2018

A Community Oriented Solution to Access to Care

Margaret Louise Thornell
Walden University

Walden University

College of Health Sciences

This is to certify that the doctoral dissertation by

Margaret Louise Thornell

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee
Dr. Mary Garner, Committee Chairperson, Nursing Faculty
Dr. Sue Bell, Committee Member, Nursing Faculty
Dr. Patrick Palmieri, University Reviewer, Nursing Faculty

Chief Academic Officer
Eric Riedel, Ph.D.

Walden University
2018

Abstract

A Community-Oriented Solution to Access to Care

by

Margaret Louise Thornell

MSN, Walden University, 2007

MsBA, Texas A&M – Texarkana, 1998

BSN, University of Texas – Arlington, 1995

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Nursing

Walden University

August 2018

Abstract

Access to primary health care services is a significant issue for many communities seeking to improve the health of their populations. This single case study describes the 12-year journey of 2 adjoining rural counties in 2 states towards meeting the primary and specialty care needs of the uninsured and underinsured population. Data were triangulated using historical documents, first-person interviews, and health utilization data. The community leadership moved through various models including a free clinic and a university-sponsored health center before finally establishing a federally qualified health center, which now serves 40,000 citizens in these counties. The site is now hosting new programs funded by research grants in alliance with area universities. Success is contributed to an unwavering desire to provide a medical home for the underinsured and underinsured, a shared vision, recognition that continued success was dependent on a funding source, recognition that practices and processes must be in place to assist with navigation for those in need of services to seek care at the appropriate venue, and a belief that the infrastructure built to provide care was sustainable. All participants recognized the importance of funding for sustainability. Positive social change has occurred from the emergence of a multidisciplinary center to serve the community's uninsured and underinsured, thus improving access to care, management of chronic conditions, and access to behavioral health professionals. Findings from this study may inform other communities faced with similar problems and can inform legislators of the importance of federally qualified health centers in the provision of health care to vulnerable populations.

A Community-Oriented Solution to Access to Care

by

Margaret Louise Thornell

MSN, Walden University, 2007

MsBA, Texas A&M University – Texarkana, 1998

BSN, University of Texas – Arlington, 1995

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Nursing

Walden University

August 2018

Dedication

I dedicate this study to my husband and children who patiently provided me the time and encouragement to complete my dissertation journey. When I was frustrated and unable to continue the small words of encouragement that you shared or just in asking how I was getting on provided me with the courage to continue.

Acknowledgments

First, I would like to thank my Doctoral Committee Chair, Dr Catherine Garner who provided me with guidance, patience, and support. Dr Garner quietly provided me with the encouragement that I needed and the oversight to assist with the completion of my study, I do not believe that completion would have been possible without Dr Garner. Thank you Dr. Garner for your time, your expertise, and your encouragement. Dr Sue Bell who served as my Committee Member, I appreciate and thank you for your time and insights. As I completed my course work and as I attended residency I had the opportunity to interact and meet many faculty and I want each of you to know that your guidance and expertise was appreciated.

In addition to my family I would like to recognize those of you in my work family who provided me with ongoing encouragement, a quiet how are you doing was all I needed, thank you.

Lastly, I want to acknowledge all who participated in this study I appreciate each of you taking the time to be excellent historians and to share your knowledge.

Table of Contents

List of Tables

List of Figures

Chapter 1: Introduction to the Study

Introduction

Hospital emergency departments (EDs) are an essential component of the health care system. Although the concept of an ED is to treat trauma and emergent conditions such as heart attack and stroke, the ED has evolved in the last decade to serve as the safety net for all who need health services, regardless of whether their health needs are deemed medically urgent. In the United States, the Emergency Medical Treatment Act of 1986 (EMTALA) is a federal law that requires a hospital EDs to evaluate and stabilize all who present for treatment regardless of their insurance status or ability to pay. Although no federal or state mandate exists to provide nonemergent care to individuals, fear of litigation often prompts hospitals to treat these individuals, often at significant financial loss.

Overcrowding in EDs is manifested by large groups of people presenting for care and is experienced throughout the United States. Overcrowding may be associated with a number of factors, including an increase in the number of people presenting for nonemergent care; an increased inpatient census, which may lead to delays in admitting a patient to an inpatient unit; and staffing difficulties both in the ED and in the inpatient unit setting. ED overcrowding is described as the most serious problem that endangers the reliability of health care systems worldwide (George & Evridiki, 2015).

In 2004, a community in northeast Texas recognized the need to develop alternatives for primary and chronic care services for a specific target population: those patients identified as the most vulnerable, between the ages of 19 and 64 years, and not

eligible for any governmental assistance. Present-day assistance is available through the Affordable Care Act insurance exchanges, Medicaid, or Medicare (Burke, 2014). Access to health care is recognized as a need not only in this northeast Texas community, but for all citizens in the United States in general (Agency for Healthcare Research and Quality [AHRQ], 2016; Emergency Nurses Association [ENA], 2016; Office of Disease Prevention and Health Promotion [ODPHP], 2018). One consequence for individuals not having insurance is that they do not have a primary medical home for preventive care and nonemergent sick care. A medical home is described as a place where individualized care is given in the same place over time (Friedberg, 2016). For example, if a patient chooses to access care in a family practice clinic where the provider has a relationship with the patient, care is provided in a primary care setting.

Historically, underinsured or uninsured patients were found to be utilizing the hospital's ED for many of their both emergent and nonemergent health care needs. The result was that the ED was unable to manage the increased patient load, and wait times increased significantly. In response to the noted ED overcrowding and prolonged wait times, The Joint Commission on Accreditation of Hospitals and Health Facilities in collaboration with Centers for Medicare and Medicaid Service (CMS) recognized a need for standard reporting of metrics, one of which is the median time of arrival to departure (Joint Commission, 2018). No specific time is determined by these standards other than a demonstration of continuous improvement. In the government database of hospital compare the hospital consumer assessment of health care providers and systems (HCAHPS), arrival to departure is utilized as a performance measure. ED performance

was added to Medicare.gov Hospital Compare (2016) in November 2012; however, historical data prior to this date are not available. The fiscal year 2016 data for the northeast Texas hospital shows a mean arrival to departure of 187 minutes compared with 172 among hospitals nationally, and 164 minutes among large hospitals in Texas (Medicare.gov Hospital Compare, 2016). This same database cites the ED as the point of entry to acute care services for 28% of visits by Medicaid and State Children's Health Insurance programs (CHIP) in addition to nearly two-thirds of acute visits by uninsured patients (CMS, 2016c). This health system recognized the need to work with the community to determine alternative care options for the population in need.

In this descriptive single case study, I sought to demonstrate the journey of this northeast Texas community from having minimal access to health care for the uninsured and underinsured to having a thriving federally qualified health center (FQHC) providing family practice, pediatrics, obstetrics, gynecology, dental care, and behavioral health services. Perspectives were solicited from primary stakeholders identified as representatives of the sponsoring health care organization in addition to key stakeholders from the FQHC. I used semistructured interviews to solicit information that represents both the 12-year journey and the current operations. I used interpretive analysis and an inductive approach to demonstrate the community commitment and visionary leadership that delivered the FQHC to the community.

Purpose

The purpose of this descriptive case study was to document the community's process, the evolution, and the outcomes of a community's medical home strategy for the

uninsured and underinsured population. I collected quantitative and qualitative data from numerous data sources. This included personal interviews with key stakeholders with structured questions revolving around historical knowledge, participation in providing a solution to the community, and current role. These data were supplemented by a review of historical documents and FQHC data on services provided, patient volumes and outcomes, and patient satisfaction. This exploration illuminated the strategy, examined the case for change, outlined what was accomplished, identified needs, and highlighted key learnings, opportunities, and measures of success. Upon completion of the study, the qualitative case study strategies that I used demonstrated the unwavering determination of a community, using both interpretive and inductive analysis. The story will be prepared for publication and will explain a community solution to access to care with the goal of outlining the successes and barriers for another community considering replication to address similar access to health care problems. This demonstration of the community's journey focused on challenges in addition to success. The implications for social change involve providing access to primary care and an alternative for the uninsured and underinsured to receive nonurgent care in a setting other than the ED. This contributes to the overall wellness of individuals in the community through providing continuous versus episodic care.

