ABSTRACT

MASON, LESLIE, ANN. A Delphi Approach to Understanding Personal Engagement and Disengagement in Doctors Working in Rural, Community Hospitals in the State of North Carolina. (Under the direction of Dr. Diane Chapman).

The passage of the Affordable Care Act catalyzed rapid changes in both the practice of medicine and how we pay for it and the effects have been largely negative on rural hospitals. Rural physicians carry heavy caseloads of chronically ill patients in settings with little access to specialty care which contributes to disengagement and ultimately turnover (Bipartisan Policy Center, 2018; MacKinney et al., 2011). The purpose of this study was to identify the facilitators and barriers to personal engagement and personal disengagement in rural, community hospitals in North Carolina at the individual, organizational, and system levels. This was achieved through the use of a three round Delphi with an expert panel comprised of 9 rural physicians and administrators. The research questions that follow were structured to reflect complex adaptive system theory, which was the lens for this study: a) What are the individual, organizational, and system-level elements that facilitate physician engagement in rural, community hospitals? b.) What are the individual, organizational, and system-level elements that facilitate disengagement in physicians in rural, community hospitals? c.) Which individual, organizational, and system-level elements contribute the most and least to physician engagement as determined by a panel of experts? and d.) Which individual, organizational, and system-level elements contribute the most and least to physician disengagement as determined by a panel of experts? The patient level was identified as a necessary level of the theoretical model. Twelve of 49 statements reached consensus and were concentrated in the individual and organizational facilitator categories. This suggests that efforts to address rural provider engagement can feasibly be approached at these levels. However, given the lack of Medicaid expansion in North Carolina, local, state, and federal intervention will be needed to address the challenges in providing rural health care in NC.
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A Delphi Approach to Understanding Physician Engagement in Providers Working in Rural, Community Hospitals in the State of North Carolina

by
Leslie Ann Mason

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APPROVED BY:

_______________________________
Dr. Diane Chapman,
Committee Chair

_______________________________
Tania Allen

_______________________________
Dr. Tuere Bowles

_______________________________
Dr. James Bartlett, II
Leslie Mason is a pediatric intermediate and intensive care trained nurse. She began her career at the Children’s Center at Johns Hopkins Hospital. After moving to North Carolina, she practiced in both academic and community settings where she began to notice systemic barriers in the health care system to providing excellent care. This prompted her to pursue doctoral studies with the goal of clarifying the obstacles and facilitators that health care workers face as they try to perform their professional roles each day. This study is the beginning of that process.
DEDICATION

For all of the health care workers delivering care in rural communities and for the communities who benefit from their commitment—this is for you.
ACKNOWLEDGMENTS

Many thanks to my chair Diane Chapman PhD, and my committee Tania Allen, Tuere Bowles PhD, and James Bartlett PhD, for their time and effort on my behalf. Starting and finishing this program would not have been possible without my husband Chris, who carried more than his share of the load these past 6 years . . . thank you for believing in me.
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CHAPTER 1: Introduction

Advances in science and technology are enabling people to live longer than ever before greatly impacting the field of health care. Sixty years ago, the capabilities of a doctor were limited to diagnosing an illness, informing a patient of his or her likely outcome, and providing supportive care while the illness ran its course (Gonzalo et al., 2017; Weisbrod, 1991). Today’s providers must have the ability to think across the continuum of care, generate and appropriately utilize evidence to guide practice, and adapt to a continuously changing reimbursement environment (DeVore, 2019; Adler-Milstein, Kvedar, Bates, 2014; MacKinney, Mueller, & McBride, 2011). These rapidly evolving expectations of the medical profession are occurring in the setting of health care reform efforts largely suited for well-resourced, urban health systems (Bipartisan Policy Center, 2018; DesRoches, Worzala, Bates, 2013; MacKinney et al., 2011).

This rapid evolution of the practice of medicine and how we pay for it are felt most acutely in rural America. Less than 10% of practicing doctors work in rural areas and geography presents a challenge to the delivery of health care services, as distance to care can be a barrier (Matthews et al., 2017; Dall, West, Chakrabarti, & Iacobucci, 2015; Chipp et al., 2011; MacKinney et al., 2011). It is estimated that 80% of the country is inhabited by approximately 50 million people or 20% of the total U.S. population (MacKinney et al., 2011). In rural areas of the country economic growth is low, poverty is high, and the ability to pay for and access health care is limited (Woodie, 2018; Frakt, 2018; Chipp et al., 2011). To compensate, physicians practicing in rural communities have to function in capacities for which they may not have formal training. This includes care coordination, social work, and specialty areas (Thach, Hodge, Cox, Parlier-Ahmad, & Galvin, 2018; Chipp et al., 2011;
Hancock, Steinbach, Nesbitt, Adler, & Auerswald, 2009). Rural physicians tend to carry heavy caseloads of chronically ill patients in settings with little access to additional health services like specialty care, which is largely concentrated in urban areas (Bipartisan Policy Center, 2018; MacKinney et al., 2011). Geography, limited resources, and heavy caseloads are contributors to disengagement and ultimately physician turnover (Thach et al., 2018; Chipp et al., 2011). In an effort to address these challenges and retain physicians, hospital administrators have begun to develop strategies to improve engagement for the physicians who continue to practice in rural hospitals (Lowe, 2012). For the purposes of this study, the researcher will use Kahn’s (1990) definitions of personal engagement and personal disengagement:

Personal engagement is the harnessing of a member of an organization to their work role; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performances . . . to promote connections to the work performed and to others. (p. 694)

Kahn’s (1990) premise for this definition was that in the context of a work situation, “people have dimensions of themselves that under the right conditions, they prefer to use and express” (p. 700) during the discharge of their duties. He goes on to further clarify that when people display personally engaging behaviors, they:

become physically involved in tasks, . . . cognitively vigilant, and empathetically connected to others in the service of the work that they are doing and in ways that display what they think and feel, their creativity, their beliefs and values, and their personal connections to others. (p. 700)
Personal disengagement is defined as “The simultaneous withdrawal and defense of a person’s preferred self in behaviors that promote a lack of connections, physical, cognitive, and emotional absence, and passive incomplete role performance” (Kahn, 1990, p. 701). When people show behaviors that demonstrate that they are personally disengaging, they do the tasks of their job at some distance from their preferred selves, which remain split off and hidden . . . they are physically uninvolved, cognitively unvigilant and emotionally disconnected from others in ways that hide what they think and feel, their beliefs and values, creativity, and personal connections to others. (Kahn, 1990, p. 702)

Research has demonstrated that hospitals with high levels of workforce engagement have better financial performance and provide higher quality care than their competitors (Decker, Mitchell, & Rabat-Torki, 2019; Lowe, 2012; Snell, Briscoe, & Dickson, 2011). Hospitals that performed well have the shared characteristic of staff that is engaged at all levels of care but it is engagement at the physician level that can transform a health care organization (Spurgeon, Clark, & Wathes, 2015; Denis et al., 2013). Hospitals and other health care organizations are challenged in their efforts to meaningfully address physician engagement because there is not agreement in the academic or healthcare industry research communities on the definition, facilitators, and barriers in the current literature, particularly as it applies to rural providers (Spurgeon, Clark, & Wathes, 2015; Snell et al., 2011).

The combination of a rapidly evolving health care environment, too few physicians practicing in rural areas, and the challenges of practicing medicine in a rural setting place stress on the doctors working in these communities (Matthews et al., 2017). As a result, rural community hospitals are looking to implement economical and sustainable solutions to keep
physicians fulfilled and connected to their work engaged. Understanding the role of physician engagement and the factors that both impede and contribute to it has emerged as a strategic area of focus (Spurgeon, Clark, & Wathes, 2015; Lowe, 2012; Snell et al., 2011).

**Statement of Problem**

Current practical and academic approaches to define and determine the essence of employee engagement are ongoing and both healthcare industry researchers and academics in the field of HRD are fractured in their approach (Cole, Walter, Bedeian, & O’Boyle, 2012; Rich, LePine, & Crawford, 2010; Shuck, 2011; Wefald & Downey, 2009; Wollard & Shuck, 2011; Zigarmi, Nimon, Houson, Will, & Diehl, 2009). Employee engagement (EE) is a concept that was made popular by the Gallup research organization in the late 1990s but it was W. A. Kahn, a management researcher, who first introduced the concept (Kahn, 1990). In the years since Kahn published his seminal definition, many researchers have extrapolated his work resulting in multiple conceptualizations and definitions of engagement including work engagement, employee engagement, job engagement, organization engagement, engagement and burnout, and engagement and satisfaction (Alfes, Shantz, Truss, & Soane, 2013; Maslach, Schaufeli, & Leiter, 2001; Rich et al., 2010; Schaufeli, Salanova, González-Romá, & Bakker, 2002; Shuck, Rocco, & Albornoz, 2011; Shuck & Wollard, 2010; Wefald & Downey, 2009; Wollard & Shuck, 2011; Zigarmi et al., 2009). Practically, this presents a challenging environment for researchers and hospital leaders to navigate how to best formulate a strategy to meaningfully engage physicians. There is a small body of literature that proposes solutions and strategies to approach physician engagement but none that have included the physician perspective on what it means to be engaged or the facilitators and barriers to engagement and disengagement in this work setting (Skillman et al., 2017; Snell et
al., 2011; Spurgeon, Mazelan, & Barwell, 2011). The problem that this study sought to address was how to foster engagement for physicians practicing in rural community hospitals in North Carolina. Hospitals are considered to be rural if they are a) in a nonmetropolitan county or b) in a metropolitan county but in an area that has a Rural Urban Community Area (RUCA) code of 4 or greater Rural-Urban Commuting Area Codes (U.S. Department of Agriculture, Economic Research Service; 2013). This study used a Delphi approach, which included convening an expert panel of physicians and administrators who identified and came to consensus on the facilitators and barriers to personal engagement and personal disengagement. There are gaps in the engagement literature and there is not a clear path from Kahn’s definition of personal engagement to that of employee engagement, therefore the assumption was made that the elements of rural physician engagement lie somewhere in between.

**Purpose of the Study**

There were three purposes of this study. The first purpose was to determine if the physicians on the panel agree that Kahn’s definition of personal engagement and disengagement applies to them in the context of their work. This was important because there is no agreed upon definition of engagement for physicians so it is necessary to establish consensus on a shared definition, which is foundational to this study. The second purpose was to identify the elements that facilitate and impede personal engagement and personal disengagement in rural, community hospital settings at the individual, organizational, and system levels. This was achieved through the use of a Delphi method, which convened a panel of experts, in this study physicians and hospital administrators, knowledgeable about a topic to consider the topic more thoroughly. The final purpose of this study was to gain
consensus from the expert panel on which facilitators and barriers contribute the most and the least to rural providers’ perceived level of personal engagement and disengagement.

A comprehensive understanding of rural provider engagement from the physician perspective and the administrators who support and structure the nature of physician practice was necessary to inform both academic and practitioner approaches. Since there is no consensus on the underlying elements of or the definition of physician engagement or disengagement, surfacing them from the perspective of those most qualified to discuss the topic can begin the process of unifying the field and identifying fruitful solutions. This was the intent of this study.

**Research Questions**

The following research questions guided this study:

1. What are the individual, organizational, and system-level elements that facilitate physician engagement in rural, community hospitals?
2. What are the individual, organizational, and system-level elements that facilitate disengagement in physicians in rural, community hospitals?
3. Which individual, organizational, and system-level elements contribute the most and least to physician engagement as determined by a panel of experts?
4. Which individual, organizational, and system-level elements contribute the most and least to physician disengagement as determined by a panel of experts?

**Theoretical Framework**

Complex adaptive systems (CAS) theory states that organizations are organic, living systems and that there are dynamic interactions occurring at points of intersection across the system (P. Anderson, 1999). The key to understanding a complex system lies in uncovering
how parts of the whole function at and between the individual, organizational, and system-levels. Important insights can be gained through a deeper understanding of the nuanced interactions across these boundaries (Institute of Medicine of the National Academies, 2012; Shuck, 2011; Anderson, Crabtree, Steele, & McDaniel, 2005; Anderson, 1999). There is a large body of literature that strongly supports the assertion that health care organizations behave as a CAS (Strumberg, 2018; Institute of Medicine of the National Academies, 2012).

Employee engagement literature is consistent with CAS theory in that engagement is complex and should be examined within the context of the individual, the organization, and the broader system. It is reasonable to suggest that physician engagement should be considered in these contexts as well. Because the research is lacking on the topic of physician engagement, a combination of employee engagement and a very small body of physician-specific engagement literature, was used to inform this study.

![Conceptual Framework](image)

*Figure 1. Conceptual framework.*
The conceptual framework for this study illustrates the barriers and facilitators to engagement and disengagement that converge at the provider level. It also attempted to identify where each falls on the continuum from engagement to disengagement by clarifying which contribute the most and least to physician engagement as determined by the expert panel.

As a result of recent health care reform and the development of new interventions and treatments, the U.S. health care system is now oriented toward the need to do more, know more, and offer more options to patients than at any point in our history (DesRoches, Worzala, Bates, 2013; Institute of Medicine of the National Academies, 2012). This puts tremendous pressure on hospitals to perform at high levels and compete for clinical talent. As the intermediary between the federal system and individual physicians, hospital administrators and physicians have the difficult job of determining how to operationalize regulatory requirements that result in the best care for patients. Their challenge is not an easy one as doctors are the primary revenue generators for health care services and as such it is vital to a hospital administrator and ultimately for patient care to make sure that they feel engaged and connected to their organization (Spurgeon et al., 2015; Lowe, 2012). At the individual level, the intersections of the organization and larger health care system are manifested. It is at this level that examples of Kahn’s definitions of personal engagement and disengagement are surfaced and potentially, the ability to gain a greater understanding of how to meaningfully address those factors to improve the overall health care system.

This study examined the factors that emerged at the intersection of the three levels of the health care system and how they manifested at the provider level to influence engagement
as defined by Kahn. Practically, it was important to determine where each factor identified by the expert panel falls on the continuum from engagement to disengagement.

**Research Methods**

The standard Delphi technique was the methodology used in this study. The Delphi technique is a research method that harnesses the power of a group of experts to solve complex social problems (Landeta, 2006; Steinert, 2009). Originally designed by scientists at the RAND Corporation in the 1950s, the Delphi technique aims to obtain consensus of a panel of experts on a specific topic by using several iterations of questionnaires and controlled feedback (Landeta, 2006; Steinert, 2009). The technique is particularly appropriate for examining topics that have little or no evidence base and are complex in nature (Franklin & Hart, 2007; Landeta, 2006). The delivery of health services is unpredictable and highly dependent on numerous interactions between individuals in different roles and in different settings. The nature of health research should be reflective of changing practice and the people who are responsible for delivery of health services, hence the decision to include physicians and administrators in this study (McDaniel, Lanham, & Anderson, 2009). The Delphi methodology lends itself to study rural physician engagement because of the rapidly changing nature of health care, and the limited knowledge available on this topic.

**Positionality statement**

My experience with the health care system began when I was 7 years old. I suffered severe burns and spent three weeks in the hospital. I remember feeling well taken care of by the nurses and providers and I think it was then that I subconsciously decided to become a pediatric nurse. I have spent the majority of my nursing career at large, nationally ranked,
academic medical centers (AMCs). In my most recent past role, I worked for an AMC supporting our rural community hospitals network and those were some of the most rewarding years of my career to date. I have the utmost respect for rural caregivers who face many challenges outside of their control and work tirelessly to deliver the best possible care to their community each day.

**Significance of the Study**

This study contributed to the HRD field as well as the practice of health care operations in three ways. This study was the first to apply the Delphi methodology to this topic. Including end users as participants is a significant contribution as the current health care landscape dictates that a different approach is needed to retaining and engaging physicians in a meaningful way; this is a key priority for hospital administrators which is why they were included in this study. Second, there is not agreement in the academic or practitioner community on the definition of physician engagement (Spurgeon et al., 2015; Snell et al., 2011; Rich et al., 2010; Shuck, 2011; Wefald & Downey, 2009; Zigarmi et al., 2009). Current efforts led by industry and consulting groups to address physician engagement are lacking in their scope and neither includes the perspective of practitioners in rural settings nor transparency in their methods (Shuck, 2011; Wefald & Downey, 2009; Zigarmi et al., 2009). This study addressed that gap. Finally, by gaining consensus on the definition and identification of factors that facilitate and impede PE, this study strengthens the approach to designing organizational efforts to achieve physician engagement for rural providers.
Limitations and Delimitations

Limitations

There were two major limitations of this study. First, because there are relatively few studies on this topic, this paper was informed by a small body of literature and as such may have made inferences that may not hold true in the future as more research is published. Second, the researcher made the assumption that employee engagement and physician engagement, specifically rural physician engagement, may be distinct constructs with different facilitating and limiting elements.

Delimitations

This study was concerned with engagement of physicians who practice in rural community hospitals in the state of North Carolina. The providers included in the expert panel may have had work or training experiences in other states or larger practice settings and the results may resonate for physicians practicing in these settings but that is not intentional. The criteria for selecting the expert panel is discussed in the methods section.

Definition of Terms

*Personal engagement*—as defined by Kahn (1990), personal engagement is the simultaneous employment and expression of a person’s “preferred self” (p. 700) in the task behaviors that promote connections to work and to others, personal presence (physical, cognitive, and emotional), and active full role performances. Kahn (1990) believed that people have different dimensions that they prefer to use given the right conditions and in expressing the preferred self that enables one to project be his/her real self.

*Personal disengagement*—as defined by Kahn (1990), disengagement is the simultaneous withdraw and defense of a person’s preferred self in behaviors that promote a
lack of connections, physical, cognitive and emotional absence, and passive incomplete role performance; to remove personal and internal energies from physical, cognitive, and emotional labors. In this state, a person is not able to project his/her real self when discharging role obligations.

*Rural*—as defined by the U.S. Census Bureau, rural is “the territory or population outside of an urbanized area which is one with a population density of at least 1,000 people per square mile; and surrounding census blocks with an overall density of at least 500 people per square mile” (U.S. Department of Health and Human Services, 2016).

**Chapter Summary**

The role of physicians in the context of the current health care system is rapidly changing (MacKinney et al., 2011). There is a lack of empirical evidence on the topic of rural physician engagement from the provider perspective. This study addressed this knowledge gap. This chapter presented a high-level overview of this study including a brief background on the topic, the problem and purpose statements, as well as the conceptual and theoretical frameworks. It also included the research questions, a brief description of the Delphi methodology, and significance of this study. In the following chapter, a comprehensive review of the literature is presented.
CHAPTER 2: Review of the Literature

There were three purposes of this study. The first was to determine if the physicians on the panel agreed that Kahn’s definition of personal engagement and disengagement applied to them in the context of their work. This was important because there is no agreed upon definition of engagement for physicians so it is necessary to establish consensus on a shared definition, which was foundational to this study. The second purpose was to identify the elements that facilitate and impede personal engagement and personal disengagement in rural, community hospital settings at the individual, organizational, and system levels. The final purpose of this study was to gain consensus from the expert panel on which facilitators and barriers contribute the most and the least to rural providers’ perceived level of personal engagement and disengagement.

This chapter contains five sections. It begins with the search strategy for the literature that is foundational to this study. Google Scholar, Web of Science, PubMed, SCOPUS, ERIC, and Business Source Complete databases were systematically searched using the following keywords: physician, engagement, rural, rural physician engagement, doctor engagement, employee engagement, and employee engagement and health care. The inclusion criteria were English language articles, peer reviewed journals, conference proceedings, unpublished manuscripts, and industry reports published between the years 1990-2017. See Appendix J for full search procedures. After completing the search, two reference librarians at two different academic libraries were consulted to be sure that the search was comprehensive. The librarian’s search was reconciled with the researchers search and no additional relevant articles were identified.
A survey of the current practice environment for rural physicians opens the chapter and provided context for the necessity of this line of research. Since there is not a large body of literature on physician engagement, employee engagement is the parallel body of research that this study draws from and it is the third section of the chapter. The existing literature on physician engagement is presented next and the chapter ends with a discussion of complex adaptive systems theory and how its application frames this research.

**The Current Practice Environment: A Complex System**

Complex adaptive systems (CAS) theory states that organizations are organic, living systems and that there are dynamic interactions that are interconnected so that one person’s actions modify the context for others (Anderson, 1999; Plesk & Greenhalgh, 2001). A CAS changes and reconfigures itself in order to adapt to challenges presented by its surroundings (Dooley, 1997; Holland, 1992). The ability to adapt, anticipate, aggregate behavior, and a nonlinear flow of information are the shared characteristics of a CAS (Dooley, 1997; Holland, 1992). What is of interest about a CAS in a health care setting is that at any given point in time, many different people in many different roles have to adapt together to achieve a good outcome for the good of someone else. This was consistent with Kahn’s (1990) findings that people derive a sense of meaning when their performance, “included rewarding interpersonal interactions with co-workers and clients” (p. 707).

The key to understanding a complex system lies in uncovering how people interact with each other across the boundaries within the system (Dooley, 1997). This study was interested in understanding how physicians become engaged or disengaged while functioning as the linchpin of the delivery of health care; they are the common intersection of all of the agents functioning in the CAS at the individual, organizational, and system-levels. Important
insights can be gained through a deeper understanding of the nuanced interactions across these boundaries (P. Anderson, 1999; R. A. Anderson et al., 2005; Dooley, 1997; Institute of Medicine of the National Academies, 2012; Shuck, 2011).

The inherent characteristic of a CAS is change. This is consistent with the state of the U.S. health care system since 2010. There is a large body of literature that strongly supports the assertion that health care organizations behave as a CAS (Institute of Medicine of the National Academies, 2012). Health care is contingent upon productive interactions across many boundaries, however the way that it is structured and funded is not conducive to the current rural practice environment (Kaufman, Reiter, Pink, & Holmes, 2016; Wright, Damiano, & Bentler, 2015; Plesk & Wilson, 2001).

The federal government has made efforts to stabilize rural health care since 1946 when the Hill-Burton Act enabled matching funds to build or expand rural hospitals. More than half of the projects funded through this legislation were allocated to rural communities (Iglehart, 2018; Watson, 2010). By 1977, Medicare and Medicaid, the federal entitlement programs that provide health care coverage for the elderly and the poor, were well established and the federally funded Rural Health clinic program was created to provide primary care to rural populations. Medicare and Medicaid play an important role in paying for health services in rural communities. Ten years later, the office of Rural Health Policy was established within the department of Health and Human Services (Iglehart, 2018). In 1999 and 2001, two landmark reports published by the Institute of Medicine called attention to the fact that both federal and private payers providing health insurance coverage were paying for care that was based on the volume of services provided, not the value or the quality of those services (Bipartisan Policy Center, 2018; Institute of Medicine, 2001).
During this same time period, the overall financial state of rural hospitals continued to be of concern for lawmakers as they realized that rural hospitals across the country were closing because of low patient volumes, outdated technology, declining population, and difficulty attracting and paying physicians who were consistently paid less than their urban counterparts (Bipartisan Policy Center, 2018; Watson, 2010). By 2001, policy makers began to consider how to address the volume versus value issue and ultimately decided that rural communities were not prepared to undergo an overhaul of the way that health care was delivered because further stabilization was needed. However, they did re-focus their efforts to enact several rural health initiatives under the Medicare Modernization Act (MMA) of 2003 (Bipartisan Policy Center, 2018).

What followed was several years of status quo, with Congress renewing the provisions of the 2003 MMA; practically for rural hospitals and doctors, a challenging financial situation unfolded. Medicare continued to reimburse rural hospitals and providers less than their urban counterparts which made it difficult to attract physicians, update infrastructure, and add new services based on community need putting them at risk for closing, and many did (BiPartisan Policy Center, 2018; Joynt, Nguyen, Samson, & Snyder, 2016; Alfero et al., 2014; Watson 2010). As rural communities lost major employers, there was a shift to small-businesses, part-time work, and lower wage jobs that did not provide coverage for health services. As a result, many became dependent on Medicare, Medicaid and paying out-of-pocket for care (Watson 2010). Stable health insurance coverage is a key element in maintaining a rural hospital’s viability, and recruiting and retaining physicians in rural areas to keep care local. After years of incremental progress, the environment was
favorable for legislators to address health insurance reform (Alfero et al., 2014; Watson, 2010).

The 2010 passage of the Patient Protection and Affordable Care Act (PPACA) accelerated new payment structures and new models of delivering care that were based on quality and patient outcomes, not volume of services provided. Hospitals were the largest recipients of federal health care dollars and also one of the first entities to experience rapid change from the PPACA (Knickman & Kovner, 2015). The portion of the law that had the most potential to positively impact rural hospitals was the expansion of the Medicaid program which would have reduced the amount of uncompensated care to hospitals and providers by expanding coverage to uninsured people (Kaufman et al., 2016). North Carolina chose not to participate in the Medicaid expansion offered under the PPACA and rural hospitals in this state continue to struggle to provide care for their communities (Lindrooth, Perraillon, Hardy, & Tung, 2018). The other major part of the law implemented in 2013 was Value-Based Purchasing (VBP) (Center for Medicare and Medicaid Services [CMS], 2013). This program withholding an increasing percentage of hospitals’ Medicare reimbursement with the opportunity to earn it back by meeting quality of care and customer-service metrics (CMS, 2013). If a hospital does poorly, it lost the money that is held back by the government (CMS, 2013). If it does well if can potentially earn back its portion and more based on national quality of care benchmark data (CMS, 2013). This is consistent with complexity-based thinking where goals are set and resources are distributed based on a whole system view moving away from the siloed model of care (Plesk & Wilson, 2001). Ultimately, most PPACA provisions were designed to have a larger impact on well-resourced
urban health systems, as rural hospitals did not have the infrastructure or resources to fully participate in the program (Alfero et al., 2014; Bipartisan Policy Center, 2018).

On the outpatient side, CMS set up a structure to test new payment and service delivery models. The Accountable Care Organization (ACO) is a contracted relationship between an insurer and a group of physicians (Knickman & Kovner, 2015). The contract required the participating providers to be responsible for cost, quality, and patient satisfaction for a specific population of patients (Randolph & Morrow, 2013). The idea is that by coordinating care and optimizing the workforce to function at their full capacity, duplication of services is reduced, health outcomes improved, and costs decreased (Knickman & Kovner, 2015; Randolph & Morrow, 2013). As it was tested, the ACO model was structured around characteristics of urban-based hospitals, and the potential for improved quality and patient outcomes that are the prominent drivers of these changes can be challenging for resource-constrained rural hospitals to implement (Alfero et al., 2014; MacKinney et al., 2011). There continues to be a level of uncertainty as to how these models will address these drivers and what efforts to operationalize the changes will mean for stakeholders. Given this uncertainty, many small and rural hospitals are choosing to engage in mergers and consolidation transactions in an effort to remain solvent. There is a growing body of evidence that substantiates the benefits of consolidation not only to patients, but also to the broader community. The realignment of services that maintain or increase access to care, access to capital to maintain or invest in facilities or technology, and improved operating efficiencies are a few of the benefits being realized (Guerin-Calvert & Maki, 2014).

The PPACA brought rapid change to our health care system. There are many levers being pulled at the local and national levels to encourage improvement, collaboration, and
coordination of care. As rural hospitals do their best to position themselves to be successful in a difficult healthcare landscape, they are looking for ways to adapt to the changes without incurring additional costs while simultaneously developing a competitive edge. One area that has taken hold over the past decade is the idea of employee engagement.

**Personal Engagement**

Employee engagement (EE) is a concept that was made popular by the Gallup research organization in the early 2000s but it was Kahn, a management researcher, who first introduced the concept of personal engagement (Kahn, 1990). According to Kahn (1990), personal engagement is the harnessing of a member of an organization to their work role; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performances . . . to promote connections to the work performed and to others. (p. 694)

In the years since Kahn published his seminal definition, many academic and industry researchers have extrapolated his work resulting in multiple conceptualizations and definitions of engagement. Practically, this presents a challenging environment for HRD professionals and organizational leaders to navigate. Academically, researchers continue to be concerned with defining and validating the concept, which has contributed to the lack of consensus (Shuck, 2011).

The aim of Kahn’s (1990) seminal research on personal engagement and disengagement was to produce a framework to explain the degree to which people are intentionally present when they function in their professional role. He drew on several researchers in the fields of sociology and psychology to build his framework, anchored by Goffman’s theory that people’s “attachment to and detachment from their roles varies” and is
fleeting (Kahn, 1990, p. 694). Goffman’s research did not have an organizational context, which is the gap that Kahn’s work filled. In defining personal engagement and disengagement, Kahn extended Goffman’s work and drew on Maslow’s hierarchy of needs recognizing that people need both self-expression and agency in their professional lives (Kahn, 1990, p. 694). Kahn’s engagement findings demonstrated consistency with Maslow’s model of self-actualization in that for Kahn, meaningfulness, safety, and availability influence how people “inhabit their role” (p. 703) with a goal of realizing one’s full potential (Kahn, 1990; Shuck et al., 2011). A final point of reference to Kahn’s (1990) work relevant to this study is the recognition that interpersonal, intergroup, and organizational contexts influence the way that people function in a work setting. This is consistent with complex adaptive systems theory, which was the lens that this study applied to understanding rural physician engagement. In a CAS there are many agents, each governed by his/her own set of rules. With each interaction, agents in the system participate in influencing the actions and ultimately the outcomes of all of the other agents with whom they come into contact (Holland, 1992; Plesk & Greenhalgh, 2001; Wilson & Holt, 2001). Physicians are the only part of the total health care system that can generate revenue, that is, be paid for services. It is the physician who is the consistent intersection of all of the parts of the complex health care system that remains constant. This was the rationale for choosing rural providers who have an additional layer of unique challenges for this study.

It is widely accepted that the concept of personal engagement was introduced by Kahn and has since been modified significantly from its original intent to suit many applications (Bailey, Madden, Alfes, & Fletcher, 2015). This has complicated the process of clarifying literature from which to draw parallels for the purposes of examining rural
physician engagement. Since this study used Kahn’s original definitions of engagement and disengagement, the work of researchers who built on his original definitions and constructs were identified. Three academic and one practitioner study were used to form the knowledge base from which parallels were drawn for rural physician engagement. Those authors are May, Gilson, and Harter (2004), Saks (2006), Macey and Schneider (2008), and Rich et al. (2010).

The May et al. (2004) study was the first to empirically test Kahn’s finding that three psychological conditions: meaningfulness, psychological safety, and availability are necessary for personal engagement to occur (Shuck, 2011). In their analysis, May et al. identified positive predictors of these three conditions and concluded that they are significantly related to engagement and an individual’s investment in their role (May et al., 2004). Similarly, Saks (2006) constructed two scales grounded in Kahn’s three psychological conditions to attempt to explain his model of antecedents and consequences of employee engagement. Saks (2006) agreed with the May et al. findings that engagement is role related. His findings also suggested that social exchange theory explains varying degrees of engagement when meaningfulness, availability, and safety are present as Kahn originally concluded but in Saks’s estimation, did not fully substantiate.

Both of these survey studies had a higher percentage of female respondents than male 86% and 52% respectively, whereas Kahn’s original qualitative study had a higher percentage of male respondents, 59%, than female. Both Saks (2006) and May et al. (2004) used self-reported data, which was a limitation in that it is difficult to infer causality. Consistent with Kahn, Saks (2006) justified employee engagement as having organizational and individual level impact. Regardless of the similar sample, both articles are consistent
with Kahn throughout their studies in that engagement is affected by context, is role related, and that psychological safety, meaningfulness, and accountability were necessary conditions of engagement.

Consistent with Kahn’s original work, Rich et al. (2010) carried forward the meaningfulness, safety, and availability framework and from their survey study, and identified antecedents to engagement. Rich et al. emphasized an important component of engagement— that it is an individual’s ability to be emotionally, cognitively, and physically present when discharging the duties of a role at the same time, which is the essence of engagement (Rich et al., 2010). The study sample consisted of 245 firefighters which is relevant to the current study because like physicians, firefighters perform a job that has severe consequences if a person is not engaged at some level.

Theoretically, Rich and colleagues expanded Kahn’s work by taking into account to what degree engagement was the vehicle to explain the outcome of role performance and established that it is engagement that explains the relationships between “individual characteristics, organizational factors, and job performance” (Rich et al., 2010, p. 617).

Practically, the findings of the Rich et al. study suggested that efforts to induce engagement can improve performance and engender an employee to the organization. They also suggested that the more one has a sense that the organization is committed and is aligned with an individual’s values, the higher the level of engagement is likely to be (Rich et al., 2010, p. 631). Finally, and of equal importance, the authors re-stated that engagement has been defined, and measured in multiple ways, which is an important consideration for practitioners when trying to assess, analyze, and address engagement; in other words, all
definitions and measurement tools do not necessarily map on to Kahn’s personal engagement definition in the same manner.

Macey and Schneider (2008) echoed the field that engagement has been defined and applied in numerous ways. In spite of this, they contended that engagement is not lacking in utility even though other concepts may have overlapping components (Macey & Schneider, 2008, p. 5). One relationship about which they are particularly clear is that engagement has been inaccurately conflated with satisfaction (Macey & Schneider, 2008, p. 7). This appears to have first occurred with Gallup organization researcher Harter when employee engagement and satisfaction were represented as a composite on the Gallup survey and engagement was used to define satisfaction (Harter, Schmidt, & Hayes, 2002; Macey & Schneider, 2008). Other authors have made this mistake likely because engagement can and has been considered a state, a trait, and a behavior, which is at the core of Macey and Schneider’s (2008) argument. What is helpful is their reference to Erickson’s work, which states that “engagement connotes activation whereas satisfaction connotes satiation” (p. 8); when satisfaction is measured in this way, it is not the same as engagement, but if it is assessed in a way that captures it as a positive affective state, then it can be considered a contributing factor to engagement (Macey & Schneider, 2008). This is consistent with Kahn’s seminal work and the way that he described an individual’s active involvement in role performance; in the act of being engaged, individuals do not just do something more, they are able to do something different, which is the differentiator (Kahn, 1990; Macey & Schneider, 2008).

Macey and Schneider (2008) offered a broad framework for understanding employee engagement by revisiting the existing literature and its related constructs. They close the
paper by reminding the reader of the important difference between conceptualizing EE and operationalizing it in the context of current inaccuracies and lack of consensus in the literature. Ultimately, they think that engagement is unique to each organization and once achieved, is difficult to replicate and a distinct business advantage (Macey & Schneider, 2008).

Together with Kahn’s original work, the four papers reviewed in this section are those that form the basis of engagement and how it is defined in this study. Despite a continued lack of a consensus definition and difficulty determining what engagement actually is and if it means the same thing across sectors, there appear to be four overarching areas of engagement literature have emerged: job engagement, employee engagement, engagement and burnout, and engagement and satisfaction (Shuck, 2011). A full analysis of each area is beyond the scope of this study but what is consistent is the challenge that organizations face as they invest considerable effort in attaining and measuring employee engagement (Alfes et al., 2013; Anitha, 2014; Shuck & Wollard, 2010). It was the goal of this study to clarify the concept as it relates to the personal engagement of rural community hospital physicians through the lens of CAS theory.

**Physician Engagement**

An organization’s ability to successfully recruit and retain employees is vital to the success of its core business (Lenaghan & Eisner, 2006). This is particularly true in healthcare where the business *is* the delivery of safe, reliable, high quality care (Lowe, 2012). The nature of the work requires high commitment and engagement levels to be successful (Mauno, Kinnunen, & Ruokolainen, 2007). Research has demonstrated that hospitals with high levels of workforce engagement have better financial performance and provide higher
quality care than their competitors (Lowe, 2012; Snell et al., 2011). Hospitals that perform well have the shared characteristic of staff that is engaged at all levels of care, but it is engagement at the physician level that can transform a system (Denis et al., 2013; Spurgeon et al., 2015). Despite the evidence that organizations with higher levels of PE experience improvement in patient safety and clinical operations, health care systems are challenged in their efforts to address PE because there is not a universally accepted definition, organizational approach, or measurement tool (Clark, 2012; Denis et al., 2013; Snell et al., 2011; Spurgeon et al., 2015; Spurgeon et al., 2011).

Spurgeon et al. (2011) are researchers in the United Kingdom’s National Health Service (NHS) and defined physician engagement as “the active and positive contribution of doctors within their normal working roles to maintain and enhance the performance of the organisation which itself recognises this commitment in supporting and encouraging high quality health care” (p. 115). As part of a broader initiative to enhance engagement of providers across the NHS, Spurgeon and colleagues (2011) created the Medical Engagement Scale (MES) to measure provider engagement. It is derived from the construct of employee engagement and grounded in this definition. The Spurgeon team’s definition had a focus on the improvement of the organization; this is consistent with the belief that large-scale changes are required across the health care system to engage physicians (Spurgeon et al., 2011). Clark echoed the need for a strategy that includes both structural and personal tactics to increase PE (2012). Results of the MES suggest that clinical quality and safety performance was improved when an organization with consistent leadership and a deliberate strategy to engage physicians was in place (Spurgeon et al., 2011). The NHS serves a rural population similar in size to that of the United States and the results of their physician
engagement efforts could have implications for understanding what drives engagement in the rural physician population (Adams, 2017; Spurgeon et al., 2011).

Snell and colleagues (2011) approached engagement by studying doctors in leadership roles. As hospitals and health systems include doctors in operational and administrative roles as a way to improve organizational engagement, physicians are finding that these roles require a skill set that they do not have (Clark, 2012; Denis et al., 2013; Snell et al., 2011; Spurgeon et al., 2011). Specifically, doctors are trained to treat individuals but in a leadership role, they have to shift their thinking to maximize resources to treat a population (Snell et al., 2011). Snell and team described the operational perspective of a physician leader as “the experience that some physicians have as being actively interested in the quality of their workplace, and are motivated to take an active leadership role to help improve that workplace” (p. 955).

This sample in this study had equal representation from urban and rural physicians in different types of practices across Canada, a country with a similarly sized rural population to the U.S.. Results indicated that both individual and organizational factors played a role in physician leaders level of engagement. From an individual perspective, choosing to be engaged in projects that improved patient care and acknowledgment for the effort and the “opportunity to make a difference” were consistent themes that illustrated why physicians in leadership roles chose to engage (Snell et al., 2011, p. 956). Bohmer (2012) reinforced this finding with his assertion that doctors ultimately control health care at the micro-system level and expend resources in the provision of care; their leadership is fundamental to improving the way that the health system performs.
Environmental and organizational factors such as the work environment, peer interactions, bureaucracy, and communication practices were cited as examples of reasons participants felt engaged or disengaged and are consistent with Kahn’s findings and CAS theory (Dooley, 1997; Kahn, 1990; Snell et al., 2011). The results of this study suggest that changes at all levels of the healthcare system (i.e., medical schools, hospitals, and individuals) are recommended to improve and sustain provider engagement (Snell et al., 2011). Like the Spurgeon study, these findings reinforce the idea that as physicians engage, clinical and operational improvements occur. Despite the evidence that organizations with higher levels of PE experienced improvement in patient safety and clinical operations, neither scholars nor practitioners agree on a definition, strategy, or measurement tool (Clark, 2012; Denis et al., 2013; Snell et al., 2011; Spurgeon et al., 2011). Based on this small body of literature, additional research is needed to determine what specific factors contribute or detract from PE for rural physicians.

**Rural Physician Engagement**

There is not a separate or proposed definition of PE for physicians practicing in rural community hospitals and the body of literature is limited. There are two elements in the available literature that describe sources of disengagement in rural community providers. Kahn defined personal disengagement as “the simultaneous withdrawal and defense of a person’s preferred self in behaviors that promote a lack of connections, physical, cognitive, and emotional absence, and passive incomplete role performance” (Kahn, 1990, p. 701). Furthermore,

When people show behaviors that demonstrate that they are personally disengaging, they do the tasks of their job at some distance from their preferred selves, which
remain split off and hidden . . . they are physically uninvolved, cognitively unvigilant and emotionally disconnected from others in ways that hide what they think and feel, their beliefs and values, creativity, and personal connections to others. (Kahn, 1990, p. 702)

The first enabler of disengagement is limited support resources. In rural areas economic growth is low, poverty is high, and resources are limited (Chipp et al., 2011).

