research on bundled payments indicated that it has led to increased quality of care (Orszag, 2016), while rewarding providers more for providing higher quality care in fewer visits (Orszag, 2016). Great savings for hospitals were also reported under the BPCI (Shih et al., 2015; Statura et al., 2017), less reconciliation payments (Ellimoottil et al., 2016), and lower readmissions rates (Statura et al., 2017). Impacts of BPCI have also been promising among specialties and sub-specialties (e.g., CMS, 2015; Dummit et al., 2016).

Not all the participants in the current study were convinced that the quality measures under the BPCI initiative resulted in increased service quality, mainly because quality is defined by money saved. In this regard, the findings of Shih et al. (2015) and Statura et al. (2017) indicated savings at hospitals using BPCI. With its focus on cost saving, participants argued that administrators could hold the physician to the allocated length of stay indicated in an episode of care under the BPCI. This is an example of a cost saving focus as opposed to a patient-centered focus.

Another quality measure under the BPCI is testing. Some diagnostic tests are considered unnecessary under the BPCI and instead specific tests are linked with specific health conditions. According to a participant, this limitation could negatively influence quality of care in patients where different tests are needed. Diagnostic testing forms part of provider decision making which is vital in deciding on the process of care (Donabedian, 2005; Gupta, Karst, & Mendelson, 2016). In the face of bundled payments, physicians may not be able to request additional tests in diagnosing more complicated conditions.

Francis and Clancy (2016) suggested that patients should be included in measuring quality of care. Most of the participants opined that this aspect of the BPCI should be reconsidered as patients' opinions are biased. This view was supported by Francis and Carolyn (2017) who warned that measuring of clinical quality in relation to individual patients is complicated. Patients' satisfaction with the outcomes of their treatment is rigged with difficulties as the current scales do not take comorbid diagnoses into consideration which could influence their level of satisfaction. Mental health issues such as depression could influence patients' level of satisfaction (Goldman & Kates, 2017). Participants were therefore concerned about the influence patient ratings may have on the practitioners. All the participants, but one, suggested that the quality measures should be further developed and refined.

Limitations of the Study

This descriptive phenomenological study was limited in terms of transferability. This was a factor of the methodological design used, which focuses on the lived experiences of the participants. Another limitation of this study was that it focused on only one hospital in a particular geographical area. Findings can therefore not be transferred to other hospital settings or geographical areas. The researcher used thick descriptions of the research context and sample to support other researchers in deciding whether the findings could be used in their studies.

Participants' life and professional situations differ as well as their level of exposure to the BPCI. These differences could influence their knowledge and perceptions of the BPCI. It is possible that participants' knowledge of the BPCI was not in-depth or on the same level as the other participants. Without prior assessment of this aspect, the researcher could not accurately determine whether there were any differences in participants' knowledge of the BPCI. Detailed descriptions of the sample and responses were used to address this limitation. This limitation has been linked with the sample size, which was small in this study. While larger sample sizes could provide a wider range of responses, the researcher was guided by saturation which was met within the current sample. The fact that prior sufficient research on the BPCI does not exist in relation to general hospitals, limited this study somewhat. This was a result of the BPCI only being in the beginning stages of implementation, providing a limited opportunity to interpret the results in terms of other general hospitals.

Recommendations

Recommendations based on the findings of this study include that there should be more and diverse studies on the outcomes of the initial implementation of the BPCI initiative. The outcomes of different studies in various contexts could inform revision of the BPCI before final implementation.

An important factor that was mentioned by participants in this study is that the BPCI should provide more flexibility. The medical fraternity is rigged with health complaints that do not fit general expectations of a specific condition. The large variety and possible combinations of health problems together with individual’s differences in responding to treatment, should be accounted for in the BPCI model.

It is recommended that this study be duplicated in other similar hospital settings in other states to build a larger body of knowledge on the implementation of the BPCI. Following the suggestions of the participants, such studies should be conducted before formal implementation of the BPCI to inform adjustments of the model beforehand.

Future researchers could develop a questionnaire to assess potential participants’ level of knowledge about the BPCI model as an inclusion requirement. A minimum expectation of knowledge on the BPCI to be included in a study would ensure that respondents base their replies on the same level of informedness of the BPCI.

The findings from a larger number of qualitative studies could be used to design a questionnaire for use in empirical studies that could target health care practitioners nationally. Such studies have the potential to reach a larger and more representative sample of health care professionals who are under the PBCI. The outcomes of much larger studies are potentially more reliable in determining the outcomes of the BPCI on health care level.

Future studies could differentiate between the different health care professionals—physician, nurse, therapist, radiologist, etc.—to differential between the influence of the BPCI on specific professionals.

Implications

Implications based on the findings of this study include that more experience with the BPCI initiative is needed over a wider population of health care providers to establish its influence on the provision of health care to the wider public. Studies such as this one with wider exploration of other states, hospitals and different health care settings could provide government with valuable input to refine the BPCI initiative. Such refinement could align the BPCI with the values of physicians and nurses which is crucial for successful care implementation and can in turn impact the quality of care patients receive.

The findings of this study indicated that changes pertaining to affordable patient costs was regarded positively. There is concern about the influence of the BPCI on the different SPO levels as the initiative was not found to be sufficiently flexible to accommodate the complexities of patients' health care needs. Greater awareness of this aspect highlighted by the outcomes of this study may lead to further design refinement to sufficiently address this need. Positive social change could be brought about by addressing individual patient needs, leading to larger acceptability and acceptance of the BPCI model.