The community engagement utilized the Centers for Disease Control and Prevention (CDC, 2015) PRECEDE/PROCEED model in which multiple stakeholders in the community were engaged for dialogue and review of data as part of a community collective action in working with the uninsured for the development of proposals for new

models of care. The PRECEDE/PROCEED framework was initially developed for use by the CDC to demonstrate accountability to stakeholders and has been used by the Office on Smoking and Health and the Division of Nutrition and Physical Activity (CDC, 2011). The process of determining a solution for the access to care problem for the under and uninsured population resulted in the introduction of a FQHC offering primary, obstetric, pediatric, behavioral health, and dental care, a medical home program, and a pediatric mobile asthma clinic as some of the programs that the community implemented. These efforts were collaborative and focused on assisting with coordinating care and meeting the health care needs of the uninsured. I present the process and results of this community development project in this paper.

Research Questions

I focused on determining how this northeast Texas community worked to provide an avenue for access to care for the underinsured and uninsured. Discovering how this community brought a FQHC to the community demonstrated the relentlessness of one leader and his passion for providing a means for all in his community to have a medical home. The following research questions guided this study:

1. What were the historical, political, and financial community actions which lead to the consensus of a new model of care?
2. How did this action fit within the intended CDC PRECEDE/ PROCEED model?
3. What are the early results of this unique care model?

4. What implications are there for health care leaders seeking to replicate the process in other communities?

In order to develop pertinent insights into this multistakeholder, inter-professional consensus building coalition and to develop propositions for further inquiry a descriptive single case study is used. As the stakeholders described their contributions many hypotheses were generated for further exploration. A hypothesis may indicate that the navigator in the ED is one of the key components in addition to having a full service FQHC that has an arrangement with the facility to see all nonurgent patients who present to the ED within 24 to 36 hours for follow up. Another hypothesis may be that the collaborative working relationships between the two entities, the FQHC and the acute care facility, have contributed to the successful program. As information was gathered the hypotheses was defined and clarified.

Background

This case study began in January of 2005. Texarkana is a community in northeast Texas and southwest Arkansas, a twin city located on the Texas-Arkansas state line. The city is 28 miles south of Oklahoma and 25 miles north of the Louisiana boundary line. The two counties that compose the service area are Bowie County, Texas and Miller County, Arkansas. The 2016 census information describes the Texarkana, AR-Texarkana metropolitan statistical area (MSA) as having a population of 150,098, a median age of 36 years, and an annual household income of $35, 824 (Federal Reserve Economic Data [FRED], 2018). In 2005, when this community recognized a need for alternative health care sites, the MSA population was 132,227 (FRED, 2018). In 2007, 17.5% of the

population was below the federal poverty level (Department of State Health Services [DSHS], 2007). Texarkana, Arkansas, is smaller, with a population of 30,470 (City of Texarkana, 2005).

Background research showed that the number of uninsured in the service area was high at 24.6% compared with 15.2% for the U.S. population (CHRISTUS, 2005a) (see Table 1).

Table 1

Number of Uninsured for Service Area

County, United States	Number of uninsured	Percentage of population
Bowie County, TX	29,401	31.3%
Miller County, AR	7,153	17.9%
United States	45 million	15.2%

Note. From CHRISTUS St Michael Health System (2005a).

A significant percentage of the population in the community is poor, with a poverty rate in 2005 showing 18.5% compared with the national rate of 12.4% (CHRISTUS, 2005a) (see Table 2).

Table 2

Significant Number of the Population in Our Community Is Poor

County, United States	% of Poverty, 2000 U.S. Census
Bowie County, TX	17.7%
Miller County, AR	19.3%

United States	12.4%

Note. From CHRISTUS St Michael Health System (2005a).

Access to primary care is limited, and there is poor coordination of services. A lack of health insurance contributes to compromised health in addition to causing an undue burden on the community. This burden is validated by the substantial amount of hospital dollars spent on charity care and bad debt; in 2004, Texas hospitals recorded $9.22 billion in uncompensated care including charity and bad debt when adjusted for inflation this figure was $2.93 billion. In this same year 2004 CHRISTUS St. Michael provided $30 million in charity care (CHRISTUS, 2005a).

The National Access to Care Survey conducted in 1994 by the Robert Wood Johnson Foundation (RWJF) showed that more than 34% of the uninsured were unable to obtain health services (Berk, Schur, & Cantor, 1995). In addition, the data indicate that the uninsured were less likely to seek care than those covered by Medicaid or private insurance (Fang, Yang, Ayla, & Loustalot, 2014). Data published by the Kaiser Family Foundation (2016) demonstrate the sharp decline in the number of people who had health insurance between the years 2000 and 2010. The study indicated that a primary contributing factor to this decline was the economic recession, which resulted in high unemployment and that led to a significant loss of employer-sponsored insurance. In addition, the uninsured tend to be sicker when presenting for treatment and are more likely to be hospitalized for conditions such as hypertension, heart failure, or diabetes (Kaiser Foundation, 2016). Evidence shows that underlying conditions can progress to more acute phases due to poor access to medications or to a doctor (Brown & McBride,

2015). Other subtle consequences include absenteeism from work which may contribute to a decrease in productivity (Kirkham et al., 2015). For students, absence from school may contribute to a decrease in revenue for the school system and a high mortality rate (Saunders, Ricardo, Chen, Chin, & Lash, 2016).

Challenges affecting the community included a low participation rate by physicians who accept patients eligible for Medicaid reimbursement and CHIP, lack of transportation services, minimal mental health services, and a lack of culturally and linguistically competent health care professionals. Access to care continues to be problematic for a particularly vulnerable population: those between the ages of 19 and 64 years who have incomes below 138% of the federal poverty level (Burke, 2014; Christopher et al., 2016). A literature search using the keywords of *primary care model*, *access to care*, and *medical home* revealed articles that address a similar theme that systematic change is necessary. Health care expenditure in the United States surpasses that of many developed countries. The list is long and includes Canada, France, Germany, Italy, Japan, and the United Kingdom (Christopher et al., 2016; Himmelstein & Woolhandler, 2016a, 2016b). The literature continues with proposals for consideration as a solution acknowledging that current and expected expenditure on Medicaid is not feasible for sustainability and alternatives are described (Christopher et al., 2016; Himmelstein & Woolhandler, 2016a, 2016b; Rollow & Cucchiara, 2016).

Framework/Nature of Study

In this case study, I explored the evolution of a community's work to provide a medical home for all citizens and the varying strategies that have been implemented. The

case study design is chosen because the boundaries between the phenomenon of overutilization of the ED for nonemergent care and the context for this consumer behavior may not clearly be evident (Yin, 2014). Case study design allows for investigation of this contemporary phenomenon in depth and within the real-world context that is similar to other communities across the nation (Yin, 2014) (see Figure 1).

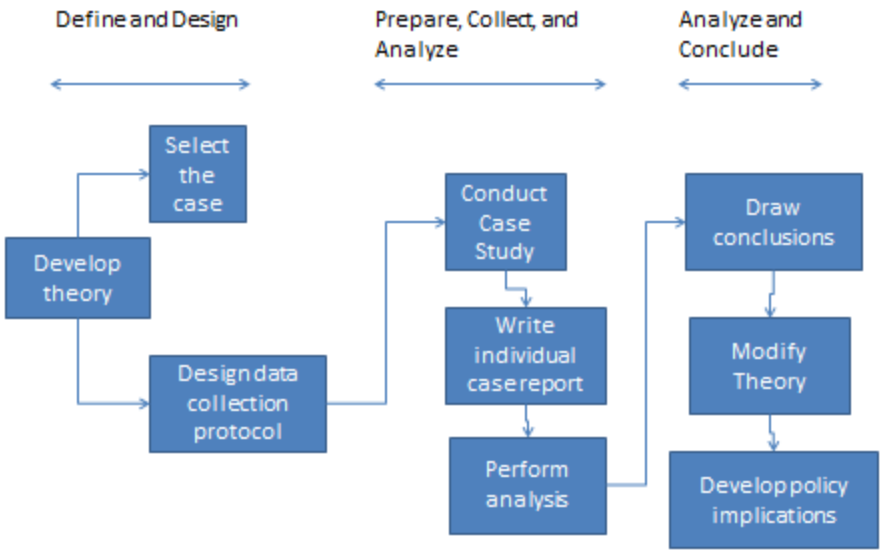


Figure 1. Case study design from Yin (2014).