What this means for rural physicians practicing in these communities is that they wear multiple hats and have to function in capacities for which they may not have formal training (e.g., a social worker or care manager; Chipp et al., 2011; Hancock et al., 2009). Consistent with CAS, the practice environment is integral to how agents function and a poorly resourced environment is a dissatisfier and an additional burden to an already overloaded physician (Dooley, 1997; Chipp et al., 2011).

A second element that presented a challenge to PE in rural hospitals is the decreased opportunities to gain additional training and keep skill sets current (Chipp et al., 2011). Rural physicians tend to be raised in small communities and gravitate to practice in similarly sized areas with some regularity (Hancock et al., 2009). As they transitioned from well-resourced medical training programs to a sometimes poorly resourced rural facility, there is a realization that they may be ill-prepared for practice in a rural setting (Chipp et al., 2011). The literature suggested that one way to overcome the burden of distance is to form a mutually respectful partnership with a larger healthcare system (MacKinney et al., 2011).

Having consistent remote support contributed to the rural provider’s ability to provide high quality care, which is a reported element of PE (Clark, 2012; Denis et al., 2013). It can also bring value in the form of opportunities to learn new skills and support for ensuring equitable
and safe care, and by extension, improve engagement (Chipp et al., 2011; Hancock et al., 2009).

Rural physicians wield considerable power and influence in their respective organizations and their communities—possibly more so than their urban counterparts because of the difficulty in recruiting to rural areas (Hancock et al., 2009). Their work influences the use of resources and determines plans of care that impact a community (McAlearney, Fisher, Heiser, Robbins, & Kelleher, 2005). Engagement strategies for providers who choose to practice in rural hospitals likely vary from those who practice in more urban settings. Further research is needed to establish a consensus definition of physician engagement and subsequently identify the barriers and facilitators for physicians practicing in rural settings.

Engagement by physician’s can transform the health care system (Denis et al., 2013). Despite the evidence that organizations with higher levels of PE experience improvement in patient safety and clinical operations, health care systems are challenged in their efforts to address PE because there is not a universally accepted definition, organizational approach, or measurement tool (Clark, 2012; Denis et al., 2013; Snell et al., 2011; Spurgeon et al., 2011).

There is a lack of research that explicitly addresses the potentially unique needs of physicians practicing in rural settings, not those in leadership positions or those who are interested in organizational improvement. This study used Kahn’s seminal work on personal engagement and the studies derived from it to begin to clarify the individual, organizational, and systemic factors that affect rural physician engagement and disengagement. An assumption was made that the contributing factors of rural physician engagement and
disengagement could be found by drawing on the available physician engagement and employee engagement literature and viewed through a complex adaptive systems theory lens.

This chapter covered five main areas: the current practice environment for physicians, context on the concept of employee engagement, the gaps in the research regarding the facilitators and barriers of engagement and disengagement in physicians practicing in rural community hospitals and complex adaptive systems theory as the lens for this study. The content in this chapter was used to guide the construction of the Round 1 Delphi questionnaire discussed in Chapter 3.
CHAPTER 3: Methods

This study used the Delphi methodology to identify barriers and facilitators to rural physician engagement. This chapter examined the origin and utility of the Delphi, advantages, disadvantages, and how the methodology was used in this study.

History and Utility of Delphi Design

The Delphi technique is a research method that harnesses the power of a group of experts to solve complex social problems (Landeta, 2006; Steinert, 2009). Originally designed by scientists at the RAND Corporation in the 1950s, the Delphi aims to obtain consensus of a panel of experts on a specific topic by using several iterations of questionnaires (Landeta, 2006; Steinert, 2009). The technique is particularly appropriate for examining topics that are complex in nature and have little or no evidence base, like rural physician engagement, or the evidence changes frequently (Franklin & Hart, 2007; Landeta, 2006; Okoli & Pawlowski, 2004; Thangaratinam & Redman, 2005).

There are three types of Delphi: classical, decision-making, and policy (Franklin & Hart, 2007). In a classical approach, the researcher seeks to establish a knowledge base about a specific topic (Landeta, 2006; Steinert, 2009). This is achieved through structured communication of a group of experts who provide insight on a complex problem in an effort to more clearly define it (Landeta, 2006). This is the approach that was used in this study. Similar to the classic Delphi, the decision-making type harnesses the knowledge of a panel of experts in order to encourage collaborative decision-making (Franklin & Hart, 2007). Finally, a policy Delphi is used for deeper exploration and brainstorming on a specific topic. It is the only type of Delphi that is not intended to reach consensus; rather, it aims to surface every
plausible option so that the group can determine the impact, consequences, acceptability, and feasibility of each one (Franklin & Hart, 2007; Gordon & Pease, 2006).

Despite the different aims of the three Delphi types, the basic elements of the method are consistent. A panel of experts is identified and convened but remain anonymous to each other. The first round of the Delphi established the panelist’s own ideas or beliefs about a topic by responding to several open-ended questions in either a questionnaire or interview format (Keeney, Hasson, & McKenna, 2011; Landeta, 2006). According to Gordon and Pease (2006), the first round helps focus subsequent rounds of the process by surfacing as many ideas as possible and then narrowing those ideas in each round based on the previous round’s responses. The process usually occurs asynchronously, although some authors have suggested that a one-round real-time process can be equally as successful as a multiple round Delphi (Gordon & Pease, 2006). Each participant should be given the opportunity to answer each question at least two times (Landeta, 2006). Panelists are provided a compiled but blinded document of all other participants’ responses prior to subsequent rounds and can choose to modify their initial replies or leave them as is (Steinert, 2009). This component of controlled feedback includes each expert’s response in relationship to others on the panel so that they have a sense of how the responses are developing and can include measures of central tendency and dispersion (Jones & Hunter, 1995; Keeney et al., 2011). Regardless of the type of Delphi, the use of an expert panel, multiple rounds with controlled feedback, anonymity of the panelists to each other, and the use of statistics to determine consensus are the shared characteristics of this research technique (Gordon & Pease, 2006; Keeney et al., 2011; Landeta, 2006).
Advantages of Delphi

There are several advantages to the Delphi method. First, there is no need for the panel of experts to be geographically co-located (Gordon & Pease, 2006; Landeta, 2006). This enables the researcher to identify and recruit experts without incurring the cost of transporting them to a central location or negatively impacting on their time—an important consideration for this study given the geography and physician schedule (Graham, Regehr, & Wright, 2003). A related advantage is that a typical Delphi is asynchronous. This allows the panelists to respond to the prompts and reflect on their own as well as the responses of the other panelists when it is convenient to them (Geist, 2010).

The promise of anonymity is advantageous to the method for several reasons. The first is that it permits the panelists to be explicit in their insights without fear of being judged by a peer (Franklin & Hart, 2007; Graham et al., 2003; Landeta, 2006). In combination with the asynchronous nature of the Delphi, anonymity decreases the tendency toward group think because the panelists are only known to the researcher; therefore, one strongly opinionated person does not have the forum to dominate the exchange of ideas (Franklin & Hart, 2007; Landeta, 2006; Steinert, 2009). Finally, the process is intended to be explorative in nature. This approach, coupled with the requirement of anonymity, promotes new knowledge generation and nontraditional ways of thinking about a particular topic (Steinert, 2009). The flexibility of the Delphi in terms of the options for different modalities for responses, its asynchronous nature, and the necessity of anonymity speak to advantages of the method.

Limitations of Delphi

Consistent with other research methods, the Delphi has several limitations. There is no widely accepted definition of an expert for Delphi purposes (Franklin & Hart, 2007;
Hung, Altschuld, & Lee, 2008; Landeta, 2006; Steinert, 2009). This presents a challenge because panel selection is vital to the validity of the consensus statements and the success of the study. To this end, the literature recommends that a researcher clearly describe the criteria for what constitutes an expert (Gordon & Pease, 2006). The selection of the panel also affects participation and retention across all rounds, particularly if those identified have a workload that limits their participation in the Delphi (Franklin & Hart, 2007; Keeney et al., 2011).

Another limitation of the Delphi is that there is a misperception that it is an easy method to apply. Researchers consistently report difficulty constructing the initial questionnaire, as well as their ability to manage the amount of data produced in each round (Franklin & Hart, 2007; Landeta, 2006). This is particularly true if the first round is conducted as an in-person interview, as the volume of qualitative data generated will be large (Keeney et al., 2011).

Lack of standards for sampling, saturation, and consensus are challenges for the Delphi, as there are no widely accepted procedures for these important elements (Clibbens, Walters, & Baird, 2012; Landeta, 2006; Steinert, 2009; von der Gracht, 2012). The responses from each round are handled only by the researcher, which introduces a concern for bias (Graham et al., 2003; Landeta, 2006). This suggests that the researcher has the ability to influence the responses. Despite these and other documented limitations, the Delphi method is widely recognized as an effective research method for generating new knowledge and facilitating decision-making (Gordon & Pease, 2006; Landeta, 2006; Steinert, 2009).
Study Design

The Delphi technique was selected for this study for two main reasons. The first is because rural physician engagement met the methodological criteria for use: the topic is complex, has little to no evidence base, and because of the volatility of the current practice environment, the evidence changes frequently (Franklin & Hart, 2007; Landeta, 2006; Okoli & Pawlowski, 2004; Thangaratinam & Redman, 2005). The flexibility of the method, specifically that the panel of experts does not need to be geographically co-located, was a second reason for selection (Gordon & Pease, 2006; Landeta, 2006). A related advantage is that the Delphi can be asynchronous. This allows the panelists to respond to the prompts when it is convenient for them (Geist, 2010). Since doctors and hospital administrators tend to work long days and have an unpredictable schedule, this feature of the Delphi was ideally suited for this study.

The Day and Bobeva (2005) Delphi structure was used to guide this study (see Figure 2). The original model was modified and populated with the process for this study. There were three phases in the original model: exploration, distillation, and utilization. In the exploration phase, planning of the Delphi, panel selection, and a pilot study occurred (Day & Bobeva, 2005, p. 107). The planning phase consisted of a literature review on the topic of barriers and facilitators to rural physician engagement. This was augmented by gaining informal input from rural physicians, those who would not be included on the expert panel to vet the purpose of the study and provide suggestions on how to optimize participation with the providers on the panel in order to retain them throughout the study. The selection criteria for the panelists occurred during the planning phase and finally, the preparation of the Round 1 semi-structured interview protocol was constructed.
Figure 2. Study design modified from Day and Bobeva’s (2005) original model.

The second stage of the exploration phase was panel selection. The recruitment process began utilizing the selection criteria from the planning section. This process ended once the participant goal was reached, and the experts were determined to meet criteria—
approximately 30 days. A profile of the final panelists was constructed and planning for the semi-structured interviews occurred.

The distillation phase included each round, data analysis of the rounds, and the decision point regarding whether to proceed or terminate. The objective of Round 1’s semi-structured interviews was to surface as many possible barriers and facilitators to PE as possible. The interview protocol was modified after the first three interviews, which functioned as the pilot. Data from all semi-structured interviews were analyzed, the data were summarized and fed back in a blinded manner to all panelists within 2 weeks of the final panelists interview. As the Delphi process dictates, this was an opportunity for panelists to modify responses after a review of all panelists’ responses. Modifications were incorporated and the Round 2 questionnaire was constructed from Round 1’s final responses. The objective of Round 2 was to rank the facilitators and barriers to rural PE identified in Round 1. Panelists were asked to categorize each facilitator and barrier at the patient level. They were then asked to rank the facilitators and barriers to PE within each category (individual, organizational, or system level) by order of greatest to least impact on rural PE. The responses were analyzed based on return rate, stability of responses, and consensus. The results were fed back to panelists for an opportunity to modify within 2 weeks of response of the final panelist’s submission. As the Delphi process dictates, this was an opportunity for panelists to modify their ranking after a review of all panelists’ responses. Modifications were incorporated and a determination was made as to whether or not there was consensus and the Delphi could be terminated or if it should proceed to Round 3. Round 3’s questionnaire incorporated modifications from Round 2.
The objective of round 3 was a refinement of Round 2. Panelists were asked to re-rank 2 categories of statements: organizational facilitators and health care system barriers which did not reach the threshold for per cent agreement. This was the end of the distillation phase.

The final phase was the utilization phase where the Delphi was terminated, final analysis of the data occurred, and a summary of findings was drafted and fed back to the panelists (Day & Bobeva, 2005, p. 107). This study was designed to have a maximum of three rounds. This was consistent with the literature’s recommendation for retention of participants as well as out of respect for the panelists’ irregular and demanding work schedules. Final analysis of the responses from Round 3 were analyzed and a summary of findings shared with the expert panel. The researcher performed additional analysis to determine congruency with the literature.

**Population and Sample**

Because this study involved human subjects, an IRB application was submitted to the NC State University IRB for approval prior to beginning the research. The target population was physicians practicing in rural community hospitals in the state of North Carolina and the hospital administrators who support their work. As is relevant to CAS theory, hospital executives act as intermediaries between different levels of the system and the providers. They also have the ultimate responsibility and accountability for the practice environment and the overall quality of services that are provided by the doctors, so they are very much invested and responsible to some degree for the level of engagement or disengagement a physician is experiencing. Experts were selected based on the criteria explained in the next section. The researcher obtained a list of all rural community hospitals in the state of North
Carolina meeting the federal rural criteria from the Shepp’s Center for Health Services Research. The list was used to identify and contact the CEOs of community hospitals in rural counties beginning with those closest in geography to Durham, as this is where the researcher was based, and working through the list going as far as the North Carolina border to obtain the appropriate panelists.

Entry to the hospitals was gained through an email to the chief executive officer (see Appendix A) for communication. He or she was invited to participate on the panel. After gaining entry, a brief presentation (see Appendix B) was delivered to the medical staff explaining the study and asking for both volunteers and nominations for participants who fit the criteria. Potential participants were asked not to identify themselves at the time of the presentation, but to contact the researcher via text message or the e-mail provided on the slide. The one-slide summary was then sent to the entire medical staff of the hospital by the medical staff services employee. This allowed the physicians to consider the study opportunity more fully. Once the participants were vetted against the inclusion criteria, the researcher sent an invitation to participate via e-mail and requested a good contact phone number. This communication (see Appendix C) provided an introduction to the researcher, a detailed explanation of the study, the Delphi protocol, the expected time commitment, how the results would be used, request to arrange the semi-structured interview, and contact information of the researcher for further questions or discussion. According to Keeney et al. (2011), providing this level of detail up front clarifies expectations for the participants and can lead to lower attrition rates throughout the study. The goal was to obtain 11 physician participants from different hospitals across the state, and five hospital executives. Each member of the panel was assigned a random number using the Excel® random number
generator as a unique identifier and maintained in a master document. Ultimately only 9 panelists were included on the panel.

Once participants were successfully recruited, an e-mail was sent that included the informed consent and the researcher’s contact information, a brief literature review on the topic of engagement, Kahn’s definitions of personal engagement and disengagement, and the open-ended questions for the interview portion. Once interest in participating was confirmed, the interviews were scheduled.

**Expert Panel**

Selection of an expert panel is the crux of the Delphi method. The importance of establishing appropriate selection criteria and managing retention cannot be overstated, as it affects the validity of the study (Day & Bobeva, 2005; Gordon & Pease, 2006; Hasson, Keeney, & McKenna, 2000; Hung et al., 2008; Keeney et al., 2011; Landeta, 2006; Okoli & Pawlowski, 2004). Given that the Delphi requires a panelist to be an expert on the topic of interest, random selection for inclusion is not appropriate (Clibbens et al., 2012; Keeney et al., 2011; Skulmoski, Hartman, & Krahn, 2007). Despite the fact that there is broad agreement on the significance of panel selection, there is less agreement about what constitutes an expert. General guidelines are as follows: a person with knowledge of and experience with the topic being explored, capacity and willingness to participate, solid writing ability, and experience with the topic under study (Hasson et al., 2000; Keeney et al., 2011; Okoli & Pawlowski, 2004; Thangaratinam & Redman, 2005). It is the responsibility of the researcher to identify relevant criteria for participation and justify the appropriateness of the panelists (Keeney et al., 2011; Thangaratinam & Redman, 2005). For this study, selection criteria for the physicians on the panel were as follows:
• The physician had practiced medicine in a rural setting for at least 2 consecutive years.

• He/she practiced at a rural community hospital in the state of North Carolina. This was a delimitation of this study because the researcher lived in central North Carolina.

• The physician could not participate if he/she was temporarily on staff, or if he/she was a resident or medical student.

• Because health care is administered differently in each state, the physician should have lived in the state of North Carolina, preferably near the hospital where he or she was employed so that he/she had a better understanding of the health landscape of the community in which he/she practiced (Chipp et al., 2011).

• The physician had a current license to practice medicine in the state of North Carolina.

• The physician could have either an M.D. or a D.O. degree.

• The physician had the capacity and interest to participate in all rounds of the study.

• The type of medicine that a physician practiced did not matter for this study.

• The physician consented to sharing his/her CV/resume with the researcher.

• English was the physician’s primary language.

The selection criteria for the hospital executives on the panel were:

• The administrator had at least 2 years of experience in a leadership role in a rural community hospital in the state of North Carolina. This was a delimitation of this study because the researcher lived in central North Carolina.
• Because health care is administered differently in each state, the administrator should have lived in the state of North Carolina, preferably near the hospital where he or she was employed so that he/she had a better understanding of the health landscape of that community in which he/she practiced (Chipp et al., 2011).
• The administrator had the capacity and interest to participate in all rounds of the study.
• The role of the administrator was any of the following: a Chief Nursing Officer, a Chief Executive Officer, Chief Medical Officer, Chief Financial Officer, or a Chief Operations Officer.
• The administrator consented to sharing his/her CV with the researcher.
• English was the administrator’s primary language.

The literature varied in its recommendations of the optimal size of the expert panel, as composition is an equally important consideration to size (Thangaratinam & Redman, 2005). Multiple studies recommend between seven and 35 panelists (Day & Bobeva, 2005; Hung et al., 2008; Keeney et al., 2011; Okoli & Pawlowski, 2004; Thangaratinam & Redman, 2005). The goal for this study was 11 panelists: six physicians and five administrators; however, five providers and four administrators for a total of nine panelists was the final size of the expert panel.

Given the importance of retaining panelists across the study, three evidence-based tactics were implemented. Providing a high level of detail up front to panelists about the study can decrease attrition (Keeney et al., 2011). This included an introduction to the researcher, a detailed explanation of the study, the Delphi protocol, the expected time
commitment, how the results would be used, and contact information of the researcher. The research has also demonstrated that face-to-face interviews for the first round of a Delphi can decrease attrition across the entire study (Keeney et al., 2011). This was not possible for two of the MDs due to their fluctuating schedule, but it did not impact their participation in the study. Scheduling for the semi-structured interview occurred as soon as a panelist confirmed their intent to participate and returned a completed informed consent. Finally, Keeney et al. (2011) recommend timely feedback to panelists after each round as a mechanism to maintain momentum. Panelists for this study were told to expect a maximum of a 2-week turnaround time for the compiled results of each round. The interview transcripts were returned within 3 days of the interview taking place.

**Stability and Consensus**

There is no agreement on the number of rounds required to reach consensus in a Delphi study; however, there is broad agreement that the number of rounds is dictated by the stability and consistency of the responses from the panelists or the law of diminishing returns (Avella, 2016; Day & Bobeva, 2005; Keeney et al., 2011; McMillan, Kink, & Tully, 2016; Okoli & Pawlowski, 2004; Skulmoski et al., 2007; Thangaratinam & Redman, 2005). Stability is defined as the consistency of responses between each round and occurs when those responses are not statistically different from each other regardless of whether or not there is a convergence of opinion (Dajani, Sincoff, & Talley, 1979). This is the definition that was used for this study. It is important to note that Dajani et al.’s (1979) definition of stability refers to group stability, not individual stability of responses. For the purpose of this study and consistent with the Delphi methodology and Dajani et al.’s original work, the stability of the group response was preferred to stability of individual responses (Dajani et
al., 1979; Keeney et al., 2011; von der Gracht, 2012). It has been suggested that a researcher make the decision to terminate the study based on the level of consensus and stability (von der Gracht, 2012). In an effort to retain as many panelists as possible throughout the study, this Delphi, as previously stated, ended after three rounds.

Because there is no widely accepted or reported measurement for stability in Delphi studies, this study used three measures. The percentage change in the number of panelists responding in each round speaks to the retention of experts. The median rank of each statement regarding a facilitator or barrier to engagement aided panelists when they were given the opportunity to change their answers after each round. The median is preferable to the mean because outliers can pull the mean masking their true nature (von der Gracht, 2012). The third and final measure of stability is based on Chaffin and Talley’s (1980) recommendation that less than a 15% change in response for each statement between rounds should be used. In conjunction with consensus measures, the 15% change can be considered a criterion in the decision to end the Delphi (Keeney et al., 2011; von der Gracht, 2012).

As stated previously, there is no definitive measurement standard for determining consensus in a Delphi study; however, there is agreement on the use of percent agreement and measures of central tendency, but not which non-parametric statistics to apply (Diamond et al., 2014; Holey, Feeley, Dixon, & Whittaker, 2007; Schmidt, 1997; von der Gracht, 2012). The lowest level of percent agreement reported in the literature was 51%, with others reporting a range of 50-97% (Avella, 2016; Diamond et al., 2014; Keeney et al., 2011; von der Gracht, 2012). This study aimed to obtain definitive clarity on the top three barriers and facilitators to rural provider engagement, so an item with at least 75% agreement in Rounds 2 and 3 was considered reaching consensus. Because of the subjective nature of the Delphi,
the literature recommended additional measures of consensus; therefore, Kendall’s W was used in this study. Kendall’s W was selected because it is a non-parametric test that is useful for assessing agreement among raters, and can measure the strength and change in consensus (Diamond et al., 2014; Schmidt, 1997; von der Gracht, 2012). Others have suggested the use of a coefficient of variation, which is only useful when comparing ratio level data and thus was not appropriate for this study (von der Gracht, 2012). Another frequently utilized statistic to determine consensus in Delphi studies is the weighted Kappa (Diamond et al., 2014; Holey et al., 2007). This does not make sense in a Delphi, as Cohen’s Kappa only measures agreement between two raters and this study consisted of a panel of nine (Holey et al., 2007). Finally, the use of a weighted Kappa to determine within-subject agreement between rounds was not consistent with the overarching aim of a Delphi study; it is the level of agreement between panelists that is the intent (Holey et al., 2007).

**Round 1: Data Collection and Analysis**

This study used a traditional Delphi approach. Round 1 began with face-to-face interviews, when possible, but was ultimately based on panelist preference. Face-to-face interviewing is appropriate when the researcher is attempting to understand how participants are experiencing and making sense of their social context (Avella, 2016; Skulmoski et al., 2007). See Table 1 for full data collection and analysis plan.
Table 1

Data Collection & Analysis Plan

<table>
<thead>
<tr>
<th>Phase</th>
<th>Procedure</th>
<th>Product</th>
</tr>
</thead>
</table>
| **Exploration:** Identify participants and develop interview protocol | Selection of participants and development of interview protocol | - Rural NC hospitals (five physicians, four members of the administration; $N=9$ total)  
- Semi-structured interview protocol |
| **Distillation** | | |
| Round 1: Qualitative data collection | - In-person/telephone interviews to be audio taped | - Text data  
- Audio files |
| Qualitative data analysis | - Interviews were transcribed using Rev®  
- Data were coded x3 prior to thematic analysis to ensure consistency  
- Analyze across themes | - Codes and themes  
- Matrix of codes and themes by demographic information  
- Matrix of codes and themes by individual, organizational, system-level elements (Creswell, 2013; Creswell & Clark, 2011) |
| Round 2,3: Quantitative data collection | | Ranking based on panelists identification of top 3-5 facilitators and barriers to engagement in each round |
| Quantitative data analysis | - Determines degree of consensus and disagreement of responses  
- Identification of other trends in data that may have been present  
- Content validity with literature | - Percentage change in number of panelists in each round (von der Gracht, 2012)  
- Median rank of each facilitator and barrier of engagement and disengagement (von der Gracht, 2012)  
- Consensus of responses with less than a 15% change from Round 2 to 3 (Chaffin & Talley, 1980)  
- Kendall’s W (Diamond et al., 2014; Schmidt, 1997; von der Gracht, 2012) |
| **Utilization:** Integration of findings | Synthesis of quantitative and qualitative data | - Discussion  
- Implications  
- Determination of how the data answered the research questions |

Face-to-face interviews in the first round have been shown to increase retention across the entire study (Keeney et al., 2011). An interview protocol for Round 1 was pilot-
tested on the first three participants and is a recommended practice to strengthen the tool (see Appendix H; Creswell, 2013). The content of the interview protocol was modified based on results from these first three panelists. This is congruent with the design of the Delphi as the aim of Round 1 was to generate as many broad responses as possible to feedback in subsequent phases (McMillan et al., 2016; Thangaratinam & Redman, 2005). Toward the goal of surfacing as many facilitators and barriers to provider engagement as possible, the researcher asked the panelists to provide at least three examples in each domain: individual, organizational, and systemic. This is consistent with Schmidt’s (1997) recommendations. The researcher asked the panelists to describe what was meant by each example to ensure understanding so that at the completion of Round 1, the panelists’ responses could be grouped with like responses using their own words (Keeney et al., 2011; Schmidt, 1997). After all responses from Round 1 were collected, the data were analyzed. Audio recordings of the interviews were obtained from Rev® transcription service and were reviewed and edited by the researcher against the researcher’s notes to verify verbatim transcription. Once the researcher downloaded the transcribed files, the request to permanently delete files from the Rev™ server occurred. Data were transcribed, organized, and analyzed for themes. Prior to grouping the data into broader themes, the data were reviewed a second time to ensure coding and groupings were consistent (Creswell & Plano-Clark, 2011). In an effort to strengthen validity, the panelists were asked to verify that their responses were accurately represented and grouped appropriately (Okoli & Pawlowski, 2004; Schmidt, 1997). Only one panelist elected to make changes to the interview transcript.
Rounds 2 and 3: Data Collection and Analysis

Construction of the electronic Round 2 questionnaire in Qualtrics™ was dependent on responses from Round 1 and informed the content of subsequent rounds questionnaires (see Appendix J). The Round 2 questionnaire was in the form of statements derived from Round 1 that identified individual, patient, organizational, and systemic barriers and facilitators to engagement and disengagement. For illustrative purposes, an informal practice run of this study was conducted. Three providers and two nurses were asked Research Questions 2 and 3. The responses after coding are displayed in Table 2.

Table 2
Facilitators of Engagement and Disengagement

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Individual</th>
<th>Organizational</th>
<th>System</th>
</tr>
</thead>
<tbody>
<tr>
<td>#2 (Facilitate engagement)</td>
<td>2) Love job</td>
<td>1) Leadership</td>
<td>6) Changing system requirements</td>
</tr>
<tr>
<td></td>
<td>4) Prominence in community</td>
<td>3) Access</td>
<td>7) Partnership models</td>
</tr>
<tr>
<td></td>
<td>5) Accountability</td>
<td></td>
<td>9) Administrative barriers</td>
</tr>
<tr>
<td></td>
<td>10) Career goals</td>
<td></td>
<td>16) Role of system</td>
</tr>
<tr>
<td>#3 (Facilitate disengagement)</td>
<td>10) Career goals</td>
<td>8) Technology</td>
<td>17) Perform Multiple roles</td>
</tr>
<tr>
<td></td>
<td>12) Voice of provider</td>
<td>11) Skill of RN’s</td>
<td></td>
</tr>
<tr>
<td></td>
<td>13) Employed/aligned</td>
<td>13) Employed/aligned</td>
<td></td>
</tr>
<tr>
<td></td>
<td>14) Patient placement</td>
<td>14) Patient placement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15) Role of organization</td>
<td>15) Role of organization</td>
<td></td>
</tr>
<tr>
<td></td>
<td>17) Perform Multiple roles</td>
<td>17) Perform Multiple roles</td>
<td></td>
</tr>
<tr>
<td></td>
<td>18) Compensation</td>
<td>18) Compensation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>19) Mismatch in resources vs. care needed</td>
<td>19) Mismatch in resources vs. care needed</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>10</td>
<td>7</td>
</tr>
</tbody>
</table>

Once all of the panelists’ Round 1 responses were coded, they were grouped for the panel’s review. The panelists were asked to agree or disagree with an item that is either a facilitator or barrier to their engagement. They were asked to rank order the top facilitators and barriers to personal engagement and disengagement. If six of eight participants (75%)
ranked a facilitator or barrier, it was dropped from the next round. The panelists received verbatim, blinded feedback from the previous round of all panelist responses, with a median rank of each statement so that they had the opportunity to modify their responses. This process represented the controlled feedback mechanism of the Delphi (Day & Bobeva, 2005; Keeney et al., 2011; McMillan et al., 2016; Okoli & Pawlowski, 2004). The Round 2 responses were refined in additional rounds. The researcher used Microsoft Excel© to analyze the data from the ranking rounds. At the conclusion of Round 3, a determination was made regarding to what extent the research questions were answered, if the data collected were congruent with current literature, and what, if any data were missing (Creswell & Plano-Clark, 2011).

The data storage plan followed Creswell’s recommendations and included the following procedures: all data were stored on two memory sticks, a master list of data collected was maintained, and participants’ anonymity was maintained by assigning a random number to each participant. The audio, transcripts, interview protocols, and individual responses were destroyed when this study was submitted for defense (2013).

Rigor

Establishing methodological rigor in Delphi studies has historically been a challenge that can be attributed to the multiple types of Delphi (Hasson & Keeney, 2011). Several researchers consider trustworthiness to be a better “gauge of effectiveness and appropriateness of a Delphi” (Keeney, Hasson, & McKenna, 2011, p. 103). Trustworthiness is considered to be the sum of four component parts: transferability, credibility, confirmability, and dependability (Keeney, Hasson, & McKenna, 2011; Lincoln & Guba, 1985). Dependability is concerned with the fidelity of the collection of data and that the
process is transparent and rational (Hasson & Keeney, 2011; Cornick, 2006; Lincoln & Guba, 1985). The researcher utilized the process described in Figure 1 to collect data and maintained an audit trail of key decisions as recommended in the literature to contribute to confirmability as well as the overall trustworthiness of the study. Confirmability is the ability of the researcher to remain objective while carrying out the study (Hasson & Keeney, 2011; Lincoln & Guba 1985). Additional to adhering to the procedures in Figure 1, the researcher followed the data collection and analysis plan presented in Table 1. In the context of a Delphi study, credibility is the degree to which the panelists’ responses are accurately captured and represented (Cornick, 2006). For this study, the panelists’ own words were utilized to construct the ranking tool and the direct responses from each round were fed back to the panelists, enabling both the researcher and the participants to validate the responses (Keeney et al., 2011; Okoli & Pawlowski, 2004). Finally, transferability is the ability to generalize the findings across settings (Hasson & Keeney, 2011; Lincoln & Guba, 1985).

Educational research must be conducted with rigor and “present insights and conclusions that ring true to readers, educators, and other researchers” (Merriam, 1998, p. 199). Four strategies of validity were applied to this research study: triangulation, member checks, feedback, and participant involvement (Merriam, 1998). Triangulation was achieved by gathering data from multiple sources using multiple methods. Member checks took the form of inviting participants to review the transcribed copies of their specific interviews in order to ensure their positions were accurately represented. Feedback was achieved by having the committee chair review the study as it progressed. In addressing the need to incorporate participant involvement, the researcher was in frequent contact with the panelists via e-mail, phone, and text messaging to ensure that all of their questions were answered,
expectations regarding turnaround times for feedback were managed, and to demonstrate the value of their time and efforts.

The reliability of a Delphi study can be enhanced in two ways: the decision-making process, and comparison of panelists’ responses across similar studies (Keeney et al., 2011; McMillan et al., 2016; Okoli & Pawlowski, 2004). Regarding the decision-making process, the participants in this study did not meet face-to-face; it is thought that this decreases the tendency to be influenced by a specific panelist or by the herd mentality (Day & Bobeva, 2005; Keeney et al., 2011; McMillan et al., 2016).

Because this is the first Delphi to explore the facilitators and barriers to rural physician engagement, comparison of panelists’ responses across similar Delphi’s was problematic for this study. However, the findings of this study were compared with the current body of literature on rural physician engagement to determine congruence.

This chapter discussed the origin and application of the Delphi methodology to the current challenge of understanding the barriers and facilitators to personal engagement and disengagement for physicians practicing in rural community hospitals. It included a detailed process for carrying out the study including data collection and analysis procedures. Tables and figures detailing the structure of the study process, data collection, and analysis were also included. Finally, this chapter discussed methodological procedures for addressing and achieving rigor throughout the study.
CHAPTER 4: Findings

Introduction

Chapter 4 contains the study findings from the expert panel. The goal was to identify the top 3-5 facilitators and barriers to personal engagement and personal disengagement in rural providers. This chapter includes expert panel demographics, pertinent details related to the processes followed to collect and analyze the data by round, and the findings for both the interview and ranking portions of the study, which are organized by research question. The chapter concludes with measures of stability and consensus.

The expert panel consisted of two women and seven men, all highly educated. There were five physicians and four hospital administrators with a range of two to more than 20 years of practice in rural hospitals. At the time of the study, 66% of panelists lived within 20 miles of the hospital in which they practiced, and were almost equally split between mid and late-career professionals. See Table 3 for full demographic information for the expert panel.

Table 3
Summary Demographic Data for Expert Panel

<table>
<thead>
<tr>
<th>Gender</th>
<th>Administrator</th>
<th>Physician</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>1</td>
<td>1</td>
<td>22.20%</td>
</tr>
<tr>
<td>Male</td>
<td>3</td>
<td>4</td>
<td>77.70%</td>
</tr>
<tr>
<td>Total</td>
<td>4</td>
<td>5</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Career Stage</th>
<th>Administrator</th>
<th>Physician</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early (2-5 years)</td>
<td>0</td>
<td>1</td>
<td>11.10%</td>
</tr>
<tr>
<td>Mid-Career (5-15 years)</td>
<td>2</td>
<td>2</td>
<td>44.40%</td>
</tr>
<tr>
<td>Late-Career (&gt;15 years)</td>
<td>2</td>
<td>2</td>
<td>44.40%</td>
</tr>
<tr>
<td>Total</td>
<td>4</td>
<td>5</td>
<td>100.00%</td>
</tr>
</tbody>
</table>
Table 3

Cont.

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Administrator</th>
<th>Physician</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>MD</td>
<td>1</td>
<td>5</td>
<td>66.60%</td>
</tr>
<tr>
<td>MHA</td>
<td>2</td>
<td>0</td>
<td>22.20%</td>
</tr>
<tr>
<td>MBA</td>
<td>1</td>
<td>0</td>
<td>11.10%</td>
</tr>
<tr>
<td>MSN</td>
<td>1</td>
<td>0</td>
<td>11.10%</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>5</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Number of years practicing in rural hospitals

<table>
<thead>
<tr>
<th></th>
<th>Administrator</th>
<th>Physician</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-5</td>
<td>2</td>
<td>1</td>
<td>25.00%</td>
</tr>
<tr>
<td>5-10</td>
<td>1</td>
<td>2</td>
<td>37.50%</td>
</tr>
<tr>
<td>&gt;10</td>
<td>1</td>
<td>2</td>
<td>37.50%</td>
</tr>
<tr>
<td>Total</td>
<td>4</td>
<td>5</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Number of years practicing in rural NC hospitals

<table>
<thead>
<tr>
<th></th>
<th>Administrator</th>
<th>Physician</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-5</td>
<td>2</td>
<td>1</td>
<td>25.00%</td>
</tr>
<tr>
<td>5-10</td>
<td>2</td>
<td>2</td>
<td>37.50%</td>
</tr>
<tr>
<td>&gt;10</td>
<td>1</td>
<td>2</td>
<td>37.50%</td>
</tr>
<tr>
<td>Total</td>
<td>4</td>
<td>5</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Distance from home to current hospital

<table>
<thead>
<tr>
<th></th>
<th>Administrator</th>
<th>Physician</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;5 miles</td>
<td>1</td>
<td>2</td>
<td>33.30%</td>
</tr>
<tr>
<td>5-10 miles</td>
<td>1</td>
<td>0</td>
<td>11.10%</td>
</tr>
<tr>
<td>10-20 miles</td>
<td>1</td>
<td>1</td>
<td>22.20%</td>
</tr>
<tr>
<td>I do not live in the community</td>
<td>1</td>
<td>2</td>
<td>33.30%</td>
</tr>
<tr>
<td>Total</td>
<td>4</td>
<td>5</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

**Round 1: The Interview**

As discussed in Chapter 3, data for Round 1 were collected through the in-person interview protocol in Appendix H. Because there is not a universally accepted definition of provider engagement, it was foundational to this study to establish a working definition of personal engagement and personal disengagement that was agreeable to all panelists. Kahn’s definitions of personal engagement and personal disengagement were identified by the
researcher as the most relevant to the work of physicians (Kahn, 1990). Once a panelist met the inclusion criteria for the study, he or she was sent a brief overview of the study, as seen in Appendix G, that included both definitions. Before beginning each interview, the researcher reviewed the definitions with each panelist to determine his or her level of agreement that they accurately represented what it meant to them to be personally engaged and personally disengaged in the discharge of their duties. There was unanimous agreement that Kahn’s definitions fully and accurately captured what it was like to be personally engaged and personally disengaged when caring for patients. This round of the study had a 100% participation rate with all nine panelists responding. Round 2 had an 89% participation rate with eight panelists responding, and Round 3, the final ranking round, had six panelists respond for a response rate of 67% for a total attrition of 33% of the panel, as seen in Table 4.

Table 4

*Participation by Panelist for All Rounds*

<table>
<thead>
<tr>
<th>Panelist (Role)</th>
<th>Round 1</th>
<th>Round 2</th>
<th>Round 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panelist 1 (Admin)</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Panelist 2 (MD)</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Panelist 3 (MD)</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Panelist 4 (Admin)</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Panelist 5 (Admin)</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Panelist 6 (MD)</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Panelist 7 (MD)</td>
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<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Panelist 8 (Admin)</td>
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<td>X</td>
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</tr>
<tr>
<td>Panelist 9 (MD)</td>
<td>X</td>
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Percent change in # of panelists participating by round

<table>
<thead>
<tr>
<th>Round 1</th>
<th>Round 2</th>
<th>Round 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>89%</td>
<td>67%</td>
</tr>
</tbody>
</table>
The interview protocol in Appendix H was modified after the first three interviews, per the study protocol previously discussed as approved in Chapter 3. The experience mapping portion of the interview was removed based on panelist feedback, as they found the exercise redundant since in the course of the interviews, they explained in detail their experiences with patients and each other and how those interactions at the intersections with each level of the complex adaptive system affected their personal engagement and personal disengagement. After all panelists were interviewed, their verbatim transcripts were returned to them to review for accuracy and fidelity as seen in Appendix I. The researcher then reviewed and coded each interview three times on three separate days. There were 86 original statements that were grouped into 11 common themes: the state of rural health care in North Carolina, workforce challenges, resources, commitment to the community, compensation, regulatory and compliance concerns, work-life balance, medical training, leadership at the organization, payer issues, and provider-to-provider influence. All statements were reviewed and like statements whose meaning was the same were grouped and a broader theme was assigned. Statements from the themes with the highest frequency of responses were included in the final ranking exercise, as seen in Table 5. All language used in the statements in the ranking exercise were taken directly from the expert panelist’s interview responses and were not modified by the researcher. There were a total of 49 statements included in the ranking and categorization rounds of the study—17 in the individual level, 23 at the organizational level, five at the health care system level, three at the patient level, and one at the group practice level. Additional levels of the theoretical model of the complex adaptive system used to guide this study were identified by the panel
in round one and include the group practice as a secondary organizational level, and the patient level situated at the core of the model.