I believe that this study served to highlight different aspects where the BPCI initiative could be improved to serve both the public and health care providers better. The increased awareness of gaps withing the BPCI initiative that lead to patients not being adequately served may result in adjusting the current BPCI model. A possible social change is the redesign of the BPCI model to a version that would be beneficial to all stakeholders and therefore could be adopted and implemented.

Theoretically this study serves to extend the Donabedian SPO model to the BPCI initiative. The study provided support for the use of the Donabedian quality framework in assessing new health care delivery and funding initiatives. The outcomes of this study addressed the gap in literature regarding the alignment of the BPCI with the values of health care providers. The BPCI initiative was regarded by the participants as being mainly cost driven while the providers' values lie within providing the best care to their patients. This misalignment highlighted by this research warrants further research.

As indicated by the outcomes of this study, the decision-making process of medical practitioners is influenced by the bundled payment model. The observation of CMS (2018) that physicians are responsible to reconcile cost differences in patients' health care regime proved to have adverse effects on the service delivery to patients in terms of selection and selection of the treatment process. Further research on how to limit costs while providing adequate and appropriate care to patients is needed.

Conclusion

While the Affordable Care Act is a commendable endeavor to bring medical expenses within reach of every citizen, the implementation of the BPCI and its bundled payment options for specific conditions were found to have important areas of concern. The conceptual framework of this study, the Donabedian quality framework, provided an appropriate way of exploring and evaluating the implementation of the BPCI. On each level of the SPO quality framework it became evident that the BPCI model needs further research and refinement before larger scale implementation is possible.

Most importantly the outcomes of this study pointed towards the possibility that patients with complex health issues may be the ones who will be the most affected by the bundled payment system. More flexibility is needed within the bundled payment system to account for the limitless variance possibilities when dealing with people who have health issues. Appropriate and sufficient medical care to an individual requires different approaches and unique combinations of available diagnostic and treatment regimes. While there is a case to be made for bundled payments tailor-made for specific conditions, the variation possibilities in individual patients demand more flexibility. In its current state, the BPCI and bundled payment system put patients with complex medical needs at risk of not receiving efficient and appropriate treatment.

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Appendix A: Comprehensive Search Strategy

Search Engine	Search Terms	Number of Sources
ERIC	Bundled Payments for Care Improvement	0
Google Scholar	Bundled Payments for Care Improvement	992

PubMed	Bundled Payments for Care Improvement	82
Walden	Bundled Payments for Care Improvement	587
ERIC	Bundled Payments for Care Improvement AND value-model OR physician perception OR patient satisfaction OR health care outcomes OR fee-for-service model OR patient selection OR health care implementation OR pay-for-performance model OR health care quality measurement OR descriptive phenomenological approach OR qualitative methods OR Donabedian framework	166
Google Scholar	Bundled Payments for Care Improvement AND value-model OR physician perception OR patient satisfaction OR health care outcomes OR fee-for-service model OR patient selection OR health care implementation OR pay-for-performance model OR health care quality measurement OR descriptive phenomenological approach OR qualitative methods OR Donabedian framework	14,600
PubMed	Bundled Payments for Care Improvement AND value-model OR physician perception OR patient satisfaction OR health care outcomes OR fee-for-service model OR patient selection OR health care implementation OR pay-for-performance model OR health care quality measurement OR	73,0879

	descriptive phenomenological approach OR qualitative methods OR Donabedian framework	
Walden	Bundled Payments for Care Improvement AND value-model OR physician perception OR patient satisfaction OR health care outcomes OR fee-for-service model OR patient selection OR health care implementation OR pay-for-performance model OR health care quality measurement OR descriptive phenomenological approach OR qualitative methods OR Donabedian framework	1998479
ERIC	Value-model OR physician perception OR patient satisfaction OR health care outcomes OR fee-for-service model OR patient selection OR health care implementation OR pay-for-performance model OR health care quality measurement OR descriptive phenomenological approach OR qualitative methods OR Donabedian framework	958,014
Google Scholar	Value-model OR physician perception OR patient satisfaction OR health care outcomes OR fee-for-service model OR patient selection OR health care implementation OR pay-for-performance model OR health care quality measurement OR descriptive phenomenological approach OR qualitative methods OR Donabedian framework	13,500

PubMed	Value-model OR physician perception OR patient satisfaction OR health care outcomes OR fee-for-service model OR patient selection OR health care implementation OR pay-for-performance model OR health care quality measurement OR descriptive phenomenological approach OR qualitative methods OR Donabedian framework	731,017
Walden	Value-model OR physician perception OR patient satisfaction OR health care outcomes OR fee-for-service model OR patient selection OR health care implementation OR pay-for-performance model OR health care quality measurement OR descriptive phenomenological approach OR qualitative methods OR Donabedian framework	2,006,121

Appendix B: Permission To Recruit

>>Text/image appears to be missing. Please address.<<

Appendix C: Permission To Use Hospital Space during Interviews

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Appendix D: Advertisement Draft (Paper and Electronic)

Want to share your feedback about the Bundled Payments for Care Improvement (BPCI) initiative?

A Walden University student is looking to evaluate the impacts of the BPCI initiative in **Fayetteville, Arkansas**. Participants will be asked to complete a **brief interview**, lasting 30 to 60 minutes, which will be conducted in a conference room **at the hospital**. Your feedback is **extremely valuable** for assessing the strengths and weaknesses of the BPCI initiative and can ultimately help to shape policy recommendations.

If you are a physician or a nurse practitioner, and are interested in this research opportunity, please contact **Okey Duru** at