The design of choice is a descriptive single-case study research using mixed-methods research. Yin (2014) described and categorized types of case studies. In this case, the medical home strategy may be considered as innovative and meets the common case rationale for performing a single case study. Other rationales for study are that this is a critical case, a common case, a revelatory case, and a longitudinal case. An additional characteristic for consideration is that the single case study is the medical home strategy which involves many entities which would be known as embedded units (Yin, 2014).

The Community Process

A meeting was hosted by one of the health care facilities in January 2005 with the purpose of engaging community stakeholders (see Table 3) to address the health challenges facing the community and discuss ways to improve the health of the population. The group adopted the Centers for Disease Control and Prevention's PRECEDE-PROCEED public health planning model for the process (CDC, 2012, 2015).

Table 3

Key Stakeholders/Entities

St. Michael Health System	Wadley Regional Medical Center
AHEC Southwest	Labcorp
Miller County Health Department	Bowie County Health Department
City of Texarkana, AR	City of Texarkana, TX
Homeless Coalition	Pharmaceutical Companies
Texarkana College of Nursing	Texas A&M University Nursing Program

The PRECEDE-PROCEED public health planning is a logic model that offers a structured approach for evaluating the process used by the group of stakeholders as the framework for their plan. The primary premise of the model is that structure is needed to develop a process that describes and outlines a community intervention. The model is divided into two specific phases; first is the PRECEDE phase, which serves to outline the intervention, followed by the PROCEED phase, which describes how to proceed with the change and how to evaluate and measure success (Tapley & Patel, 2016).

The model is circular and starts with the PRECEDE component, which includes four phases that explain how to develop an effective intervention. This is followed by the PROCEED components that in turn lead back to the beginning. The acronym *PRECEDE* stands for *predisposing*, *reinforcing*, and *enabling constructs in educational diagnosis and evaluation* to describe the process of developing and planning. *PROCEED* stands for *policy*, *regulation*, and *organizational constructs in educational and environmental development*.

Key Stakeholders and Goals

Stakeholders represented both the acute hospitals, CHRISTUS St. Michael Health System (CSM) and Wadley Regional Medical Center (WRMC), the Area Health Education Council (AHEC) Southwest, the Bowie and Miller county health departments, the cities of Texarkana Texas and Arkansas, a private company Labcorp, the homeless coalition, pharmaceutical companies, Texarkana College of Nursing, and Texas A&M University nursing program. The group formed by these stakeholders wanted to identify resources available to address the issues, develop a shared agenda for improving health, and promote 100% access to care with zero health disparities. The community stakeholders agreed that the problem of access to care was significant. The group of stakeholders recognized that uninsured individuals who do not have a regular care provider and who face substantial out-of-pocket costs forgo effective screening services, chronic disease care and treatment, and treatment for potentially serious symptoms. The impact of not having the ability to seek care not only affects the individual, but has a spillover effect impacting their families, employers, and schools. When children are sick,

a parent may not be able to go to work; this affects the employer with either an additional expense to replace the missing worker or to work short and affect productivity. If the parent is sick, the family is affected directly because a caregiver or provider is sick and indirectly because the support needed by the family may not be available. In addition, the child or children may not be able to go to school because the parent is unable to provide transport or get the child ready. An additional effect of having a sick parent is that the parent may not be able to participate in providing oversight to homework and assisting the child in their studies. The long-term effects of not having access to nonurgent, nonemergent health care is the development of chronic conditions including heart disease, diabetes, stroke, and cancer. A focus on wellness and health promotion through healthy behaviors including proper diet, exercise, and routine screenings can contribute to the overall health and wellness of a community.

The health of a community is measured not only with a look at the prevalence of chronic disease or the health of any individual, it is also measured in the citizens' wellbeing. An initiative based out of the Center for Community Health and Development at the University of Kansas developed the Community Tool Box (2016) to assist with evaluating a community. Key indicator questions suggested for community evaluation are

1. How does it contribute to the stability of families?
2. Are children nurtured and supported?
3. Is lifelong learning fostered and encouraged?
4. Is there meaningful work for the citizens?
5. Is there an opportunity for involvement in the democratic process?

6. Are there resources for those who need help?
7. Is there a process to protect and maintain the natural environment?
8. Is there encouragement of the arts?
9. Is there support for racial and cultural diversity?
10. Does the community work to promote and maintain the safety and wellbeing of its members? (Community Tool Box, 2016, n.p.)

Operational Definitions

For this study, the following definitions are applied.

Medical home: When reviewing the literature, it was noted that the term *medical home is* interpreted in different ways. One interpretation is to apply the term *medical home* when describing interventions applied to a primary care practice or the characteristics of this practice and the patterns of care. Another interpretation, which is more applicable to this study, is to study a pattern of care. In this second interpretation, *medical home* is used to describe receiving primary care from a specific source where a relationship is developed between the provider and the patient and a medical history is available for reference. The National Committee for Quality Assurance (NCQA, 2016) describes a patient-centered medical home (PCMH) as a way to put the patient at the forefront of their care and a means of providing continuous care with the opportunity to develop a relationship with the provider and to enhance the patient experience while providing quality care.

Federally qualified health centers (*FQHCs*) are government-funded nonprofit community health centers considered as safety net providers that provide outpatient primary care services in medically underserved communities (CMS, 2016a).

Free clinic model: This model describes a setting where care is provided by volunteers, physicians, advanced practice nurses, registered nurses, and other disciplines in an area specifically designed and supported by donations. There may be some compensation for administrative services.

The Health Resources and Services Administration (*HRSA*) is a federal agency with responsibility for improving health and achieving health equity through access to quality services. It is run through the U.S. Department of Health and Human Services (USDHHS, 2016a).

Medicaid is a government program that provides medical and health related services to specific groups of people in the United States, the program is managed by the (CMS, 2016c).

Assumptions

In this study, I assumed that key stakeholders in the FQHC and key personnel at the hospitals and within the community who were identified as having knowledge of the history and struggle with the creation of a solution to access to care would participate in the interview process. I also assumed that these interviews would provide sufficient evidence to address the research questions and provide the necessary information to provide an accurate representation of the community solution to access to health care for

the underinsured and uninsured. Finally, I assumed that all archived documents (meeting minutes, etc.) were accurate in nature.

Limitations

The accurate reporting of this community's response in response to the need for access to health care for the uninsured and underinsured was dependent on the participation of the identified stakeholders, in addition to access to any documented historical milestones, pertinent data, and measures of success. Another limitation was the perception of what "access to care" means. Access to care may signify geographic limitations, transport limitations, economic limitations, individual choice, or the perception of the quality of care available.

Significance

This case study has assisted in providing a system perspective of a community group who explored and implemented a population-based program that is designed to specifically address a community need for a medical home for the uninsured, some of whom have been high utilizers of the ED for nonemergent care. The study highlights the effects on the community, patients, and health care providers. The study also highlights the effects on the community, the patients, and the FQHC. Critical outcomes are identified in addition to measures of success. The significance to the community was a reduction in the need for emergent care, better quality outcomes for patients because of consistent primary care, and better use of fiscal resources. The care delivery model is defined for presentation to legislators as an option to consider for policy change. Future

significance and social change would be for other communities to decide to replicate this care model in their community.

Implications for Social Change

This case study demonstrates the history and development of a community approach regarding access to care. Access to care outside the ED is a global problem. In addition to addressing a gap in the literature, demonstrates lessons learned. The identified problem of access to care is not unique to this small northeast Texas region. An overcrowded ED in a community can be an indication of failure of the health system to meet the needs. This is typically seen in communities where the hospital serves as the safety net for the poor and underserved. One of my goals is that this case study may serve to motivate other communities to pursue change. The study demonstrates the trials and tribulations involved in not only setting up the FQHC but also in the creation of a process designed to meet an identified need. The case study may also be used to demonstrate to the legislature a solution to meeting a community access to care need.

Transition Statement

Access to health care for the underinsured and uninsured is limited. Those in the age group 19 to 64 years old who are not eligible for government funded programs are particularly vulnerable. This vulnerability is demonstrated by the high number of people who access the EDs for nonurgent or nonemergent care. A northeast Texas community led by a visionary health care leader worked for 12 years to address and offer some resolution to the access to health care problem. This resolution not only provided for the identified vulnerable population but also for the greater community. This resolution

included a free clinic, a modified version of a FQHC, and then a FQHC. The CDC (2015) framework of PRECEDE- PROCEED was used to evaluate the program and demonstrate the community solution to access to care and the development if a robust medical home strategy. In Chapter 2, I provide a literature review of related topics regarding access to care for the underinsured and uninsured and more detail of the 12-year journey of this community.