Table 5

*Round 1 Statements Organized by Theme*

<table>
<thead>
<tr>
<th>INDIVIDUAL (17)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Caring for Community</td>
<td>People that are from here, identify, they have sense of ownership and wellbeing in the community that’s very apparent. Those that have spent an extended time and had plans to practice community medicine, they don’t even necessarily have to be from here, if they’ve been practicing here for five, six, seven years, there’s a definite difference in ownership than a subset that you can tell is kind of clocking in and clocking out on a day to day basis.</td>
</tr>
<tr>
<td></td>
<td>I love the community. I live here. I love seeing my patients around. They love seeing me, that’s probably the reason I’m still here, is the patient interaction. Because you can make more money somewhere else, but you don’t get that kind of interaction in a bigger place.</td>
</tr>
<tr>
<td></td>
<td>I think that we are going to have to measure engagement and community involvement in different ways; going to rotary, chamber after hours, senior center, etc. because it is just not possible to make living in the community a requirement for providers anymore.</td>
</tr>
<tr>
<td></td>
<td>You would like to think that the care would be more personal, because a lot of these people are neighbors. But when you got physicians who don’t live in the community, that isn’t necessarily the case.</td>
</tr>
<tr>
<td></td>
<td>Physician engagement is not just about you and the hospital. It’s about your career, and where you go with the next step with your career. You could be part of the system, and rewarded for that.</td>
</tr>
<tr>
<td></td>
<td>There are a number of physicians that have long standing relationships in the community. And I think that increases their desire to be successful and for the organization to be successful. Because it’s part of where they are, it’s part of their life.</td>
</tr>
<tr>
<td></td>
<td>Maintaining any degree of legitimate engagement is challenging based on the small number of people who are positively engaged because there is just not enough to spread it out. You need the support of MDs at many levels, just one person is not going to be effective.</td>
</tr>
<tr>
<td></td>
<td>There are providers who feel a connection to the community and enjoy the challenge of trying to provide something that no one else has or no one else can in this setting.</td>
</tr>
<tr>
<td>MD to MD influence</td>
<td>There needs to be a medical staff that is supportive of each other.</td>
</tr>
<tr>
<td></td>
<td>There are physicians who are not consistently involved, but who will become involved and engaged when there are certain issues on the table.</td>
</tr>
<tr>
<td>Work/Life</td>
<td>As more and more millennials have moved into healthcare careers, they have really focused more on work life balance. And that has tended to push them into more of a time clock orientation if you will. So they come in, they do their job, and they go home, they spend the time with the family, spend time with friends, that type of thing. You don’t see as much of that relationship building at work with them as you used to with the older generations of providers.</td>
</tr>
<tr>
<td></td>
<td>Provide a mechanism to support physicians to identify what they need to be able to take care of themselves; to move away from what they may not have realized is an unhealthy commitment to the practice of medicine at the cost of their own well-being.</td>
</tr>
</tbody>
</table>
Table 5

Cont.

<table>
<thead>
<tr>
<th>INDIVIDUAL (17) (cont.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Workforce challenges</strong></td>
</tr>
<tr>
<td><strong>Compensation</strong></td>
</tr>
<tr>
<td><strong>Medical training</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ORGANIZATION (23)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Committed to the Community</strong></td>
</tr>
<tr>
<td><strong>Leadership</strong></td>
</tr>
<tr>
<td><strong>Medical training</strong></td>
</tr>
<tr>
<td><strong>Compensation</strong></td>
</tr>
</tbody>
</table>

| **Leadership** | Stability in the C-suite is important. |
| **Medical training** | For physicians, I think we’re trained to be the captain of the ship, not the whole organization but within your office or within the care team, So I think in order to perform well, you have to have the support staff perform relatively well also so that you are fully preforming in your role, and not other people’s roles. |
| **Compensation** | I think even as a surgeon I am a specialist but we don’t train in hysterectomies, we don’t train in C-sections anymore. There’s a lot of things that the prior decades of general surgeons did, we don’t do anymore, and if we did, in a place like this you could have a bigger impact. It’s just that now that we feel ill equipped to do it because we’re being trained in a way that emphasizes the sub-specialty more so than the generalist. But in these smaller places and rural places what you really need is a couple of generalists because that’s what you can afford and can do the most good with here. |

| **Leadership** | Stability in the C-suite is important. |
| **Medical training** | For physicians, I think we’re trained to be the captain of the ship, not the whole organization but within your office or within the care team, So I think in order to perform well, you have to have the support staff perform relatively well also so that you are fully preforming in your role, and not other people’s roles. |
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Table 5

Cont.

<table>
<thead>
<tr>
<th>ORGANIZATION (23) (cont.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The last leader we had wanted to get physicians to feel like they were an important part of the medical staff and provide them opportunities to be a leader, to move up, and to see that as part of their career trajectory down the road. And that kind of energy brought a lot of us into leadership.</td>
</tr>
<tr>
<td>Our current CEO does not talk to us about how taking on leadership roles fits into our career path, what roles there are for us to be leaders. It’s more just a matter of running the medical staff. So, I think it’s the individual people at the CEO level, that drive that.</td>
</tr>
<tr>
<td>MDs as Leaders</td>
</tr>
<tr>
<td>There is a core group of physicians that work here, that are just never going to do anything more than come to work, do their job, and go home. Because that’s who they are. That doesn’t make them bad. And doesn’t mean that they aren’t interested in how the organization’s doing. They just don’t have any interest in being the ones having the discussions.</td>
</tr>
<tr>
<td>There are not enough physician leaders to go around, there are fewer of them and they have to do everything, in terms of taking an active role in changing things.</td>
</tr>
<tr>
<td>The smallness can also work to foster engagement, because you’re not lost. You are a large percentage of the medical staff and kind of by default, you have a large impact.</td>
</tr>
<tr>
<td>Regulatory/Compliance</td>
</tr>
<tr>
<td>State of rural in NC</td>
</tr>
<tr>
<td>Financially, the people that are leaving rural communities, are the people with the money. So, your smaller towns have less tax dollars, more entitlement burdens, and fewer insured. So, the revenue flow to the hospital that can be turned into your personal reimbursement is lower, yet you’re sacrificing some of the quality of life to stay in a small town, because you feel like it’s the right thing to do. So, that’s going to be an increasing line of tension.</td>
</tr>
<tr>
<td>Workforce challenges</td>
</tr>
<tr>
<td>Specialists like orthopedic and general surgeons are a hard hire. It is hard to find somebody who wants to practice in a small town who’s going to be loyal to the hospital and to the county. You end up with applicants, but you end up with people who have had issues somewhere else.</td>
</tr>
<tr>
<td>Every time we see a high turnover of the nursing staff, and you bring in people that are fresh out of training, it erodes your faith and your ability to provide good care.</td>
</tr>
<tr>
<td>I would say that up until our hospital was bought, we had people that had been here their whole life and it felt like family, and that was big for engagement.</td>
</tr>
<tr>
<td>I had a sense that I could really help the hospital where I did not feel that way about my group practice.</td>
</tr>
</tbody>
</table>
Table 5

Cont.

<table>
<thead>
<tr>
<th><strong>ORGANIZATION (23) (cont.)</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Resources to get work done</td>
<td>Limited resources due to being a smaller rural hospital: meaning lack of specialists available for support</td>
</tr>
<tr>
<td></td>
<td>Ability to provide the level of care that sicker patients need</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>HEALTH CARE SYSTEM (5)</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NC Insurance/Payer issues</td>
<td>North Carolina’s decision not to expand Medicaid has an impact, particularly in rural communities.</td>
</tr>
<tr>
<td>State of rural</td>
<td>Rural hospital closures in non-expanded states are concerning. States like North Carolina are making it difficult for a doctor to be a small business entrepreneur. And I think in many ways our economy at a national level is built on small business entrepreneurs. So you take away their ability to operate and to generate revenue and value, and that’s not a good thing economically</td>
</tr>
<tr>
<td>Payer</td>
<td>As a physician looking at a patient, I think the payment system here can be difficult. Even if you have insurance you end up paying more and so patients fear to go to the hospital. So the patient who can’t afford care is worried and I feel those patients are labeled noncompliant when the reality is, they just cannot afford care. There are constant cuts to what providers are being paid so you have a system that is designed to not have anyone aligned or interested in doing anything more than what they are paid to do. Insurance is a challenge in terms of what doctors want to do for patients. One thing that physicians can do to take the next step in re-shaping health care is to be part of the conversation to change the way insurance works specifically the authorization for care. It’s a small component of the big picture but is front and center for providers and its low-hanging fruit—if it’s picked, it gives you some interest in climbing the tree.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>PATIENT (3)</strong></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Patient engagement with physicians can drive physician engagement with the organization. If they feel like they’ve got a patient population who is working with them, listening, wanting to get better, then the physicians are, I believe, more likely to go to the organization and work within the healthcare system to try to change things for the better, for the patient. And that’s really what it’s all about. Rural physicians may disproportionately experience patients who may be interpreted as not caring but actually they have a low medical IQ. It may relate to lack of resources, which is not necessarily the case. It’s easy to be engaged when you have a lot of resources at your disposal, when you have people to advocate for you, and you have a strong social support but harder to do so when you do not have those same capabilities. It’s really challenging to convince patients that when they don’t have something highly complex that they’re fine in their local facility, and that’s so hard to do because sometimes people just get in their mind that better care comes from these places (larger academic center).</td>
<td></td>
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<table>
<thead>
<tr>
<th><strong>GROUP PRACTICE (1)</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Compensation</td>
<td>Contracted and large practice groups should not work in rural as their incentives are misaligned (aggressive about maintaining high income for partners) and payer structure is not congruent; it’s a difficult fit.</td>
</tr>
</tbody>
</table>
Rounds 2 and 3: Ranking and Categorization

The results of Round 1 were the basis from which the Round 2 and 3 rankings were derived. The two subsequent ranking rounds were administered electronically using a tool built in Qualtrics®, as seen in Appendix J. The tool was reviewed by the researcher’s committee chair prior to distribution to the panel. It was distributed via individual e-mails to the expert panel, and the researcher’s cell phone was included in the event there were questions on how to use the tool. Three panelists including one physician and two administrators, required an e-mail reminder; otherwise, eight of the nine panelists completed the ranking tool within 7 days. Round 2 had an 89% participation rate with eight panelists responding, and Round 3, the final ranking round, had six panelists respond for a response rate of 67% for a total attrition of 33% of the panel, as shown in Table 5.

In Round 2, 11 statements reached consensus in that at least 75% of the responding panelists ranked these statements in the top 50% of all statements in each category (i.e., individual, organizational, health care system, and patient). Round 3 resulted in only one additional statement of consensus. As a reminder, Kendall’s W was selected because it is a non-parametric test, useful for assessing agreement among raters, and can measure the strength and change in consensus. Kendall’s W has range of 0-1 with a higher value indicating a stronger level of agreement. It is also appropriate to use with ordinal data (Weiler, 1995).

The organizational facilitators of personal engagement category reached strong consensus with a Kendall’s W of 0.73, individual facilitator a moderate consensus with a Kendall’s W of 0.57 and individual barriers a low to moderate consensus with a Kendall’s W of 0.33. During Round 3, only one additional statement reached consensus in that at least
75% of the responding panelists ranked these statements in the top 50% of all statements in the individual barrier and health care system categories as seen in summary Table 6. When analyzed separately, there was not a meaningful difference in agreement between the physicians and the administrator responses for any of the questions.

Table 6

*Summary of All Results Including Stability, Median Rank, and Consensus*

<table>
<thead>
<tr>
<th></th>
<th>Individual Facilitator</th>
<th>Individual Barrier</th>
<th>Organizational Facilitators</th>
<th>Organizational Barriers</th>
<th>Health Care System Barriers</th>
<th>Patient-Level Items*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of statements reaching consensus in R2</td>
<td>2 (1,4)^a</td>
<td>2 (3,9)</td>
<td>2 (1,3)</td>
<td>3 (1,2,6)</td>
<td>1 (1)</td>
<td>1 (1)</td>
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<td>Number of statements reaching consensus in R3</td>
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<td>Stability</td>
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<tr>
<td>Percent change in panelists’ responses from R1 to R2</td>
<td>1 (11%)</td>
<td>1 (11%)</td>
<td>1 (11%)</td>
<td>1 (11%)</td>
<td>1 (11%)</td>
<td>1 (11%)</td>
</tr>
<tr>
<td>% change in panelists’ responses from R2 to R3</td>
<td>0 (0%)^a</td>
<td>3 (33%)</td>
<td>3 (33%)</td>
<td>0 (0%)^a</td>
<td>33% (3)</td>
<td>0 (0%)^a</td>
</tr>
</tbody>
</table>

**Median Rank by Statement: Round 2 (Feedback for Panelists)**

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**Median Rank by Statement: Round 3 (Feedback for Panelists)**

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</table>

^a Numbers in parentheses indicate the number of panelists who were removed from the consensus results due to missing data.
### Table 6

**Cont.**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Individual Facilitator</th>
<th>Individual Barrier</th>
<th>Organizational Facilitators</th>
<th>Organizational Barriers</th>
<th>Health Care System Barriers</th>
<th>Patient-Level Items*</th>
</tr>
</thead>
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</table>

**STABILITY: Percent change for each statement between rounds 2 & 3***

| Statement 1 | NA<sup>b</sup> | -25 | NA<sup>b</sup> | N/A | NA<sup>b</sup> | NA<sup>b</sup> |
| Statement 2 | NA<sup>b</sup> | -25 | 4.5            | N/A | 45.5           |                |
| Statement 3 | NA<sup>b</sup> | -25 | 29.5           | N/A |                | -17            |
| Statement 4 | NA<sup>b</sup> | 25  | 0              | N/A | 0              |                |
| Statement 5 | NA<sup>b</sup> | 25  | 0              | NA<sup>b</sup> | -4.5           |                |
| Statement 6 | NA<sup>b</sup> | -12.5 | 42             | NA<sup>b</sup> |                |                |
| Statement 7 | NA<sup>b</sup> | 0   | 25             | N/A |                |                |
| Statement 8 | NA<sup>b</sup> | 25  | 0              | N/A |                |                |
| Statement 9 | NA<sup>b</sup> | 46.5 | N/A            | N/A |                |                |
| Statement 10| NA<sup>b</sup> | -12.5 | 12.5            | N/A |                |                |
| Statement 11| NA<sup>b</sup> | -9   |                | N/A |                |                |

**CONSENSUS (Kendall’s W)**

| Round 2 | 0.57 | 0.33 | 0.32 | 0.14 | 0.18 |
| Round 3 | N/A  | 0.20 | 0.73 | N/A  | 0.07 |

Statements that contributed most to personal engagement

| 1,4 | 1,3 | 1 |

Statements that contributed least to personal engagement

| 7,8,10 | 11 |

Statements that contributed most to personal disengagement

| 3,9     | 1,2,6 | 1,2 |

Statements that contributed least to personal disengagement

| 7,10 | 3,7 | 6 |

*Note. (Statements that reached consensus); *New category identified during study by panelists; **Individual Facilitators and Organizational Barriers reached consensus in Round 2 so were not put back to the panel for Round 3; ***Individual Facilitators and Organizational Barriers reached consensus in Round 2 so were not put back to the panel for Round 3 (<15% is consistent with stability and an indicator to end study); a No Round 3 for this category; b Consensus reached in Round 2.
A goal of this study was to identify the top 3-5 facilitators and barriers to rural provider personal engagement and personal disengagement using the Delphi method in three rounds. During the course of the analysis, it became clear that a cutoff point was needed to clearly determine the top facilitators and barriers; otherwise, all statements would reach consensus regardless of how they were ranked just by the nature of being included in the tool. Thus, statements ranked in the top half of each category was used as an arbitrary cutoff point to identify those ranked highest by the expert panel. Despite two ranking rounds, this panel reached consensus on more statements during Round 2 than Round 3, as Round 3 yielded little to no change or decreased consensus, as seen in Table 6. Specific results of the ranking exercise are reported in the context of the research question answered.

**Research Question 1: Items That Facilitate Personal Engagement**

Regarding Research Question 1, “What are the individual, organizational, and system-level items that facilitate physician engagement in rural, community hospitals?” individual responses are presented in Table 7. At the individual level, the panel identified two statements that facilitated personal engagement: physicians who have practiced in the community for an extended period of time and have built strong relationships with patients, and feeling a sense of responsibility for improving health as well as the success of the organizations with which they are affiliated were those that reached consensus.

**Table 7**

*Rank and Percent Agreement for Individual-level Facilitators of Personal Engagement*

<table>
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<tr>
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</table>
At the organizational level, an unexpected finding was the panel’s identification of group practice as an additional and parallel level in the CAS to the hospital. Regardless of
organization or group practice, the panel agreed on the following two facilitators to personal engagement. The organization has to tie what they do and their approach to caring for people to the needs of the surrounding community; they have to be a part of and engaged in the bigger picture. Living in the community and having a sense of ownership for the place you work was the second facilitator. Additional detail is presented in Table 8.

Table 8

Rank and Percent Agreement for Organizational Facilitators of Personal Engagement

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Number of Panelists Who Ranked the Statement in This Position

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Percent Agreement by Statement

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<td>2 of 8</td>
<td>5 of 8</td>
<td>3 of 8</td>
<td>2 of 8</td>
</tr>
</tbody>
</table>
At the system level, there were no facilitators of personal engagement identified by the expert panel.

The identification of the patient level in the complex adaptive system was an unexpected finding for this research question. Because discussions about adding this level to
the model were organic and identified as a gap by the panel in Round 1, only one statement occurred with enough frequency to be included in Round 2. The patient-specific items were included as categorization questions only since they were not clearly identified during the interview round as a facilitator or barrier. The panel categorized three patient level statements and since this was only a 3 round Delphi, there was not an opportunity to include in the ranking rounds. The item that the panel reached consensus on was that patient engagement can drive personal engagement particularly if a provider feels that they have a patient population who is working with them to get better. This statement reached 87.5% consensus, as seen in Table 9.

Table 9

*Patient Level Contributors to Personal Engagement and Disengagement*

<table>
<thead>
<tr>
<th>Panelist</th>
<th>Facilitator of Personal Engagement (1)</th>
<th>Barrier to Personal Disengagement (2)</th>
<th>Facilitator of Personal Disengagement (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Admin)</td>
<td>Patient engagement with physicians can drive physician engagement with the organization. If they feel like they’ve got a patient population who is working with them, listening, wanting to get better, then physicians are more likely to go to the organization and work within the healthcare system to try to change things for the better, for the patient. And that’s really what it’s all about.</td>
<td>Rural physicians may disproportionately experience patients who may be interpreted as not caring but actually they have a low medical IQ.</td>
<td>It’s really challenging to convince patients that when they don’t have something highly complex, that they’re fine in their local facility. That is hard to do because sometimes people just get in their mind that better care comes from these other places like a larger academic center.</td>
</tr>
<tr>
<td>2 (MD)</td>
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<tr>
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</tr>
<tr>
<td>8 (Admin)</td>
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</tbody>
</table>
In summary, findings for the first research question included two new levels of the CAS, patient and group practice as a parallel to the organization which for this study was considered the hospital. The individual facilitators of personal engagement were specific to being part of the community by building relationships, choosing to remain in rural areas, and having a sense of responsibility for helping your organization be successful.

At the organizational level, the approach to caring for people has to be aligned with health efforts in the broader community and taking ownership for the place one works were the organizational facilitators of personal engagement identified by the panel.

There were no health system facilitators of personal engagement, however there was one patient level facilitator that can drive personal engagement for providers which was having a patient population who is working with them to improve their health. Research question two will address those items that facilitate personal disengagement.

**Research Question 2: Items That Facilitate Personal Disengagement or are Barriers to Engagement**

Regarding Research Question 2, “What are the individual, organizational, and system-level elements that facilitate personal disengagement in physicians in rural, community hospitals,” Tables 10 and 11 provide the full detail for this section. At the individual level, the inability to maintain sustained levels of engagement because of the lack of peers who are also engaged at a similar level was an issue. Seeing colleagues leave rural communities for better resourced areas was also an area of consensus. Trying to convince patients that they do not need to be transferred out of the community for care was the patient level facilitator of personal disengagement as seen in Table 9.
Table 10

*Rank and Percent Agreement for Individual Facilitators of Personal Disengagement*

<table>
<thead>
<tr>
<th>Panelist</th>
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Frequency of How Each Statement Was Ranked by the Panel (e.g., 4 panelists ranked statement 3 #1)

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**Note.** Statement 1=I think that we are going to have to measure engagement and community involvement in different ways; going to rotary, or the chamber after hours because it is just not possible to make living in the community a requirement for providers anymore; Statement 2=You would like to think that the care would be more personal, because a lot of these people are neighbors. But when you have physicians who don’t live in the community, that isn’t necessarily the case; Statement 3=Maintaining any degree of legitimate engagement is challenging based on the small number of physicians who are positively engaged because there are just not enough to spread it out. You need the support of providers at many levels, one provider is not going to be effective; Statement 4=There needs to be a medical staff that is supportive of each other; Statement 5=There are physicians who are not consistently involved but who will become involved and engaged when there are certain issues on the table; Statement 6=As more and more millennials have moved into healthcare careers, they have focused on work life balance. That has tended to push them into more of a time clock orientation. They come in, they do their job, and they go home. They spend the time with the family, friends, that type of thing. You don’t see as much of that relationship building at work with them as you used to with the older generations of providers; Statement 7=The organization needs to provide a mechanism to support physicians to identify what they need to be able to take care of themselves; to move away from what they may not have realized is an unhealthy commitment to the practice of medicine at the cost of their own well-being; Statement 8=Part of the reasons for a provider not being the right fit in rural is more limited resources; we really only have that core ED and hospitalist group and limited specialties. If you have physicians who are used to having a variety of providers available for consultation and additional support, they are not going to be comfortable in this environment; Statement 9=You see everybody leaving for the bigger towns. You feel like you’re making a sacrifice to stay because we don’t have Starbucks and Target, and all the fancy stores. We don’t have the great schools. And yet, they want to pay you less because your market pays less so that part of it does play into it a little. That strains the loyalty, when you feel like you’re undervalued; Statement 10=There are a lot of things that the prior generations of general surgeons trained in that we don’t do anymore, and if we did, in a place like this, you could have a bigger impact. We feel ill-equipped because we’re being trained in a way that emphasizes the sub-specialty more so than the generalist. But in these smaller places and rural places, what you really need is a couple of generalists because that’s what you can afford and can do the most good with.

Regarding organizational and practice level barriers that facilitate personal disengagement, the panel reached consensus on three: having a portion of the medical staff not interested in going above and beyond, the sense that the hospital lost part of its identity when it was acquired or became part of a larger system, and finally that there are not enough physician leaders in rural community facilities to lead the medical staff. Complete detail can be seen in Table 11 below.
Table 11

*Rank and Percent Agreement for Organizational Facilitators of Personal Disengagement*

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Number of Panelists Who Ranked the Statement in This Position

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Table 11

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| 87.50 | 75.00 | 25.00 | 62.50 | 37.50 | 87.50 | 25.00 | 37.50 | 50.00 | 62.50 | 50.00 |

| 7 of 8 | 6 of 8 | 2 of 8 | 5 of 8 | 3 of 8 | 7 of 8 | 2 of 8 | 3 of 8 | 4 of 8 | 5 of 8 | 4 of 8 |

Note. Statement 1=There is a core group of physicians that work in rural that are just never going to do anything more than come to work, do their job, and go home. Because that’s who they are. That doesn’t make them bad. And doesn’t mean that they aren’t interested in how the organization’s doing. They just don’t have any interest in being the ones having the discussions; Statement 2=In this climate where smaller hospitals have been taken over by bigger parent companies, I think some of the fingerprint or personality of the hospital gets lost. You feel like you’re just one piece of the corporate puzzle; Statement 3=Our current CEO does not talk to us about how taking on leadership roles fits into our career path or what roles are available to us. It’s more just a matter of running the medical staff. It’s the individual people at the CEO level that drive that; Statement 4=The fact that our town doesn’t draw people very much because of crime and education, has been a big deterrent to get people to stay here and to be engaged. So it’s more than just the hospital itself, it’s the town, and the quality of life in the town, that makes it hard to keep people here; Statement 5=One of the things that are different about community hospitals versus at AMCs, are that they have employed Chiefs of Surgery, and Medicine, so there’s stability there. We have elected people in those roles and you rotate through. People that are doing it now have really never done it before. Because most people don’t live here anymore, it’s hard to get people to even want to do it. So the quality of the leadership of the medical staff is a real roller coaster ride; which reduces some of that bonding, some of that engagement that you get when you’ve bonded with everybody who’s involved in leadership; Statement 6=There are not enough physician leaders to go around, there are fewer of them and they have to do everything, in terms of taking an active role in changing things; Statement 7=It is not an active plan to be ‘absent’ as a provider, but the absence of a sense of encouragement to improve quality, or improve your practice from the employer, or a sense of trying to help you do better or grow has an impact; Statement 8=Financially, the people that are leaving rural communities, are the people with the money. Your smaller towns have less tax dollars, more entitlement burdens, and fewer insured. The revenue flow to the hospital that can be turned into your personal reimbursement is lower, yet you’re sacrificing some of the quality of life to stay in a small town, because you feel like it’s the right thing to do. So, that’s going to be an increasing line of tension; Statement 9=Specialists like orthopedic and general surgeons are a hard hire. it is hard to find somebody who wants to practice in a small town who’s going to be loyal to the hospital and to the county. You end up with applicants, but you end up with people who have had issues somewhere else; Statement 10=Every time we see a high turnover of the nursing staff, and you bring in people that are fresh out of training, it erodes your faith and your ability to provide good care; Statement 11=Limited resources due to being a smaller rural hospital: meaning lack of specialists available for support.

At the health system level, seven of eight panelists recognized the North Carolina legislature’s decision not to expand Medicaid was a barrier to engagement as was the separate but related issue of the inability for a physician to successfully operate an independent practice as shown in Table 12.
Table 12

*Rank and Percent Agreement for Health Care System Facilitators of Personal Disengagement*

Round 2 Statements Regarding Barriers to Personal Engagement

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| Sum of Ranks | 17 | 34 | 25 | 28 | 34 | 30 |
| Median Rank  | 2  | 5  | 2.5| 3.5| 4  | 4.5|

Number of Panelists Who Ranked the Statement in This Position

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Percent Agreement by Statement

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| Percent Agreement | 87.5 | 37.5 | 62.5 | 50 | 50 | 37.5 |

7 of 8 | 3 of 8 | 5 of 8 | 4 of 8 | 2 of 8 | 3 of 8
### Table 12

**Cont.**

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| Sum of Ranks | 15 | 18 | 23 | 22 | 21 |
| Median Rank | 2 | 3 | 4 | 4 | 4.5 |

### Number of Panelists Who Ranked the Statement in This Position

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Note: **Statement 1=** North Carolina’s decision not to expand Medicaid has an impact, particularly in rural communities; **Statement 2=** States like North Carolina are making it difficult for a doctor to be a small business entrepreneur. In many ways, our economy at a national level is built on small business entrepreneurs. So, you take away their ability to operate and to generate revenue and value, and that’s not a good thing economically; **Statement 3=** Rural hospital closures in non-expanded states like North Carolina are concerning; **Statement 4=** As a physician looking at a patient, I think the payment system here can be difficult. Even if you have insurance, you end up paying more. So patients are afraid to go to the hospital because they can’t afford care and are labeled non-compliant when the reality is that they just cannot afford healthcare; **Statement 5=** There are constant cuts to what providers are being paid so you have a system that is designed to not have anyone aligned or interested in doing anything more than what they are paid to do; **Statement 6=** An effective relationship with an academic or larger center is important for rural community hospitals.

<sup>a</sup> Removed in Round 3: Consensus reached in Round 2. NR means no response in this round.
In summary, the individual level facilitators of personal disengagement were the inability to sustain full engagement because of the lack of colleagues who are also equally engaged. Experiencing colleagues leaving rural communities for better resourced care setting was also an area of panel consensus. The final individual facilitator of personal disengagement was the constant need to convince patients that they do not need to be transferred out of the community hospital to a larger center.

Organizationally, having a medical staff who are not equally interested in going above and beyond their regular duties was a dissatisfier for the panel. Having the sense that a hospital lost part if its identity when it was acquired or became part of a larger system was also a strong contributor to personal disengagement. A gap in having enough physician leaders who really want to lead the medical staff was the final statement of personal disengagement identified at the organizational level.

Finally, at the health care system level, 84% of the panelists agreed that North Carolina’s decision against Medicaid expansion was a facilitator of personal disengagement. This impacts the second system level item, which was the inability of a physician in a rural community to maintain an independent practice. Research question three will address those statements that contribute most and least to personal engagement in rural physicians.

**Research Question 3: Elements That Contribute the Most and Least to Physician Engagement**

Which individual, organizational, and system-level elements contribute the most and least to physician engagement as determined by a panel of experts? As seen in summary Table 6, the statements that were found to reach the highest and lowest level of agreement based on the percentage of panelist agreement and were consistently highest and lowest
across rounds 2 & 3 are those that were identified to contribute most and least to rural provider personal engagement. These statements are identified in the summary Table 6 and specified in Tables 7 and 8 individual and organizational facilitators, respectively.

The items that contributed most to personal engagement at the individual level were statements 1 and 4 which reached 75% and 100% agreement respectively. Both of these statements described a sense of being an important part of the community and the sense of personal responsibility to do everything you can to take good care of your neighbors. The least relevant individual elements to personal engagement were statements 7 and 10 which both reached 0% consensus in question number one. Statement 7 spoke to physician colleagues who are perceived to not be consistently involved or invested and only come forward when an issue that they are interested in is on the table. Statement 10 addresses the need to have support staff perform to their fullest ability so that the provider can do the same.

Organizationally, statement 1 in the question related to organization facilitators of personal engagement had the highest level of agreement at 87.5%. This was about the importance of an acute care organization being aligned and integrated with the needs of the community being served. This is congruent with the organizational facilitator of living in the town and ‘owning’ the place where you work. Statement 11 reached only 25% and 16% agreement in Rounds 2 and 3 respectively contributed least to provider engagement. This was related to a provider’s ability to bring value to the hospital but not one’s group practice.

There was one statement at the patient level that contributed to provider engagement that was about feeling that the patients were equally engaged in their care and wanting to get healthier. This statement reached 87.5% agreement. There were no items at the health care system level that contributed to personal engagement of rural providers. Research question
four will discuss those statements that contributed most and least to personal disengagement for rural providers.

**Research Question 4: Elements That Contribute the Most and Least to Physician Disengagement**

Which individual, organizational, and system-level elements contribute the most and least to physician disengagement as determined by a panel of experts? Consistent with Research Question 3 and as seen in summary Table 6, statements that were found to reach the highest and lowest level of agreement based on the percentage of panelist agreement and were consistently highest and lowest across rounds 2 & 3 are those that were identified to contribute most and least to rural provider personal disengagement. The detailed statements are included in Tables 10, 11, and 12, and are specific to individual, organizational, and health care system barriers.

Statements 3 and 9 attained 87.5% agreement and contributed most to personal disengagement of rural providers. Statement 3 explained that the ability of a rural provider to maintain any degree of engagement is challenging based on the small number of physicians who are similarly engaged because there are just not enough of them on the medical staff. Statement 9 spoke to the concern about losing colleagues to more developed and better resourced practice markets which strains loyalty and causes those who remain in rural feel undervalued.

The lowest contributors to individual provider disengagement were statements 7 and 10 which both reached 25% and 33% agreement respectively in both Rounds 2 and 3. Statement 7 spoke to the need for a mechanism of support for provider well-being. Statement 10 described medical training and the sense of being ill equipped to be successful
in a rural community because of the emphasis on sub-specialty care more so than how to be a generalist.

Organizationally, statements 1, 2, and 6 contributed most to personal disengagement with 87.5% agreement for 1 & 6, and 75% for statement two. The core group of providers who come to work, do their job, and are not part of efforts to improve things was the thrust of statement 1. This item had synergies with statement 6 that identified the lack of physician leaders interested in taking an active role in changing things for the better. Statement two captured the sense of loss of identity when a rural hospital becomes part of a larger system.

Items 3 and 7 both had 25% agreement and were those that contributed least to personal disengagement. The current CEO does not have conversations with the physicians on how leadership fits into their career path or what roles are available to them. There is a sense those at the CEO level that drive these conversations. Item 7 described how physicians do not have an active plan to be 'absent' but the absence of a sense of encouragement to improve quality, or improve practice from the employer, or a sense of trying to help you do better or grow has an impact on one’s level of engagement.

The health care system level of the CAS, the North Carolina legislature’s decision not to expand Medicaid has impacted rural communities achieved 87.5% agreement and was the item that contributed most to personal disengagement. Establishing an effective relationship with an academic center was the item that contributed least at an agreement level of 37.5%.
Stability and Consensus

Because there is no widely accepted or reported measurement for stability in Delphi studies, this study used three measures. The percentage change in the number of panelists responding in each round, the median rank of each statement which was fed back to the panelists to inform them of how the panel ranked each statement when they were given the opportunity to modify their responses after each round, and the percentage change in response for each statement between rounds as recommend by Chaffin and Talley (1980). All of these measures are depicted in Table 6. The percentage change was indicated for three of the five categories that did not result in panel agreement on three or more statements, triggering a Round 3. Originally, this study proposed the use of Chaffin and Talley’s less than 15% change between rounds as an indicator of stability and when to stop the study (1980). This actually was of no consequence in this Delphi because this was only ever going to be a 3 round Delphi as suggested by Keeney, Hasson, & McKenna to retain panelists (2011). So regardless of when the <15% change occurred it may be an irrelevant measure of stability when the study has a pre-determined number of rounds.

As previously stated, there is no definitive measurement standard for determining consensus in a Delphi study; however, there is agreement on the use of percent agreement and measures of central tendency, but not which non-parametric statistics to apply (Diamond et al., 2014; Holey, Feeley, Dixon, & Whittaker, 2007; Schmidt, 1997; von der Gracht, 2012). Because of the subjective nature of the Delphi, the literature recommends additional measures of consensus, therefore Kendall’s W was used in this study because it is a non-parametric test, useful for assessing agreement among raters, and can measure the strength and change in consensus (Diamond et al., 2014; Schmidt, 1997; von der Gracht, 2012).
seen in Table 6, the results indicate a high level of consensus for individual facilitators in Round 2 with a Kendall’s W of 0.57 and organizational facilitators in Round 3 with a Kendall’s W of 0.73. In Round 2, individual barriers reached low to moderate consensus of 0.33 and organizational facilitators reached a consensus of 0.32.

This chapter reported findings from three total rounds of this study. Because there is a dearth of evidence on this topic, a goal of this study was to identify the top 3-5 facilitators and barriers to personal engagement and personal disengagement in rural providers. Overall, 111 initial statements from the interview round were content analyzed and resulted in 49 statements organized into 11 themes that formed the basis of subsequent ranking tool. Two additional levels of the CAS were identified by the panel that were not included in the original theoretical model: patient and group practice.

Findings for research questions 1 were centered around the importance of the community to the provider and his or her sense of responsibility for staying and working to ensure the best possible care was delivered locally.

Research question two identified no health care system level facilitators of personal engagement only barriers. Statements in this question reflected the frustration of trying to retain both patients and colleagues in the community. The majority of the responses were related to the role that the organization played in having an imbalance of providers on the medical staff invested in the organization and the community, and a sense of lost identity when the hospital or group practice was acquired by a larger company. Finally, all of the system level barriers to personal engagement had a common thread of the NC legislature’s decision against Medicaid expansion and the negative impact it has had on their practice and rural hospitals in general.
Research question number three found that the statements that contributed most to personal engagement were those that aligned with that sense of ownership for caring for the community and having a patient population who was engaged. Those that contributed least were uninvolved colleagues, not being able to bring value to a group practice, and having support staff who are not performing to their full capacity.

Finally, research question four identified that colleague disengagement had an effect on personal disengagement for peers who leave to practice in more urban, well-resourced areas. This leaves fewer engaged physicians in the rural communities and little encouragement or ability to advance into other roles which leads to decreased engagement. Those items that contributed least to provider disengagement were those that referenced medical training that was incongruent with the nature of rural care, organizational support for well-being, and having a relationship with a larger academic center. Across all questions, there was no meaningful difference in agreement between the physicians and the administrator responses on the panel.

This chapter presented findings from all three rounds of the Delphi. Six statements met the stability criteria of a less than 15% change between rounds although it is unclear how relevant this measure is in a study with a predetermined number of rounds, and 12 of the 49 original statements reached 75% agreement among the expert panel. Measures of stability and consensus were also discussed and two categories reached consensus based on Kendall’s W. Implications for these findings will be analyzed and discussed in Chapter 5.
CHAPTER 5: Discussion & Conclusions

This final chapter includes a summary of previous chapters, an updated conceptual model based on the findings, conclusions and recommendations organized by research question, and study limitations.

Chapter Summaries

Chapter 1 laid the foundation for this study by demonstrating the gap in the literature and hence the need to begin to establish a body of evidence for this important topic. It introduced CAS as the theoretical framework and proposed a conceptual model to enable the reader to quickly visualize and understand the facilitators and barriers of personal engagement and disengagement. Finally, chapter one included the research questions, a brief description of the Delphi methodology, and significance of the study.

Chapter 2 began with a survey of the literature of the current practice environment for rural physicians and provided context for the necessity of this line of research. Since there was not a large body of literature on physician engagement, employee engagement was the parallel body of research from which this study drew from. The chapter ends with a discussion of complex adaptive systems theory and how its application framed this research.

In Chapter 3, an extensive review of the Delphi methodology and its application for this study was discussed. A detailed plan for executing the research was presented including pilot testing of the interview tool, panel selection and treatment between rounds, decision criteria, and measures of consensus and stability. Chapter 3 closed with a discussion of the methodological procedures for addressing and achieving rigor throughout the study.

Chapter 4 enumerated the results of the three round Delphi. A total of 49 statements were included and fell into 11 broad categories. Few statements met the stability criteria
between rounds, and 12 of the 49 original statements reached 75% agreement among the expert panel. Measures of stability and consensus were presented and two categories reached consensus based on Kendall’s W. Patient and group practice were new layers of the CAS identified by the panel.

**Conclusions and Discussion**

Despite the limited body of research, the goal of this study was to understand the barriers and facilitators to rural provider engagement. The purpose of this study was three-fold. The first was to identify a definition of personal engagement and disengagement that rural providers and administrators could agree applied to them in the context of their work. There is no agreed upon definition of engagement for physicians, particularly those in rural practice so it was necessary to establish consensus on a shared definition, which was foundational to this study. All agreed that Kahn’s 1990 definitions of personal engagement and personal disengagement accurately represented their sense of what it meant to be engaged or disengaged. Establishing a common definition was a small but important finding that has implications for further study of provider engagement.

The second purpose was to identify the elements that facilitated and impeded personal engagement and personal disengagement in rural, community hospital settings at the individual, organizational, and system levels. The third and final purpose of this study was to gain consensus from the expert panel on which facilitators and barriers contributed the most and the least to rural providers’ perceived level of personal engagement and disengagement. In all areas of the study, the threads of community and the economic changes that rural communities have experienced over the past 20 years are woven throughout the responses to
each research question. Discussion and conclusions from study results are presented below. Practice, research and policy recommendations will be addressed at the end of the chapter. The research questions that guided this study were:

1. What are the individual, organizational, and system-level elements that facilitate physician engagement in rural, community hospitals?
2. What are the individual, organizational, and system-level elements that facilitate disengagement in physicians in rural, community hospitals?
3. Which individual, organizational, and system-level elements contribute the most and least to physician engagement as determined by a panel of experts?
4. Which individual, organizational, and system-level elements contribute the most and least to physician disengagement as determined by a panel of experts?

Each research question sought to identify the individual, organizational, and system-level issues that facilitated and impeded physician engagement in rural, community hospitals in NC.

Findings

As discussed in the previous chapter, 49 statements grouped into 11 themes were the output of the interview round of this study. There were 17 statements that were specific to the individual level of the CAS, 23 organization-related statements, five at the healthcare system level, and three at the patient level. Overall, individual and organizational facilitators reached the highest level of agreement with a Kendall’s W of 0.57 and 0.73, respectively. Two additional levels of the complex adaptive system were identified by the panel: the patient and group practice, which required an update to the original theoretical model as seen in Figure 2.
There was unanimous panel agreement that Kahn’s definitions accurately captured what it meant to be personally engaged and personal disengaged at work. In rounds two and three, there was no meaningful difference in response agreement when analyzed by job category, i.e., administrators versus physicians, which suggested that the panel participants were closer in their assessment of the facilitators and barriers to rural provider engagement than they may realize. Key themes that were evident in the results of this study were the importance of community and the financial challenges that rural communities face. Both will be discussed in subsequent sections.