Chapter 2: Literature Review

Summary of Problem, Purpose, and Stakeholders

The community group began a review of available resources that included the two acute care hospitals, that, at the time, were both nonprofit organizations. The Greater Texarkana Peoples' Clinic (GTPC), a volunteer-funded free clinic, the school nurses, the pediatric All for Kids Clinic sponsored by the University of Arkansas for Medical Science (UAMS) and designed to provide care to Medicaid pediatric patients, and the local public health units that provide preventative and prenatal care provided representatives. These agency representatives were asked to meet with the group to explain their organization, current population and service capabilities, and the ability to expand services in the community. During a 12-year period, the group continued to partner and work together to bring an alternative health care resource designed to meet the needs of the uninsured and underinsured to their community. The driving forces that prompted the community partners to continue pursuit of an alternative site for health care, in addition to the increase in nonurgent ED visits, was the knowledge that a lack of insurance is associated with a lack of preventative care, a higher mortality rate, a greater likelihood of presenting with complex medical conditions, and minimal preventative care or screenings compared with the insured population (Christopher et al., 2016). During this 12-year period, different models were implemented with minimal success. As the team worked through the development of alternative access points to care, they realized that even if a patient is appropriately evaluated in a clinic or at a health fair, referral is not

available for specialized care. The recruitment of specialist physicians and advanced practice providers (APPs) specialists became an essential component of the plan.

Models of Care Considered

Free Clinic Model

The GTPC was established in 2003 as a 501(c) (3) nonprofit organization to provide free, quality care to qualifying residents in the greater Texarkana area who did not have access to basic medical services. The clinic model was that of a free medical clinic. In this community, the free clinic was managed by volunteers and opened to provide access to health care for those who could not access care either due to transportation to a medical center or due to upfront and subsequent costs. Free clinics are not required to adhere to standards such as those of The Joint Commission (2018) or CMS, because they are free clinics and do not bill insurance.

Darnell (2011) described the anecdotal history of a free clinic as a clinic that opens in response to meet a need and serve a safety net. Darnell performed extensive research that involved 361 free clinics in the United States. The purpose of the study was to determine what precipitated the opening of the clinics. Darnell's questions included whether the need for the clinics was greater when there was a higher proportion of uninsured, a higher number of poor adults, or a higher number of African American people, and if there was a lower number of clinics in locations where an FQHC was operating. The results of the study showed no correlation with the demographics and the need for the clinic; the only correlation seen was that when a free clinic was present, the population using the FQHC was lower. In this northeast Texas community, the clinic

opened in March 2004; it was located in the basement of a local church and was described as a community-based volunteer clinic staffed by local ED physicians and nurses who volunteered their time two nights a week. Brennan (2013) described free clinics as a band-ad to the problem of access to care and clearly states that a free clinic cannot be considered as a solution to the lack of routine access to health care. Brennan continued in a description of free clinics and that a free clinic is typically found in church basements or local community centers rather than in a fully-equipped medical building.

The GTPC was stereotypical of Brennan's (2013) description of a free clinic. This clinic provided medical care, prevention, and education to the residents of Miller and Bowie counties. Senator Mike Ross acknowledged the opening of the GTPC at the Arkansas Senate noting the following:

> The clinic, whose motto is Good Health for All, was established to provide free, quality health care to qualifying residents in the greater Texarkana area…a non-judgmental, compassionate environment in which to serve those individuals and families largely rejected by mainstream society has been created. The Greater Texarkana Peoples' Clinic is truly the result of a collaborative community effort. (170 Cong. Record 6453, 2004)

Collaborating partners who sponsored the GTPC included CSM, WRMC, Bowie and Miller County Health Departments, The Homeless Coalition, the cities of Texarkana Texas and Arkansas, two nursing school programs, Labcorp, pharmaceutical companies, and the University of Arkansas for Medical Sciences Area Health Education Center - Southwest (UAMS AHEC-SW). UAMS AHEC-SW is the outreach arm of UAMS

located in Little Rock. The AHEC program was founded in 1973 through the combined efforts of the Governor, the state legislature, and the University of Arkansas for Medical Sciences (UAMS), as a means to encourage UAMS medical school graduates to remain in Arkansas and provide primary care services for those in rural communities who had access to minimal resources (Arkansas Area Health and Training Center, 2012). GTPC met a community need and demonstrated an ability to provide services at approximately 65% of the cost of delivering comparable care through government programs. Community needs included a medical home for the uninsured, chronic disease management, cancer screenings, and health education. The GTPC also served as a community-based setting to train medical students and primary care residents. Prior to closing in 2007, the clinic served approximately 1,900 patients.

Modified Federally Qualified Health Center Model

The GTPC clinic closed its doors to allow the opening of the Texarkana Community Health Center (TCHC) operated by AHEC-SW to serve additional patients in need of a medical home. The new clinic was required to provide community-based governance via the GTPC board of directors. The organization met the requirements outlined by HRSA of a FQHC "look alike" entity. FQHC look-alike clinics are community-based programs that meet the requirements of the HRSA Health Center Program, but do not receive Health Center Program funding (USDHHS, 2016a, 2016b). Requirements include (a) the performance of a community needs assessment and the identification of its target population; (b) the center must provide primary care services and any additional services identified as needed in the assessment; (c) core staff is

available; (d) hours of service match the community need with after-hours coverage available; (e) arrangements are made with hospitals to provide continuum of care services; (f) a sliding fee discount program is in place where patient discounts are adjusted on the patient's ability to pay; and (g) a quality improvement program is place and ongoing (USDHHS, 2016b). TCHC was designed to provide comprehensive primary, preventative, and supplemental health services to residents of Miller County in Arkansas and Bowie County in Texas. The clinic was designed to provide services to the medically underserved populations and to meet identified community health needs.

TCHC collaborated with established providers rather than duplicating services to serve the identified community need. This included gynecological and obstetrical services, radiological services, mammography, mental health and substance abuse services, community outreach, and services at the homeless shelter via a mobile unit. The goal was to provide care to all of those in need regardless of their ability to pay. UAMS is a teaching facility and the providers were primarily family practice residents who are supported by advanced nurse practitioners, nurses, and a licensed social worker. An additional plan included offering pharmacy access for TCHC patients either with an in-house pharmacy or by contracting with an existing pharmacy to increase access for patients. TCHC planned to work towards obtaining 340B designation. The 340B drug discount program is a federal program created in 1992 that requires the pharmaceutical companies to provide medications to eligible organizations at a significantly reduced rate (340b Health, 2018). However, with the ever-growing community need for primary care, TCHC was unable to meet the needs.

Hospital-Affiliated Model

The EDs in the area were experiencing overcrowding with an exponential growth in visits primarily in the nonurgent arena. Attempts were made to medically screen patients to the TCHC for care. The *term medically screen patients* is used to describe a mechanism for managing patients who present with a nonemergent condition. Historically, these patients are evaluated and deemed to have a nonemergent condition, and the ED has a mechanism to refer patients back to their primary care physician or to some other venue in the community for care. In this community, the ED attempted to screen to the TCHC. The literature provides references to performing medical screening exams and referral as a means to manage ED overcrowding (Sukpraprut-Braaten et al., 2016; Nguyen et al., 2013). In the case of this northeast Texas community, it was important to one of the faith-based facilities to ensure that the patients were not only screened for a nonemergent condition but also that they had a location to receive care. However, problems emerged around making timely appointments, and some experienced difficulty making follow-up appointments. The TCHC had developed its own patient base and was demonstrating an inability to cope with the community need. In 2010, one of the facilities, CSM, opened another clinic designed to serve the underinsured and uninsured. This clinic was located in Texarkana, Arkansas, and was called the Texarkana Family Clinic (TFC). The TFC continued to serve patients and provide primary care services until an alternative could be developed.

Federally Qualified Health Center

A patient centered medical home (PCMH) is described in the literature as a model that promotes continuous care (Liem, et al., 2014), attempts to shift the paradigm of care from individual health to population health (Kern, Edwards, & Kaushal, 2016), and must be accessible and serve as an approach to providing comprehensive, coordinated, family centered primary care (Matiz, Robbins-Milne, Krause, Peretz, & Rausch, 2016; Cheak-Zamora & Farmer, 2015). In 2009, the Affordable Care Act (ACA) was presented as a solution to access to health care for vulnerable populations (Burke, 2014). The vision for ACA was excellent; however, the supporting infrastructure, both financial and human resources, was not created to meet the needs of the population (Blumenthal, Abrams, & Nuzum, 2015; McMorrow, Kenney, & Goin, 2014).

CSM continued to explore options and found the FQHC as an excellent alternative to meet the needs of the identified target population. These centers are designated by the Bureau of Primary Health Care (BPHC) and the Center for Medicare and Medicaid Services (CMS, 2016b) and are required to provide services to all who present for care regardless of the patient's ability to pay and to offer a sliding scale fee schedule based on the family's income (Chaple, Sacks, Randell, & Kang, 2016).

Community Planning Process

Plans were created for next steps, which included seeking government funding from health resources and services administration (HRSA) to establish a new access point, either a federally-qualified health center (FQHC) or similar organization, the development of a healthy community initiative to improve the health of the whole

population, and the expansion for eligibility of public health insurance through advocacy. Other steps included the creation of a community partnership involving health and human service stakeholders, representatives from the business community, and the chamber of commerce. This group was called the Community Health Action Group (CHAG).

In 2009, CSM engaged a consulting firm to assist with the establishment of an FQHC. Once again, meetings were set up with community stakeholders and detailed information was shared about the establishment of an FQHC. Documents from 2009 indicate a listing of requirements of FQHCs: that it be (a) community based nonprofit or public primary health care clinics; (b) located in or serving a designated medically underserved area/population (MUA or MUP); (c) dedicated to a 51% consumer majority board governance structure; (d) provide primary health services to people in all stages of the life cycle; (e) provide services to all people regardless of ability to pay and charge for services on a sliding fee discount scale based on the patients income and size of family; and (f) compliance with federal program expectations and requirements and all applicable state requirements. HRSA (2016), a governmental agency that was founded in 1982 and promotes a vision "healthy communities, healthy people … whose mission is to improve health and achieve equity through access to quality services" (n.p.), verify that the requirements for a FQHC are unchanged with the exception of an additional requirement requiring the clinic to have an ongoing quality assurance program. FQHC rules require the clinic to either directly provide the following services or for the clinic to contract with another entity for the service. The comprehensive list of services includes primary care, dental, mental health, substance abuse, diagnostic lab and x-ray, prenatal and perinatal,

cancer and other disease screening, blood level screenings to include lead levels, communicable diseases, and cholesterol, well child, child and adult immunizations, eye and ear screening for children, family planning services, emergency medical, pharmaceutical, case management, outreach and education, eligibility and enrollment services, transportation and interpretation, and referral services (CMS, 2016b).

The first company that CHRISTUS St Michael approached was one listed as a 501(c) nonprofit that was already operating nine community health clinics for uninsured and underinsured residents in Williamson and the surrounding central Texas counties. This group opened their first clinic in 2002 and shared a patient census with more than 150,000 patient visits in 2009. This company's vision was aligned with the CHRISTUS and focused on the provision of quality, accessible health care for the uninsured and underserved. The health system leadership was enthusiastic and pleased that this company presented an answer to an identified community need. Negotiations continued for approximately 18 months and then crumbled because the company was unable to follow through on commitments because they had experienced tremendous growth in the markets they were serving and were unable to provide the resources for another community.

The Chief Executive Officer (CEO) of the health system was determined to find an alternate venue for care. This executive reached out to Genesis Prime Care and negotiations started again. Genesis Prime Care was operating FQHC clinics in three other Texas cities: Jefferson, Longview, and Marshall. The company was familiar with FQHC

rules and regulations and enticed the health system and community with an offer to bring a turnkey program to Texarkana.

The Community Solution

In November 2013, the TCHC closed, and in December 2013, the Genesis Prime Care clinic opened. In the first six months of operation from December 2013 to June 2014, Genesis served 5,372 patients. Data provided by Genesis indicated that in the following months, from July 2014 through June 2015, 15,446 patients were served. July 2015 through June 2016 saw 19,610 patients were served, and, from the most recent data provided by the Genesis COO, 29,433 patients were served in the period from July 2016 to May 2017.

As the FQHC matured and added various specialties including family practice, pediatrics, dental, and obstetrics, the hospital coordinated referral services and provided community education regarding the services offered by the FQHC. Currently, the clinic staff includes three physicians, a pediatrician, an obstetrician, and a dentist, eight nurse practitioners, two licensed social workers, a licensed counselor, and a dental hygienist. The clinic has two locations: one in Texarkana Texas and another in Texarkana, Arkansas.

Summary

Access to health care for the uninsured and underinsured presents a national dilemma. Safety net providers are one of the primary sources that serve to meet the health care needs of the uninsured, Medicaid recipients, and other vulnerable populations and are often known as providers of last resort (Hacker et al., 2014). The literature is abundant

with examples of vulnerable populations and their health care needs; however, finding evidence of successful solutions is difficult. This northeast Texas community worked together for 12 years with a common goal of providing access to health care for the uninsured and underinsured. Different models of care were tried that included a free clinic, a modified FQHC model, a hospital affiliated model, and finally a FQHC. Each different care delivery model was successful and outgrew its resources; each model outperformed expectations and required an alternate solution. This case study research explores in detail the initiatives and steps that were taken on the journey to providing access to health care to the identified vulnerable population, those between the ages of 19 and 64 years who were not eligible to receive government assistance.

Chapter 3: Review Problem, Purpose, and Nature of the Study

Research Design

Research begins with an inquiry, an interest, or question and evolves into a collection of data, and then analysis of the data that serves to answer the original query. The design of choice was case study research using mixed-methods methodology, which involves integrating both qualitative and quantitative research. The primary objective of the research was to explore the concepts of what, how, and why in relation to serving the needs of the uninsured and underinsured in this small northeast Texas community. Leung (2015) described this type of questioning as a method used to understand words and to use these words to form a descriptive analysis of an inquiry.

A community-oriented solution to access to care using a medical home strategy is the focus of study. Yin (2014) described and categorized types of case studies. In this case, the medical home strategy may be considered as innovative and meets the common case rationale for performing a single case study. The rationales for this type of study are a critical case, an extreme or unusual case, a common case, a revelatory case, and a longitudinal case. An additional characteristic for consideration is that the medical home strategy involves many entities that would be known as embedded units (Yin, 2014). The chosen study design is an embedded single case study explanatory design.

Possible Types and Sources of Data

The development of a case study requires triangulation of data from multiple sources. Data collection will follow the qualitative (QUAL) → quantitative (QUAN) pattern as described by Morse (Creswell & Plano Clark, 2011). Yin (2014) described data

collection as case study evidence and notes that sources of evidence can be present in many forms, including archival records, documentation, interviews, and direct observations. Data collection primarily utilized two primary sources. Analysis of face-to-face interviews provided data to highlight the challenges and successes of the journey prior to implementation of a solution, in addition to showcasing the community-oriented solution to access to care. Analysis of quantitative data from various sources demonstrated the verification and validation of the need for an access to care solution. The study demonstrates the critical factors included in the decision to bring an FQHC to the community in addition to a program review and analysis of aggregate data.

Creswell and Plano Clark (2011) validate that this QUAL → QUAN method is appropriate for use in an explanatory design. The QUAL data determined the critical process and outcomes of the case study under review. Qualitative data analysis is described as iterative, inductive, and eclectic by (Teddlie & Tashakkori, 2009). When comparing QUAL data to QUAN data, the QUAL data are often described as less scientific and involves more inductive analysis, where the researcher is looking for relationships and exceptions which may be interpreted as being influenced by researcher bias rather than scientific and factual. However, QUAL data can provide an explanation of the phenomena under review, whereas the QUAN data may be factual and open to analysis.

Yin (2014) described data analysis as a process consisting of categorizing, tabulating, testing, or otherwise recombining evidence with a goal of demonstrating empirically based findings. The use of triangulation from multiple sources of evidence in

case study research allows the researcher to explore a wide range of historical and behavioral issues (Yin, 2014). Validity of the evidence is demonstrated when it can be supported by different sources of evidence. See Figure 2 for a demonstration of the relationship and triangulation of multiple sources of evidence.