**Implications for Practice: Providers and Administrators in the Community**

What is of interest about a CAS in a health care setting is that at any given point in time, many different people in many different roles have to adapt together to achieve a positive outcome for the good of someone else. However, it is the physician who is the point of intersection for each of those roles in all levels of the CAS that remains constant. Doctors control health care at the micro-system level and determine how to expend resources in the provision of care; thus, their leadership and engagement is fundamental to the way health care is delivered (Trach, Hodge, Cox, Parlier-Ahmad, Galvin, 2018; Bohmer, 2012).

At the individual, organizational, and patient levels of the CAS, the importance of the relationship that rural providers in this study have with their patients, colleagues, and their communities cannot be overstated. Their sense of responsibility for improving the health of the people in their communities was a strong facilitator of their personal engagement. It is why they remain in rural practice. As one of the panelists stated “you can make more money somewhere else, but you don’t get this kind of interaction in a bigger place”. This finding is consistent with previous literature that identified the individual benefits of the power of
enduring relationships within the community and that engagement has organizational and individual level impacts (Thach et al., 2018; Saks, 2006). It also reinforces the value that this panel placed on spending time in the rural community in which the organization your work for is situated. A previous study by Thach and colleagues corroborated the value of understanding real-life issues facing rural communities and how to navigate the role of being a provider and a neighbor (2018). For leaders in rural hospitals, this has practical implications as they can help bring the community and the medical staff closer together in nontraditional ways as one of the panelists suggested, by carving out time during the work day for members of the medical staff to participate in the community health needs assessment process every three years, present to the rotary, or become a member of the local chamber of commerce, and participate in conversations with local and state legislators to advocate for rural community health.

The panel recognized the importance of organizational alignment of services with the health needs of the community. This was consistent with the Rich et al., study that found that the more an individual sensed that their organization was committed and aligned with their values, the higher their level of engagement was likely to be (2010). Another study supported the need for providers practicing in rural communities to be prepared to adapt their practice to ensure the needs of the patients in the community were being met (Thach, 2018). The addition of a patient level to the CAS as a facilitator of personal engagement demonstrated the importance of their role in the CAS. Panelists recognized that patient engagement spurs their own personal engagement which was consistent with Kahn’s (1990) finding that people derive a sense of meaning when their performance, “including rewarding interpersonal interactions with co-workers and clients occurs” (p. 707). Practically, these
findings suggest that physicians be included in the organizations strategic planning processes and engage with local health agencies to better understand their constraints to determine how to work collectively to care for a shared population.

The panel appreciated the changes in the idea of community across an evolving rural physician work force. They perceived that some of their colleagues are focused more on work-life balance and less on being involved in opportunities to solve problems to positively impact care, ultimately decreasing the frequency of interactions amongst the medical staff. When considered in the larger context, work-life balance could be a reason that providers engage or disengage. Previous studies have demonstrated that work environment, peer interactions, bureaucracy, and communication practices are reasons for both engagement and disengagement (Snell et al., 2011, Dooley, 1997; Kahn, 1990). Practically, this is an interesting time in health care where there are multiple generations working side-by-side, each with their own drivers and barriers to engagement (American Hospital Association, 2018). As a retention tool, it could be valuable for rural administrators to have regular conversations with different segments of their workforce to understand what those drivers and barriers are and implement tactics to address and to leverage to accelerate organizational change.

There were no facilitators of personal engagement at the health system level. This suggests that practically, efforts to facilitate provider engagement could be feasibly addressed at the individual provider and organizational/group practice levels by working with the community and medical staff to tie the ties tighter between them and the health care organizations providing services. Since it is difficult to attract doctor’s to rural communities,
perhaps different ways of bringing the community and the providers together to reinforce that sense of ownership and accountability to one another are needed.

**Implications for Practice: Economic Challenges for Providers and Administrators**

Across the individual and organizational categories, there was consistency in the responses with the national trend where the overall financial state of rural hospitals is of concern (Frakt, 2018; Lam, Broderick, & Toor, 2018; Woodie, 2018). Rural hospitals across the country are closing because of low patient volumes, outdated technology, declining population, and difficulty attracting and paying physicians who are consistently paid less than their urban counterparts (Bipartisan Policy Center, 2018; Watson, 2010; Woodie, 2018). The panel’s perspective demonstrated their concern at seeing colleagues leave their community for better resourced practice settings, contributing not only to their level of disengagement, but also their concern for fewer peers engaged at a similar level and not enough physician leaders available to lead the medical staff. There is evidence that demonstrates that quality and safety of care is improved when an organization has consistent leadership and a strategy to engage physicians (Spurgeon et al., 2011). This is compounded by the panels’ concern about having to convince patients to remain in the community for care. As one provider put it,

> It’s really challenging to convince patients that when they don’t have something highly complex, that they’re fine in their local facility. That is hard to do because sometimes people just get in their mind that better care comes from these other places like a large academic center.

With both colleagues and patients leaving the community, rural provider engagement and loyalty are easily strained. This study did not substantiate the research that suggested that
one way to off-set the challenges of providing care in a rural setting was to form a partnership with the a large health care system, typically an academic medical center which can provide an added layer of support (Denis et al., 2013; Clark, 2012; MacKinney et al., 2011). The expert panel ranked a relationship with a larger center as one of the least impactful items to their sense of disengagement.

North Carolina’s decision not to expand Medicaid under the PPACA was a strong facilitator of personal disengagement for this study’s expert panel. There are negative health and economic consequences for states that have not expanded and the expert panel in this study felt that acutely. Since 2010, approximately 90 rural hospitals have closed across the country due to financial struggles of lower incomes and higher rates of people without insurance which means that there are more people who cannot pay for care and less money the rural hospital receives for taking care of them (Frakt, 2018). In expansion states, large reductions in uncompensated care have been realized particularly in states with high rates of low income, uninsured people; the majority of hospital closures have also been in states that have not expanded the program (Frakt, 2018). Practically, this means that hospital leadership and physicians should invite their state and federal representatives into the community to help them understand the challenges they are faced with and what expansion could yield toward the financial health and stability of the community.

Changes in the reimbursement structure have also spurred a trend of consolidation and there are fewer and fewer rural NC hospitals and practices that remain independent. This too, weighed on the expert panels level of disengagement as they felt that “In this climate where smaller hospitals have been taken over by bigger parent companies, some of the fingerprint or personality of the hospital gets lost. You feel like you’re just one piece of the
corporate puzzle.” Given the financial uncertainty plaguing rural communities, rural hospitals are entering into mergers or being acquired outright to remain solvent. This is congruent with the literature that has found that the ability to access to capital, investment in facilities, and maintenance of services are all benefits of consolidation into a larger system (Frakt, 2018; Guerin-Calvert & Maki, 2014). Practically this suggests that when mergers or acquisitions occur, the integration process should include an assessment and plan for understanding the culture of the organization and how to retain or incorporate into the new corporate structure.

Overall, the findings of what drives personal disengagement at each level of the CAS; losing colleagues, patients, and declining economic conditions are difficult to address in isolation and will require a coordinated effort at all levels of the health care system.
Figure 3. Final Conceptual Model

**Note Engagement Statements:** I4=Individual Statement 4 There are a number of physicians that have long standing relationships in the community. That increases their desire to be successful for themselves and the organization. Because it's part of where they are, it's part of their life. O1=Organizational Statement 1 In a rural area, you have to tie what you do as an acute care organization to the needs of the community in which you are of service. P1=Patient Statement 1 Patient engagement with physicians can drive physician engagement with the organization. If they feel like they’ve got a patient population who is working with them, listening, wanting to get better, then physicians are more likely to go to the organization and work within the healthcare system to try to change things for the better, for the patient. And that’s really what it’s all about. I1=Individual Statement 1 Physicians that have spent an extended time in the community who aren’t necessarily from here, but have been practicing here for five, six, seven years, there is a difference in ownership than those who are clocking in and out every day. O3=Organizational Statement 3 I think living in a town and owning the place you live and where you work, is huge for engagement.

**Disengagement Statements:** I3=Individual Statement 3=Maintaining any degree of legitimate engagement is challenging based on the small number of physicians who are positively engaged because there are just not enough to spread it out. You need the support of providers at many levels, one provider is not going to be effective. I9=Individual Statement 9 You see everybody leaving for the bigger towns. You feel like you’re making a sacrifice to stay because we don’t have Starbucks and Target, and all the fancy stores. We don’t have the great schools. And yet, they want to pay you less because your market pays less so that part of it does play into it a little. That strains the loyalty, when you feel like you’re undervalued. O1=Organizational Statement 1=There is a core group of physicians that work in rural that are just never going to do anything more than come to work, do their job, and go home. Because that’s who they are. That doesn’t make them bad. And doesn’t mean that they aren’t interested in how the organization’s doing. They just don’t have any interest in being the ones having the discussions. O6=Organizational Statement 6=There are not enough physician leaders to go around, there are fewer of them and they have to do everything, in terms of taking an active role in changing things. O2=Organizational Statement 2=In this climate where smaller hospitals have been taken over by bigger parent companies, I think some of the fingerprint or personality of the hospital gets lost. You feel like you’re just one piece of the corporate puzzle. HCS2=Health Care System Statement 2=States like North Carolina are making it difficult for a doctor to be a small business entrepreneur. In many ways, our economy at a national level is built on small business entrepreneurs. So, you take away their ability to operate and to generate revenue and value, and that’s not a good thing economically. HCS1=Health Care System Statement 1=North Carolina’s decision not to expand Medicaid has an impact, particularly in rural communities.
**Implications for Research**

Hospitals and health care organizations are challenged in their efforts to engage rural doctors because there is not a good understanding of what it is and what the facilitators and barriers are to attaining provider engagement. (Spurgeon et al., 2015; Snell, Briscoe, & Dickson, 2011). This study established 49 facilitators and barriers that were based on Kahn’s definitions of personal engagement and personal disengagement (1990). Additional research is needed to clarify if these facilitators and barriers are applicable to a larger group of rural providers and administrators or if they are only relevant in these rural hospitals. Further research is also needed to validate the use of Kahn’s definitions in the health care space with physicians, as there is a lot of work to engage physicians both in rural and urban practice settings but little of it is grounded by a common definition. Given the amount of data generated by a nine-person panel, a small research team may be a more appropriate approach for future studies.

The importance of the relationship between the rural community and its doctors cannot be overstated and although it has been documented in rural practice in general terms, it will be important for rural care in NC to gain a deeper understanding of this relationship and how it impacts the health of a rural population (Amalba et al., 2018; Thach et al., 2018; Woodie, 2018). Finally, additional research would be useful to inform strategic approaches to achieving and appropriately measuring provider engagement and disengagement using Kahn’s definitions and in the context of Macey & Schneider’s work in which they determined that engagement has been inaccurately conflated with satisfaction (2008, p. 7). Particularly that “engagement connotes activation whereas satisfaction connotes satiation” (p. 8); when satisfaction is measured in this way, it is not the same as engagement, but if it is
assessed in a way that captures it as a positive affective state, then it can be considered a contributing factor to engagement (Macey & Schneider, 2008). Definitive separation of these two concepts is important and has key implications for further defining and delineating rural provider engagement.

**Implications for Policy**

A healthy population is foundational to a community’s ability to grow, attract, and sustain an economically viable community (Thach et al., 2918; Woodie, 2018). Health care is contingent upon productive interactions across many boundaries, however the way that it is structured and funded is not conducive to the current rural practice environment (Kaufman, Reiter, Pink, & Holmes, 2016; Wright, Damiano, & Bentler, 2015; Plesk & Wilson, 2001). Medicaid expansion is a vital policy issue for both providers and hospitals in North Carolina, particularly for rural hospitals. According to the NC Rural Center, addressing the health care coverage gap is “possibly the most significant action that could be taken” to improve the health of North Carolinians (Woodie, 2018). Recent studies have demonstrated improved financials in the way of uncompensated care and significant reduction in the likelihood of rural hospital closure (Antonisse, Garfield, Rudowitz, & Guth, 2019; Woodie, 2018; Frakt, 2018). The literature is consistent with the feedback of the expert panel: taking action to expand Medicaid could help improve economic depression in rural communities so that health care agencies can care for more people, which would require employing more people, paying providers appropriately, and possibly slow the outmigration of rural health workers. Expanding Medicaid is a good first step toward improving economic conditions in rural NC, but the general assembly will need to monitor its implementation and proactively consider additional economic solutions to stabilize the rural counties in the state.
Despite the fact that it did not reach a high-level of agreement, training programs for rural providers are another policy consideration for legislators. One of the physician panelists stated

In a place like this, you could have a bigger impact…but we feel ill-equipped because we are being trained in a way that emphasizes specialty care but in these smaller places, what you really need is a couple of generalists because that is what you can afford and can do the most good with.

The literature is clear that the best predictor of successful practice in rural is upbringing and training in these communities but between 50-74% of practicing providers do not fit either of those categories (Thach et al., 2018). There are only 13 physicians per 10,000 people in rural areas of NC (Spero, 2019). This suggests that there are opportunities for legislators to consider changes to the current number of rural training programs and how to best prepare physicians for rural practice. An alternative and more timely option would also be expansion of the scope of practice for nurse practitioners to help fill the gap in available providers.

**Limitations**

There were several limitations to this study. The first was the small panel size. The second was that the study was informed by a small body of literature on this topic and as such may have made inferences that may not hold true in the future as more studies are published. Third, the expert panel may have had personal or organizational changes occur while the study was conducted that would influence participation and perspectives; thus, this study should be replicated in multiple rural hospitals to ensure that the findings are consistent and applicable. Finally, the researcher is new to the Delphi methodology and found it to be simultaneously flexible enough for this panel but a steep learning curve.
Conclusion

It has been 10 years since the passage of the PPACA. The practice of medicine and the ability of a health care organization to deliver care in rural communities continues to increase in complexity at every level of the system. There are many challenges to address and unfortunately, there is only so much that can be done by individuals and their respective health care organizations to foster physician engagement. The alignment of state and federal policies for medical training, reimbursement for care, insurance coverage, and economic development are also necessary. It is the researchers’ hope that this study provided a much needed rural provider perspective to the conversation about the individual, organizational, and systemic challenges that rural physicians and their colleagues face each day as they care for their neighbors.

It is clear that as the health care system in the United States continues to evolve, care delivery models in rural parts of the country will be affected in different ways than may be intended. Given the challenges that exist for physicians providing care in rural areas, it is important to examine provider engagement and the methods to achieve it.
References


Centers for Medicare & Medicaid Services’ health care innovation awards program.


APPENDICES

A. Communication to Hospital CEO
B. Power point presentation for the medical staff
C. Invitation to participate
D. Demographics
E. Informed consent
F. IRB approval
G. Brief overview of topic for panelists
H. Round 1: Semi-structured Interview protocol
I. Interview transcripts
J. Qualtrics Ranking Tool
K. Detailed literature search strategy
Appendix A

Communication to Hospital CEO

Dear (Insert Name here)

My name is Leslie Mason and I am a doctoral student at NC State. I am writing to request your permission to invite you and physicians who fit the inclusion criteria at your hospital in a research study on the topic of physician engagement. I would appreciate the opportunity to speak to your hospital’s medical staff about the study and gauge their interest in participating. I have attached a brief presentation for your review. If you have questions or require further information, please do not hesitate to contact me. My contact information is below.

Thank you for your time XXXXX

Best,

Leslie Mason

919-884-6807

lamason@ncsu.edu
## A Delphi approach to understanding physician engagement in doctors working in rural, community hospitals in the state of North Carolina: Study overview

**Purpose**

Physician engagement is not a well-defined concept. This study seeks to identify and define the facilitators and barriers to physician engagement and disengagement for providers practicing in rural, community hospitals in North Carolina.

**Methodology**

A Classic Delphi: A panel of experts in a field convened to examine topics that have little or no evidence base or an evidence base that is complex and changes rapidly.

**Panelists**

- Doctors (11) and hospital administrators (5) working in rural, community hospitals in the state of North Carolina
- The panelists are anonymous. Only the researcher knows their identity.

**Data Collection**

- **Time commitment ~ 2-3 hours over a 2-3 month period of time**
- **Begins with:** Semi-structured interview data 30 minute (face-to-face interview)
- **Round 2-4:** Ranking & Categorization 20 minute electronic tool for each round (1 round every 3-4 weeks until consensus reached)

**GOAL** is 80% consensus on the top 2-5 facilitators and barriers to provider engagement/disengagement

**Contact information**

If you would like to participate or have additional questions, please text the researcher:
Leslie Mason @ 919-884-6807 or e-mail lamason@ncsu.edu
Appendix C

Invitation to Participate in Study

Dear (insert name here),

Thank you for your interest in participating as an expert panelist in a study to better understand the topic of rural physician engagement. I am a nurse and a doctoral student at NC State University. I am interested in clarifying the facilitators and barriers to physician engagement in providers working in rural community facilities.

The study will be carried out using a Delphi methodology. The Delphi method convenes a panel of experts knowledgeable about a topic to consider it more thoroughly. All of the panelists are anonymous to each other. The only person who knows the identity of the panelists is the researcher. For Round 1, you will be asked to have a 30-minute in-person interview with the researcher at a location of your choice. This helps identify all of the possible barriers and facilitators to physician engagement. Your responses will be used to create the subsequent round’s ranking questionnaire which will ask you to rank, categorize, and comment on the barriers and facilitators from a larger list generated from all panelist’s responses. The interview will be recorded so that the researcher can transcribe your responses verbatim. Your responses as well as all other panelists will be sent back to you for your review and you may decide based on the answers of the full panel that you would like to change your initial response. Each round will be the same format with the number of responses narrowed further based on the level of agreement on the rankings from the earlier rounds. Again, you will be provided with the full panels blinded responses and can choose to change yours based on that feedback. Once all of the final answers are submitted to the
researcher, the Delphi process will close and additional analysis of the responses will take place. The final analysis will be provided to all panelists for their review and comment. Rounds 2-4 will be in an electronic format and can occur at a time and place of your choosing.

Please complete the enclosed/attached/following demographic information so that the researcher can determine if you meet the inclusion criteria for participation on the panel.

I would like to thank you for your time and consideration. If you have any questions please do not hesitate to contact me at lamason@ncsu.edu or 919-884-6807.

Best,

Leslie Mason

Doctoral Student

NC State University

919-884-6807
Appendix D

Demographic Sheet

Contact information:

Name: (write—in how you would like to be addressed)

Preferred e-mail address: (where you are most likely to receive and respond to the researcher)

Stage of Career: Early, (2-5 yrs of practice) Mid (5-15 years of practice), Late career (> 15 years of practice)

What is the best day of the week to reach you?

What is the best time of day to reach you?

1.) Do you have the capacity and interest to participate in all rounds of this study?

2.) Will you consent to sharing your CV with the researcher? Y/N

3.) Would you like to receive a brief write up of the results of this study?
Appendix E

Informed Consent

Institutional Review Board for the Use of Human Subjects in Research

North Carolina State University

INFORMED CONSENT FORM for RESEARCH

Title of Study: A Delphi Approach to Understanding Personal Engagement and Disengagement in doctors working in Rural, Community Hospitals in the State of North Carolina.

Principal Investigator: Leslie Mason
Faculty Advisor: Dr. Diane Chapman

What are some general things you should know about this research study?
You are being asked to take part in a research study. Your participation in this study is voluntary. You have the right to be a part of this study, to choose not to participate or to stop participating at any time without penalty. In this consent form you will find details about the study in which you are being asked to participate. If you do not understand something in this form it is your right to ask the researcher for clarification or more information. A copy of this consent form will be provided to you. If at any time you have questions about your participation, do not hesitate to contact the researcher(s) named above or the NC State IRB office as noted below.

What is the purpose of this study?
The purpose of this study is to identify and gain consensus on the facilitators and barriers to physician engagement and disengagement in rural, community hospital settings at the individual, organizational, and system levels.

Am I eligible to be a participant in this study?
You can take part in this study if you are a doctor who has practiced medicine in a rural setting for at least 2 consecutive years, are currently practicing as a physician at a rural community hospital in the state of North Carolina, are an administrator with at least 2 years of experience in a leadership role in a rural community hospital in the state of North Carolina, living in the state of North Carolina, preferably near the hospital where you are employed, have a current license to practice medicine in the state of North Carolina, have the capacity and interest to participate in all rounds of the study, are willing to share your CV/resume with the researcher, and speak English as a primary language.

You cannot participate in this study if: you are temporary or interim staff; are a resident or medical student, not a resident of the state of NC; do not have a current medical license to practice in the state of North Carolina and are not a hospital administrator for at least 2 years in a rural community hospital.
What will happen if you take part in the study?
If you agree to participate in this study, you will be asked to remain anonymous to all other panelists. The only person who will know your identity is the researcher. You will have a 30-minute in-person interview with the researcher at a location of your choice. The interview will be audio recorded. Your responses will be used to create questionnaire which will ask you to rank, categorize, and comment on the barriers and facilitators to engagement and disengagement. Your responses as well as all other participants will be sent back to you for your review after each questionnaire and you may decide based on the answers of the full panel that you would like to change your initial response. This process continues for a maximum of 4 rounds until the panel reaches consensus. All of the rounds of the study after the interview will be in an electronic format and can be completed at a time and place of your choosing.

Risks
There are no known risks to participating in this type of study. It will require approximately 3 total hours of your time over the course of approximately a 3 month time period.

Benefits
As a participant, there may be no direct benefit to your participation. Indirectly, your expert perspective will contribute to a better understanding of physician engagement.

Confidentiality
The information in the study records will be kept confidential to the full extent allowed by law. Data will be stored securely on a back-up hard drive, and two memory sticks. No reference will be made in oral or written reports that could link you to the study. After the study is submitted, all of the records will be destroyed. You will NOT be asked to write your name on any study materials so that no one can match your identity to the answers that you provide.

Compensation
You will not receive anything in return for participating in this study.

What if you have questions about this study?
If you have questions at any time about the study or the procedures, you may contact the researcher, Leslie Mason at 919-884-6807 or at lamason@ncsu.edu.

What if you have questions about your rights as a research participant?
If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact the NCSU IRB Office via email at irb-director@ncsu.edu or via phone at 1.919.515.4514.

Consent to Participate
“I have read and understand the above information. I have received a copy of this form. I agree to participate in this study with the understanding that I may choose not to participate or to stop participating at any time without penalty or loss of benefits to which I am otherwise entitled.”

Participants signature__________________________________ Date _______________
Investigator’s signature__________________________________ Date _______________
Appendix F

IRB Approval

Dear Leslie Mason:

Date: July 19, 2018
IRB Protocol 12008 has been assigned Exempt status
Title: A Delphi Approach to understanding physician Engagement in doctors working in rural, community hospitals in the state of North Carolina
PI: Chapman, Diane D.

The research proposal named above has received administrative review and has been approved as exempt from the policy as outlined in the Code of Federal Regulations (Exemption: 46.101. Exempt b.2). Provided that the only participation of the subjects is as described in the proposal narrative, this project is exempt from further review. This approval does not expire, but any changes must be approved by the IRB prior to implementation.

1. This committee complies with requirements found in Title 45 part 46 of The Code of Federal Regulations. For NCSU projects, the Assurance Number is: PWA0000349.
2. Any changes to the protocol and supporting documents must be submitted and approved by the IRB prior to implementation.
3. If any unanticipated problems or adverse events occur, they must be reported to the IRB office within 5 business days by completing and submitting the unanticipated problem form on the IRB website: http://research.ncsu.edu/clinical/compliance/irb/submission-guidance/

Please let us know if you have any questions.

Sincerely,

Mandy Driver
919.515.7515
IRB Analyst
ncsuoffice@ncsu.edu
Appendix G

Brief Overview of Topic for Panelists

Nowhere are the changes in the practice of medicine felt more acutely than in rural America. Less than 10% of practicing doctors work in rural areas and geography presents a challenge to the delivery of health care services, as distance to care can be a barrier (Chipp et al., 2011; Dall et al., 2015; MacKinney et al., 2011). It is estimated that 80% of the United States is inhabited by approximately 50 million people (MacKinney et al., 2011). In rural areas of the country, economic growth is low, poverty is high, and resources are limited (Chipp et al., 2011). To compensate, physicians practicing in rural communities have to function in capacities for which they may not have formal training (Chipp et al., 2011; Hancock, Steinbach, Nesbitt, Adler, & Auerswald, 2009). Rural physicians tend to have heavy caseloads of chronically ill patients in settings with little access to additional health services like specialty care, which is largely concentrated in urban areas (MacKinney et al., 2010). Geography, limited resources, and heavy caseloads are contributors to disengagement and ultimately physician turnover (Chipp et al., 2011). In an effort to address these challenges, hospital administrators have begun to explore strategies to improve physician engagement (Lowe, 2012). For the purposes of this study, Kahn’s definition of personal engagement: “the harnessing of organization members to their work roles; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performances and meaningfulness, safety, and availability are important contributing factors to engagement” will be used (p. 694). The simultaneous employment and expression of a person’s “preferred self” in the task behaviors that promote connections to work and to
others, personal presence (physical, cognitive, and emotional), and active full role performances. (p. 700)

Research has demonstrated that hospitals with high levels of workforce engagement have better financial performance and provide higher quality care than their competitors (Lowe, 2012; Snell, Briscoe, & Dickson, 2011). Hospitals that perform well have the shared characteristic of staff that is engaged at all levels of care but it is engagement at the physician level that can transform a health care organization (Denis et al., 2013). Hospitals and other health care organizations are challenged in their efforts to meaningfully address physician engagement because there is not agreement in the academic or industry research communities on the definition, facilitators, and barriers in the current literature, particularly as it applies to rural providers (Snell et al., 2011).

The combination of a rapidly evolving health care environment, too few physicians practicing in rural areas, and the challenges of practicing medicine in a rural setting places stress on the doctors working in these communities. As a result, rural community hospitals are looking to implement economical and sustainable solutions to keep physicians fulfilled and connected to their work (Lowe, 2012; Snell et al., 2011). Understanding the role of physician engagement and disengagement and the factors that both impede and contribute to it has emerged as a strategic area of focus (Lowe, 2012; Snell et al., 2011).
Appendix H

Round 1: Semi-structured Interview Protocols

This protocol is modified with permission from Dr. Anita Snell and colleagues’ (2011) study on engagement levels in physician leaders. Permission to use and modify this guide is included below.

Prior to both the administrator and provider interviews, the researcher will review Kahn’s (1990) definitions of personal engagement and disengagement to provide a focus for our discussion.

Personal engagement is the harnessing of a member of an organization to their work role; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performances . . . to promote connections to the work performed and to others. (p. 694)

Kahn’s (1990) premise for this definition was that in the context of a work situation, “people have dimensions of themselves that under the right conditions, they prefer to use and express” (p. 700) during the discharge of their duties. He goes on to further clarify that when people display personally engaging behaviors, they:
become physically involved in tasks, . . . are cognitively vigilant, and empathetically connected to others in the service of the work that they are doing and in ways that display what they think and feel, their creativity, their beliefs and values, and their personal connections to others. (p. 700)

Personal disengagement is defined as “The simultaneous withdrawal and defense of a person’s preferred self in behaviors that promote a lack of connections, physical, cognitive, and emotional absence, and passive incomplete role performance” (Kahn, 1990, p. 701). When people show behaviors that demonstrate that they are personally disengaging, they do the tasks of their job

at some distance from their preferred selves, which remain split off and hidden . . . they are physically uninvolved, cognitively unvigilant and emotionally disconnected from others in ways that hide what they think and feel, their beliefs and values, creativity, and personal connections to others. (Kahn, 1990, p. 702)

Research has demonstrated that hospitals with high levels of workforce engagement have better financial performance and provide higher quality care than their competitors (Lowe, 2012; Snell et al., 2011).

The protocol below is the original protocol. It was modified after the first 3 interviews in Round 1 in accordance with panelists feedback to remove the experience diagramming as each of them felt that they had already covered much of what was being asked in their original interview.

**Physician Protocol**

This study proposes that there are three main influences that determine engagement individual, organizational, and systemic. Individual refers to specific things about a person
(upbringing, training, experience, etc.) that contributes to a sense of engagement or disengagement. Organizational refers to the hospital in which you currently are employed and take care of patients. Systemic means the broader health care system (local, state, or federal). A reminder that the identities of the expert panelists are completely confidential so as not to bias the responses.

**Individual** (Probe/clarify as appropriate)

Could you share your area of specialty and how long you have practiced in a rural community?

What is it about you personally — part of your personality, your upbringing or your professional training — that causes you to feel *engaged* in your work? (Physician)

What is it about you personally — part of your personality, your upbringing or your professional training — that causes you to feel *disengaged* in your work? (Physician)

When you think about your physician colleagues, those that you work with regularly, would you say they tend to have more or less the same levels of engagement as you do? (Physician)

Do you see significant variation among your colleagues in terms of their levels of disengagement?

Among the colleagues you know who appear to be engaged, what would you say are the primary drivers that lead them to feel engaged?

Among colleagues that seem somewhat disengaged, what do you think are the primary drivers that lead them to be disengaged?

**Organization** (Probe/clarify as appropriate)

How much of your sense of engagement do you think comes from your immediate work environment meaning from the people that you work with, the relationships with team members, the values of the organization, or your ability to do the kind of work that you enjoy doing? (Physician)

What specifically about the organization fosters your sense of engagement? (Physician)

What specifically about the organization fosters your sense of disengagement? (Physician)
What are the things about this hospital or the work environment that cause you to feel less engaged, or to cause you to disengage? (Physician)

What kind of strategies can you think of that rural community hospitals might take to foster physician engagement? (Physician & Administrator)

**Health Care System** (Probe/clarify as appropriate)

Thinking about the larger health care system, are there elements that contribute to your sense of engagement? (Physician)

If yes, which of these have the strongest impact on your sense of engagement?

What are the aspects of the health care system that affect rural community hospitals specifically that foster your feeling(s) of engagement? (Physician)

What are the aspects of the health care system that affect rural community hospitals specifically that foster your feeling(s) of disengagement? (Physician)

**CAS** (Probe/clarify as appropriate)

If you were to weigh the influence of these three levels of the health care system: individual, organizational, and the broader health care system, which would you say has the strongest influence on your current state of engagement? (Physician)

If you were to weigh the influence of these three levels of the health care system: individual, organizational, and the broader health care system, which would you say has the strongest influence on your current state of disengagement? (Physician)

Are there other influences on your level of engagement that have not been mentioned?

What are top 3 facilitators of engagement and personal disengagement?

What are the 3 barriers that to engagement/disengagement in a rural community hospital?

What are the additional thoughts that you have based on your experience with engaged and disengaged physicians working in rural hospitals that you would like to share that you think is important for this study?
Administrator Protocol

This study proposes that there are three main influences that determine engagement individual, organizational, and systemic. Individual refers to specific things about a person’s (upbringing, training, experience, etc.) that contributes to a sense of engagement or disengagement. Organizational refers to the hospital in which you currently are employed and take care of patients. Systemic means the broader health care system (local, state, or federal). A reminder that the identity of the expert panelists is completely confidential so as not to bias the responses.

Do you think that there is something about the physicians practicing in this hospital that is unique to them that causes them to feel engaged in their work? Why or why not? (Administrator)

Do you think that there is something about the physicians practicing in this hospital that is unique to them that causes them to feel disengaged in their work? Why or why not? (Administrator)

Individual (Probe/clarify as appropriate)

Do you think there is something about physicians in general, part of the personality, or professional training that causes them to feel disengaged in their work? Why or why not?

Do you think there is something about physicians in general, part of the personality, or professional training that causes them to feel disengaged in their work? Why or why not?

When you think about the physicians that you interact with regularly, would you say they tend to have more or less the same levels of engagement? (Administrator)

Do you see significant variation among the physician staff in terms of their levels of engagement?

Do you see significant variation among the physician staff in terms of their levels of disengagement?

Among the physicians who appear to be engaged, what would you say are the primary drivers that lead them to feel engaged?
Among the physicians that seem somewhat disengaged, what do you think are the primary drivers that lead them to be disengaged?

**Organization** (Probe/clarify as appropriate)

How much of a sense of engagement do you think comes from the immediate work environment, i.e., the people that the providers are interacting with, the relationships among team members, or the general climate of the organization? (Administrator)

What specifically about this organization fosters provider engagement? (Administrator)

What specifically about the organization fosters a sense of disengagement for the providers? (Administrator)

What are the things about this hospital or the work environment that cause physicians to feel less engaged, or that cause them to disengage? (Administrator)

What kind of strategies can you think of that rural community hospitals might take to foster physician engagement? (Physician & Administrator)

**Health Care System** (Probe/clarify as appropriate)

What are the aspects of the health care system that affect rural community hospitals specifically that foster feeling(s) of engagement in the medical staff? (Administrator)

What are the aspects of the health care system that affect rural community hospitals specifically that foster the feeling(s) of disengagement in the medical staff? (Administrator)

What about the broader health care system would you change that could foster rural physician engagement and decrease disengagement? (Physician & Administrator)

**CAS** (Probe/clarify as appropriate)

If you were to weigh the influence of these three levels of the health care system: individual, organizational, and the broader health care system, which would you say has the strongest influence on the current state of provider engagement? (Administrator)
If you were to weigh the influence of these three levels of the health care system: individual, organizational, and the broader health care system, which would you say has the strongest influence on the current state of provider *disengagement*? (Administrator)

Would you agree or disagree that these are the three main determinants to physician engagement or disengagement? (Administrator)

Are there other influences on the level of provider engagement that have not been mentioned?

What are the additional thoughts that you have based on your experience with engaged and disengaged physicians working in rural hospitals that you would like to share that you think is important for this study?

**Exercise: Experience Diagramming** (Probe/clarify as appropriate)

During this exercise, I would like you to tell me about an ideal patient care situation that you were a part of that you walked away from thinking or feeling personally engaged/disengaged. While you do this, I will map the process and ask you to validate at the end that all interactions across different people and levels of the system, as well as breakpoints or places where opportunities to improve, were noted. (Physician)

During this exercise, I would like you to tell me about an ideal patient care situation or interaction with a physician that you walked away from thinking or sensing that the provider was engaged/disengaged. While you do this, I will map the process and ask you to validate at the end that all interactions across different people and levels of the system, as well as breakpoints or places where opportunities to improve, were noted. (Administrator)
Follow-up questions:

What was the response of the people in the situation with you? How did this affect your (the physician’s) experience of being engaged/disengaged?

What was the response from the organization? How did this affect the provider’s experience of being engaged/disengaged?

Were there any lasting consequences of this situation in terms of changes in your (Physician) relationship with the people involved or with the organization as a whole?

How common are experiences like this in everyday work life at your organization?

Did the event lead to more engagement/disengagement? For what reasons?

What are other thoughts about this situation that you would like to share that I have not asked about?

Disengagement

The exercise will be repeated with an example of an experience in which the individual was disengaged, using the same format and questions.

Conclusion

The researcher will summarize the conversation and ask the following questions to wrap-up:

What are the additional thoughts that you have based on your experience with engaged and disengaged physicians working in rural hospitals that you would like to share that you think is important for this study? (MD & Administrator)

Is there anything else that you would like to add?

Thank you for your time and your participation.
This is the protocol that was utilized for panelists 4-9 after being modified.

**Individual** (Probe/clarify as appropriate)

What is it about you personally—part of your personality, your upbringing or your professional training—that causes you to feel *engaged* in your work? (Physician)

What is it about you personally—part of your personality, your upbringing or your professional training—that causes you to feel *disengaged* in your work? (Physician)

Do you think that there is something about the physicians practicing in this hospital that is unique to them that causes them to feel *engaged* in their work? Why or why not? (Administrator)

Do you think there is something about physicians in general, part of the personality, or professional training that causes them to feel *disengaged* in their work? Why or why not?

What are the 2-3 individual facilitators and barriers to personal engagement for rural providers?

**Organization** (Probe/clarify as appropriate)

How much of your sense of engagement do you think comes from your immediate work environment meaning from the people that you work with, the relationships with team members, the values of the organization, or your ability to do the kind of work that you enjoy doing? (Physician)

How much of a sense of disengagement do you think comes from the immediate work environment, i.e., the people that the providers are interacting with, the relationships among team members, or the general climate of the organization? (Administrator)

What specifically about the organization fosters your sense of engagement? (Physician)

What specifically about the organization fosters your sense of disengagement? (Physician)

What specifically about this organization fosters provider engagement? (Administrator)

What specifically about the organization fosters disengagement for the providers? (Administrator)

What kind of strategies can you think of that rural community hospitals can take to foster physician engagement? (Physician & Administrator)
**Health Care System** (Probe/clarify as appropriate)

What are 2-3 aspects of the health care system that foster your feeling(s) of engagement? (Physician)

What are the 2-3 aspects of the health care system that foster rural community providers feeling(s) of disengagement? (Physician)

What are the aspects of the health care system that affect rural community hospitals specifically that foster feeling(s) of engagement in the medical staff? (Administrator)

What are the aspects of the health care system that affect rural community hospitals specifically that foster the feeling(s) of disengagement in the medical staff? (Administrator)

What about the broader health care system would you change that could foster rural physician engagement and decrease disengagement? (Physician & Administrator)

To be clear, what are the 2-3 barriers and facilitators of personal engagement/disengagement for rural providers?

**CAS** (Probe/clarify as appropriate)

When you think about your physician colleagues, those that you work with regularly, would you say they tend to have more or less the same levels of engagement as you do? (Physician)

Among the colleagues you know who appear to be engaged, what would you say are the primary drivers that lead them to feel engaged?

Among colleagues that seem somewhat disengaged, what do you think are the primary drivers that lead them to be disengaged?

When you think about the physicians that you interact with regularly, would you say they tend to have more or less the same levels of engagement? (Administrator)

engagement?

Among the physicians who appear to be engaged, what would you say are the primary drivers that lead them to feel engaged?

Among the physicians that seem somewhat disengaged, what do you think are the primary drivers that lead them to be disengaged?
Conclusion

The researcher will summarize the conversation and ask the following questions to wrap-up:

What are the additional thoughts that you have based on your experience with engaged and disengaged physicians working in rural hospitals that you would like to share that you think is important for this study? (MD & Administrator)

Is there anything else that you would like to add?

Thank you for your time and your participation.
Appendix I

Round 1: Semi-structured Interview Transcripts

Panelist 1 (physician)

Researcher: Please share your area of specialty and how long you've practiced in your specialty?

Expert Panelist: I'm an Orthopedic Surgeon. I started in practice in 1986. At about my 10th year in we developed a business plan to get bigger. Part of that meant merging with another group in town and part of it meant generating satellite offices. Honestly, we felt threatened by surrounding hospitals and we thought the bigger and broader based we were the better. And we did it with no specific loyalties to any hospital we did it as a private practice independent group.

Expert Panelist: And we knew in the beginning that the hospital piece didn't make sense. The incentives weren't aligned. So, in other words we were going to go to the satellites and try to establish active, busy, successful practices and it would only happen if we kept patients local. I remember meeting the primary care people in one rural community and realizing immediately that if I tried to bring everything, I saw that needed surgery back to the main urban practice area, I'm undermining the local hospital and medical community, and that wasn't going to work. So, our plan was not to worry about hospital issues, but to build what worked locally.

Expert Panelist: And so I happened to live in the northern part of Durham County, which is rural, so that was one reason why the satellite fell to me or appealed to me. But it also appealed to me because I was a general orthopedist not a specialist. So my generation often had generalist who might concentrate on some one particular area, but they weren't really trained any differently than the next guy. So that was changing as I came along.

Expert Panelist: I think I'm the last hire in my practice that's a generalist. Everybody else has done residency and then done a year of fellowship or sometimes two years of fellowship in some particular area. And comes to the group bringing expertise in that area. So it appealed to me to be in a small community because that's the perfect place to be a generalist.

Researcher: One of your fellow panel members echoed this sentiment; that the way that this person was trained is too specialized for the rural setting. And that medical training today is not designed to produce generalists.

Expert Panelist: Very true. What excited me about doing it was that, I'd been practicing for 10 years at that point, so I'm pretty comfortable with what I'm doing at this point in my career. I mean when you start off it's hard. There are things you have never done before, and they're things you've done rarely before. But somewhere around five -10 years in, you're pretty comfortable with most of it.
Expert Panelist: So it was easy for me to get traction, meaning I didn't have to refer much to experts in the urban areas. Interesting, and it worked it did fine. The office got busy my surgeries grew and I got excited about bringing what I knew how to do to a small place who otherwise really wouldn't have that. I had competition at first there was another practice there. A good guy he worked for a local health system. He tragically got sick and actually died. So he had to close his practice down in that left me as the only act there.