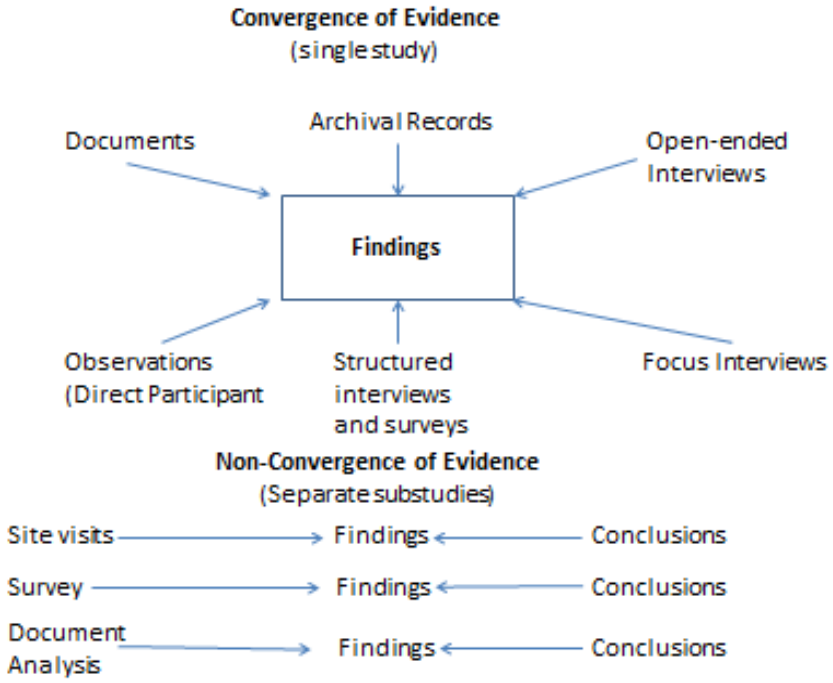


Figure 2. Validity of evidence (Yin, 2014, p. 100).

The use of multiple sources of evidence provides construct validity to the collected evidence; multiple sources converge and demonstrate the phenomenon. In summary, the method was sequential and exploratory in nature.

The source of the QUAL evidence is data collected during interviews with key stakeholders in the community development process and those now associated with the FQHC program. The purpose of the interview was to understand the history and aspects

of the program. Preparation for conducting the interviews included researcher preparation. This preparation included the researcher reviewing Yin's (2014) four recommended attributes to ask good questions. The definition of a *good question* is one that demonstrates an inquiring mind. This inquiring mind must be able to process information as shared and allow the information to lead to another inquiry. To be a good listener, the researcher must be able to actively listen and respond to all comments and ideas shared by the interviewee. This type of active listening must not be clouded by the researcher's opinions. The researcher must stay adaptive and able to pursue any direction that the acquired information may indicate while maintaining an unbiased perspective. The researcher should have a firm grasp of the issues being studied, allowing the researcher to recognize any conflicts in the information shared and respond appropriately, make additional inquiry, and be able to avoid bias and conduct ethical research. The researcher must be open to all information shared and not allow personal bias to influence the findings. Ethical research reflects the highest ethical standards as demonstrated by accurately presenting information shared, behaving honestly, and accepting responsibility for their work.

The interview plan was to schedule and conduct one-to-one, face-to-face conversations that would last no longer than 45 minutes. Preparation for the interview involved the development of a consent form and an interview tool. In addition, prior to each interview, it was essential for me to learn as much as possible about the stakeholder's role in either the current solution or the journey to the implementation of a solution to access to care. The purpose of the interview was to corroborate information

collected or assumptions made from documents or literature reviews prior to the interview. To ensure integrity of recall and information shared the interviews were recorded using a smart phone after obtaining permission from the interviewee. The QUAN data collection involved retrieving data related to critical outcomes as identified in the interviews. The variables for use in QUAN data collection were identified during the interview as the interviewee referenced various documents and sources of information. Sources include hospital records demonstrating a decrease in the number of lower level visits and a decrease in the number of return ED visits, for example. Program records demonstrating identified key metrics included the number of referrals, number of appointments kept, and the number of patients who return for initial visit and assessment. The source of evidence was organizational records in both the hospital and program cases.

The quality of the study is measured by using the four strategies proposed by Yin (2014). Construct validity is measured in the use of multiple sources of evidence and the documentation of a clear chain of evidence; key informants will also review a draft case study report in addition to receiving an executive summary. To ensure internal validity, pattern matching was performed, explanations of all steps were provided, and a logic model of analysis was used. External validity is demonstrated by the use of the Levesque, Harris, and Russell (2013) Access to Care Model. Reliability is demonstrated by case study logs, the use of case study protocol, and a case study database.

Assumptions, Limitations, and Delimitations

It is assumed that all historical documents were correct and that interviewees were candid in sharing their points of view. It was also assumed that quantitative data was collected accurately and reflected the true outcomes of the FQHC program.

A limitation is regarding the case itself: this is a single case study in a rural area of the Texas/Arkansas border. The issues of this community may not be representative of other community settings.

Summary

Disparities occur in the ability to access care. In many communities, the uninsured and the underinsured are unable to access primary and specialty care services. This project serves to demonstrate community ownership of a growing problem by highlighting the history and development of an access to care problem driven by the Chief Executive Officer (CEO) of one of the two acute care hospitals in the community. The single case study model is used to demonstrate one community's journey to provide affordable access to specialized care through partnering for success with a federally qualified health clinic and implementing strategies to assist with navigating patients to the clinic.

Chapter 4: Presentation and Analysis of Data

Introduction

This case study showcases a 12-year journey traveled by a community in northeast Texas in order to meet the challenge of offering affordable health care to the underinsured and the uninsured. One of the preemptive observations was the increasing number of people who accessed the ED for nonemergent care. The ED was struggling to provide services to large numbers of people with limited resources. This led to compromised quality of service with long lengths of stay and high numbers of people leaving without being seen. The hospital executive leadership vowed to work with identified key stakeholders to look for a solution.

The journey to meet the community needs involved multiple endeavors. Examples of these include setting up a free clinic in a church basement and staffing this clinic with volunteers from various medical professions, supporting a children's clinic designed to primarily serve children in Medicaid and CHIP, setting up a community clinic initially funded by one of the community hospitals, setting up a community clinic in partnership with Southwest Area Health Education Center (SW-AHEC), and, finally, the opening of a FQHC in 2013.

Study, Setting, Demographics

The northeast Texas community border city is Texarkana, representing the residents of both Miller County in Arkansas and Bowie County in Texas. Miller County was created by an act of the territorial legislature of Arkansas on April 1, 1820, and included most of what is now Miller County, Arkansas, and the Texas counties of Bowie,

Fannin, Cass, Morris, Titus, Franklin, Hopkins, Delta, and Hunt (Connor, 2010). In 1836, Texas became a republic, and Arkansas became a state. Today Miller County is located in the southwestern corner of the State of Arkansas. As of the 2010 Census, the population in Miller County was 43,462 (FRED, 2018). Bowie County, Texas, is located in the northeast corner of the state of Texas. In the 2010 U.S. Census, the population was 92,565 (FRED, 2018). Both Miller County and Bowie county are part of the Texarkana, TX-AR Metropolitan Statistical Area defined by the U.S. Office of Management and Budget as a two-county region anchored by the twin cities of Texarkana, Texas, and Texarkana, Arkansas.

Description of the Sample

Key stakeholders representing various professions in both the acute care setting and in the FQHC participated in the study. Yin (2014) described an interview as one of the most crucial sources of evidence. Two primary stakeholder groups participated in the interview process, including those involved in the creation of the vision, the community process and those who are currently involved with the FQHC and the acute care facility. The community is served by two comparable acute care facilities. However, only one of the facilities continued in the long-term journey to provide an access point for care or a medical home for the uninsured and underinsured. I was unable to locate historians at both facilities. This limits the acute care representation to represent one acute care facility A total of 11 stakeholders were interviewed for this study. Collaboration with senior leadership at both entities assisted with the identification of participants and the sharing of information used in this research study.

The first group included the chief executive officer (CEO) of the primary health care facility, the director for advocacy and community outreach, the director of practice formation, the director of case management, the emergency department manager, the emergency department case manager, and a retired administrator who facilitated the last 5 years of negotiation.

The latter group of participants is currently directly involved with the coordination of the FQHC and included the CEO, the regional chief operating officer (COO), the regional practice/program director, and one of the clinical providers an advanced practice nurse (APRN) clinicians involved in the delivery of care in the FQHC. Carthon, Wiltse Nicely, Altares Sarik, and Fairman (2016) describe the selection of people directly involved in the study as "stakeholder sampling."