Expert Panelist: The weakness in the plan from the very beginning was that the payer mix is very different. And I knew that and naively thought that if I just work harder, I'll be okay. We paid ourselves, we never divided money evenly. We always recognized that some people were bringing in more and therefore should take home more. But it wasn't a drastic difference between top and bottom.

Expert Panelist: And so at first working harder was enough. I stay sort of in the middle of the pack and you look at all of our incomes- when I say our I'm talking about my group, my partners. But that began to change when the guys that were specialists and really hitting home runs, wanted not to be supporting anybody that they wanted their money, they wanted their income. And so the way we paid ourselves began to change.

Expert Panelist: It didn't happen all at once. It happened over several years. And by about my 20th year in, it had changed enough that I was at the bottom of my peers, my partners.

Expert Panelist: I was busy, so they're busy too. I don't want to say I was the busiest, but I was busy. And I didn't handle that well. It bothered me I felt like I was failing in some sense, I guess. There's some jealousy I'm sure that other people, were that ... I'm trained like everybody else, I worked hard like everybody else and I'm making a bunch less. We tried to do things about it didn't work. I couldn't change it. I'm not saying nobody tried to help me change that. I was vocal about it and people did practice reviews and audits and all those kinds of things.

Expert Panelist: So we tried to make some sense of it, but in the end we couldn't change it. And I worked too hard for too long. The bottom line is I burned out, and that was a really difficult experience. I got a coach that helped a lot, I met with a coach for a little over a year. Ultimately what happened is I got a sense of the lay of the land enough to go to the group and say, "look, I can't hit your minimum numbers, I can't" There's a threshold that you had to hit to be considered a partner. And I couldn't hit that, I never hit that number.

Expert Panelist: And bottom line is they put me on salary without making me less of a partner that made sense. So it wasn't punitive in any way and it was a fair's salary it was fine. And so for the last four or five years, I did better because I didn't have to worry about making something that I couldn't make. But it was a very difficult experience.

Researcher: It sounds like it.
Expert Panelist: For a long time in my practice. I felt like I worked for the rural hospital, not my group. And it's because when you put what I do on paper and next to what everybody else in the group does on paper, it looks like the bottom 10% or something. So it's hard to feel like you're helping the group or you're contributing to the group, or your voice in the group changes. I felt like I had no real, that I wasn't worth being in the group almost.

Expert Panelist: Whereas at the hospital I could really help, we did some really good things. The OR got very strong, great people there good head of the OR. We had a great relationship with the hospitalist team. It took a while to grow our hospitalist team there as you know, and we finally did good with it, and I think patient care got better.

Expert Panelist: We had some real challenges. The hardest challenge to me was the staffing issues. The hospital's struggles to staff adequately without paying through the nose. And unfortunately we didn't staff well and so our patients satisfaction scores were terrible for a long time. That's finally changed has gotten better.

Expert Panelist: What I feel the most proud about is patient care. I think I took good care of people and I think I helped the hospital, I think the hospital is stronger. And so I look back on that and I feel good. When I look at my group I don't feel that way. I feel like most of them are probably glad I'm retiring. Because now somebody else supposedly is going to come along and do better or match what's ... get closer to the average.

Expert Panelist: The group will be stronger ... One way to get stronger is to cut your low producers. We've had many gurus over the years come, and analyze our practice and try to get business wise stronger. And one of the tactics is to cut your, fire, get rid of your low producers and try to replace them with new people who are going to be high producers. There's a part of me that feels like I couldn't be on the team or be considered valuable to my group because I couldn't make enough money.

Researcher: So is that because of the dynamic of the community where volume isn't there?

Expert Panelist: So there are several pieces

Expert Panelist: One of them is payer mix; we'd have very high government insurance, Medicare and Medicaid. In this County there's much less commercial insurance. Part of it is the fact that as a generalist you see more people for everyone you operate on then if you're a specialist. So if you're the total joint specialist, people send you patients who need total joints. When you're the general Orthopedist, you see people with hip or knee pain, many of whom don't need surgery.

Expert Panelist: But they still get to see an orthopedist. They should be able to see an orthopedist. So anyway, you do a lot more almost primary care stuff when you're a generalist than you do when you're a specialist. So I think those are the main reasons.
Researcher: Okay. That makes sense. So then for you as an individual in this study, we’re thinking about your group and the hospital when we think about the organization. So you have two dynamics to work through. I just have to be mindful of clarifying that when I ask you these questions.

Expert Panelist: So we started with a part time presence and I went along with my partner and we both were there maybe a day and a half a week or something like that. We had practices in rural and urban and it got hard to do. And one of the things that happened to my practice in the urban office is that when you’re the generalist, you’re the last person to see a patient. So somebody, Mrs. Smith calls in, "I’m hurting, I want to see the doctor." The call center person says, "Where are you hurt?" "I hurt my knee." So what the call center goes and looks at the list. Who are the on-duty doctors, and all the people that specialize in knees are there. And then the last thing down there is the generalist. And that happens for everything. Hip Pain, back pain, hand. So you ended up being sort of the last option.

Expert Panelist: There is nobody in the urban setting that is a generalist. It’s just a very hard thing to do anymore. So that was happening to me. My partner is a spine specialist. So his business, his personal model way he was better served by staying in our busy urban practice. My needs were better met by moving to rural community. That’s what happened as I saw it I became the guy for my practice and I quit going to the urban practice completely. And that was that about 10 years into my practice when that happened mid ’90s yeah.

Researcher: When you think about your colleagues in the hospital did you sense some variation in terms of their level of engagement with the hospital? Back to what you said about feeling like you could do good for the hospital. Was that a common feeling or was that occurring in pockets?

Expert Panelist: There was a time when anesthesia services were contracted with a different group. And some of those providers did not want to come to our hospital. They felt it was too small that there were not enough specialists around to call on if they needed somebody. Some of them just didn't like to drive, the commute. I’ve been in that hospital with providers who I knew did not want to be there. I have had that experience. I also have colleagues that have built a good practice there; one of our GI docs has done pretty well.

Expert Panelist: So for a surgical specialists like orthopedics you got to be ... if you’re a butting up against the hospital all the time it’s miserable. To me it made every sense to try to help the hospital not fight the hospital or complain all the time about the hospital. If we needed to get better than it seemed to me the best way it was for me to get in there and make enough noise that we got better. I never thought like it was going to work to just complain about it. I felt like it was home. It was where I wanted to be. And I was trying to make it happy at home.

Researcher: In your time working there, were there periods of time when people were pretty engaged or was there the burnout factor? Were providers engaged around
specific issues? - Because it sounds like there was a core group who are pretty engaged.

Expert Panelist: I agree. One of the things that happen to our hospital that has happened to many hospitals is that the primary care base began not to come to the hospital, that sounds terrible. But the truth of the matter is that they financially do better if they spend their hours in their office. And the benefit of going to the hospital to see their own patients, to make it rounds every day in the hospital was not worth it. It just wasn't happening. So when I first went there the primary care, were very supportive and knowledgeable, made rounds every day.

Expert Panelist: They were excited to see me there because they knew that I could keep their patients in the community and they broke their hips or whatever. That changed completely. There was a time when there was a hospital service and it was hit and miss whether the hospitalist was excited to be there and fully engaged or not. We struggled for a while, but once we got one of the contract groups-on board as the hospitalist group, we got a core of really good providers.

Expert Panelist: That was a huge thing. So I think that’s the swing I will remember the most is how the primary care left. And there was a couple of years there where it was tough because the hospitalist program really wasn't what it needed to be. There were some good providers, but it was hit and miss. Until the hospital really got a core of good hospitalists in, they became the core of the hospital.

Researcher: How much of your sense of engagement comes from your immediate work environment? Either your practice or your group in the hospital.

Expert Panelist: So I think my sense of satisfaction comes primarily from patient care. I enjoy clinical medicine. I like trying to help trying to figure out what is reasonable to consider doing from a surgical standpoint. And then being able to do it safely, even though I’m in a small hospital with more limited resources. That was challenging but rewarding. People appreciated being able to stay local, especially the elderly. Elderly you know don’t travel well and they want their friends and family to be able to come see in locally. And that to me was the biggest thing you felt good about it at the end of the day.

Expert Panelist: I would put that, as the core is patient care. For me an important aspect of it was the ability of the hospital to take good care of people. That it wasn't going to work for me to do an operation well if the care wasn't appropriate afterwards. And I enjoyed trying to make the hospital better. It wasn't easy and we didn’t always make the mark, but we got better. I feel proud, I feel good about that. I think it's give and take, the hospital feels good about what I was doing and I feel good about what the hospital is trying to do.

Expert Panelist: So to me I didn't have a feeling like the hospital was worthless and never going to amount to anything or was too small to succeed. And I never hated operator who purchased the hospital. I thought they helped us. Some people in my group hated
them. In terms of my group I have very mixed feelings. I don't know if ... I think the people that are really driving my practice now probably considered this community-very minor piece of the puzzle, and probably don't value what went on there. I understand that I'm not as much angry about it as I'm just disappointed that is that way, but it is that way.

Researcher: What are the strategies that you can remember that the hospital did to foster or put in place to foster provider engagement in that community? Was that even necessary for you because you felt so committed to the community?

Expert Panelist: Well, I felt committed to the community because it was my practice, it was my life. I think the hospital eventually made some good moves. They did some infrastructure things that were critical. They did some contractual things that were good. They get credit in my book for the contract with the hospitalist service. I think the ER providers are better than what they used to be across the board. I think that's a stronger service. There are huge challenges. I could talk all day about it. The hospital was in the red -The lack of Medicaid expansion is really hurting,

Expert Panelist: It has hurt a lot. I don't know that they will ever get orthopedics really back. I know they have somebody now, but it's not working well. I could easily see the place not trying to do any orthopedics.

Researcher: What are the things that you think were the missteps on the part of the hospital?

Expert Panelist: They could've negotiated better with my group; we didn't have to have a divorce. When I say ... we need to talk about this a little bit because it won't make sense if we don't. The bottom line is that now my group takes no call at the hospital, has turned in all privileges. We don't even go in the hospital, none of us. It used to be very recently that we did all of it. We took a call every day, did all of the surgeries that were appropriate up there. And we went very quickly to doing none. What happened? So what happened was driven by my practice by Emerge. We had a call team. So I personally was old enough that I didn't take primary care, but everybody would leave stuff for me to do.

Expert Panelist: So it's important to talk about this a little bit because it won't make any sense if you don't. What that basically means is there are 10 or 11 people on this call list. You're on maybe three times a month, and you'll get the phone call from the ER. Mrs. Smith has a broken hip. Everything would get admitted to me. The person taking the phone call would never have to go in. The hospitalists did the admission. When I say they were admitted to me that's not really true. They were admitted to the hospitalist, but I was going to be the responsible surgeon.

Expert Panelist: And then I would find out about it when I got up in the morning. And then figure out how to, you know, what needed to be done and when was the best time to do it and all that kind of stuff. And my group decided that they wanted to be paid for
being on call. Pay for call to my knowledge never happened at the hospital. That's not true anymore. But at the time it was.

Expert Panelist: The business climate around is that orthopedist get paid for call. So this is not brand new territory. If you go to Raleigh, if you go to anywhere there’re many, many people paid for call. And there was a negotiation between my practice and the hospital about pay for call. And it broke down and both sides they drew the lines, and anyway it fell apart and my practice said see you later. I think that was handled poorly.

Expert Panelist: I mean there were so many ways we could have continued to take call there. There just were lots of ways to do it. But to me that was handled not well by ... I mean some of it is on my practice group but some of it is on the hospital.

Researcher: I'm sorry.

Expert Panelist: And so then the hospital had to scramble to find another orthopedist and all that kind of stuff. So that's how the thing got broken. I think that it's so easy to get from this county to one of the academic centers for healthcare that for many County residents they bypass this hospital.

Expert Panelist: And I think that's always been true. I think it's, I'm going to become more true, especially in orthopedics, the way it's headed now. I don't know these numbers completely, but roughly ... when I first started there, the studies said that about 50% of ... you know if you do it by zip code, 50% of the people in the county zip codes would get their care locally and 50% would go South.

Expert Panelist: Now it's something like 85% goes outside the county, is a huge shift. And I don't know what the hospital is supposed to do about it. To me I guess there are two challenges for the hospital. One is the primary care base is not something they control. So most of the primary care is done by independent practices. The hospital has a primary care provider that have a second one I think coming. So they're trying to have a primary care presence that they have some control.

Expert Panelist: But it's in its infancy. It's not big. And the primary care practices don't have the allegiance to the hospital that they used to. Many of those providers, direct patients out of county. And I think that will happen even more now that you know that my group is not doing anything at the hospital.

Expert Panelist: I mean they'll probably, hopefully we're going to still send them to my office. But the provider that's in my office will be taking that case to our busy urban practice. And I don't think it'll bother the primary care that, that's what's happening. 20, 10, 15 years ago. It would have bothered the primary care that you're taking that patient's care out of the county. Now it doesn't bother them so much. And that's a real problem for the hospital.
Expert Panelist: So primary care is a piece of the problem. The other piece of the problem is that for specialists like orthopedist in general surgeons, it is a very hard hire, it is hard to find somebody who wants to practice in a small town who's going to be loyal to the hospital and to the county. You end up with applicants, but you end up with people who have had issues somewhere else they just looking. People do ... I know, you know all this before.

Expert Panelist: People do what's called work your guarantee. The recruiting firm contacts the hospital who is looking for an orthopedist. Who would like North Carolina cause the weather's nice. It's close to the triangle. So you're okay. You live in Raleigh or Durham or Cary, someplace and you work at the hospital.

Expert Panelist: So you get a guarantee. That means that the matter how busy you are, you get paid X and as long as X is big enough and as long as you're going to get X for ... usually two years is standard. You're pretty set for those two years. You come, you do the best you can, but you have any illusions about the place. You might be busy, you might not be busy, it doesn't really matter. Because at the end of your two years, you want to do the same thing again.

Expert Panelist: You're going to use a recruiter or you're going to find it. And so many small hospitals are looking for orthopedists. So you end up with this parade of people that aren't really going to stay. That's a problem. The hospital could spend a whole lot of money on these guarantees and not get what they want. The person that they hired to be the orthopedist is older than me. He's working his guarantee. He lives well outside of the community and I don't know all the details of his practices, but I've heard things, I mean if somebody has a few medical problems too sick they are sent to a tertiary center. It's just a far cry from what we used to do.

Researcher: So I think we segued out of the organizational questions. And so in terms of thinking about the broader health care system, what is affecting rural community providers, sense of engagement?

Expert Panelist: One thing I think is that practice groups like my old one shouldn't be in the small hospital business period.

Researcher: That's interesting. Why do you say that?

Expert Panelist: Because this hospital—is not going to make enough money to be on the same team with everybody else. It's just not realistic to do that. That's what I tried to do. Nobody can say that personally you're the best at everything you ever did and nobody ever could do it better than that, that's silly. Somebody maybe could get in the position I was in and do better, but I doubt it I really do.

Expert Panelist: And so I personally think from a systems big picture since a practice like that is so bottom line driven and so aggressive about maintaining high income for partners, you probably ought not to even be in the market in a small town. It's too difficult
to fit. The flip side of that is that to me the best way to provide orthopedics in the county is for the hospital to hire the orthopedists so that all the incentives are lined up. Whether there are enough of those people in the world to ever make that happen. I don't know, but to me that would be the best scenario. You hire a young orthopedist to you or she in their family want to live more or less in town and be there for 25, 30 years. That would be the best.

Researcher: That's really interesting.

Expert Panelist: Yeah. The problems are many. One of the problems is that there's may not be enough business there for more than one person. Some models suggested that there need to be 2.3 orthopedists in the County or something like that. But those models are flawed because they under represent how many people go leave for care at a bigger center. Does that make sense?

Researcher: Yes. A lot of migration.

Expert Panelist: Yes. The county went from 30,000 to 15,000 people. If you take that size and you know that they're all going to get their orthopedic care there, sure you probably need 2.3 or whatever it is. But that's not what you have. So anyway you probably don't have enough work for more than one or 1.2 people or something. So then you got the dilemma of being on call all time. You can't do that. What do you do when the person's not on call? Where do you get your care? There are all kinds of discussions about sharing other providers.

Expert Panelist: Somehow you try to come up with a team and then you're asking members of that team to travel a lot. Well, suddenly the job becomes not so fun. It's hard to hire into that kind of world. So I don't know how to solve it.

Researcher: Are there other broader healthcare system, issues that are impacting either rural providers sense of engagement or disengagement in your work?

Expert Panelist: One of the most destructive things that I witnessed in our hospital was the staffing crisis. We were understaffed. The patients were not being well cared for. We were using travelers, but not enough of them. And it was a depressing place. I mean, you get a really sick person and it was scary.

Researcher: Nurses, physicians, support staff, in terms of staffing?

Expert Panelist: I'm saying, thinking about the nursing primarily. So if you're a general surgeon and you've got a sick patient, your ICU is ... that's a hard environment. You want to disconnect. You want to not be engaged. I mean, I think that the patient satisfaction scores coming up, now that the staffing crisis is better. Is going to help physicians feel better, I just think, if you don't trust that your patients are getting good care. You're going to get disengaged in a hurry.
Researcher: What was the impact on the provider community and the patients when the subspecialty clinics pulled out of the community?

Expert Panelist: I don't think, at least for me, it didn't make any difference. What I did notice was that it made a difference to the community. So I would hear from my patients, I can't get my chemo locally, now I have to go to one of the big academic centers and boy is that hard or whatever.

Expert Panelist: I think some of the staff at the hospital felt the hostile pull the rug out of them. There was real loyalty around that program. I know that two of the women that were the primary nurses in that clinic, and that was really tough, that was their baby. That was their home. That was what they got up in the morning and wanted to go do and then went away. So many of the nurses that used to work there left. Ironically most of them work in the tertiary center. So just like patients go there, so do employees. If you're a nurse and you want to grow your ICU experience, you're not going to do that in a place like this. You want to do that someplace. And it's so easy to do it we're so close.

Researcher: Any other aspects of the broader healthcare system that you feel like are really affecting rural providers in rural communities?

Expert Panelist: They're under insured, it's huge problem. That figure that gets worse.

Researcher: Coming up to the end. Thank you for being patient. If you had to rank the order individual, organizational health care system, and your group practice; Which would you rank in terms of the way the influence on your sense of engagement as a provider?

Expert Panelist: What contributed the most was the individual part practicing the clinical medicine, just the patient or the provider patient relationship. You get a lot more from your patients that you give your patients.

Researcher: Interesting.

Expert Panelist: So it was very rewarding that way. That's for me, definitely at the top. I guess second for me is the hospital itself. I really was entangled in the hospital, wrapped up in the hospital in terms of committees and meetings and efforts to do quality initiatives. And you know there are good people there that I enjoyed working with, and we made some headway. I don't feel like it was ... as difficult as the circumstances are still and have been, there's still a sense of reward for me in trying to help that place.

Expert Panelist: In terms of the system, meaning the operator. I don't have a negative. I think they have done some good things. They certainly haven't solved everything, not that anybody can. But I criticized them a little bit that there've been so many leadership changes. Too many CEOs, we've had too many chief nursing officers. It took us too long to wake up about the extended care unit.
Expert Panelist: So yeah, there's some blame there, but I don't ... I guess I think their hearts in the right place. I really think they genuinely want their business ... They believe their business model is going to work if they can do good care at a local level. And I think that they want to do that.

Expert Panelist: I'm comfortable with them owning the hospital. I don't think that's the issue, the least or the most ambivalent about, I guess that is my group practice. I just think that what evolved for me was a major disconnect and I don't see this as a solution for it.

Expert Panelist: My recommendation if I could make it to my group would be don't be involved in a small hospital environment. It's not going do what you wanted to do, and in any case you don't get frustrated trying to make it do what you want to do. And you're better off just not being there.

Researcher: What would you say about the legislative piece of the system?

Expert Panelist: I would love to see Medicaid expanded. I would love to see people have insurance even if it's not the top insurance. I'm an advocate for that.

Researcher: And what are the things that I haven't thought about asking you that you think will definitely have an impact on provider engagement in rural communities and the rural community hospitals? What have I missed?

Expert Panelist: I don't think of any, I can't think of anything that we missed. One of the hesitancies that I had about talking about all this is that for me it was a very personal journey, painful journey because of the burnout. And that does influence the way I feel about it, it has to. I bring that baggage, if you want to call it baggage. In some ways it's useful because it's speaks to a lot that the things that run through this issue are clearly there.

Researcher: No, I think you're right, the group-practice -group dynamic and the hospital dynamic and the ecosystem of the county seem like they are contributors to engagement and disengagement.

Researcher: And then the perspective of pulling that thread through really weaves it all together. I think it's very relevant and I think the burnout piece is really important, because a lot of research now speaks to it. All these providers are burned out. What does that say about how we're managing physicians in general in terms of the healthcare system?

Researcher: Any other questions for me?

Expert Panelist: No. This is good.
Panelist 2 (physician)

Researcher: Because there's not a good definition of personal engagement and personal disengagement, I am proposing that we use a definition from Kahn, a researcher who did some work around what that really means in the early 90's. So I'll read you these definitions so that you have some grounding. Is that ok?

Panelist: Sure, that's good.

Researcher: When you're displaying behaviors of personal engagement, you're involved in tasks, you're cognitively vigilant, and you're empathetically connected, during the discharge of your duties. You can just be sort of who you are and really fully engaged. On the disengagement side, it's really this simultaneous withdraw of how you express yourself and bring yourself in a work situation, in your discharge of your duty, one is cognitively, emotionally passive in the discharge of duties. Do these definitions resonate with you in terms of personal engagement and personal disengagement?

Panelist: Yes so disengagement is being withdrawn for some reason,

Researcher: Yes, there's some reason where you're just cognitively uninvolved, checked out. So I had two quick questions and then we'll start the whole thing. So given those definitions, at this point in time, which end of the spectrum would you say when you're providing care, personally engaged or personally disengaged.

Panelist: Personally engaged.

Researcher: For you personally, do you feel that tend to have been consistently more engaged or disengaged?

Panelist: Yes, for seven years. I have tried to give as much as I can to my work, so I want to say, you know, I mean again, it's very difficult to comment how much person can be fully engaged but maybe 80-85% fully engaged.

Researcher: Is there something about you, like your personality, your professional training, or how you were raised that causes you to be engaged or are you just that kind of person?

Panelist: No, you know, when we were growing up my parents said that, you know, this is like, you know, this is giving you and your family food and you're doing the community a service or you know, doctors are well regarded back in my country so you're trying to do a good human service and to give 100% to the job.

Researcher: Okay.

Panelist: So I try to justify that for reason, obviously you're human, you know, you're going to do all the things you can to balance your life, but give 100% to the work.
Panelist: So I would say rather than it's coming from my heart, it's the way I have been raised.

Researcher: Okay, when you think about providers that you work with, would you say that they have a similar level of personal engagement or personal disengagement as you do?

Panelist: It's very difficult to say. You see some providers who will do the work just for the sake of doing the work.

Researcher: Do you find that in terms of your peers here in this organization, are engaged?

Panelist: Sure, it is a contagious thing. The personally engaged physicians are always a separate group, but as person, who is mentally disengaged who do the job just for the sake of doing it, they have a separate group. I think it's just a contagious nature and the prevalence of their thinking matches each other.

Researcher: Okay. So then thinking about the organization, so the work place you're in now, or the other rural community hospital in NC where you worked, how much of that sense of engagement do you think comes from the immediate work environment? So meaning the, the relationships you have with the multidisciplinary teams, or the supporting structures for you to provide care?

Panelist: Sure.

Researcher: Would you say that that is something that really feeds into your sense of engagement and you need that at work or are the things about you individually that drive it?

Panelist: No, I mean you need to have your own energy system and at the same time you need to have some push from the surroundings. So to give you an example, I have seen smaller communities are more community oriented. Community hospital always has this feeling, like you know, we can do it. You get more, you know, you get more incentive to do work. Like you get more energized. Whereas at a different rural NC hospital, which is a big but bigger place, you don't get a push, you know, you don't have the sounding administration engagement, or I have never had a pharmacist or case manager come to me with suggestions to care plan and that works to boost you up in engagement.

Researcher: So was there something about this organization that was attractive to you that you felt like it was a good fit?

Panelist: No, This was a selfish decision. The reason I chose this hospital is because the recruiting company. Uh, they have limited placements. Um, but I mean they, they can recruit us all over the United States, but then I'm located in in a community that is good for my family and we consider that home. My wife is happy, my son is happy. And so I wanted to be close to my home place because for 4 years I used to commute back and forth 3 hours each way a fair bit. So, this was the closest hospital and that's the reason that I chose it. I didn't have any specific attachment or requirement.
Researcher: But that sounds like something you're saying is definitely something that would feed into your ability to be personally engaged. Your family's happiness.

Panelist: Yes.

Researcher: And that weighs on you - do you feel like you have a responsibility to that directly?

Panelist: I mean, I knew this was, is going to be very difficult. I'm going to be extremely busy, super busy because we're on 24/7 calls. But then for me, family comes first.

Researcher: Okay, Yes. So that's a big ... I think it's really important for me to understand that for this study because I think we ask a lot of our physicians, especially physicians in rural communities and you tend to forget that, you know, they are a person, they have family, they have other needs and maybe those things are wrapped up in that sense of personal engagement and disengagement.

Panelist: Every time I'm stressed out, the last 2 months have been hectic making this change. I was thinking more about is this the right place? My wife says, 'no that is your job keep doing it' and then you know, I get the positive energy and that adds to my personal engagement.

Researcher: Interesting, are there things that are challenges or things that are structural or organizational in this organization that you could see feeding either you or your peers sense of disengagement?

Panelist: Limited resources due to being a smaller community or also lack of specialists I think puts us also at predicament. For instance, if somebody's sick and if you know, if you only have few specialists you can call.

Panelist: Right, that's say the patient is local. He was a young guy and is getting good care and he gets worse. I don't have many specialists to call so I'd say anything to do with the lack of transport is a concern. For some reason the beds are not available at the tertiary center for the patient and he ends up being here a while. In a smaller organization, you can't provide the kind of care that sicker patients need so, you know, if the transport happens faster, it is much better for patient care.

Researcher: Thinking about those things that you said, lack of resources, lack of specialty care, transport piece; thinking about your experience in rural communities, what strategies can you think of that rural community hospitals can take to foster physician engagement? And it doesn't have to be related to the things that you just said.

Panelist: Yes, no, I mean as long as the physicians who work in the community, they understand, they make the family of that patient aware of what's going on and as soon as they are communicating with the tertiary center for support and appropriate things are being done and that's fine. You wouldn't know the patients that are not being seen by the specialist right away. As long as there's a communication to a bigger center it is ok, so for this hospital we have a good support system from a bigger
center, which is a good thing. You know, the same thing had happened at a different
center that was three and a half hours away and the benefit is that here, you have
that connection to. The physician who are extremely talented, and who may be the
expert in the field and that is very difficult to find.

Researcher: So you get that link to the tertiary care center so that people could meet with the
experts and that’s okay?

Panelist: Sometimes providers do not have to have a willingness to approach for help and then
I remember that there is an affiliation and I can reach out so there is a willingness to
approach someone for help.

Researcher: Okay. So then moving away from a specific organization, I’m thinking about the
broader healthcare system either across the state of North Carolina, which you’re
clearly familiar with or at the federal level. What are those things that contribute to a
sense of disengagement from the physician's perspective?

Panelist: I think the biggest thing, you know, first of all I’m already on salary so I not worry
about the money that much. But the insurance system here can be difficult if you look
at patients who are w/out insurance; they are the ones who take up the largest
amount of health care expenditure. As a physician looking at the patient, I think the
payment system here can be difficult.

Panelist: Even if you have insurance you end up paying more and so patients, they fear to go to
the hospital. So the patient, who can’t afford care is worried and I feel those patients
are labeled noncompliant with medication or noncompliant with something else but it
is hard. You know, people should be able to afford it, you know, I mean everybody
should be eligible to have insurance.

Researcher: So it dis-incentivizes people?

Panelist: Yes, exactly.

Researcher: Are there things about rural community hospitals specifically that tend to foster you
or your peer sense of disengagement? Is it just the limited resources? Is it the payer
structure, those kinds of things?

Panelist: So your question is related to a rural community do they cause...

Researcher: Yes. Do you think there's more disengagement in providers working in rural
communities because of these or other structural pieces of the health care system?

Panelist: It's a difficult question to answer, I want to say no. I think in the, if you think about it,
it may be a propensity to cause more chance to cause disengagement, engagement of
the community.
Researcher: Okay. Thinking of the things you said before, limited resources, access to specialty care - if you could wave a magic wand, which one of those things that if you could change, would you change about the broader system that you think would impact on the provider's level of engagement in a small community hospital?

Panelist: If we can take all this and lose one thing, it will be the litigation. You know, when I do my work, my focus is always patient care, right? For instance, if I'm not worried about litigation, I would admit every patient to this hospital to take care of them, you know, that’s easier for them, for patients with normal community hospital care it is okay, but for those who need other things to be treated that we do not have resources here for them, we have to transfer to the Tertiary Care Center.

Researcher: Interesting.

Panelist: I mean, I could be wrong, but you know, there's limited personnel and there's no right or wrong. That's why you need the expert on the line at the tertiary care center to help.

Researcher: There are these three big buckets, individual, the organization, and health system. Are there other big buckets that I didn't include, mention? Something else that impacts rural provider engagement or disengagement?

Panelist: I don't know. I mean, uh, I've, I've noticed I can say like, you know, obviously some providers really want to be in a bigger city. So most of them want to be smaller fishes in the bigger places, other people want to be big fish in small places so they are willing to go to smaller, foreign medical graduates come to the community because we have to and stay here for 3 to 4 years.

Panelist: Being on a visa, we don't get the jobs in bigger places. You will see most of be foreign medical students in a rural community. Especially from India because people from India take a good 20 years to get the green card. So this is my eighth year of waiting. Some other countries, they get it within six months to a year. So doctors are viewed along the same line as engineers and there are so many engineers you know, so nowadays, you know, the decision becomes so difficult every few years we have to extend your visa. So even being a doctor, my visa is extended but I have to apply for only 1 year.

Panelist: So regarding disengagement you know, what you see the rural communities, with foreign medical graduates, but then at the American medical graduates, they come here because of the loan repayment, or they are from the community, you know, like they have had been involved in a smaller community and are want to pay back to the community. I do not know if there are more incentives added to physicians coming to, you know, for the American medical graduates to come to the community, maybe if they did come more often then there will be more physician engagement.

Researcher: That's really interesting. I didn't realize the system was like that. That's definitely an added layer of complexity because there's a shortage of rural providers.
Panelist: Yes. That's the reason, most of the medical graduates you will see in these rural communities is because they are from the Indian population. I have done seven to eight years. I'm eligible but I cannot apply for green card because you have to wait for your visa to become current, which mine is 2011. And currently the period they are working on is 2008 - it has been stuck there for five years and it's not going to move for at least 15 years. So I think my son who is a US citizen will sponsor us when he turns 21. People don't understand or realize that dependent visas are also restrictive. So my wife has been in the United States with me for eight years. She cannot work. She stays at home and it's a negative, spouses they become depressed, you know.

Panelist: It ends up being a big thing.

Researcher: That is a big thing.

Panelist: My wife doesn't complain. She is supportive, she has my son to take care of during day and sometimes we need to get out of the house and do something, otherwise you get depressed.

Researcher: That's a really valid concern and it is helpful to understand. Thank you. So you just answered my last question: other influences are that important one so is there anything else that I am not asking or not thinking of that you know, based on your experiences with in different rural places with engaged and disengaged providers, do you think is relevant?

Panelist: Sometimes the support stuff, if you're a good support staff for instance in this hospital not seem the case management group as well as the pharmacy group. They are awesome. I love them. And that motivates you to work. I have seen those pharmacists coming in and going out of the way, you know, to help us. The same thing and I have seen in the smaller communities similar because they want to do something for the community they want to do it for the team work. So I think that attitude of being a team comes in a small community. So in rural hospital I see a support staff causing or providing incentive for positive engagement.

Researcher: And then is there anything else that you can think of it I'm not asking.

Panelist: I think that's good.

Researcher: Thank you. Let me talk you through the next steps.
Panelist 3 (physician)

Expert Panelist: Right. But people are going to want your information.

Researcher: Right. People want the information, and I want to make it as practical as possible. The validity of the study rests on the expert panel. So it has taken me since October to make sure that I am getting the right mix of panelists. I've had to exclude some people that have wanted to participate because the inclusion criteria dictates that the panel needs to be providers who have been in rural for at least a certain amount of years. People don't have to live in the community, but the majority... only one person on the panel lives on the periphery of the community, not in urban, but just sort on the boundary.

Expert Panelist: That's important to have though, because people that don't live in the community, their engagement can be very different.

Researcher: Agreed.

Researcher: So, to review, and I know that I sent you the definitions for personal engagement and personal disengagement, but I'll re-orient you before we start with the questions. So, for personal engagement, the definition is based on a 1990 definition of social science researcher, and the premise is that people have these dimensions of themselves that, under the right conditions, they bring with them to work every day. And when they're at work, they can employ and express themselves fully; they're cognitively engaged in their performance and their duties; and they have, meaningful connections that are made and promoted with each other.

With personal disengagement, there is a simultaneous withdrawal of all those things when at work and feeling disengaged. So, there is this sense that you're doing your work at some distance from yourself; from others you sort of split off, cognitively, emotionally not involved. And feeling like there's not a connection to the work, or the folks you're doing it with.

Researcher: For this study, the questions are in sections of individual – which is referring to you personally, the organization, is the one in which you practice. However, for the folks that have been in hospitals that are on the panel, that have an owner or an operator, you can speak to that too, if you want that to be part of the organization and how you structure it. And then, for the system, I'm asking you to think about either the state of North Carolina, or the broader health care system conditions that impact on your personal engagement or disengagement.

Expert Panelist: Okay.
Researcher: So those are the definitions for level setting purposes. We will start with the individual piece. So how long have you practiced internal surgery in a community environment?


Researcher: Where were you before that?

Expert Panelist: I practiced out west – Oregon.

Expert Panelist: Spent three years there.

Researcher: How'd you get here from Oregon?

Expert Panelist: Well I grew up here. This is my hometown. So, I went out to Seattle to train and then stayed out there for a few more years and found a job in Oregon just to try to get out of the rain a little bit, and it didn't work. It was just as rainy down there. And then my wife and I decided it was time to go somewhere that had more sun. So, I came back here.

Researcher: Is there something about you personally, your upbringing, or just who you are individually, that you think contributes to your sense of engagement? As you said in one of your emails, you are the last of a dying breed of doctors who are engaged in a hospital; live in a community; and really invested in making it better. So is there something about you, the way you were raised, or your training that impacts your engagement.

Expert Panelist: Yes, I guess, for the first two. So, having had my dad and my grandfather both were surgeon’s here, there was something kind of romantic about coming back and being the third generation, because you don't get that very much. So, it was sort of the curiosity, more than anything else, to fill in for a legacy like that. They were both dead and gone, had no longer been practicing for several years when the hospital called and said we really need a surgeon here, and I said fine I'll give you five years, and I'll see what happens. So, the curiosity is what got me here, just kind of coming back and doing that again, and sort of following in their footsteps to see what it was like what they went through. In terms of staying here, it's been more of, once you're in a community, and you have your friends; and your kids have their friends, and they're in school; that five year promise became a twenty year adventure, because you just can’t really pick up and do that to your kids. It's just a hard thing to do.

Researcher: How have you seen this community change since you've been here?

Expert Panelist: It was growing quickly when we first moved here and then after three or four years, when they pulled out of the tobacco subsidies; and they created NAFTA; and the textile mills all left; the economy tanked. And so, the affluence has diminished significantly, and it's really basically a very poor little town now.
Researcher: This is a very relevant layer to this research - the rural community economy.

Expert Panelist: We saw a lot of physicians coming here and living here when I first moved here, and that trend has changed completely now. No one wants to live in a small town. They want to live in outskirts of Charlotte, or Raleigh and commute, which I think is a huge issue with your topic.

Researcher: Yes, if we could think about your colleagues who you work with regularly, do you have a core group that are still engaged in this hospital, or are there fewer of you here?

Expert Panelist: In our practice, we require general surgeons to live here. General surgeons tend to like to be leadership type people, and so they are still fairly much involved. I'd say the core group of this hospital used to be primary care when I first moved here, and primary cares, nationally and locally, have pulled out of inpatient care.

Researcher: Yes.

Expert Panelist: And so those guys are no longer involved in the hospital side they're still invested in the community, but they aren't invested in the hospital so much anymore.

Expert Panelist: So that part of the core group has dissolved, and it leaves fewer and fewer people to do medical staff leadership, and get things done. We also have gone from just having physicians on staff, to having contracted labor with hospitalists, and ER doctors, and radiologists. So these guys who also used to be people who lived in town and were part of the core leadership, are no longer there. They come, do their job, and leave and go back to wherever they came from. So, that's been a big loss. I do think the other core group of people that sort of do the leadership part of the hospital are invested in the hospital is pretty small.

Researcher: Okay. Would you say there's significant variation among your colleagues in terms of their levels of personal disengagement and engagement?

Expert Panelist: Oh, yeah.


Researcher: What do you think the primary drivers are for folks that tend to feel engaged?

Expert Panelist: Identity. If you associate this hospital with being who you are, then you're engaged, because you want to make it better. If you associate this as just your job or workplace that you commute to, you aren't engaged and you can get another job somewhere else if it doesn't work out.

Researcher: I had a conversation with another panelist about the guarantee piece, and working your guarantee, and how that has also played into...
Expert Panelist: Financially?

Researcher: Yes.

Expert Panelist: So there's definitely ... and money comes into this. Because you want to feel valued, and most of us who live in a small town, feel like we're making a sacrifice to do that. And, as you know, the population now is what, 50/50 rural, urban, and in ten years it's expected to be 70/30.

Researcher: Yes.

Expert Panelist: And so, you see everybody leaving for the bigger towns. You feel like you're making a sacrifice to stay because we don't have Starbucks and Target, and all the fancy stores. We don't have the great schools that money's going into everywhere. And yet, they want to pay you less because your market pays less. You're in a poor reimbursement market, so that part of it does play into it a little. That strains the loyalty, when you feel like you're undervalued.

Researcher: Okay. Any other thoughts on the individual piece before we move on to the organizational piece?

Expert Panelist: You can't survive as a private practice doctor in a small town anymore.

Researcher: No.

Expert Panelist: It just doesn't work; so pretty much all-small town physicians will be employed at some point. But then the economics of providing pay that is competitive to keep people here as opposed to going to a big town ... most of what we see right now, with a third of our physicians here because that's how they meet the requirements for their visa. And it serves a need, but it's not always the best for hospital quality.

Researcher: Okay. Any other thoughts on the individual piece before we move on to the organizational piece?

Expert Panelist: I don't think so.

Researcher: So, what are the things about this organization, this hospital that fosters a sense of personal engagement?

Expert Panelist: The leaders, and the individual leaders. And I don't know how much time you want to put into that, but.

Researcher: However much time you want...

Expert Panelist: I've been through five CEO's since I've been here, I think. And the first one, just because of his weird personality, drew no loyalty at all. The second two were very friendly and drew you in, and felt like family. And the last guy, before the one we have currently, was a real go-getter; real energetic; and he really wanted to get physicians to feel like they were an important part of the medical staff; and
provide them opportunities to be leaders; and to move up; and to see that as part of their career even down the road. And that kind of energy brought a lot of us into leadership. Our current CEO is a really good guy, but we really don't talk about those things anymore. We don't talk about how it fits into your career as a surgeon, what roles there are for you to be leaders. It's more just a matter of running the medical staff again. So I think it's the individual people at the CEO level that drive that.

Researcher: Okay. And then what would you say about the rest of the leadership team? Each is a little bit different. There's a hospital that I interviewed, where the COO and the CNO are the same person, and the CEO and that's it. And then there are others that have each of those people, so, do you think it's just primarily driven by the CEO, or are there other players on that leadership team that play a role?

Expert Panelist: So, the other players here, there are two other players, I would mention. The CMO, Chief Medical Officer, works a lot with the medical staff to be sure that the medical staff side of things is run. So, he's helping people fulfill the roles that they need to be doing as chief of this, or chief of that.

Researcher: Okay.

Expert Panelist: It helps a little bit with engagement, but not a lot.

Researcher: Okay.

Expert Panelist: The second player is the employer. So this hospital has a structure where the whole hospital administration is entirely separate from the branch of the operator that employs physicians. And they are separated for a reason: If you're negotiating a contract, you don't want to be mad at your CEO. There's a reason for that. But, the operator does not do a good job on the physician employment side. I have a boss I've had for 6 months, I've never met him. He's never come to say hello. We're having contract negotiations and he's never been here. So, they're terrible, when it comes to engagement. They're doing nothing to encourage us to take on more leadership roles, to do more for the quality of the hospital at all. Zero.

Expert Panelist: And they're the ones that control the purse strings, so they really should be putting in quality pieces, encouraging growth, encouraging leadership ... so very disappointed on that side. And that's probably the one thing that is straining my engagement right now the most, is this sense of, lack of, coordination, I guess, between employment and the hospital. Physician engagement is not just about you and the hospital. It's about your career, and where you go with the next step with your career. You could be, sort of, part of the system, rewarded for doing that.

Researcher: I think you answered both questions. We talked about engagement and disengagement there. In what ways do your relationships with other colleagues,
not providers, impact your sense of personal engagement or personal disengagement?

Expert Panelist: That's also very big. One thing the operator did three years ago now, is they've entered us in a position leadership class, PLI Institute.

Researcher: Okay.

Expert Panelist: And several of us that did that; and bonded going through that. We were chiefs of this, or chiefs of that, chairman of different departments, and so we felt like we were kind of this leadership group, and that was very strong. But everybody was sort of looking at it as a possible career track as well, and there was nothing there at the end. There was no opportunity, by the operator, to put that to use in a career track, so two of the guys have already left, that were involved. And one of them just sort of backed away from a position of leadership altogether. So, out of the four of us, I'm kind of the only one left, even doing anything within a leadership role right now. So, it's kind of weird that they would put us in that situation to train us, and then not have anything to do afterwards.

Expert Panelist: But it does make a difference to have a good core group of people that you can work with. I think one of the things that are different about community hospitals versus at the larger health systems are that health system has employed Chiefs of Surgery, Chiefs of Medicine, and so there's stability there. We have elected people in those roles and it's by custom that you rotate through these things. And so, people that are doing it now, have really never done it before. Because most people don't live here anymore, it's hard to get people to even want to do it. And so, the quality of the leadership of the medical staff is a real roller coaster ride; which reduces some of that bonding, some of that engagement that you get when you've bonded with everybody who's involved in leadership.

Expert Panelist: So, I think the theme of that would be, stability in medical staff leadership would improve engagement over time.

Researcher: What about your interdisciplinary colleagues, is it a similar dynamic? Is there turnover and not a lot of loyalty there too, so that there's not a core group of those people supporting your practice, and the care of the patients?

Expert Panelist: I'm not quite sure I entirely know what you're getting at but when it comes to the leadership part of the medical staff, the interdisciplinary teams are basically hospital employees who are involved in quality, and the nurses, the quality manager, that sort of thing, they work with us. And those are relatively stable.

Expert Panelist: In terms of our practice, our hospital practice is pretty separate from the clinic; it's a very separate thing. In terms of being at the hospital, if I understand your question right, turnover of vital nursing staff in the OR, nursing staff on the floors; every time we see a high turnover, and you bring in people that are fresh out of training; it erodes your faith and your ability to provide good care sometimes. And
that does impact ... when you have a crew that's been here for ten years, or twenty years, and they're going to retire here, and they buy-in and this is their home, you feel like family. And I would say that up until the operator-bought our hospital, that was our strong suit: that we had people that had been here their whole life and it felt like family, and that was big time for engagement. But that was about the same time that primary care was backing out, and so a lot of things were changing, and so it sort of eroded that sense of a family.

Researcher: Are the primary care providers the same providers, but they're just not coming to the hospital anymore?

Expert Panelist: There's been a big turnover. Those guys who were the leaders were also members of the board, and things like this, and they're either all dead or out of practice now, retired.

Researcher: Okay.

Expert Panelist: So all the primary care doctors, with the exception of maybe one or two, are now young folks that come and kind of go quickly.

Researcher: So that core group has also turned over?

Expert Panelist: Yeah.

Researcher: What are the strategies or approaches that you've seen, in your time here, that have worked to foster a higher level of engagement for you and your colleagues?

Expert Panelist: So, first on relationships, our CEO before this was really good at going in and meeting everybody, and making them feel special and part of the team. Putting in silly rules, like you pass somebody within five feet, look them in the eye and say hi, those seem silly, but they make a difference. Especially if you're probably on the lower end of the pay scale at the hospital, and you've got surgeons stopping, saying hi to you, that probably means a lot. The thing now, called AIDET, I don't even know what AIDET means, but that's our big thing now, about being nice to people, and it's kind of fallen away, because no one really understands what that stupid word means. But those things are nice; just trying to encourage more interaction within the hospital itself.

Researcher: What has not worked?

Expert Panelist: In terms of the physicians, the physician employment vacuum that we talked about a little while ago ... it's not an active plan to be absent. But the absence of the employers and any sense of encouragement towards improving quality, or improving your practice you don't feel like there's anything from the operator trying to help you do better or grow.
Expert Panelist: In terms of active plans that have not worked, I haven't seen any. There haven't been many active plans, for just the providers. Most of the active stuff that the CEO does currently is more towards trying to recreate that family feeling in the hospital as a whole. Most of the providers don't come to those things because they're driving from Wake Forest, and want to go back home at the end of the day.

Researcher: Just from your estimation, what percentage of providers do you think, still live in this community?

Expert Panelist: Of active medical staff, I would say it's maybe 15%, 10-15%.

Researcher: From a shift of what?

Expert Panelist: Oh, it was probably 80% when I first came here.

Expert Panelist: Yeah, it was pretty rare to have someone come from out of town to work here when I first moved here.

Researcher: Wow.

Expert Panelist: So, yeah, that's been a huge shift. If you include primary care doctors that are not active staff at the hospital, that's a higher number, because a lot of them do live in town.

Researcher: Okay.

Expert Panelist: They just don't work at the hospital.

Researcher: So is that, not an occupational hazard, but a blessing and a curse, to living in town? Right? People see you in the grocery store and ...

Expert Panelist: For me, it's great.

Researcher: You enjoy it?

Expert Panelist: I love the community. I love seeing my patients around. They love seeing me. That part's what makes it, that's probably the reason I'm still here, is the patient interaction that is what has kept me here. Because you can make more money somewhere else, but you don't get that kind of interaction in a bigger place, that and having family here. That part is special.

Expert Panelist: I think the problem from the primary care provider's perspective is the shift of them being all outpatient medicine and not being part of the hospital is not good for the hospital. And it's not good for our new systems of trying to have accountable care organizations involving them, cause they're the keystone for that.
Expert Panelist: The hospital gets the burden for those guys that once had to make it work.

Researcher: Yeah. Anything else around the organizational piece that we did not cover?

Expert Panelist: I think one thing that affected a little bit of the physician engagement was promises of this relationship with a larger academic center—not really coming through. I think they came at this from, we have to careful with our brand; we're going to help you guys with quality, but we're not getting too close. But the promises that came from the operator—were the, "oh yeah, you're going to be hand in hand with the tertiary center the whole time", and that hasn't really happened. We don't really have much of a relationship with them—that's any different than what we had before.

Expert Panelist: A lot of folks expected to have a lot closer relationship?

Researcher: Yes.

Expert Panelist: I understand the tertiary center’s-perspective. If they're going to have 10, 15 different hospitals with their name on it, they've gotta be sure they don't dilute out their brand. That brand is very important to those guys.

Researcher: But at the same time, the majority of the transfers to them come out of here and your other partner hospital 45 minutes away.

Expert Panelist: We send a lot of people over there.

Expert Panelist: The model they talk about, which is great, which is they want they want to have bread and butter stuff done in the community. They don’t want to pull that stuff to the tertiary center. They want to pull the complicated stuff there and that hub and spoke system, works very well if you’re really a hospital in their own system. But we’re not a one of their hospitals.

Researcher: Yeah.

Expert Panelist: We've got a very weak brand, small letters on the bottom of the sign. Patients have come to me and so many times and said, "I'm so glad you're a doctor", and I had to say no, I'm not. I'm not a doctor. I'm the same person I was last week.

Researcher: Okay. Last section. Are you okay on time?

Expert Panelist: Yes.

Researcher: So, in terms of the healthcare system, so again, you can think about the broader healthcare system nationally, or the state, and the challenges that we have in the state. What do you think of those elements that push in on provider's sense of engagement or disengagement?
Researcher: So for example, I've heard consistently is lack of Medicaid expansion, and some of the decisions that are being made in the legislature?

Expert Panelist: So, you said disengagement ... I've been thinking of this as me and the hospital. I'm not thinking about me and the government, or me and being a surgeon. I'm thinking about me and the hospital itself.

Researcher: Yes.

Expert Panelist: I don't see where federal and state legislation has any impact on that. Well, one thing [redacted] has done, and contractually we required it when we sold the hospital, is they still have to do a certain percentage of funds as charity care.

Expert Panelist: And so, the fact that I have patients that can't afford to get their hernia fixed, or their breast cancer managed, the hospital is going to still do charity care, and I can still get them taken care of. So that’s helpful. If the hospital refused to help anybody who had no money, that would be a big deterrent. Cause that’s important to me.

Researcher: Okay.

Expert Panelist: But Medicaid expansion would be nice from the perspective of allowing us to take care of more of our patients, but it doesn't affect my engagement, I don't blame our hospital for not getting Medicaid expanded. It's not their fault.

Researcher: Are there other pieces of the system though that you see affecting rural communities, and rural community hospitals specifically?

Expert Panelist: Financially. I mean, the people that are leaving rural communities, are the people with the money. So, your smaller towns have less tax dollars, more entitlement burdens, and fewer insured. So, the revenue flow to the hospital that can be turned into your personal reimbursement is lower, yet you're sacrificing some of the quality of life to stay in a small town, because you feel like it's the right thing to do. So, that's going to be an increasing line of tension. I joke around with some of the people that want to do third world medicine rotations, and I say, well I don't have to go to Africa once a month, I'm doing it right here at [redacted] every day. So, I think that financial tension and the flight to the suburbs of the bigger towns, is going to continue to erode the physician engagement.

Researcher: Okay. Anything else that we haven't talked about that you think has bearing?

Expert Panelist: I don't think so. I think, we've talked about it a little bit, but I think living in a town and owning the place you live and where you work, is huge for engagement. And the fact that our town doesn't draw people very much because of crime and education, has been a big deterrent to get people to stay here to be engaged. So it's more than just the hospital itself, it's the town, and the quality of life in the town, that makes it hard to keep people here who would be engaged.
Expert Panelist: And the hospital does its part to try improve that. They're our largest employer.

Expert Panelist: But there's only so much that they don't have the money to invest in the town to make it better.

Researcher: Is this a shrinking county?

Expert Panelist: It's a flat county, but the part that's growing is the part that's destitute, and the part that's shrinking, is the part that has money.

Researcher: Okay.

Expert Panelist: So it's a shrinking economy, but a stable population. The population may have gone down a little, the city has gone down. We were about 18,000 when I moved here, we are about 15,000 now. The county, I think, is still about 50,000. I don't think that's changed.

Researcher: Okay. Anything else you can think of that is relevant that we have not discussed?

Researcher: The goal of the study is to achieve 85% consensus in each of the categories: so individual, organizational, systemic, patient, practice if it's relevant, and then to your point, package the results for practical use. People are definitely interested in what I'm learning.

Expert Panelist: Oh, yeah. This is not just beginning. It's getting bigger and bigger. This is a tidal wave.

Researcher: It is. For me, I am just trying to establish some body of research that's at least legitimate, and then dig in, deeper.

Expert Panelist: I'm really curious to hear the echo from the other side. What do the say is the problem? I'm assuming you've got some administrators and employers on there?

Researcher: Yes. They're remarkably aligned with a lot of the things that you are saying.

Expert Panelist: Okay. Cause I could see their angle being more physicians are selfish, or you know, whatever their ... I'd be really curious to see what they say.

Researcher: No. I've not gotten that at all, actually. It's really been interesting how similar the responses have been.
Panelist #4 (physician)

Researcher: Okay, thank you. I don't know if you had a chance to read the definitions that I sent you with the consent of personal engagement and disengagement. Did you have a chance, I can quickly recap them for you?

Expert Panelist: I did briefly, I went through them.

Researcher: There is no widely agreed upon definition of provider engagement or what it means to have provider engagement. I'm interested in barriers and facilitators to personal engagement and personal disengagement for physicians practicing in rural North Carolina. Just to recap, the personal engagement comes from a definition from a researcher named [Kahn] in 1990. When people are engaged, they become physically involved in tasks are cognitively vigilant, they're empathetically connected in service of others in the work that they're doing.

Researcher: They feel like they can bring their whole selves to the role and to the discharge of their duties. With disengagement, it's basically the opposite. This simultaneous withdrawal and defensive someone's preferred self in the manner in which they are functioning and doing their role. Physically, cognitively, non-vigilant, non-involved emotionally disconnected from others. Are you comfortable with those definitions?

Expert Panelist: Yes.

Researcher: Is there something about yourself, part of your personality, or upbringing or your professional training, that inclined you more to be more engaged or disengaged in your role.

Expert Panelist: I think that as far as upbringing is concerned, or personality, I'm certainly a social person, so I think it helps sort of in the engagement with patients and other colleagues and co-workers. I think culturally probably what's most significant to me is those kind of connections to people. I think sometimes I do though feel a very strong desire to not be consumed by work and I think sometimes the blurring of boundaries seems to bother me more than other people.

Expert Panelist: And I wonder if maybe that's because I have this either acute awareness or fear of burnout or that I will become sort of too consumed in work. I think from a spiritual standpoint, I feel it's important to not put an overemphasis on work, as opposed to things like family religion and things like that. Does that answer the question?

Researcher: There's no wrong answer; the validity of the study is the rural experience for the providers on the panel and there are no identified facilitators or barriers in the literature. There is no right or wrong answer so please don't feel like that, but it sounds like or is it accurate to say that you tend to be feel more engaged in your work based on that definition as long as you can maintain this balance?
Expert Panelist: Yes, I think that's true.

Researcher: So then when you think about your colleagues that you work with regularly. From your perspective, do you think that they tend to have more or less the same level of engagement as you do?

Expert Panelist: It's a little hard to say because obviously everybody's kind of in a different place. Yes, I would say with a few exceptions, maybe less engaged.

Researcher: The follow up there is, from your perspective and the folks that you're interacting with, do you see significant variations of your colleagues in terms of their levels of engagement or disengagement, do you feel like it's in pockets, it's on a continuum?

Expert Panelist: I think it seems to be pretty varied, not only related. It seems to be very related to specialty sometimes, because I think certain specialties do cluster personality type. I think the other thing that makes it variable is kind of like you said about trajectory. I think that there are ... people seem to be in different places depending on sort of where they are in their career. I seem to notice that at least in this environment, I think I've noticed that a lot.

Expert Panelist: It seems like people toward the latter half of their career, it seems to be that maybe they just have found, maybe they just found such a way to be effortless that it seems like I don't know, I think that seems to be more common.

Researcher: Okay. For those folks that you would put in the more personally engaged bucket, what would you say you think are those drivers? And then same question, what would be the things that make them to be disengaged.

Expert Panelist: Definitely, there are people who have a lot of career ambition. They seem to be extremely engaged for that reason. If you think about someone who feels like they are ladder climbing, like this is just sort of the tip of the iceberg of where they kind of want to eventually be, versus someone who sort of kind of happy where they are so they tend to kind of coast a little bit more and then I do strongly feel like disengagement happens when people feel disgruntled or maybe they feel unappreciated or they feel like their engagement's not fruitful.

Researcher: Okay. How do you mean? If there ... with colleagues, with patients, with each other in terms of is their engagement with some people?

Expert Panelist: Well, I could say even anecdotally. Having a conversation with my nurse earlier today, there's certain patients where they just don't seem to want to give anything, so you start to give a little less because you really feel like this person doesn't care, and you're ... “Oh, why do I care so much? And they really don't care at all?” So you do disengage with people like that. You really find yourself saying, “You know what, this is pointless”. And then in the same token, from a system standpoint, you may experience the same thing, if you're sort of initially thinking,
"Oh, I'm going to come in and I'm going to pitch in, I'm going to be this team player, and I want to make changes and make improvements.

Expert Panelist: And you kind of run into a lot of how there are, get people and know people in organizations. If you run into a lot of brick walls and a lot of roadblocks, that can be discouraging, and that may be the other thing that I see from more seasoned colleagues is that they are ... maybe they just had a point where they sort of see things as “Okay, well, this has been this way for a long time, and it's not going to change and there's no point in spending a lot of energy”.

Expert Panelist: What did you say?

Researcher: The patient's piece is very interesting. That's really important.

Expert Panelist: I think when you think about the rural physician, you may disproportionately experience patients who are ... some of their what we may interpret as not caring may relate to low medical IQ, it may relate to lack of resources, you know what I mean?

Researcher: Sure.

Expert Panelist: It's easy to be engaged when you have a lot of resources at your disposal, when you have people to advocate for you, and you have a strong social support. For people who don't have that, that may be said. It could be that some of that is misinterpreted. But I was going to say if I look back at this definition about displaying what you think and feel, your creativity, your beliefs and values. I think in general, and this isn't really just a thought of medicine. I think in general, when you think about kind of corporate structures which medicine falls under. I think that speaking for myself but I don't think this is just me, that people that are extreme minorities may often feel a little bit like their work self and their home self are very different.

Researcher: Interesting.

Expert Panelist: And it may be because they feel like in workplace culture there's always workplace politics and culture and so there may be some feeling that you won't fit in, and sort of be able to like mesh with people and have this seamless experience.

Researcher: People you work with or people you're serving also?

Expert Panelist: I think mostly people you work with.

Researcher: Very interesting. From an organizational perspective, how much of your sense of personal engagement do you think comes from work environment?
Expert Panelist: No. I think they largely does, and I think when we were talking individual I probably moved over into some of the organizational thinking about sort of ...kind of just simplified, I mean, it can be sort of a positive reinforcement or a negative reinforcement that affects behaviors. You're going to want to continue to do things that you feel are fruitful and are well received, and basically are not wasting your time. I think that definitely is kind of an organizational thing. And I know ... I just had a conversation with a nurse and she doesn't get along with this other nurse, and you can just imagine how if you work closely with people that you just don't like that can really make you want to disengage, which fortunately, I don't think I work with a lot of people at this point.

Researcher: How much of your sense of engagement do you think comes from your work environment people you work with, relationships with team members, values to the organization, the skill level of the support people around you?

Expert Panelist: Yeah. Certainly everybody needs ... especially for physicians, I think we're sort of the captain of a certain part of the ship, not the whole organization but within your office or within maybe the care team or something like that, So I think in order to perform well, you'd certainly have to have kind of the supporting staff also perform relatively well and so you're performing in your role and not other people's roles.

Researcher: Yes. Do you feel that in a rural environment where you may not have as many say, specialists that you can call so you're having to wear a ton of different hats, including those that you may already have in your organization?

Expert Panelist: Yes. I think that definitely is a difference. If I compare here to the academic center where I trained, I think that's a big difference, and I think even when it comes to just day to day tasks, there are certain things I think I do now that I don't remember any physician doing based on the fact that I have just limited staff, limited resources and some of it is volume based. The organization may feel that they can support having additional people in a certain role in a smaller place, when they're not taking care of hundreds of patients a day, but maybe a dozen or two dozen, you know what I mean?

Researcher: Sure. What about, again, thinking about the organization in general or broadly; what specifically about your current organization fosters a sense of engagement for you?

Expert Panelist: Well, the smallness can also work to foster engagement, because you're not lost. You are a large percentage of the medical staff and kind of by default, you have a large impact, so that has actually, I think increased my engagement especially as a young physician kind of just coming out of training in doing and being involved in things that I think I probably otherwise would have seen as sort of a "Oh, I'll do that sort of later in my career", kind of participation whether it be in committees or different meetings or different things outside of necessarily my specialty.
Expert Panelist: I think that is obviously a top down thing, it comes from the C suite folks, as far as involving you and sort of making you feel like okay, your participation would make a big difference. So, I do feel that in the smaller kind of rural environment.

Researcher: What about the organization fosters a sense of disengagement; I think you spoke a little bit to that before in terms of resources and functioning in roles for which you maybe don't have the bandwidth or training. Is there anything else that is appropriate to put in that bucket?

Expert Panelist: Seem like there was something that I just kind of slipped out of my mind. I'll try to remember as we continue-

Researcher: It's okay, we can go back.

Expert Panelist: It's something that I thought about and then I lost it.

Researcher: No, that's okay. Just thinking, just reflecting-

Expert Panelist: Ask the question again, maybe that will trigger-

Researcher: What's specific about the organization fosters a sense of disengagement. We talked about things that foster a sense of engagement for a rural provider, but-

Expert Panelist: Oh, I was going to say if ... and I don't know this is necessarily rural of which is small, but it probably maybe a little bit of both. In this climate where the smaller hospitals have been taken over by kind of bigger parent companies. I think some of the individuals, are kind of fingerprint or sort of personality of the hospital may be lost a little. You sort of feel like you're just kind of one piece of the corporate puzzle but some of that individuality in kind of reaching the community that you’re in, I think some of that gets lost and the way that I think it negatively impacts engagement is because again, when there are things that you feel passionate about.

Expert Panelist: Or you may feel like "Okay, this is something that I think would really help, but this is something that I feel my patients really need" but you're always given this sort of whitewashed ... this is the corporate policy kind of response. I think that can really hamper your desire to be engaged and connect because you feel like you don't have any influence over those things even though kind of on one hand you’re sort of being told "he physician is the decider " and what you guys think should drive things but sometimes it sort of feels like it doesn't and I think that ... It's funny there's a one of the other surgeons here he's "Oh yeah this is my third corporate Hospital" and that's always the same", you know what I mean?

Researcher: Interesting, Yeah.
Expert Panelist: Whereas I think even in a place like an academic center where you have this other sister facilities, but you don't really talk about it “Oh, well all the academic center facilities have to do this”. You talk about it more as "this is what we need here".

Researcher: That's an interesting contrast. Last question in this section we're almost finished is ... are you still okay on time? Just to be mindful here. What kind of strategies do you think that rural community hospitals, can foster that would help support better physician engagement? What kind of an approach would work?

Expert Panelist: One thing that you said that was about sort of wearing different hats and so the lack of available resources likes subspecialties and things like that. We can adjust like we did with cardiology and started reaching out to other providers to do more consultation. I don't really think that the availability for those kinds of consults really doesn't have to be something physically there all the time. Sometimes they can be ... they have ... what is that called? Where-

Researcher: [Tele] medicine.

Expert Panelist: Yeah, exactly. Those kind of resources could really help where you just feel like okay, here’s a way of widening my support system and resource base, even though it's not physically, accessible. It's not necessarily ... It's still remote, is what I'm trying to say. Even though it's still remote. I have the hardest time getting a Spanish interpreter. Things like that where just ... “Why don't they have those” ... They have them in other hospitals like this little computer on wheels thing where you call someone and they pop up like Face Time and they talk to the patient on the laptop.

Expert Panelist: There's just certain resources that really help you even if it's not something that they could actually spend money on a physical person being in house, they may not be able to justify that, So that came to mind. Let me think. I'm trying to keep in mind your definitions because I think maybe I'm super imposing my own-

Researcher: No, that's fine too. We're trying to define ... to identify and define here what these barriers are. Your definitions and thoughts are really the crux of this study; so don't preclude yourself from doing that.

Expert Panelist: Trying to think from a strategy standpoint.

Researcher: We can come back to it, if you think of something else.

Expert Panelist: Yeah, I guess ... I can't really think of anything. I know I have not done that here. But I know I did enjoy when it seemed as a resident that they would set aside some protected time and some days we would do things that sort of weren't even clinical but they were designed that sort of getting at "Are you experiencing compassion fatigue?" or understanding different personality types and how those different personality types interact in the hospital. I thought that those kind of
things, you wouldn't have one of those often, but it would be sort of a welcome break to think about sort of your kind of can be in an emotional hill.

Expert Panelist: I don't know that I've ever done anything like that here or even been ... You kind of get maybe a survey question or something every now, and then about that topic, but that's probably it. That might be a way to engage physicians in sort of thinking about what they need to sort of be able to take care of their self.

Researcher: Sure. Last set of questions. If you think very broadly about health care system, your responses could be framed from the federal level, the local level, the state level, but just systemic impact, so outside of the organization in which you are currently functioning. Can you think about the elements that contribute to your sense of disengagement when relating to the broader healthcare system and then we can narrow to engagement?

Expert Panelist: Certainly... seems to be an emphasis on quantity over quality just in medicine general which all of us kind of go into medicine for our own reasons, but that a lot of overlaps. People nowadays just can feel sort hurried in trying to provide care in that environment. They don't really even have time to sort of really emotionally engage with patients. Where you're just sort of always on the clock, and I think at some point is going to sort of reach a tipping point where eventually we'll have to figure out “Okay, how do we wind back some of these enormous pile of paperwork that physicians are doing that doesn't actually impact patient care or outcomes.”

Expert Panelist: It’s just sort of driven by other things within whether it’s I don’t know avoiding malpractice or what the sort of things are that drive all of it. But we really get bogged down in that stuff and some of its necessary you sort of understand why, but it seems like there was a point in time where there was very little of that, and now there is just more and more. It's ... When is that going to be saturated? Eventually it'll be like opioids we'll finally say, "Oh, it’s too much, we focused on this too much. We created another crisis." I guess something that sort of things to involve the bigger system, not necessarily any individual or place...

Expert Panelist: But then it's also sort of interesting to think about the idea of feeling maybe overwhelmed or disengaged by wearing a bunch of different hats. But then also, when you think about the concept of medical training changing. That's actually what everybody used to do, It's just now that we feel sort of ill equipped to do it because we're being trained in a way that emphasizes the sub specialty more so than the generalist. I wonder if that pendulum will shift, especially when you think about the fact that there's the academic centers, but there's also all of these smaller places and rural places where what you really need is a couple of generalists and that's what you can sort of really afford and really do the most good with.

Researcher: It's a good point about what you really need is a couple of generalists because that's what you can afford, and you can do the most good work.
Expert Panelist: Yeah. If you can conference and consult and find out “Yeah, this patient really need to go” or are they find where they are which is a little bit of guidance, “Oh, this is kind of what I would do” That's actually very ... I find it challenging because I got used to that environment. I do find it challenging but it's just myself and one of the general surgeon and I'm used to having all these surgeons, whether they were trainees or attending's that I could talk to and bounce ideas off and have a level of comfort with and discuss things and sometimes in a rural place you can feel like you're a little bit in a little vacuum.

Expert Panelist: And it can be a little isolating, and that can be sort of hard especially when of course what you do want to do is give your patient the standard care and give them the best care possible and it's really challenging along those same lines to sort of convince patients that when they don't have something highly complex that they're fine in their local facility, and that's so hard to do because sometimes people just get in their mind that “Okay but better care comes from these places.” I was trying to tell a patient in her family today better care is going to come from a place where they know you.

Expert Panelist: Because restarting the process every time, it's not good, and people just get frustrated, and they just say "Alright well we'll just do whatever we can and will band aid things up we'll get you out the door". But you get admitted to a place where your primary care doctor is down the road, he can stop by and it's a different experience so kind of tapping into the things that we have that maybe bigger place doesn't have. I think even as a surgeon I am a specialist but we don't train in hysterectomies, we don't train in C-sections. There's a lot of things that the prior decades general surgeons did, we don't do anymore, and if we did, it certainly in a place like this you could have a little bit of a bigger impact, and I don't think they were getting substandard care.

Researcher: Okay. Then all those things that you mentioned if there was one thing you could change about the broader system as we just spoke about that you think could have the most positive impact on either increasing engagement or decreasing disengagement. What do you think that would be?

Expert Panelist: I think the piece about increasing the providers face time with the patients and at the same time decreasing our need to do Paperwork. . It's amazing how inefficient. I order home health for someone. It is absolutely amazing how much paperwork I get for one patient. I write the order and then they type it and send it back for me to sign it again. I'm like ... "what are we doing? Alright. Why did I just sign that twice?" But it's ... "Oh, we need it". This regulatory Board or that regulatory board says you have to have it.

Researcher: Are there any other big buckets that influence or could influence rural provider engagement that I haven't addressed or are there other ones that you would add that I didn't consider?

Expert Panelist: I think the things we talked about could fall into one of those areas.
Researcher: Okay, so then if you were to rank the influence of these three levels of health care system, individual, organizational and the broader healthcare system, which of those would you say ... in what order would you say has the strongest influence on your levels of engagement? And then we'll do the same thing in the reverse for disengagement. Which one has the biggest impact or strongest influence?

Expert Panelist: I think its individual actually. I think it's something that you already had a strong desire to do and would do under even the worst conditions. Which is good, people decide to do it.

Expert Panelist: I'll say organization and then the system.

Researcher: Okay, and then in the reverse. If you had a reverse rank, what are the things that have the strongest influence on your disengagement? The system or your own individual factors or organization?

Expert Panelist: I would say... I put organization first, and then I'll put individual and I'll put system third. I guess part of that is because, I don't know, I guess. I feel like we are pretty engaged bunch, sort of have to be, get through medical school and residency.

Expert Panelist: You can be brilliant and non-engaged and then decide “Okay, I'm going to” ... Actually I think a lot of the brilliant unengaged people, unengaged emotionally do bench research. Work with non-live people you know what I mean? It's highly intellectual, but not emotional and sort of not related to connections with people all day every day, and that was why I didn't like the lab. I was like ... "Oh, this is sad, how could I do this all day?"

Researcher: Okay, so then last two questions, and then we'll be finished. If you were going to rank just broadly rank top three facilitators for personal engagement in a rural community hospital, and then top three barriers or facilitators of disengagement,

Expert Panelist: Let's see. Oh gosh, this one feels like something I need to roll around in my head a bit.

Researcher: Well, I'm going to send you your transcript here in the next day or two and you're welcome to change any of your answers, so this is not setting stone and I won't proceed with any data analysis until I hear you're fine with the transcript. Don't feel like this is it, this isn't the only chance you have to respond.

Expert Panelist: Okay, so facilitators. Let's see.

Expert Panelist: I guess I would say lack of support I guess could be what I would say and I would say lack of resources which are I guess I consider two different things, although they kind of overlap.
Researcher: The Lack of resources ... which ones? But before you talked about can a strong connection to a larger center, would you put that into support or resources? How are you thinking about those two words? Just so I make sure I understand.

Expert Panelist: I think about support as being ... I guess I would think of that more as far as sort of the things that we have currently, working well. Even to the point of taking care of a patient on the floor and having the nurses engage and take ownership of that treatment plan.

Expert Panelist: Yes, I was putting that as a resource, and then with money put in there.

Researcher: Sure absolutely, that will support, you got to live, so then those are the things that.

Expert Panelist: And that was only two.

Expert Panelist: And then, I guess I would say climate might be the other one.

Researcher: Interesting that you say climate versus culture.

Expert Panelist: Yeah. Sometimes we kind of interchange those when we're talking about ... but I guess I'm thinking of climate as kind of the day to day ... for the day to day feel of a place whether people are encouraging and optimistic or people are ... you know what I mean? I guess that's what I'm thinking about as far as climate is concerned. So then for facilitators, I would say in a rural place, one of the really big facilitators is personal relationship.

Researcher: Okay. With people, you work with, with the community?

Expert Panelist: Mostly with colleagues, but as a separate one I would also say community engagement and community involvement. Again, when you're at small place you can have a really big impact, and it's actually something people want and reach out to you and ask for and can be very fulfilling.

Researcher: Sure. Speaking engagements in the community or community event?

Expert Panelist: Yeah. I speak at Relay for Life. I've been to the senior center, those kind of things. I've been approached about radio shows. Small community.

Researcher: Okay, any other ones you want to put in that bucket? Are those the primary one.

Expert Panelist: Let's see, and then I would say patient engagement is a facilitator too, which if there were two bubbles that overlap with community but mostly individual patients.
Researcher: Okay. You spoke to this a little earlier so this other patients who we've probably said before whether they have a lot of resources they have little check out where people take interest in their health and partnering with you.

Expert Panelist: Yeah, when you see the opposite... Sometimes I think we as human beings we sort of remember our negative experiences too much. But the reality is you do see the opposite as well, and I'll tell you one thing, I always thought you can see that. I hardly ever see malingerers here and people who were just trying to get out of work and just trying to loaf around like at the academic center where I trained. They have that here but it seems so much less common.

Expert Panelist: People here in general just kind of want to get back to work, want to take care of family. I don't know. Maybe they're less entitled.

Researcher: Okay, anything else that I didn't ask that trigger your brain while I was going down this path?

Expert Panelist: Not that I can think of right now.
Expert panelist #5 (physician)

Researcher: Given the definitions that we reviewed, which would you say describes you best when you are providing care at this point in time: personally engaged or disengaged?

Panelist: Engaged – I started off being focused on being a good doctor: a person rounding on patient making decision based on objective medicine: labs/imaging/data – I wanted to do that job well

As I worked, I realized that its important part but only a small part of giving good medical care. A bigger part is understanding the system in which care is provided.

It took me 1-1.5 years to realize that there is just no way to do this completely at the bedside, so I then committed to improving the system so that it could help me be a better physician.

Researcher: Would you say that, as a rule, you more often feel engaged or more often disengaged? Probe or clarify as appropriate.

Panelist: Personally, when I get to the point when I feel disengaged or when I feel this is about me - I have to move on How do you maintain that? One of the bigger challenges in a rural environment b/c it is hard to sustain being one of a few committed providers. In the beginning it is a commitment that I must do this and everything else will conform to this and you start to pull away from other things, like personal time, in the name of providing good care, it becomes a personal event, and those become a little bigger. Maintaining any degree of legitimate engagement is challenging based on the small number of people who are positively engaged because there is just not enough to spread it out.

- You also need buy in and support of family for lack of time commitment to them because that time goes to institution and you start to question if you should continue to do this in its current form.
- This has been the toughest part for me
- One of the CEO’s once met my wife and he thanked her for commitment to hospital and for allowing me to spend more time at hospital than at home

Researcher: This study proposes that there are three main influences that determine engagement individual, organizational, and systemic. Individual refers to specific things about a person (upbringing, training, experience, etc.) that contributes to a sense of engagement or disengagement. Organizational refers to the hospital in which you currently are employed and take care of patients. Systemic means the broader health care system (local, state, or federal).
Individual

Researcher: What is it about you personally — part of your personality, your upbringing or your professional training — that causes you to feel engaged in your work?

Panelist: Upbringing plays a huge role, I was always taught and told ‘if you are going to do something ‘DO IT’, commit to it and see it through to the end, ‘give it your best shot until the end’. That is all I know through high school, and medical school. If it can’t be 100% every time, when I agree to be a part of something it’s with an absolute commitment to seeing it through – this drives a lot of it because I have given my word. And I hate to renege on my word. My overall commitments permit me to do it; I am going to get it done. It just stuck with me because it’s always worked . . . Sort of the last man standing because that was the commitment made at the beginning.

Researcher: What is it about you personally — part of your personality, your upbringing or your professional training — that causes you to feel disengaged in your work?

Panelist: Not being able to give 100%.

Organization

Researcher: How much of your sense of engagement do you think comes from your immediate work environment meaning from the people that you work with, the relationships with team members, the values of the organization, or your ability to do the kind of work that you enjoy doing?

Panelist: It has changes in terms of where the allegiance lies and I will walk you thought that. Initially I worked with [redacted]— my only sense of company was [redacted]. Working in the hospital, I realized [redacted] was subgroup of [redacted] – and that there are 3 companies [redacted] I don’t think you will be able to do anything well unless you have a sense of alignment across these 3 organizations. I believe in [redacted] method of health care delivery so it was very easy to align with that – is precisely what I wanted to be like as a doctor and was an easy alignment. The next step was to take that alignment and march it up to what the host institutions wanted. This happened relatively quickly because I live in the community and understand the needs of community in relation to hospital. When [redacted] took over [redacted] what they said made sense in terms of what they wanted for community. They were speaking to the things that needed to be said and what they wanted me to hear: good quality care at bedside and doing things to show that we are promoting high quality care consistently.
Seeing that same push for good care at corporate level at LPNT health. In beginning I did not see it because everything I saw or heard was ‘its corporate’ and I began to question if they really cared because the things handed down were not working for us and make me weary of corporate structure. In my desire to steady the course, I took on administrative roles in the hospitalist program (direct relationship) and the hospital’s direct relationship with PMH and corporate. I realized that the corporate goal is same but from a bird’s eye view. Then I realized that the picture is much bigger and the agenda at corporate level is the same. As things trickle down and get changed and adjusted along the way the objective is still the same. Within a year and a half I realized that I am essentially aligned across the 3 institutions that help me provide the kind of care that I wanted to provide. My experience was that the people who had a role in my work, we were doing the things to enable me to do the work that I wanted to do.

Then things switched. I had an opportunity to be involved in primary care and now can take a 30k foot view to primary care and understand how do these connect and bridge. Then I had the opportunity to work in home health and hospice with the county which as I look across the spectrum I have pretty good perspective of system of health care in Person county. I realized in my little section of this, I could only touch so many people and that there is so much broader work to be done at hospital and community level that just one person is not going to be able to be effective. You need the support of multiple physicians at many levels.

As I was coming to this realization, things were beginning to change at the hospital and actions that lead to practices and policy changes stopped happening. And that made ongoing alignment tough for me. I just didn’t see how things were going to continue in a manner that would make me want to continue to do the work because I was falling out of alignment and it was frustrating because I wanted to be committed and maintain complete alignment and day by day I was losing alignment, instead of making it stronger. I fell out of corporate level not local level alignment. Not from Apogee. I was able to appreciate why people are disengaged from an organization level; you talk about support for primary care without actual support. And us not integrating into primary care, instead support was automatic at hospital level and did not involve the PCP’s because they want to be detached.

In a rural area, you have to tie what you do as an acute care organization to the needs of the community in which you are of service. We don’t have a system where our PCP’s are breaking down the door to send patients our way. There is not credibility, faith, or alignment and it is hard to run an organization smoothly like this. You need
the support of doctors to vouch for the place and it’s just not there.

If you think about how a hospital interacts with the local community and physicians in particular; you know I have heard a prominent community member say that he would expect local leadership to be involved in civic activities in county and when they aren’t it’s hard for us to support hospital. The other piece is leadership that is unstable. You have to ask when are they going to be stable enough to engage with community?

- This suggests to me that if the leadership is tuned into the community, we need to step up our efforts to bridge the gap
- The best thing that they could do is acknowledge the community perspective and feel for the organizations because when you do these strategic plans, it’s important that you don’t’ ignore what you find just because you don’t like what you hear. And I think things were on the back burner, things like PCP providers perspective on the hospital
- Now the hospital is realizing its time to take a second look, will take a while to close the gap
- Every leadership team wants providers engaged, but in terms of meeting you half way or some of the way and giving you some assurances in terms of your engagement - It doesn’t fully happen, you aren’t fully heard, you get interrupted before you are fully heard and you get an experience like that one or two times where you get knocked down and unless you have an unyielding resolve, you aren’t going to continue. The leaders don’t realize that you have to hear people out. You don’t have to act on what they are saying in every case, but you have to hear people, otherwise

**Researcher:** What kind of strategies can you think of that rural community hospitals might take to foster physician engagement?

**Health Care System**

**Researcher:** What are the aspects of the health care system that affect rural community hospitals specifically that foster your feeling(s) of engagement/disengagement?

**Panelist:** There are constant cuts to what providers are being paid so you have a system that is designed to not have anyone interested in doing anything and for the ones who are, you know it will be a tall order because you hope there are others who will help.

It also seems like BCBS can do whatever they want with backing of the legislature, and when big mistakes are made it’s smoothed over. How does a physician feel a drive to engage? Be a part of it? You don’t. You put your head down

Or you join a system, become employed and forget about it but then are subjected to different set of regulations/documentation issues. Put all of those things together and it feels as if the system conspires against being a good engaged provider in a small town. It makes your interest tough and you ask Do I really want to do this?
I like what I do, because I do get to make decisions about where I am going to put my time and effort based on latest info from D.C. the state, the county, and into the hospital. I like that because I can make decisions on how I work and what I do based on payer issues/regulations. It helps to be current in that regard. The perk that I get is diversity in my work; it makes my decisions a little more informed earlier than it would have and more so than my peers.