Setting

A location of the participant's choice was selected for each interview, varying from the participant's office or work location to my office. Either email or a direct call to the identified stakeholder provided the initial communication and request for participation. Upon scheduling the interviews, a consent form was emailed to the participants for review. This consent form provided an overview of the background information and procedure planned for the interview in addition to information outlining the principles and expectations of the study.

The introduction to each interview involved a full review by the principal investigator of the purpose of the study, the consent form, the type of questions, and a section, which indicated that with the permission of the interviewee, each interview be

recorded using a smart phone. Participants agreed that the information gathered may be used in the research documentation or in a publication at a later date. The purpose of the interview was shared for review prior to any conversation or scheduling of the interview.

I emphasized the importance of obtaining the unique knowledge that the participant had regarding the community's historic journey to provide access to care for the uninsured and underinsured. This knowledge included the role of the participant, their involvement in planning, developing, implementing, or working within or with the current structure. Each participant willingly agreed to be interviewed and shared what was known about the evolution of the FQHC and, subsequently, the value to the community served.

Data Collection

Historical Data

A literature review included browsing relevant subject matter. The key words *medical home*, *uninsured*, *uninsured*, *FQHC*, and *access to care* triggered further exploration of relevant subject matter. The knowledge gained served to guide me in understanding the wide-reaching problems facing those underinsured and uninsured who were attempting to access care. The document review assisted me with identifying the key stakeholders, preparing for the performance of interviews, providing guidance to the development of the interview tool, and providing me with the scope of knowledge needed to successfully conduct meaningful interviews.

In addition to data retrieved from the interviews, I used information obtained from historical data that included archived organizational data, news clippings, and a book,

Historic Texarkana: An Illustrated History (Rowe, 2009). Information from websites of governmental agencies, local agencies, or other nonpublished literature from local agencies are often described as gray literature. Tricco, Tetzlaff, and Moher (2011) describe the use of gray literature to provide not only a different perspective and a comprehensive review of the subject, but also to acknowledge that published material may have statistically-significant results that the unpublished literature may not have. The use of the gray literature may assist with addressing publication bias. These gray resources were also used to explore the topic of the plight of the uninsured and underinsured in addition to gaining an insight into not only the extent of the problem, but also into the many innovative solutions and assistive resources that are available.

Interview Data

Each interview lasted between 20 and 45 minutes. A total of 11 stakeholders were interviewed. Five represented the acute care historical perspective, four represented the present-day operations, and two demonstrated the clinical application of working within the designed access to care program. Interviews were conducted over a nine-month period of time from February 2017 through October 2017. All participants agreed to recording of the conversation. I transcribed the recordings into a Word document and uploaded into a computer-assisted qualitative data analysis software Nvivo 11. This software is designed to assist in the identification of emerging themes.

I used an interview guide containing semi-structured, open ended questions. This conversational interview technique followed a pattern with two levels of questions: the level 1 “how” questions were followed by the level 2 “why” questions. Level 2 questions

were open ended, friendly, and nonthreatening. The utilization of a conversational interview allowed me to solicit information pertinent to the core purpose of the investigation, in addition to creating a path for alignment that assisted with categorization of the information. An additional benefit gained from using semi-structured questioning was to assist with avoiding any tendencies to stray from the prescribed objectives.

The interview guide for those identified as historians or program leaders included

- What involvement did the participant have in the development of the community solution to access to care?
- What learnings could the participant share to assist others who may want to replicate the program?
- What information would the participant recommend for inclusion in the study that would demonstrate the journey travelled and success of the strategy?

Questions for those identified as having unique knowledge regarding the intricacies of the program included

- What has been the medical home strategy?
- What is your role?
- What are your measures of success?
- What elements are in place that will contribute to sustainability?

This investigation continued until no new information was discovered and the sources were repeating previously-known information.

Data Analysis

Qualitative inquiry was performed to explain the journey of a small northeast Texas, southwest Arkansas community. Tricco et al. (2011) describe the task of knowledge synthesis as a scientific art. In this description, the authors acknowledge the role of asking broad open-ended questions which served to facilitate mapping and comparing story lines. These authors describe qualitative evidence as a means to promote contextual insights.

Data shared during the interview process was combined for analysis rather than considered as independent sources (Sangster-Gormley, 2013; Yin, 2014) to give me an opportunity to understand how the northeast Texas community was able to implement a solution that provided access to care for the uninsured and underinsured.

Yin (2014) recommends the adoption of specific techniques for data analysis. In this study, I utilized the logic model. This method provided a mechanism for me to operationalize a chain of events that occurred over a period of time (Yin, 2014). In many ways, the logic model is similar to pattern-matching with the primary difference being the clear identification of sequential stages. With each piece of information, a new door opened, or a new idea presented for the next step.

I sought common themes and sequences while reviewing the data and used the emergent framework to assist with grouping the data. I used this iteration of the common themes as a starting point for analysis of each interview and identified six dimensions. Within these dimensions subcategories were identified to assist with the further understanding and description of the in-depth investigation of the community-oriented

solution to the access to care case study. A word cloud, a visual representation demonstrating how often words in a defined document or group of documents appear further assisted with identifying themes across the interviews (see Appendix A).

Data analysis started with uploading the interviews into the software Nvivo 11. Nvivo is a data management system that facilitates and assists the investigator to organize, analyze, and share collected data. In this study, various terms are used to describe the many components of analysis, some of which are sources, coding, and nodes. The primary sources are the literature review, websites, and interviews. Coding is the process of gathering data and grouping it by a particular theme. A node is the name given to a collection of coded data that represents a set of ideas, opinions or experiences related to a particular theme. For example, data grouped and coded in the uninsured and underinsured node may demonstrate particular characteristics that are associated with or describe the underinsured or uninsured.

Data analysis began after importing the interviews into the software. The next step was to read and review each interview with the objective of identifying common themes. One of the primary components of analysis is to reflect on information. Common themes were identified after reflection and review of the interviews. These themes were used to create a hierarchy of seven parent nodes. A parent node represents the theme, and, from this parent node, child nodes may be created that provide more focus for a particular detail. If there is more than one focus or child node for a theme, these are called sibling nodes. The seven parent nodes identified to represent the theme of the interviews included (a) underinsured or not insured; (b) sustainability; (c) shared vision; (d)

navigation; (e) medical home; (f) Delivery System Reform Incentive Payment (DSRIP) Program; and (g) advice for replication.

The node navigation had a child node called transition of care program. The node medical home had sibling nodes of historical perspective and FQHC. The node hierarchy (see Appendix D) demonstrates the number of sources (in this case interviewees) who referenced the theme in addition to the number of references made throughout the interview process. The themes of medical home, historical perspective, and FQHC were given the most focus. Using a comparison diagram in NVivo, it was demonstrated that 10 of the 11 interviewees referenced both medical home and FQHC and five of the 11 referenced historical perspective and FQHC during the interview process. A text search query on medical home provided a word tree (see Appendix C) that assisted with identifying the context in which the word medical home was referenced by the sources. Nodes described were identified from thematic words noted during review of the interviews (see Appendix B). These nodes served as the framework for the codebook. Coding is the process used by the principal researcher when labels area attached to lines of text to allow for comparison of similar pieces of information. Each label identifies a node and the nodes are listed in the codebook with a description.

Evidence of Trustworthiness

One concern that appears prevalent with purposeful sampling is the higher risk for researcher bias (Benoot, Hannes, & Bilson, 2016). Steps to reduce researcher bias include sharing the early findings with a trusted source so that after reading, this source will be able to offer alternatives for data collection (Yin, 2014). Additional tactics to reduce

researcher bias described by Vandenberg and Hall (2011) include the completion of member checks and peer debriefing. The researcher must hold him/herself accountable and maintain ethical research practices. Another method for avoiding bias in processing data obtained from an interview is for two researchers to code and analyze and then compare with each other. Consideration was given to each of these points and bias was addressed by sharing frequent renditions of information gathered and seeking input and feedback from those involved in the creation of an avenue to receive care.

Yin (2014) describes bias occurring in three different ways, including measurement bias, sampling bias, and procedural bias. Measurement bias is attributed to the way the data is collected, in this case the manner of the interview. The most common impact is the actual setting in which the research is conducted. The interviewee may be influenced by peer pressure if interviewed in the midst of others. Thus, all interviews were conducted in a private location and every effort was made to make the interviewee comfortable.