**Researcher:** What about the broader health-care system would you change that could foster rural physician engagement and decrease disengagement?

**Panelist:** If I could change one thing on a broad general level it would be related to insurance because right now all of what docs want to do for patients, is dictated by what insurance is willing to pay for. One change to physicians to take the next step in re-shaping health care is to change the way insurance works specifically the authorization for care. It’s a small component of the big picture but is front and center for providers and its low hanging fruit – if it’s picked, it gives you some interest in climbing the tree.

*Complex Adaptive Systems*

**Researcher:** If you were to weigh the influence of these three levels of the health care system: individual, organizational, and the broader health care system, which would you say has the strongest influence on your current state of disengagement?

**Panelist:** 1.) Organization 2.) Personal, 3.) System

**Researcher:** Would you agree or disagree that these are the three main determinants to your level of engagement or disengagement meaning: are there other influences on your level of engagement that have not been mentioned?

**Researcher:** When you think about your physician colleagues, those that you work with regularly, would you say they tend to have more or less the same levels of engagement as you do?

- Yes, a few have said that since I got here, they could scale back because I was carrying the load, they did not realize things weren’t happening before my involvement
- When you have one set of people who are engaged pull back and 2 others can add to 10 and help in some way but if 5 of the 10 continue to work harder because the others pulled back, then you need a torchbearer which is the capacity in which I have been serving

**Researcher:** Do you see significant variation among your colleagues in terms of their levels of engagement?

**Panelist:** Yes but it is improving
Researcher: What are the additional thoughts that you have based on your experience with engaged and disengaged physicians working in rural hospitals that you would like to share that you think is important for this study?

Panelist: No additional thoughts

Researcher: Thank you for your time and your participation.

Expert Panelist #6 (administrator)

Researcher: Would you agree with that or disagree with these definitions?

Panelist: I would agree with that.

Researcher: Okay. So those are the definitions to guide the conversation. So I’m proposing that there are three main influences that determine engagement: individual, organizational, and systemic. Individual, we’re talking about people, upbringing, training, experience, organizational, organization in which you are functioning. And then systemic can be the broader healthcare system either at your federal, state, local level that impacts your provider’s practices. So first set of question we are focusing on the individual first: is there something about physicians practicing in this organization that you think is unique that engenders their engagement?

Panelist: As a whole, or can I speak to individuals?

Researcher: You can speak to individuals, however you think is appropriate.

Panelist: So I think ...

Panelist: People that are from here, identify, they have sense of ownership and wellbeing in the community that's very apparent. Those that have spent an extended time and had plans to practice community medicine, they don't even necessarily have to be from here, if they've been practicing here for five, six, seven years, there's a definite difference in ownership than a subset that you can tell is kind of clocking in and clocking out on a day to day basis.

Researcher: Okay.

Panelist: And is doing it because they have to and it pays the bills, not because they feel an obligation to our specific community.

Researcher: Okay, so that community piece?

Panelist: Yeah.
Panelist: Ultimately it's kind of at the most basic level and example is this; do they have a friend in town they can go to dinner with? I would probably say, those that would say yes are fairly engaged. And those that would say, no, are not.

Researcher: Do you think there's something about the training or personality or sort of their innate sense of who they are as physicians that feeds into whether they're personally engaged or personally disengaged in their work in the rural setting?

Panelist: I think it can be a combination of any of those factors. I don't think it's one specific. I know some doctors, there are probably doctors at the larger institutions that came from small towns and said to themselves at a young age “I'm never practicing here” and they leave and never come back. They knew they wanted to be a doctor, and they said, I'm never going back. There's doctors we have here that grew up in small towns, said that's why I wanted to come to a community like this because I wanted to serve in a similar setting of where I grew up because they remembered their doctor and I think doctors in smaller towns, there's a reverence to them. And there's a plus and a minus to that because everybody sees them in the grocery store and wants to know why they have that rash in the middle of the fruit section.

Panelist: And then in a bigger, urban setting, you don't have that. The doctor can go somewhere and 99% of the people don't know who they are or what they do. So there's some anonymity.

Researcher: Do you think that that engenders even another layer of accountability or responsibility for the health of the community?

Panelist: I think it does. I think there's an ownership ... It's almost political even when you're in a smaller town. It's like a political position. You're the doctor. You're my doctor, your everybody's doctor. And some really own that still. But I feel like less and less want to.

Researcher: Why do you think less and less want to?

Panelist: I think in a sense the industry and the training has jaded a lot of folks on medicine. Based on how they're compensated. And I think that's become a looming factor between the debt and liability they take on vs the life style and compensation they receive... It's still a great calling. The people that get into medicine are brilliant. You have to be to go through all that. But there's an element generationally when you get out of residency, you're automatically worth the average income of everybody else. Everybody knows and references the MGMA median, where there used to be this mentality of you're not worth anything until you see people and you build a practice. You have to build it. There's this element of, I did 80 hours weeks in residence. I've already paid my dues. Now you pay me.

Panelist: And some of that's supply, demand economics so they can have that mentality. But there's less of an element of when you get out you still have to earn that respect and reverence. And that's more of an old guard type mentality. Not to say there's not physicians coming out that have that, but I think it's less and less than what it was.
Researcher: Interesting. So for the providers that you're interacting with regularly, do you think that they have the same ... Do you think the engagement or disengagement sort of is in packs? Or do you think it's a continuum? How would you say for the ones that you interact with in terms of their level of engagement or disengagement?

Panelist: When you say continuum, what do you mean?

Researcher: So are they sometimes engaged, not engaged, sometimes not...

Panelist: I think you see some of that. Kind of like almost like biorhythms where sometimes particular physicians are more engaged. There's some that have no desire. They want to come here ... I think more of their engagement and energy is focused in work/life balance.

Researcher: Okay.

Panelist: And there's some that for decades have had an unhealthy commitment to the practice of medicine at the cost of their own well. More and more personal interests weigh heavily. And that's what you see, kind of shift in mentality and how many days of call are they going to take. And that's why advertisements for certain positions address the life balance factors more, you can be part of a nine man group it's a one and nine call rotation. Or there is no call. So there are packs, it's generational. You have more traditional ... The traditionalists and the baby boomer physicians who remember what it was like to take 15 nights of call or be on call a month for their practice in the hospital. And that goes back to the previous statement of, that's how they built their practice and built their income.

Panelist: They weren't coming out and getting offers at the MGMA median. Because that wasn't even available information 25 years ago.

Researcher: So then thinking about what we just talked about in terms of the individual piece, what do you think of the primary drivers that lead them to the personal engagement? And then primary drivers that lead them to the disengagement side? And the discharge of their duties in their work?

Panelist: I think things that would lead them to personal engagement of the hospital really are who mentors them both before they come to the market, and then after. How they're idea of practice is formed is critical. I think if they have mentors early on that really talk about the importance of the community and the hospital and knowing your patients and I think they're more likely to have personal engagement here.

Researcher: Okay.

Panelist: They're more likely to have those discussions with their families about their engagement and their work commitment up front. The things that disengage I would say are ... There's a lot of external factors that push that. So just in general where medicine is headed. Everybody wants Academic medicine -it is something kind of like
the shiny coin everybody wants to have. Nice to have that brand, to be in the larger group. Less call, more kind of a shift work approach. And be able to do studies and have that prestige. But it's a different kind of prestige. Other factors I would say is the payer dynamics, it's harder when you're a community doctor because you can't be all things and be on every committee because you just can't make a living.

Panelist: And then when it gets too far upended you look for employment under the hospital. And then there's I don't know if I would say less ownership because their employed doctors that still have immense ownership. But there's just an element of separation that occurs. They have to be employed thought because it's not sustainable for them otherwise. So I don't know if that results with them having some sort of bitter feelings towards the practice of medicine if they could always do it one way on their own and be a business owner.

Panelist: Because there's a lot of pride in that. And then when the dynamics just don't favor that anymore, they have to be employed. So there's just some kind of residual resentment towards the system that they're in at that point.

Researcher: Interesting. So switching gears to think about the organization and not the people. How much of a sense or do you think that there's a sense of that ... How much do you think the immediate work environment, colleagues, relationships with either community relationships with patients, et cetera play into that sense of personal engagement? And then same question, for personal disengagement?

Panelist: I think it's fairly, it's pretty important from a culture standpoint because if younger physicians for example come in and they see other physicians that are engaged in the organization, it's a rising tide rises all ships, right? If there's energy around it, they want to be a part of it. There's value in the medical staff making its own decisions, controlling its bylaws. As opposed to defaulting to whatever administration wants to do. So if we're recruiting physicians I always look for engaged physicians. If it's a hospital-based contract, I try to be as specific as possible about the need to show up at these meetings. Be engaged. And you don't always ... You get some that go through the motions, and you get some that truly want to improve what's going on.

Panelist: And that's when it works the best because if it's intrinsic for them, and it's not me prodding the whole way, or administration or the hospital structure prodding them along the way, then you start to see some synergy and you start to see others kind of tap into that energy. But if it's pulling teeth, that's disengaging for anybody. If you can't get them to show up at meetings, or participate in general.

Researcher: So there's some research that suggests recently, not specific to providers, that leadership teams and leaders shouldn't be responsible and can't possibly be responsible for the engagement of their employees. There has to be some ownership on the individual's side. But the way that that's set up is through clear expectations. This is healthcare, this is what we do here. We change. We have to change to survive. These are the constraints in which we work. You choose to be here knowing this or you don't. What would you say to that in to that? Being specific about how much of
that is a give and take in terms of the individual’s responsibility versus your responsibility as an administrator?

Panelist: I think I would agree with it. There's an employment contract you have with someone. And you can state the bare essentials of what you want. And then there's this social contract that really kind of determines one culture and how you're going to be perceived. So we try to talk about our big push is how do we control the narrative of what our hospital is? So for us, if you look at our quality metrics, we actually do very well. But if you look at our experience metrics, we do very poorly. So in an ideal realm those two things should be fairly correlated consistently, not inverse. And we are actually inverse.

Panelist: So it's a matter of how we engage folks and how we kind of reach people on a personal level. And I don't think ... I struggle with have we put so much on people in terms of tasks that they're so focused on the task and documenting to make sure the quality is good. And we've lost touch. And in our market, our payer dynamics and our mix is such that I don't have, we don't have 10 people running around to be concierge to folks. So there's always this balance, this question of I'd rather get the quality piece right first, and make sure we're saving a life. And then figure out how to make sure someone feels good about their life being saved.

Panelist: If you did it the other way around, my scores might look great, but not my quality.

Researcher: So what is it about this organization that you specifically think fosters a sense of engagement for your providers?

Panelist: I think when the elements are there; I think it's taking care of your neighbors and the people that you know. You're really caring for your community, it's not as much strangers coming in are just driving down I85. So there's just the sense of taking care of Jim, who my father works with or whatever. He's been here forever. They're my patient. So I think that ownership and the fact that those people know their doctors and look to them and trust them on that level, I think is pretty engaging. And we can connect those dots.

Researcher: What do you think the things are the disengaging factors then?

Panelist: I think it's harder and harder for those connections to be made because it's difficult for me to convince doctors to live in this market.

Researcher: What do you think the percentage is of your providers that live here?

Panelist: When you say live here, are you talking about within my primary service areas?

Researcher: Yes.

Panelist: So maybe 20%.
Researcher: Okay.

Panelist: And that's a combination of we don't have a Target. We don't have a Starbucks. Our schools don't rate as well. This goes back to that personal balance. You have more and more traditional households. In the past the physician would work and the spouse typically wouldn't. And now you have more and more, both adults working in the house. I'm one of those people.

Researcher: Do you think the relationships with support staff impact engagement or disengagement for your providers? Not necessarily support staff, everyone they interact with on a multidisciplinary team, nursing, pharmacy, etc.?

Panelist: I think that goes back to some of that energy around culture and engagement. When doctors see nursing and techs that have been here for years leave, they don't hesitate to come directly to me and say, you're losing somebody really good in so and so. Why can't we keep them? So I think those represent chinks in the armor so to speak when you start to see long-term people you identify with loyalty and engagement go away or retire. And even that, I think it's probably well documented, workforces are less and less loyal.

Researcher: Yeah.

Panelist: Than they used to be. They're more transient, more likely to look around. If there's $5 more, and they have to drive a half hour more, why not?

Researcher: What are the strategies that you've seen work to positively impact on rural provider engagement in any of your rural experience? Not just here.

Panelist: I think a high level of visibility for leadership is helpful. And really promoting that doctor or provider. And setting expectations up front when you recruit them is important. I think to tell them that their practice is going to ramp up much quicker if they're out and visible outside of their office hours. And that the community will approach them with a level of reverence if they feel like they know personally Dr. So and so. They see that they're a human being who also treats their ailments.

Panelist: Other than that, it's difficult because it's just every time you move the needle here, compensation's one thing, but you necessarily can't afford to be in an arm's race with some of the bigger urban institutions. But that's what it often turns into.

Researcher: Last set of questions. Thinking about the broader healthcare system, so thinking about the structure because I know you're dialed in at the state level, so it can be state or federal. What are those aspects of the broader healthcare system that you think affect rural community providers a little more ...?

Panelist: Medicaid expansion's right up there. Rural hospitals are closing at record pace particularly in non-expanded states. You're seeing more and more, you're seeing elements of ... Not even elements, you're just seeing a migration of your workforce,
your capable workforce going to urban centers, which is going to continue over the next 20 years. I think right now it’s about 2020 it's going to be 50/50 in terms of population. By 2040 or 2035 it's projected to be 70/30 in terms of the populations favoring urban settings versus rural.

Researcher: How much out migration does this county have every day for work?
Panelist: Oh gosh, I have that data over here.
Researcher: It's okay.
Panelist: But we’re definitely at a net loss in terms of folk’s migration down to Wake or Durham or Raleigh for work.
Researcher: Okay.
Panelist: But we do get some migration in from some of the more rural counties. But net we're at a slight loss.
Researcher: Okay.
Panelist: So I think economically, I think the state's making some rough decisions. Recent decisions on the state employee health plans to cut, what is it, 300 million? That number moves around every article I read. I think it's going to be interesting politically. I don't know if that's just posturing in the midst of the next election, but they're making decisions that are going to hurt rural North Carolina pretty bad. And they'll hurt our ability to attract doctors and ultimately doctors, more and more independent doctors will look for shelter under employment of a hospital system. And that just represents more loss to the hospital system in terms of taking on that and providing consistent benefits.

Panelist: And we'll see how that goes. I think where many states like North Carolina are making it difficult for a doctor to be a small business entrepreneur. And I think in many ways our economy at a national level is built on small business entrepreneurs. So you take away their ability to operate and to generate revenue and value, and that's not a good thing economically, I'll tell you that. That's 101.

Researcher: What if you could or would change any of those things, or are other things about the broader system, what would that one thing be that you think would trickle down through to your providers working with community, and sort of make them feel like okay, this is better, I can do this?
Panelist: I think ultimately, I think if we expanded Medicaid in the state, I think it would translate into a lot of benefits for the hospital staff and providers. And give them a little more security in how we practice. And that they're going to be paid to be a safety net in a community that is a ... Economically we're probably in the bottom 10 of
100 counties in the state. We usually rate pretty low. So our unemployment's still just south of 10% somewhere, or maybe it's higher.

Researcher: Wow.

Panelist: Maybe it's eight. I don't know. I know we're still low compared to the state and national average.

Researcher: So last three questions. So thinking about those big buckets, where would you ... If you had to rank the three levels of the healthcare system, individual, organizational, or systemic, which one do you think has the strongest influence on current state or provider engagement? And then which one would you say, which order would you put them in for ranking of their disengagement?

Panelist: So that's a tough question because I think the one that's most susceptible to change, I think the individual engagement is more of a generational movement that is less elastic so to speak. But I think if things happened at a systemic level that benefited the hospital, you would see ... I think organization, systemic and then individual.

Researcher: Okay.

Panelist: Just based on where we're at.

Researcher: Okay. For engagement?

Panelist: Yeah.

Researcher: Disengagement you think healthcare system first, is that what I heard you say?

Researcher: If you were ranking ... So the things that have the biggest impact on your providers level of disengagement. Would it be their individual attributes that we talked about? Organizational, or the healthcare system?

Panelist: Okay. So I think from a provider's perspective, they'd probably say organizational.

Researcher: What would you say?

Panelist: I would say systemic because that impacts a lot of my decisions and ability flexibility.

Researcher: Okay.

Panelist: And then I'd say organizational and then individual.

Researcher: Okay. And then so what would you say, last question, what would you say are just overall, even if they're things we've talked about, what are your two top facilitators and your two or three top barriers for engagement in the current setting?
Panelist: Facilitators?

Researcher: Mm-hmm (affirmative).

Panelist: Like I said earlier, I think one would be the leadership team here's level of energy and engagement. I think facilitates greater engagement from the providers. I think they see us present and out. That motivates them. I think the other piece would be to see I think some systemic growth, support from an industry standpoint. So we go back to Medicaid expansion. It's just there's a lot to be concerned about going forward from a policy and payer standpoint.

Researcher: Okay. And then two barriers or disengagement sort of where would you, what do you think are those top two things that are disengaging from your perspective here?

Panelist: Systemic issues.

Researcher: Okay.

Panelist: Are disengaging. And then I think organizationally I think there gets to be concern with for lack of a better term, the bureaucracy and standardization of what we have to do.

Researcher: Okay. That was it. Thank you.

Expert panelist #7 (administrator)

Researcher: Personally engage with the folks around them, they're cognitively vigilant; they're empathetically connected to other people, in the ways that they're doing their work. They're not doing things that are above and beyond because they're asked to do it, it's just, they want to do it. They're just there with you. Disengagement is not the opposite, but ... According to this one Researcher, Kahn, it's on a continuum. It's this withdrawal of all of that in this defense of somebody where they're defending, withdrawing themselves, they're not connected, they're not cognitively involved with you when they're discharging their duties.

Panelist: Okay.

Researcher: I've bucketed the questions into three big buckets that I am suggesting influence personal engagement, personal disengagement, and those two things. And so, there are questions around individuals, organizations, and the larger healthcare system. And so, the organization piece is in reference to this hospital, the individual means the physician that you're working with, and then the system could be the local system of care, the state and federal system of care. In terms of physicians that you've had experience with in rural community hospitals, is there something about the physicians that tend to ... choose to practice in rural community hospitals that you think has this inherent engagement in their work? Causes them to feel engaged?

Panelist: The family oriented one.
Researcher: Family oriented one. Interesting. Because they can-

Panelist: They have children, they interact with the people in the community, so they see the people in the community, so therefore they get more involved, and that person in the community may be their patient in the hospital, maybe somebody who their little boy play junior league with.

Researcher: Interesting. So there is a sense of accountability?

Panelist: Right because you don't want them seeing out in the neighborhood.

Panelist: Right.

Researcher: Okay. Are there things for providers, maybe they live in the community, maybe they don't, that you think from an individual perspective, an individual provider, that causes them to be inherently disengaged in their work?

Panelist: Those in the hospital, what I see with some of the hospitals in the smaller communities, they come with a different idea of how much work they're going to have to do. Then your small, little rural hospital is usually only one work in the hospital. Whereas in your larger hospitals, there's always somebody else who you can count on. You can call for ... you can pick up the phone and go, "Hey, I'm up here, can you come up here and look at this person and give me ... some ideas of what's going on." You don't get that in rural communities. You don't have anybody else you can call, so that burns a lot of them out and it makes it where they don't want to come into the community, small areas.

Researcher: Okay. Interesting. Have you noticed, that for those that are engaged, if you're thinking about those people, that there's something just personality-wise, or training-wise? Maybe they are from a rural community that ...

Panelist: I think it's probably those who are raised in the community, and they're coming back to the community.

Researcher: Okay.

Panelist: It's hard to get someone who is from a big city to want to come to a rural community, unless they're almost ready to retire.

Researcher: Hm. Okay. Thinking about the providers that you interact with regularly, do you think that or do you notice that ... is the engagement or disengagement contagious? Are there any patterns like that that you notice?

Panelist: No, what I have noticed if they're all are engaged, including the hospitalists, the surgeons, the ED, they're all engaged, and they're cheerleaders for one another.

Researcher: Okay.
Panelist: Whereas if they're not, it just festers and you get a lot more complaining.

Researcher: Okay. Now, thinking about the organization, so here's where the nursing and the other relationships come in to play, how much of a sense of the provider engagement or disengagement do you think comes from interactions and relationships with nursing and other support staff?

Panelist: Their engagement would be with the other team members, where they feel like they know what they're doing and they have enough people to work with. If the doctors feel comfortable with the nurses or other people that they can count on, 'cause they're here by themselves, it's better. They're more engaged. If they feel there's not enough staff, they get disenchanted and don't trust the nursing staff. You don't have trust there.

Researcher: Do you think ... Again, more about the nursing staff piece; do you think that piece is really a big driver?

Panelist: Oh, yes.

Researcher: Yeah.

Panelist: Oh yeah. Definitely. 'Cause again, nurses do the work in the hospital.

Researcher: That's why you're in the hospital ... you need nursing care.

Panelist: Right. The doctors come in for a little while, but if something goes wrong with that patient in the hospital, they're gonna either blame the hospital or the doctor, 'cause, "Oh, I went to that doctor. Let's see what happened to them." They don't want to hear that in the community. They want to make sure they've got people they can count on in the hospital. Maybe I'm going too far into the answers.

Researcher: No, not at all. Not at all, because I think your perspective is a really interesting one because I think you have a different perspective on what those relationships are really like and what their impact really is.

Panelist: See, I deal with everything.

Researcher: Yeah, it really is. And so, then vice versa, though. But still related. Do you think that's the same for nurses? Does their relationship with the physician impact their levels of engagement here, or do you think that they have good relationships that keep them here?

Panelist: A good relationship keeps them here.

Researcher: Okay.
Panelist: Bad relationships don't keep them here. It doesn't keep the doctor, nor does it keep the nurse because they're constantly butting heads.

Researcher: What does this organization do specifically that fosters a sense of engagement for your physician staff, and I'll ask the same question about your nursing staff so we can see if there's a parallel?

Panelist: Well, with the physicians at the hospital here, they're new, and they came from larger hospitals and they came to this little tiny hospital, thinking it's gonna be much easier because our census is so low, where they're used to taking care of maybe 25, 26 patients on an average daily, and have somebody else here. They've got less than that with nobody else. I think we'll have more disengagement here than with the hospitalists. The other people here, most of the other doctors here, like your surgeons, your internal medicine... those who do come here that's internal medicine, they are rooted into the community. This is their hospital.

Researcher: What about your nursing staff? Does that play into also... just trying to tie the ties together if they're necessary, so for your nurses that live in this community, same thing, they feel like this is their hospital? They'll see physicians outside of here, people who originate in the community?

Panelist: And most of them know them. They know each other.

Panelist: That's what keeps a lot of the nurses here. Those who are brought up in this community, who's worked here for a while, they will stay here. It's hard attracting new people here, though.

Panelist: Then it turns into a viscous cycle. You don't have enough nurses, then the nurses get dissatisfied or disengaged, and then your doctors become disengaged 'cause they can't count on their nurses.

Researcher: Because you can't count them to stay because there's turnover, or you can't count on their level of skill?

Panelist: It's all of that because the skill level is not what it should be because you're having to bring in new grads. Then they don't stay here, so you're constantly turning over and they're constantly seeing new faces.

Researcher: Got it. It's sort of unsettling for them.

Panelist: Right. From both sides.

Researcher: Here's the magic wand question, and then there's only one more set of questions. What strategies have you seen that rural community hospitals have put in place those foster engagements that have worked? Or that could be put in place regardless of any resource constraints?
Panelist: I hate to say this, but improving staffing.

Researcher: Okay.

Panelist: Because everywhere I go, and these are small communities, staffing is always an issue. Always an issue. It just goes back to a lot of philosophies that we're using. Being visible, letting people know that you're here for them, and again, in a smaller hospital you can do that. In a smaller community, you can do that. I think having social things, recognizing people for the little things, you can do that at a little, small hospital. Or you can write handwritten notes in a smaller hospital, but you don't have that many people to write notes to. Everybody knows everybody.

Researcher: It is that layer of ...

Panelist: Family.

Researcher: You're going to see them again?

Panelist: Yes.

Researcher: And so, you have that extra layer of accountability there.

Panelist: Mm-hmm (affirmative).

Researcher: Okay. Then thinking about the broader healthcare system, Are there things that you think, structurally, within that system that really affect ...

Panelist: Rural hospitals?

Researcher: Yes, and that level of engagement for physicians and for your clinical staff.

Panelist: What I've seen in the last six or seven years with a rural hospital, it is lack of funding. That's why a lot of them are closing. Sometimes people feel better going to a larger institution, if it's not far away, they're coming to their little small community hospital, 'cause sometimes, little community hospitals have gotten a bad reputation. And so, that is really hurting them. Your rural hospitals problem must have part of a larger structure; they don't get the funding, whereas Blue Cross might pay this individual rural hospital this amount of money. But pay the one, the big hospital another, because of different pay structures. That's hurting the small hospitals. And people are more complicated. Illnesses are more complicated nowadays than they used to be, so therefore, the rural hospitals can't always accommodate those illnesses, so they ship them out.

Researcher: Of all of those things you just said, what would be ... what one or two of those things would you change that you think would have the biggest impact on rural that could help turn the tide?
Panelist: Well, I think having hospitals, rural hospital connected to larger systems, that's a big help, this networking. Being able to provide the staff that they need, whether it's physician staffing, nursing staffing, and being able to offer a little bit more variety of specialties, 'cause in your rural hospitals, you only have just a few of them.

Researcher: A lot of what I read in preparation for this study talks about how the payer model is structured for larger systems, larger, well-resourced systems. Then, there's sort of these carve outs, and, "Oh, here's what we can do for rural, here's what we can do for critical access." The system is not really built with rural in mind.

Panelist: Right.

Researcher: Of the three buckets, individual, organizational, and then the broader system... are there any other buckets that you think would impact that I haven't included?

Panelist: No, I don't think so. No.

Researcher: No? Which of those buckets do you think has the strongest influence on provider engagement and disengagement? The organizational piece, the individual piece, the larger health care system piece?

Panelist: No, that's last on the list.

Researcher: Last?

Panelist: I think the personal commitment, 'cause I think if you've got the personal commitment, everything else will fall into place. You want it to work.

Panelist: You want to see your community hospital thrive because that's your community rural hospital. A lot of them realize that's the only thing they have out there within 40 and 50 miles, so we got to make it work. I'm here for the long haul. Especially at this hospital, that's what I've seen with some of the doctors here at this hospital.

Researcher: They're committed?

Panelist: Mm-hmm (affirmative).

Researcher: Same.

Panelist: Mm-hmm (affirmative).

Researcher: Any other things that you think are determinants on the engagement, disengagement piece that I haven't brought up?

Panelist: I think the executive leadership in a hospital ...

Researcher: Okay.
Panelist: ... has a lot to do with whether physicians are engaged or disengaged. Because there's lack of effective communication with them.

Researcher: In your experience, do you find that in the rural hospitals that physicians are in leadership roles enough that they can help turn the tide, or not enough? Do you see them taking on a role to help address this piece?

Panelist: It's kind of half and half.

Researcher: Okay.

Panelist: Because in real rural hospitals like this one, you don't have enough to go around.

Researcher: Okay.

Panelist: So you use the one or two, three of them that to do everything, so they do take an active role in trying to change things.

Researcher: Okay. I just wonder if you go back to what you said about the payment structure piece, does that ... have you seen that work? Where physicians are incented to do that work, and take the active role to change things?

Panelist: No.

Researcher: No? Money doesn't work?

Panelist: I don't think so.

Researcher: Okay.

Panelist: For people who are really engaged and committed, money isn't everything.

Researcher: Okay. Interesting. Very interesting. Any other thoughts that you have in terms of your vast experience working in these rural community hospitals with the engaged, disengaged? I mean, do you see it as a trajectory? Like do you see people come in, this hospitalists group you're talking about, do they come in, "Yes, we're gonna be a good partner.", then it falls off, or do you feel like they just come in flat and ...?

Panelist: Well, for those I've seen here, that have just come in? They're falling off, they're becoming disengaged, and we're having to spend a lot of time trying to coach them up. Because like I said, it's a small hospital, so they have to do a lot of things. They have to attend a lot of meetings, and it's just ... you know, hospitals have a lot of meetings. They're feeling overwhelmed, so when they start feeling overwhelmed, they become disengaged.

Researcher: Interesting.
Panelist: You keep saying all my answers are interesting.

Researcher: They're super interesting because I just haven't thought about this ... I just haven't thought about it from your perspective, so I think your insights are really ... especially as a nurse administrator, It's different when you talk to your physician administrator or a different administrator who's never been a clinical person.

Panelist: Right.

Researcher: You have a better sense of what that means to be clinical, to work in that environment, you know what I mean? That's why I think, that's why I really wanted to talk to you and I'm so grateful that you participated because I don't think I'm going to get a lot of administrators on the panel who have a clinical background. Is there anything else that I'm forgetting that ...

Panelist: No, I think that's it.

Researcher: This is it? Okay. Thank you.

Expert Panelist #8 (administrator)

Researcher: So, the definition we're using, there's one for personal engagement, one for personal disengagement. And I just need to make sure you understand or agree with those definitions as a frame of reference. If you don't, tell me what you think they should be.

Researcher: So in personal engagement definition it is, the harnessing of a member of an organization to their work role. So, there's a thinking that, when you're engaged, you want to be this person, who you really are. And you employ and express yourself cognitively, emotionally during role performance. So, during the discharge of your duties you're cognitively vigilant, you're empathically connected to others in ways that you feel like you can fully just be there. There's nothing that's of holding you back in any of any of these domains of being engaged.

Researcher: In personal disengagement is a withdraw, or defense, of your preferred self and these behaviors; this lack of connection, emotional absence, you're passive. You're just doing the task of your job at some distance from yourself.

Panelist: Sounds fair to me.

Researcher: Okay. I'm proposing that there are three big buckets in a system's framework. The individual, organizational, and healthcare system facilitators and barriers for engagement and disengagement for physicians. So, that's how the questions are bucketed. So, the first set is individual. Please try not to use the name of the hospital or any names of physicians, if you wouldn't mind.

Panelist: Gotcha.
Researcher: I'll strike it from the record when it’s transcribed. Do you think that there's something about the physicians practicing in this hospital when you think about the engaged physicians, from an individual perspective or them as a group, is there something them about them unique to them? That puts them in the engagement bucket for you?

Panelist: Couple of things came to mind. There are a number of physicians that have long standing relationships in the community here. And I think that increases their desire to be successful and for the organization to be successful. Because it's part of where they are, it's part of their life.

Panelist: The other piece is there is at this institution, a really strong relationship between most of the medical staff among each other, supportive of each other. More so than there are at some other places.

Panelist: Which I think lends to more engagement, more interest in what it take to be successful? And how can we work with the organization to ensure that everybody is successful?

Researcher: Okay. So then, are there, same question, but in terms of disengagement, are there things inherent to the physicians who are disengaged? Not necessarily anything about the organization, just those individuals?

Panelist: The ones that are more disengaged, tend to be ones that work here on what I call a time clock mentality. So, it may be some of the emergency room physicians, it may be some of the hospitalists, it may be some of the groups for which we have outside contractual relationships. But don't have that relationship with the community.

Panelist: So, they come on, they do their shift. They leave, they come in and they see patients in the office. They leave go back to where they live. And it's more of a, the way I see it, it's most of a-

Researcher: Like transactional?

Panelist: A little bit, but I'm thinking more of like just going to your job as opposed to having a passion about your, what you're doing. Does that make sense?

Researcher: Yes. So, staying in the individual bucket, are there things about, do you think there are things inherent with physicians, not just rural physicians, but I know that's the overall topic. That is it inherent in their personality, or professional training that leads them down the path of more engagement, or disengagement? Are there, thinking about the same, the two buckets you were just thinking about, are there sort of individual characteristics that may be they have similar that you've noticed?

Panelist: The ones who are more engaged tend to be the ones that have that relationship style. That they like relationships with their colleagues, they like relationships with nursing, they like relationships with administration. The ones that are disengaged tend to seem to be more almost loners in a sense.
Panelist: We're all taught in med school, captain of the ship, you're the one in charge. And you're almost taught in a sense to be that single person. Now, that teaching has gotten better over the years.

Panelist: Yeah. That teaching has gotten better over the years. As med schools have understood and residencies have understood the importance of that teamwork and collaborative approach. But the flip side of that is as more and more millennials have moved into healthcare careers, more and more of them have really focused more on work life balance. And that has tended to push, and tended to gravitate them into positions of more time clock oriented if you will.

Panelist: So, they come in, they do their job, and they go home, they spend the time with the family, spend time with friends, that type of things. You don't see as much of that relationship building at work with them as you used to with the older generation.

Researcher: Okay, that's interesting. So then, do you see significant variation among the physician staff here in terms of level of engagement and disengagement? Are there factions of, or is it a, does it wax and wane?

Panelist: It probably waxes and wanes a bit. There are those that are consistently engaged. There are those who become engaged when there are certain issues on the table. And there are those who choose not to. But some will float back and forth. Those are core group that you can rely on, consistent engagement. They are here, they are involved, they are walking in my office.

Panelist: They're around, they're visible. And they want to know what's going on, and they want to be involved. And there are those who unless you go seek them out when they are working, you will never see.

Researcher: Okay. For that group, that you're putting in the engaged bucket, what do you think are those primary drivers? Or do you think they're internal? Do you think they are something else to wanting to stay engaged?

Panelist: I think it's innate to them that that's something that they want. We've got one physician here in particular, who was very, very engaged in, many years ago. Who sort of withdrew because of got burned on a couple of issues. Who is now re-engaged based on his desire, and working with different people.

Panelist: Within the administrative team. Which was nice to see, nice to see him come back. Because I think he's a good leader. I think he's going to be someone good. And so, I think the, I think those that are really engaged find something important within themselves to be engaged. It gives them a feeling of, maybe, I don't know if worth is the right word. But a feeling of being, I feeling, I don't know what the right term is.

Panelist: Satisfaction. And to a degree, enjoyment.
Researcher: So, then for the folks that you're thinking about, the disengaged, same question. But for the folks that you think are disengaged, what do you think those primary drivers are? Again, innate or external.

Panelist: Well, I think it's still innate, but I think the drivers are different. I think for them, they get their personal growth and satisfaction is not the job, not the career. It's the family, it's outside actives. Socialization outside of work. Whatever. But the career, the work that they do is something that's out of necessity.

Researcher: Work to live, not live to work?

Panelist: Yeah. And they, one can say, they've got it right from a standpoint of lifestyle.

Researcher: Okay, so then, switching gears thinking about organizations. So, this institution. So, in terms the folks that you're thinking are engaged, how much of that do you think comes from the immediate work environment? In terms of the people, the relationships, the colleagues, the people that come in the door every day with administration, or just the general climate of the organization?

Researcher: Or do you think it's something else about the organization that fosters that engagement?

Panelist: So, the question is which comes first, is the engagement because the physician wants to be engaged? Or is the engagement because the organization is welcoming to that engagement? And I think it's a little bit of both. I think currently, the organization is very welcoming and reaching out, and wants that engagement. Which then brings people who may be were on the fence, more on the side of being engaged than what they were before.

Panelist: But I don't think that by itself takes somebody who's not engaged and turns it around.

Researcher: So, same question then for disengagement.

Researcher: So, is there something that in terms, so you said that the chicken and the egg, which comes first, the disengagement or organizational engagement?

Panelist: Right.

Researcher: Are you thinking the same for disengagement?

Panelist: Well, I think certainly if the organization is not welcoming of engagement it's very easy for those who are disengaged to stay that way. When the organization as we are now welcoming engagement, encouraging people to get involved, there are those who have been disengaged in the past. Who are a little more willing to potentially at least explore the option.
Panelist: But they still have to have some interest. There are still, there's still a small core group of physicians that work here, that are just never going to do anything more than come to work, do their job, and go home. Because that's what they, that's who they are. That doesn't make them bad. And doesn't mean that they aren't interested in how the organization's doing. They just don't have any interest in being the ones having the discussions.

Panelist: And with the, what we've all described as engagement from a standpoint of discussions, and involvement, and leadership roles potentially. And that type of thing.

Researcher: So, what strategies have you seen, organizationally, that put people on the engaged side? And the disengaged side? What's worked, what hasn't worked that you've seen so far in your career in rural hospitals?

Panelist: Here or anywhere?

Researcher: Anywhere.

Panelist: Presence of a leadership team. Welcoming ideas. Not necessarily pushing them aside. From a disengagement side, certainly have seen circumstances where you don't have that, where you have strong leadership, but it's almost dictatorial. And so, there's just pushback, and withdraw, walk away, don't want to be involved. That's not the way it is here. But I have seen it elsewhere.

Panelist: It's really you see more of the disengagement when there is less involvement of seeking comments and ideas from the physicians. Even if it's an evidence based practice, that you can show in the literature is best. If you don't engage the physicians, and you just say, I'll use antibiotic stewardship as an example.

Panelist: This is what makes sense from an antibiotic stewardship standpoint, we need to move down this road. And you don't have the opportunity to have that dialogue, and you just say this is what we're doing as an organization. Because this is what makes sense. A lot more disengagement. And frequently a lot more initial engagement from a standpoint of being upset. But if you continue to push it, those, they'll back away.

Panelist: And you probably won't hear from them but under the surface, they're creating havoc.

Researcher: What would you say, so there's some research that suggests that leaders in an organization, any organization, can't be and shouldn't be 100% responsible, accountable for the engagement of their staff. That at some point, you have to manage expectations in a manner that the employees understand what they're getting into to. And sort of that these are our circumstances. And we have to thrive in spite of them, and within these boundaries.
Researcher: The suggestion and the research is we don't do enough to set the expectations of this is how this is, this is how healthcare is. We are always changing, we have to, that's just the nature of the industry.

Researcher: These are the structures that are in place. So, this organization, this is how we function here, period.

Panelist: I am a huge believer that physicians function much better, and particularly surgeons, much better under very strict, consistently enforced guidelines. All right, they will fight those guidelines being put in place. And they will argue about whether it makes sense. But once you have them to understand the why, and block utilization some time. I'm thinking of OR in particular, block utilization.

Researcher: Sure.

Panelist: First time start, turn over time, all these type of things. If you have, and behavior in general, job organization. If it's very clear that certain things will not be tolerated, the expectation is that you will be respectful. You will discuss and listen to what's going, from the nursing staff, from your colleagues. That there will be dialogue, and it won't be a monologue.

Panelist: And you truly hold everybody to the same standard. You will be more successful and so will they. And I have seen that happen. But that's a very, very tough road to go down. And a very scary one. Because everyone immediately thinks that all you're going to do is piss surgeons off and they all leave. Whereas, I truly believe all you're going to do is get them energized to where they'll dialogue, they'll talk to you about what's good and what's bad.

Panelist: And there's some back and forth discussions. But in the long road, they'll be more invested and more engaged, and supportive of the organization. Because they know exactly what's expected. And everybody's held accountable equally.

Researcher: Okay. So, then in thinking about the broader healthcare system, and about rural community hospitals, and this is really the driver for my whole study. Because a lot of the, engagement research with providers is done in well-resourced urban centers, who benefit from the current structure.

Panelist: Sure.

Researcher: Because I think those are things, things for that group are different drivers for engagement. Or if they're not different in my opinion, they have a heavier weight in a rural community.

Researcher: So, in thinking about the broader healthcare system, what aspects of that system do you think effect rural community hospitals specifically? It could be state, could be federal.
Panelist: Say that again. So, what-

Researcher: So, what are the larger healthcare system, big picture, yeah.

Panelist: Okay, so not just the particular system we are a member of, but the entire overall healthcare-

Researcher: Yup.

Panelist: Okay, gotcha.

Researcher: And it could be a state specific thing, it could be federal thing. But is there something you think crosses all those boundaries, that comes directly down, that has a direct impact on the providers that you're responsible in terms of their, those feelings of personal engagement or disengagement?

Panelist: So, it's interesting. For years, one of the things that has frustrated physicians more than anything, are regulatory compliance concerns. Hospitals have been hit with that for ten, 15 years. From a standpoint of what the expectations are. CMS guidelines, all the different requirements, so forth and so on.

Panelist: All of which have a bearing on how the physician practice, the physician was not the one held responsible as much. But in most situations, when you look at quality as a perfect example, hospitals are financially responsible, financially held accountable for quality measures. That physicians control, but physicians haven't had any accountability for.

Panelist: So, it was difficult to get physicians engaged. Now, that we have moved into MACRA, MIPS, more of the quality engagement for expectations at the practice level, that changes. And I don't think physicians are quite there yet by and large. Now, there are some groups that do very, very well. There are some that are on board, they've been doing PQRS for years. They're fully supportive, and believe that they're gonna be, they're gonna benefit from this whole process.

Panelist: And they very well may. But the majority of physicians, particularly in a rural setting, really are not there. Because it's not been something that's been a major player in the rural setting until recently. They're not in a large multi-specialty 150 physician group, that's led by a physicians that are looking proactively at these types of issues.

Panelist: You have a lot of physicians in a rural setting that are in small groups, solo groups, two or three doc groups. Or are employed by the hospital. But they are employed locally in a lot of places, employed locally, and not part of a large network. Even within our network here, the physicians employed here are employed somewhat locally. They're not really viewed as being part of the larger system within our healthcare community.

Panelist: So, it is unique in that regard for them. So, as the regulations come down, as there is a push from regulatory issues, that's going to change the quality outcomes, and so
forth, and dollars are going to be they're going to have dollars that are going to be attached to that. That will drive change for the physicians. The other piece is really around third party payers.

Panelist: Physicians notoriously, historically, have been horrible negotiators with third party payers. They basically take whatever they're given. They'll negotiate, they'll fight, and they'll rumble, they'll want to do this, want to do that. But unless they happen to be in a very large multi specialty practice, like I mentioned before, 100, 150 docs, or in some very, very large system that truly had a systemness to it. Their ability to really impact negations with the third party payers is small.

Panelist: So, they were held captive to those insurance companies. And that the increase within a rural setting, increased number of Medicare and Medicaid patients. And the difficulty in North Carolina with Medicaid expansion, or lack thereof has been huge. I spent a number of years in New York State, not in a rural setting. But in a moderate size city. But anywhere in New York state, even though not financially wonderful, Medicaid was, there was a significantly smaller number of self-insured patients, because Medicaid was available.

Panelist: Slightly easier than it is here.

Researcher: Interesting. So, then what about the system, if you could pull out one of those things, what do you think would change or foster more of a sense of engagement from the providers in rural communities?

Panelist: If we could work together with the physicians, as an organization, to help them understand the importance of quality of measures, how to be successful at the quality measures. And how that's going to help them down the road, be able to have that more pointed discussion with the third party payers, because they have a high quality practice. I think that would be huge.

Researcher: How do we do that?

Panelist: A lot of communication, a lot of discussion, a lot of education. And you need to bring certain resources to bear. A lot of physician practice, particularly small ones in a rural setting, really don't have the access to not just collecting the quality data. But really analyzing, and understanding how it is they can improve upon it.

Panelist: If we had a system to do that, that we could go out to the practices that are associated with our hospital. And say, "Here, we will help you with this. We will help show you that this is what we can do, et cetera, et cetera, et cetera." That would be phenomenal.

Researcher: Hmm, all right, last two questions. So, we talked about individual, we talked about organization. We talked about the broader healthcare system, are there any other buckets that I'm not thinking about, that you would, or any other categories? Or any other facilitators, or barriers that we hadn't talked about?
Panelist: The only thing we haven't spoken about is the patient.

Researcher: Okay.

Panelist: And the only reason I say that is, patient engagement with the physicians can drive physician engagement with the organization. If they feel like they've got a patient population who is working with them, listening, wanting to get better, and this type of thing, then the physicians are, I believe, more likely to go to the organization. Work within the healthcare system, to try to change things for the better, for the patient.

Panelist: And that's really what it's all about.

Researcher: It's a good category to add. Okay, so then of those four big, broader buckets, which would you say has the strongest influence on current state of provider engagement? Individual inherent who they are, the organizational, the broader healthcare system. Or the level of patient engagement?

Panelist: Still think it's individual. And I think it's individual because without the individual interest, although you can influence that, you really will never have great engagement. And so, I think the individual is really the driver.

Researcher: So, of engagement, but would you say that's the driver of disengagement for those providers? Or would you say it's one or the other?

Panelist: I think it's a driver for disengagement, can also be any of them. All right. The biggest one is probably organization. If the organization is not willing to work with the physicians to be engaged, is not willing to help them understand issues, concerns, so forth. Then and not willing to listen, most importantly.

Panelist: Then there's no reason for them to be engaged. That's going to be their opinion. So, whether they want to be engaged or not, I mean they may want to be, and they may be banging their head against the wall, for a few years. And just finally say, it's just not worth it. I've seen that happen. Doctors walk away, because it's just not worth it.

Panelist: So, I think the organization can be a huge impact for the disengagement. The regulatory stuff, the large system state, national is something that they don't have any control over, they realize they don't have any control over. They don't like it. But it's across the board. The more the organization can help them deal with that, and engage them, and ways to improve both in the hospital and in their practice, I think can make a big difference.

Researcher: Any other thoughts based on your experiences? Engaged, disengaged providers working in this setting that I haven't asked about, that you think are relevant?

Panelist: Not really. The only thing that comes to mind is, and I agree with your premises that the rural setting is vastly different than suburban, or urban. This is a completely different animal. Regulations are the same, expectations are the same. You would like
to think that the care would be more personal, because a lot of these people are neighbors. But when you got physicians who don't live in the community, that doesn't necessarily the case.

Panelist: So, it's a, you got a higher percentage of physicians in a rural setting, who don't live in the community, than you do in the suburban, or urban areas. It's just, that's just the way it is. Unless you're so rural, there's nothing close by. So, that has an impact.

Researcher: On the overall health of the community?

Panelist: On the overall health of the community, of the engagement of the providers. It just, it's different.

Researcher: What's the percentage of your providers who live in this community do you think? How many medical staff are on staff here?

Panelist: Total active medical staff is about, I wanna say 60 total medical staff. So, about 130 I think if I'm not mistaken.

Expert Panelist #9

Researcher: So, the definition we're using, there's one for personal engagement, one for personal disengagement. And I just need to make sure you understand or agree with those definitions as a frame of reference. If you don't, tell me what you think they should be.

Researcher: So in personal engagement definition it is, the harnessing of a member of an organization to their work role. So, there's a thinking that, when you're engaged, you want to be this person, who you really are. And you employ and express yourself cognitively, emotionally during role performance. So, during the discharge of your duties you're cognitively vigilant, you're empathically connected to others in ways that you feel like you can fully just be there. There's nothing that's of holding you back in any of any of these domains of being engaged.

Researcher: In personal disengagement is a withdraw, or defense, of your preferred self and these behaviors; this lack of connection, emotional absence, you're passive. You're just doing the task of your job at some distance from yourself.

Panelist: Sounds fair to me.

Researcher: Okay. I'm proposing that there are three big buckets f in a system's framework. The individual, organizational, and healthcare system facilitators and barriers for engagement and disengagement for physicians. So, that's how the questions are bucketed. So, the first set is individual. Please try not to use the name of the hospital or any names of physicians, if you wouldn't mind.

Panelist: Gotcha.
Researcher:  
I’ll strike it from the record when it’s transcribed. Do you think that there’s something about the physicians practicing in this hospital when you think about the engaged physicians, from an individual perspective or them as a group, is there something them about them unique to them? That puts them in the engagement bucket for you?

Panelist:  
Couple of things came to mind. There are a number of physicians that have long standing relationships in the community here. And I think that increases their desire to be successful and for the organization to be successful. Because it’s part of where they are, it’s part of their life.

Panelist:  
The other piece is there is at this institution, a really strong relationship between most of the medical staff among each other, supportive of each other. More so than there are at some other places.

Panelist:  
Which I think lends to more engagement, more interest in what it take to be successful? And how can we work with the organization to ensure that everybody is successful?

Researcher:  
Okay. So then, are there, same question, but in terms of disengagement, are there things inherent to the physicians who are disengaged? Not necessarily anything about the organization, just those individuals?

Panelist:  
The ones that are more disengaged, tend to be ones that work here on what I call a time clock mentality. So, it may be some of the emergency room physicians, it may be some of the hospitalists, it may be some of the groups for which we have outside contractual relationships. But don’t have that relationship with the community.

Panelist:  
So, they come on, they do their shift. They leave, they come in and they see patients in the office. They leave go back to where they live. And it's more of a, the way I see it, it's most of a-

Researcher:  
Like transactional?

Panelist:  
A little bit, but I'm thinking more of like just going to your job as opposed to having a passion about your, what you're doing. Does that make sense?

Researcher:  
Yes. So, staying in the individual bucket, are there things about, do you think there are things inherent with physicians, not just rural physicians, but I know that's the overall topic. That is it inherent in their personality, or professional training that leads them down the path of more engagement, or disengagement? Are there, thinking about the same, the two buckets you were just thinking about, are there sort of individual characteristics that may be they have similar that you've noticed?

Panelist:  
The ones who are more engaged tend to be the ones that have that relationship style. That they like relationships with their colleagues, they like relationships with nursing, they like relationships with administration. The ones that are disengaged tend to seem to be more almost loners in a sense.
We're all taught in med school, captain of the ship, you're the one in charge. And you're almost taught in a sense to be that single person. Now, that teaching has gotten better over the years.

Yeah. That teaching has gotten better over the years. As med schools have understood and residencies have understood the importance of that teamwork and collaborative approach. But the flip side of that is as more and more millennials have moved into healthcare careers, more and more of them have really focused more on work life balance. And that has tended to push, and tended to gravitate them into positions of more time clock oriented if you will.

So, they come in, they do their job, and they go home, they spend the time with the family, spend time with friends, that type of things. You don't see as much of that relationship building at work with them as you used to with the older generation.

Okay, that's interesting. So then, do you see significant variation among the physician staff here in terms of level of engagement and disengagement? Are there factions of, or is it a, does it wax and wane?

It probably waxes and wanes a bit. There are those that are consistently engaged. There are those who become engaged when there are certain issues on the table. And there are those who choose not to. But some will float back and forth. Those are core group that you can rely on, consistent engagement. They are here, they are involved, they are walking in my office.

They're around, they're visible. And they want to know what's going on, and they want to be involved. And there are those who unless you go seek them out when they are working, you will never see.

Okay. For that group, that you're putting in the engaged bucket, what do you think are those primary drivers? Or do you think they're internal? Do you think they are something else to wanting to stay engaged?

I think it's innate to them that that's something that they want. We've got one physician here in particular, who was very, very engaged in, many years ago. Who sort of withdrew because of got burned on a couple of issues. Who is now re-engaged based on his desire, and working with different people.

Within the administrative team. Which was nice to see, nice to see him come back. Because I think he's a good leader. I think he's going to be someone good. And so, I think the, I think those that are really engaged find something important within themselves to be engaged. It gives them a feeling of, maybe, I don't know if worth is the right word. But a feeling of being, I feeling, I don't know what the right term is.

Satisfaction. And to a degree, enjoyment.
Researcher: So, then for the folks that you're thinking about, the disengaged, same question. But for the folks that you think are disengaged, what do you think those primary drivers are? Again, innate or external.

Panelist: Well, I think it's still innate, but I think the drivers are different. I think for them, they get their personal growth and satisfaction is not the job, not the career. It's the family, it's outside actives. Socialization outside of work. Whatever. But the career, the work that they do is something that's out of necessity.

Researcher: Work to live, not live to work?

Panelist: Yeah. And they, one can say, they've got it right from a standpoint of lifestyle.

Researcher: Okay, so then, switching gears thinking about organizations. So, this institution. So, in terms the folks that you're thinking are engaged, how much of that do you think comes from the immediate work environment? In terms of the people, the relationships, the colleagues, the people that come in the door every day with administration, or just the general climate of the organization?

Researcher: Or do you think it's something else about the organization that fosters that engagement?

Panelist: So, the question is which comes first, is the engagement because the physician wants to be engaged? Or is the engagement because the organization is welcoming to that engagement? And I think it's a little bit of both. I think currently, the organization is very welcoming and reaching out, and wants that engagement. Which then brings people who may be were on the fence, more on the side of being engaged than what they were before.

Panelist: But I don't think that by itself takes somebody who's not engaged and turns it around.

Researcher: So, same question then for disengagement.

Researcher: So, is there something that in terms, so you said that the chicken and the egg, which comes first, the disengagement or organizational engagement?

Panelist: Right.

Researcher: Are you thinking the same for disengagement?

Panelist: Well, I think certainly if the organization is not welcoming of engagement it's very easy for those who are disengaged to stay that way. When the organization as we are now welcoming engagement, encouraging people to get involved, there are those who have been disengaged in the past. Who are a little more willing to potentially at least explore the option.
Panelist: But they still have to have some interest. There are still, there's still a small core group of physicians that work here, that are just never going to do anything more than come to work, do their job, and go home. Because that's what they, that's who they are. That doesn't make them bad. And doesn't mean that they aren't interested in how the organization's doing. They just don't have any interest in being the ones having the discussions.

Panelist: And with the, what we've all described as engagement from a standpoint of discussions, and involvement, and leadership roles potentially. And that type of thing.

Researcher: So, what strategies have you seen, organizationally, that put people on the engaged side? And the disengaged side? what's worked, what hasn't worked that you've seen so far in your career in rural hospitals?

Panelist: Here or anywhere?

Researcher: Anywhere.

Panelist: Presence of a leadership team. Welcoming ideas. Not necessarily pushing them aside. From a disengagement side, certainly have seen circumstances where you don't have that, where you have strong leadership, but it's almost dictatorial. And so, there's just pushback, and withdraw, walk away, don't want to be involved. That's not the way it is here. But I have seen it elsewhere.

Panelist: It's really you see more of the disengagement when there is less involvement of seeking comments and ideas from the physicians. Even if it's an evidence based practice, that you can show in the literature is best. If you don't engage the physicians, and you just say, I'll use antibiotic stewardship as an example.

Panelist: This is what makes sense from an antibiotic stewardship standpoint, we need to move down this road. And you don't have the opportunity to have that dialogue, and you just say this is what we're doing as an organization. Because this is what makes sense. A lot more disengagement. And frequently a lot more initial engagement from a standpoint of being upset. But if you continue to push it, those, they'll back away.

Panelist: And you probably won't hear from them but under the surface, they're creating havoc.

Researcher: What would you say, so there's some research that suggests that leaders in an organization, any organization, can't be and shouldn't be 100% responsible, accountable for the engagement of their staff. That at some point, you have to manage expectations in a manner that the employees understand what they're getting into to. And sort of that these are our circumstances. And we have to thrive in spite of them, and within these boundaries.
Researcher: The suggestion and the research is we don't do enough to set the expectations of this is how this is, this is how healthcare is. We are always changing, we have to, that's just the nature of the industry.

Researcher: These are the structures that are in place. So, this organization, this is how we function here, period.

Panelist: I am a huge believer that physicians function much better, and particularly surgeons, much better under very strict, consistently enforced guidelines. All right, they will fight those guidelines being put in place. And they will argue about whether it makes sense. But once you have them to understand the why, and block utilization some time. I'm thinking of OR in particular, block utilization.

Researcher: Sure.

Panelist: First time start, turn over time, all these type of things. If you have, and behavior in general, job organization. If it's very clear that certain things will not be tolerated, the expectation is that you will be respectful. You will discuss and listen to what's going, from the nursing staff, from your colleagues. That there will be dialogue, and it won't be a monologue.

Panelist: And you truly hold everybody to the same standard. You will be more successful and so will they. And I have seen that happen. But that's a very, very tough road to go down. And a very scary one. Because everyone immediately thinks that all you're going to do is piss surgeons off and they all leave. Whereas, I truly believe all you're going to do is get them energized to where they'll dialogue, they'll talk to you about what's good and what's bad.

Panelist: And there's some back and forth discussions. But in the long road, they'll be more invested and more engaged, and supportive of the organization. Because they know exactly what's expected. And everybody's held accountable equally.

Researcher: Okay. So, then in thinking about the broader healthcare system, and about rural community hospitals, and this is really the driver for my whole study. Because a lot of the, engagement research with providers is done in well-resourced urban centers, who benefit from the current structure.

Panelist: Sure.

Researcher: Because I think those are things, things for that group are different drivers for engagement. Or if they're not different in my opinion, they have a heavier weight in a rural community.

Researcher: So, in thinking about the broader healthcare system, what aspects of that system do you think effect rural community hospitals specifically? It could be state, could be federal.
Panelist: Say that again. So, what-

Researcher: So, what are the larger healthcare system, big picture, yeah.

Panelist: Okay, so not just the particular system we are a member of, but the entire overall healthcare-

Researcher: Yup.

Panelist: Okay, gotcha.

Researcher: And it could be a state specific thing, it could be federal thing. But is there something you think crosses all those boundaries, that comes directly down, that has a direct impact on the providers that you’re responsible in terms of their, those feelings of personal engagement or disengagement?

Panelist: So, it's interesting. For years, one of the things that has frustrated physicians more than anything, are regulatory compliance concerns. Hospitals have been hit with that for ten, 15 years. From a standpoint of what the expectations are. CMS guidelines, all the different requirements, so forth and so on.

Panelist: All of which have a bearing on how the physician practice, the physician was not the one held responsible as much. But in most situations, when you look at quality as a perfect example, hospitals are financially responsible, financially held accountable for quality measures. That physicians control, but physicians haven't had any accountability for.

Panelist: So, it was difficult to get physicians engaged. Now, that we have moved into MACRA, MIPS, more of the quality engagement for expectations at the practice level, that changes. And I don't think physicians are quite there yet by and large. Now, there are some groups that do very, very well. There are some that are on board, they've been doing PQRS for years. They're fully supportive, and believe that they're gonna be, they're gonna benefit from this whole process.

Panelist: And they very well may. But the majority of physicians, particularly in a rural setting, really are not there. Because it's not been something that's been a major player in the rural setting until recently. They're not in a large multi-specialty 150 physician group, that's led by a physicians that are looking proactively at these types of issues.

Panelist: You have a lot of physicians in a rural setting that are in small groups, solo groups, two or three doc groups. Or are employed by the hospital. But they are employed locally in a lot of places, employed locally, and not part of a large network. Even within our network here, the physicians employed here are employed somewhat locally. They're not really viewed as being part of the larger system within our healthcare community.

Panelist: So, it is unique in that regard for them. So, as the regulations come down, as there is a push from regulatory issues, that's going to change the quality outcomes, and so
forth, and dollars are going to be they're going to have dollars that are going to be attached to that. That will drive change for the physicians. The other piece is really around third party payers.

Panelist: Physicians notoriously, historically, have been horrible negotiators with third party payers. They basically take whatever they're given. They'll negotiate, they'll fight, and they'll rumble, they'll want to do this, want to do that. But unless they happen to be in a very large multi specialty practice, like I mentioned before, 100, 150 docs, or in some very, very large system that truly had a systemness to it. Their ability to really impact negotiations with the third party payers is small.

Panelist: So, they were held captive to those insurance companies. And that the increase within a rural setting, increased number of Medicare and Medicaid patients. And the difficulty in North Carolina with Medicaid expansion, or lack thereof has been huge. I spent a number of years in New York State, not in a rural setting. But in a moderate size city. But anywhere in New York state, even though not financially wonderful, Medicaid was, there was a significantly smaller number of self-insured patients, because Medicaid was available.

Panelist: Slightly easier than it is here.

Researcher: Interesting. So, then what about the system, if you could pull out one of those things, what do you think would change or foster more of a sense of engagement from the providers in rural communities?

Panelist: If we could work together with the physicians, as an organization, to help them understand the importance of quality of measures, how to be successful at the quality measures. And how that's going to help them down the road, be able to have that more pointed discussion with the third party payers, because they have a high quality practice. I think that would be huge.

Researcher: How do we do that?

Panelist: A lot of communication, a lot of discussion, a lot of education. And you need to bring certain resources to bear. A lot of physician practice, particularly small ones in a rural setting, really don't have the access to not just collecting the quality data. But really analyzing, and understanding how it is they can improve upon it.

Panelist: If we had a system to do that, that we could go out to the practices that are associated with our hospital. And say, "Here, we will help you with this. We will help show you that this is what we can do, et cetera, et cetera, et cetera." That would be phenomenal.

Researcher: Hmm, all right, last two questions. So, we talked about individual, we talked about organization. We talked about the broader healthcare system, are there any other buckets that I'm not thinking about, that you would, or any other categories? Or any other facilitators, or barriers that we hadn't talked about?
Panelist: The only thing we haven't spoken about is the patient.

Researcher: Okay.

Panelist: And the only reason I say that is, patient engagement with the physicians can drive physician engagement with the organization. If they feel like they've got a patient population who is working with them, listening, wanting to get better, and this type of thing, then the physicians are, I believe, more likely to go to the organization. Work within the healthcare system, to try to change things for the better, for the patient.

Panelist: And that's really what it's all about.

Researcher: It's a good category to add. Okay, so then of those four big, broader buckets, which would you say has the strongest influence on current state of provider engagement? Individual inherent who they are, the organizational, the broader healthcare system. Or the level of patient engagement?

Panelist: Still think it's individual. And I think it's individual because without the individual interest, although you can influence that, you really will never have great engagement. And so, I think the individual is really the driver.

Researcher: So, of engagement, but would you say that's the driver of disengagement for those providers? Or would you say it's one or the other?

Panelist: I think it's a driver for disengagement, can also be any of them. All right. The biggest one is probably organization. If the organization is not willing to work with the physicians to be engaged, is not willing to help them understand issues, concerns, so forth. Then and not willing to listen, most importantly.

Panelist: Then there's no reason for them to be engaged. That's going to be there opinion. So, whether they want to be engaged or not, I mean they may want to be, and they may be banging their head against the wall, for a few years. And just finally say, it's just not worth it. I've seen that happen. Doctors walk away, because it's just not worth it.

Panelist: So, I think the organization can be a huge impact for the disengagement. The regulatory stuff, the large system state, national is something that they don't have any control over, they realize they don't have any control over. They don't like it. But it's across the board. The more the organization can help them deal with that, and engage them, and ways to improve both in the hospital and in their practice, I think can make a big difference.

Researcher: Any other thoughts based on your experiences? Engaged, disengaged providers working in this setting that I haven't asked about, that you think are relevant?

Panelist: Not really. The only thing that comes to mind is, and I agree with your premises that the rural setting is vastly different than suburban, or urban. This is a completely different animal. Regulations are the same, expectations are the same. You would like
to think that the care would be more personal, because a lot of these people are neighbors. But when you got physicians who don't live in the community, that doesn't necessarily the case.

Panelist: So, it's a, you got a higher percentage of physicians in a rural setting, who don't live in the community, than you do in the suburban, or urban areas. It's just, that's just the way it is. Unless you're so rural, there's nothing close by. So, that has an impact.

Researcher: On the overall health of the community?

Panelist: On the overall health of the community, of the engagement of the providers. It just, it's different.

Researcher: What's the percentage of your providers who live in this community do you think? How many medical staff are on staff here?

Panelist: Total active medical staff is about, I wanna say 60 total medical staff. So, about 130 I think, if I'm not mistaken.
Appendix J

Round 2 & 3: Ranking Tool

Start of Block: Default Question Block

Q1 How many years have you worked in a rural hospital?

☐ 2-5 years (1)

☐ 5-10 years (2)

☐ > 10 years (3)

Q2 How many years have you worked in a rural NORTH CAROLINA hospital?

☐ 0-2 years (1)

☐ 2-5 years (2)

☐ 5-10 years (3)

☐ > 10 years (4)
Q3 Please provide the approximate distance from your home to the rural hospital in which you work?

☐ <5 miles (1)

☐ 5-10 miles (2)

☐ 10-20 miles (3)

☐ I do not live in community where the rural hospital in which I practice is located. (4)

Q4. Please type in your initials for data matching & validation purposes. Your anonymity will not be compromised.

__________________________________________________________________
Q5 These are PATIENT-specific panelist statements.

FIRST, please categorize each statement as a facilitator or barrier to personal engagement/disengagement by dragging and dropping each one into the appropriate box on the right side of the page.

SECOND, please rank order ALL of the statements in the box by dragging and dropping each one in its order of importance with #1 being the most important.

<table>
<thead>
<tr>
<th>Facilitator of Personal Engagement</th>
<th>Barrier to Personal Disengagement</th>
<th>Facilitator of Personal Engagement</th>
<th>Barrier to Personal Disengagement</th>
</tr>
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<tbody>
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Q6 PART 1 of 2: INDIVIDUAL-specific panelist statements.

The researcher has assigned each statement in this section as a likely FACILITATOR of personal engagement based on the interview responses of the expert panel.

Please RANK your top 5 statements by dragging and dropping each in order of importance with #1 being the most important FACILITATOR to personal engagement.

You may rank all 10 if you like. If you choose to do so, please check the box at the end of this section indicating that you have done so.

There is a text box at the end of the section for your comments.

_____ Physicians that have spent an extended time in the community who aren't necessarily from here, but have been practicing here for five, six, seven years, there is a difference in ownership than those who are clocking in and out every day (1)

_____ I love the community. I live here. I love seeing my patients around. They love seeing me, that's probably the reason I'm still here, is the patient interaction. Because you
can make more money somewhere else, but you don’t get that kind of interaction in a
bigger place. (2)

_____ Physician engagement is not just about you and the hospital. It's about your career,
and where you go with the next step of your career. You could be part of the system,
and rewarded for that (3)

_____ There are a number of physicians that have long standing relationships in the
community. That increases their desire to be successful for themselves and the
organization. Because it's part of where they are, it's part of their life. (4)

_____ There are physicians who feel a connection to the community and enjoy the
challenge of trying to provide something that no one else has or no one else can in
this setting. (5)

_____ There needs to be a medical staff that is supportive of each other. (6)

_____ There are physicians who are not consistently involved but who will become
involved and engaged when there are certain issues on the table. (7)

_____ As more and more millennials have moved into healthcare careers, they have focused
on work life balance. That has tended to push them into more of a time clock
orientation. They come in, they do their job, and they go home. They spend the time
with the family, friends, that type of thing. You don't see as much of that relationship
building at work with them as you used to with the older generations of providers. (8)

_____ The organization needs to provide a mechanism to support physicians to identify
what they need to be able to take care of themselves; to move away from what they
may not have realized is an unhealthy commitment to the practice of medicine at the
cost of their own well-being. (9)

_____ For physicians, I think we're trained to be the captain of the ship, not the whole
organization, but within your office or within the care team, So I think in order to
perform well, you have to have the support staff perform relatively well also so that
you can fully perform in your role. (10)

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Q6a I ranked all statements in this section.

- YES (1)
- NO (2)
Q7 PART 2 of 2: INDIVIDUAL-specific panelist statements.

The researcher has assigned each statement as a likely BARRIER to personal engagement based on the interview responses of the expert panel.

Please RANK each of the following statements by dragging and dropping the statements in order of importance with #1 being the most important BARRIER to personal engagement.

You may rank all 10 if you like. If you choose to do so, please check the box at the end of this section indicating that you have done so.

There is a short text box at the end of each section for your comments.

I think that we are going to have to measure engagement and community involvement in different ways; going to rotary, or the chamber after hours because it is just not possible to make living in the community a requirement for providers anymore. (1)

You would like to think that the care would be more personal, because a lot of these people are neighbors. But when you have physicians who don't live in the community, that isn't necessarily the case. (2)

Maintaining any degree of legitimate engagement is challenging based on the small number of physicians who are positively engaged because there are just not enough to
spread it out. You need the support of providers at many levels, one provider is not going to be effective. (3)

There needs to be a medical staff that is supportive of each other. (4)

There are physicians who are not consistently involved but who will become involved and engaged when there are certain issues on the table. (5)

As more and more millennials have moved into healthcare careers, they have focused on work life balance. That has tended to push them into more of a time clock orientation. They come in, they do their job, and they go home. They spend the time with the family, friends, that type of thing. You don't see as much of that relationship building at work with them as you used to with the older generations of providers. (6)

The organization needs to provide a mechanism to support physicians to identify what they need to be able to take care of themselves; to move away from what they may not have realized is an unhealthy commitment to the practice of medicine at the cost of their own well-being. (7)

Part of the reasons for a provider not being the right fit in rural is more limited resources; we really only have that core ED and hospitalist group and limited specialties. If you have physicians who are used to having a variety of providers available for consultation and additional support, they are not going to be comfortable in this environment. (8)

You see everybody leaving for the bigger towns. You feel like you're making a sacrifice to stay because we don't have Starbucks and Target, and all the fancy stores. We don't have the great schools. And yet, they want to pay you less because your market pays less so that part of it does play into it a little. That strains the loyalty, when you feel like you're undervalued. (9)

There are a lot of things that the prior generations of general surgeons trained in that we don't do anymore, and if we did, in a place like this, you could have a bigger impact. We feel ill equipped because we're being trained in a way that emphasizes the sub-specialty more so than the generalist. But in these smaller places and rural places, what you really need is a couple of generalists because that's what you can afford and can do the most good with. (10)

Q7a I ranked all statements in this section.

○ YES (1)

○ NO (2)
Q7b Optional comment box

End of Block: PART 2: INDIVIDUAL BARRIERS

Start of Block: ORGANIZATION-LEVEL STATEMENTS PART 1: FACILITATORS

Q8 PART 1 of 2: ORGANIZATIONAL-specific panelist statements.

The researcher has assigned each statement in this section as a likely FACILITATOR of personal engagement based on the interview responses of the expert panel.

Please RANK your top 5 statements by dragging and dropping each one in order of importance with #1 being the most important FACILITATOR to personal engagement.

You may rank all 11 if you like. If you choose to do so, please check the box at the end of this section indicating that you have done so.

There is a text box at the end of the section for your comments.

_____ In a rural area, you have to tie what you do as an acute care organization to the needs of the community in which you are of service. (1)
_____ There is a need for alignment between the organization's operationalization of mission, values, and commitment to quality with my personal values and vision for practice (2)
_____ I think living in a town and owning the place you live and where you work, is huge for engagement. (3)
_____ The fact that the hospital provides charity care for patients that can't afford to get their hernia fixed, or their breast cancer managed is important to me; I can still get them taken care of. (4)
_____ Stability in the C-suite is important. (5)
_____ As far as involving you and making you feel like your participation would make a big difference, that is a top down thing, it comes from the C suite folks and it has to mean that our voices are heard. The leadership does not have to act on everything we say, but there is an expectation that if we are asked to be involved that we are fully heard. (6)
_____ The last leader we had wanted to get physicians to feel like they were an important part of the medical staff and provide them opportunities to be a leader, to move up,
and to see that as part of their career trajectory down the road. That kind of energy brought a lot of us into leadership. (7)

_____ The smallness of a rural setting can also work to foster engagement because you're not lost. You are a large percentage of the medical staff by default, you have a large impact. (8)

_____ I think that attitude of being a team comes more easily in a small community. In rural hospital I see a support staff as a source of positive engagement for providers. (9)

_____ I would say that up until our hospital was bought, we had people that had been here their whole life - it felt like family, and that was big for engagement. (10)

_____ I had a sense that I could really help the hospital where I did not feel that way about my group practice. (11)

---

Q8a I ranked all statements in this section.

☐ YES (1)

☐ NO (2)

---

Q8b Optional comment box

---

End of Block: ORGANIZATION-LEVEL STATEMENTS PART 1: FACILITATORS

Start of Block: ORGANIZATION-LEVEL STATEMENTS PART 2: BARRIERS

Q9 PART 2 of 2: ORGANIZATIONAL-level panelist statements.

The researcher has assigned each statement in this section as a likely BARRIER of personal engagement based on the interview responses of the expert panel.

Please RANK your top 5 statements by dragging and dropping each one in order of importance with #1 being the most important BARRIER to personal engagement.

You may rank all 11 if you like. If you choose to do so, please check the box at the end of
this section indicating that you have done so.
There is a text box at the end of the section for your comments.

_____ There is a core group of physicians that work in rural that are just never going to do anything more than come to work, do their job, and go home. Because that's who they are. That doesn't make them bad. And doesn't mean that they aren't interested in how the organization's doing. They just don't have any interest in being the ones having the discussions. (1)

_____ In this climate where smaller hospitals have been taken over by bigger parent companies, I think some of the fingerprint or personality of the hospital gets lost. You feel like you're just one piece of the corporate puzzle. (2)

_____ Our current CEO does not talk to us about how taking on leadership roles fits into our career path or what roles are available to us. It's more just a matter of running the medical staff. It's the individual people at the CEO level that drive that. (3)

_____ The fact that our town doesn't draw people very much because of crime and education, has been a big deterrent to get people to stay here and to be engaged. So it's more than just the hospital itself, it's the town, and the quality of life in the town, that makes it hard to keep people here. (4)

_____ One of the things that are different about community hospitals versus at AMC's, are that they have employed Chiefs of Surgery, and Medicine, so there's stability there. We have elected people in those roles and you rotate through. People that are doing it now have really never done it before. Because most people don't live here anymore, it's hard to get people to even want to do it. So the quality of the leadership of the medical staff is a real roller coaster ride; which reduces some of that bonding, some of that engagement that you get when you've bonded with everybody who's involved in leadership. (5)

_____ There are not enough physician leaders to go around, there are fewer of them and they have to do everything, in terms of taking an active role in changing things (6)

_____ It is not an active plan to be 'absent' as a provider, but the absence of a sense of encouragement to improve quality, or improve your practice from the employer, or a sense of trying to help you do better or grow has an impact. (7)

_____ Financially, the people that are leaving rural communities, are the people with the money. Your smaller towns have less tax dollars, more entitlement burdens, and fewer insured. The revenue flow to the hospital that can be turned into your personal reimbursement is lower, yet you're sacrificing some of the quality of life to stay in a small town, because you feel like it's the right thing to do. So, that's going to be an increasing line of tension (8)

_____ Specialists like orthopedic and general surgeons are a hard hire. It is hard to find somebody who wants to practice in a small town who's going to be loyal to the
hospital and to the county. You end up with applicants, but you end up with people who have had issues somewhere else (9)

Every time we see a high turnover of the nursing staff, and you bring in people that are fresh out of training, it erodes your faith and your ability to provide good care. (10)

Limited resources due to being a smaller rural hospital: meaning lack of specialists available for support (11)

---

Q9a I ranked all statements in this section.

- YES (1)
- NO (2)

---

Q9b Optional comment box

---

End of Block: ORGANIZATION LEVEL STATEMENTS PART 2: BARRIERS

Start of Block: HEALTHCARE SYSTEM STATEMENTS

Q10

These are HEALTH CARE SYSTEM-specific panelist statements.

According to the expert panel, there were ONLY BARRIERS identified in this category.

Please RANK your top 5 statements by dragging and dropping each one in order of importance with #1 being the most important BARRIER to personal engagement.

There is a text box at the end of the section for your comments.

- North Carolina's decision not to expand Medicaid has an impact, particularly in rural communities. (1)
- States like North Carolina are making it difficult for a doctor to be a small business entrepreneur. In many ways, our economy at a national level is built on small
business entrepreneurs. So you take away their ability to operate and to generate revenue and value, and that's not a good thing economically (2)

Rural hospital closures in non-expanded states like North Carolina are concerning. (3)

As a physician looking at a patient, I think the payment system here can be difficult. Even if you have insurance, you end up paying more. So patients are afraid to go to the hospital because they can’t afford care and are labeled non-compliant when the reality is that they just cannot afford healthcare. (4)

There are constant cuts to what providers are being paid so you have a system that is designed to not have anyone aligned or interested in doing anything more than what they are paid to do. (5)

An effective relationship with an academic or larger center is important for rural community hospitals. (6)

Delphi Ranking: Rural MD Engagement
Round 3

Start of Block: Default Question Block

Q1 Please type in your initials for data matching & validation purposes. Your anonymity will not be compromised.
Q2
Please RANK each of the following statements by dragging and dropping the statements in order of importance with #1 being the most important BARRIER to personal engagement

______ I think that we are going to have to measure engagement and community involvement in different ways; going to rotary, or the chamber after hours because it is just not possible to make living in the community a requirement for providers anymore. (1)

______ You would like to think that the care would be more personal, because a lot of these people are neighbors. But when you have physicians who don't live in the community, that isn't necessarily the case. (2)

______ There needs to be a medical staff that is supportive of each other. (4)

______ There are physicians who are not consistently involved but who will become involved and engaged when there are certain issues on the table. (5)

______ As more and more millennials have moved into healthcare careers, they have focused on work life balance. That has tended to push them into more of a time clock orientation. They come in, they do their job, and they go home. They spend the time with the family, friends, that type of thing. You don't see as much of that relationship building at work with them as you used to with the older generations of providers. (6)

______ The organization needs to provide a mechanism to support physicians to identify what they need to be able to take care of themselves; to move away from what they may not have realized is an unhealthy commitment to the practice of medicine at the cost of their own well-being. (7)

______ Part of the reasons for a provider not being the right fit in rural is more limited resources; we really only have that core ED and hospitalist group and limited specialties. If you have physicians who are used to having a variety of providers available for consultation and additional support, they are not going to be comfortable in this environment. (8)

______ You see everybody leaving for the bigger towns. You feel like you're making a sacrifice to stay because we don't have Starbucks and Target, and all the fancy stores. We don't have the great schools. And yet, they want to pay you less because your market pays less so that part of it does play into it a little. That strains the loyalty, when you feel like you're undervalued. (9)

______ There are a lot of things that the prior generations of general surgeons trained in that we don't do anymore, and if we did, in a place like this, you could have a bigger impact. We feel ill equipped because we're being trained in a way that emphasizes the sub-specialty more so than the generalist. But in these smaller places and rural places, what you really need is a couple of generalists because that's what you can afford and can do the most good with. (10)
Q3  
Please RANK the following statements by dragging and dropping each one in order of importance with #1 being the most important FACILITATOR to personal engagement.

______ There is a need for alignment between the organization's operationalization of mission, values, and commitment to quality with my personal values and vision for practice (2)  
______ The fact that the hospital provides charity care for patients that can't afford to get their hernia fixed, or their breast cancer managed is important to me; I can still get them taken care of. (4)  
______ Stability in the C-suite is important. (5)  
______ As far as involving you and making you feel like your participation would make a big difference, that is a top down thing, it comes from the C suite folks and it has to mean that our voices are heard. The leadership does not have to act on everything we say, but there is an expectation that if we are asked to be involved that we are fully heard. (6)  
______ The last leader we had wanted to get physicians to feel like they were an important part of the medical staff and provide them opportunities to be a leader, to move up, and to see that as part of their career trajectory down the road. That kind of energy brought a lot of us into leadership. (7)  
______ The smallness of a rural setting can also work to foster engagement because you're not lost. You are a large percentage of the medical staff by default, you have a large impact. (8)  
______ I think that attitude of being a team comes more easily in a small community. In rural hospital I see a support staff as a source of positive engagement for providers. (9)  
______ I would say that up until our hospital was bought, we had people that had been here their whole life - it felt like family, and that was big for engagement. (10)  
______ I had a sense that I could really help the hospital where I did not feel that way about my group practice. (11)

End of Block: ORGANIZATION-LEVEL STATEMENTS PART 1: FACILITATORS

Start of Block: HEALTHCARE SYSTEM STATEMENTS

Q4  
Please RANK the statements below by dragging and dropping each one in order of importance with #1 being the most important BARRIER to personal engagement.

______ States like North Carolina are making it difficult for a doctor to be a small business entrepreneur. In many ways, our economy at a national level is built on small
business entrepreneurs. So you take away their ability to operate and to generate revenue and value, and that's not a good thing economically (2)

Rural hospital closures in non-expanded states like North Carolina are concerning. (3)

As a physician looking at a patient, I think the payment system here can be difficult. Even if you have insurance, you end up paying more. So patients are afraid to go to the hospital because they can’t afford care and are labeled non-compliant when the reality is that they just cannot afford healthcare. (4)

There are constant cuts to what providers are being paid so you have a system that is designed to not have anyone aligned or interested in doing anything more than what they are paid to do. (5)

An effective relationship with an academic or larger center is important for rural community hospitals. (6)

End of Block: HEALTHCARE SYSTEM STATEMENTS
### Appendix K

#### Detailed Literature Search Strategy

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