Sampling bias may be related to either omission or inclusion bias (Yin, 2014). Omissions bias occurs if the population, the focus of the study, is not adequately represented. Inclusion bias occurs when a key stakeholder or participant is not included because it is inconvenient. Procedural bias occurs if the participants experience some type of pressure to respond or coercion to give an opinion driven by the interviewer. In an effort to overcome bias, the preparation for the interviews by the investigator includes a review of the factors influencing bias and committing to follow the outline suggested by

Yin (2014), starting with broad investigation followed by more detailed and focused questioning.

I held myself accountable for presenting accurate information by recording each interview in addition to taking copious notes that were later transcribed into this research document. No conflict of interest was identified for any of the study participants. Each participant was given the opportunity to share his/her story with emphasis on his/her role in the creation of a community-oriented solution to access to care. The interview focused on events and acts that led to current activities. The many different aspects of the community solution to access to care contributed to a broad perspective regarding the historical perspective and the extent of the health care needs of the community which the FQHC is serving.

Results

Analysis of these interviews identified major themes and relationships which included an unwavering desire to provide a medical home for the underinsured and underinsured, a shared vision, recognition that continued success was dependent on a funding source, recognition that practices and processes must be in place to assist with navigation for those in need of services to seek care at the appropriate venue, and a belief that the infrastructure built to provide care was sustainable. All recognized the importance of funding for sustainability.

Persistent stakeholders with a common vision. The CEO of the primary health care facility provided a passionate, sincere rendition of the journey that he spearheaded for a 12-year period. This leader recognized that the community needed a solution for

access to nonurgent care for those without a funding source. His driving force was a belief that "my facility serves as the safety net hospital" and that in this role, "we always try to take care of the poor . . . . as well as everyone else in the community." His goal was "to create a safety net that nobody falls through." In his quest to provide an access point, this leader reached out to community leaders and held public forums demonstrating the unserved need in his community. The facility Director of Advocacy and Community Planning (ACP) recalled the outreach activities:

> I took on the role of outreach activities and took on responsibilities not only for a clinic in Texarkana but also a clinic in Magnolia, Arkansas and a clinic in Prescott Arkansas, as well as a clinic in Texarkana known as the College Hill clinic; this evolved into a Texarkana Clinic managed by [Arkansas Area Health and Training Center] AHEC and supported by our facility. At this same time, we saw a significant jump in the volume of community residents using the ED as their primary home. Eventually, there was an evolution of other clinics, a senior clinic, a pre-natal clinic, and a senior day site program in addition to a mobile heath van. We needed a solution and began researching to see if we could qualify to have a FQHC in Texarkana . . . our CEO has a vision that everyone on Texarkana would have a medical home and not use the ED, a medical home and not necessarily just a physician. As the FQHC has evolved and grown, it has far surpassed what was anticipated.

The CEO reached out to physician groups and to the other primary comparable facility in town; all acknowledged the unmet need. However, no one was willing to make

a financial commitment to implement change. The CEO then reached out to his sponsoring congregation and requested assistance. The facility set up a family practice clinic funded by the local facility and the system funds. This clinic served many. However, the CEO declared that "something robust and sustainable" was needed. The need to demonstrate sustainability drove the investigative path of pursuing a FQHC for the community. This adventure proved to be challenging, and after two failed attempts at partnering with various companies, a group was found who already had successful FQHCs operating in Texas was able to open a FQHC in Texarkana. The Director for ACP shared that Texarkana as a community was unable to meet the FQHC requirements; however, "an established FQHC was able to create a satellite in Texarkana and provide a new access point, an extension of an established FQHC." This first FQHC opened in 2013 with two family practitioners, a dentist, and a pediatrician today the clinic has and in the first six months the clinic served 5,372 patients. Currently the clinic staff includes three physicians, a pediatrician, an obstetrician, and a dentist, eight nurse practitioners, two licensed social workers, a licensed counselor, and a dental hygienist. The clinic has two locations: one in Texarkana Texas and another in Texarkana, Arkansas.

The CEO for the FQHC describes the growth:

> We were originally organized to be a safety net for the uninsured and underinsured population . . . . we grew very quickly in that in the Texarkana area and since then in other areas . . . we have grown significantly . . . . as more providers were needed to meet the community need . . . we get approximately 100-120 patients that are using the emergency room as primary care . . . . there

was another piece of the population that just has not sought care medical care previously because they knew they could not afford it.

This clinic CEO further articulated alignment with the visionary CEO when she described that prior to the FQHC, many were unable to access care in the community; thus, her clinic mission statement is "to positively impact the health and wellbeing of the community." This mission statement supports the facility mission statement: "to extend the healing ministry of Jesus Christ."

One of the facility's retired administrators who was responsible for negotiating with various entities and potential partners over a four-year period shared that "in the first year 2013, 5,000 visits were recorded. This doubled to 10,000 in the second year, and in 2017, three locations were operational with over 40,000 visits." This administrator offers words of advice to those who may be considering partnering with a group for alternate avenues to access care: "when selecting a partner, especially an FQHC, essential elements include an inquiry about are the competency of their management team, the engagement of their Board, and the communication between the management team and the Board."

Community engagement. This administrator attributes the success and growth of the FQHC to the influence and engagement of leadership. Board membership for the FQHC includes the CEO as a de-facto member, and the members represent the community. In Texarkana, the community members are all obligated to receive services at the clinic. The retired administrator went on to share the advantage of having the Board members all be patrons of the clinic as "an opportunity to observe from [the] patient

perspective and to provide feedback." He then shared an example: "yesterday I called for an appointment and was on hold for nearly five minutes. That gave me the opportunity to share with management that I think we have a problem here." In addition to the Board members representing the community, an additional measure of operational success was reported by this retired administrator and Board Chair:

> One of our keys to success for this clinic is that we have a care collaboration committee. Members include key stakeholders from the clinic and from the health care facility. Staff from the clinic come over each month and meet with the hospital staff. To be successful you need the front desk person that answers the call and knows the ED navigator personally to be able to have a one to one conversation. This makes the process work . . . building this type of relationship has been so beneficial from every perspective, especially for the patients . . . . keying them in for the same day appointments, being able to pick up the phone, have a personal relationship and help that patient in need, that has worked wonderfully and if it is not working it comes out in the collaboration meeting.

This past administrator also noted the significant improvement with self-pay patients and Medicaid patients that were presenting for primary care in the ED:

> There are very few primary care providers who take self-pay in this community, and there are a limited number who accept Medicaid just because of the low reimbursement . . . . these patients couldn't find primary care, so they ended up in the ED. Now there is a far more efficiency from a cost perspective, and better from a clinical perspective because they have a provider to manager their health

> care… Two measures of success for the FQHC are two service measures. The first is "would you go back to see this provider again?" and the second is "could you get a same day appointment? . . .. One of the items the Board looks at is capacity and same day appointments. If the capacity is 60% yet patients cannot get same day appointments the Board is asking why.

The administrator followed this up with final comments:

> In summary, I would like to say to anybody that is trying to replicate this: the FQHC model is by far the most efficient one that lets you take advantage of federal funding and enhanced reimbursement for the underserved. Any federal program, as we know, comes with some regulatory requirements that can be stringent. But they are well worth the investment in that you have an engaged board and good management. It also allows the health system partner to subsidize our operations, which you cannot do in all situations because of the physician hospital system relationships, but FQHC has exemptions for most of those because of the populations that they serve along with referrals.

The response of the facility CEO warns against dependency on federal government and consistently encourages all "to depend on ourselves and not on the federal government to solve community problems, that we need to tighten the net so that no-one slips through." The clinic CEO describes the FQHC as "the lowest cost plan for primary health care for these patients who do not have health insurance or are falling through the cracks . . . it allows for the provision of services as well as for those receiving services."

Multidisciplinary holistic care and coordination. During the interview process, the need for multidisciplinary holistic care was emphasized with the full service FQHC, which includes obstetrics, pediatrics, family practice, dental care, and the correlation between chronic disease and behavioral disorders. To address the behavioral disorders, the provider group has six licensed social workers on staff who provide counseling and whose work has demonstrated value in addressing the social needs that accompany many of the chronic illnesses, anxiety, trauma or stress.

The FQHC Regional Practice manager emphasized the success of having a multi-specialty clinic in addition to success of the ED Navigator program where patients are referred either

> for same day appointments or within the next 48 hours. If the patients need specialty services not provided by the clinic, the FQHC has established relationships with specialists within a 200-mile radius…I believe there is care out there if you want to access . . . . the initial steps must be taken.

The FQHC also has various programs and packages setup with local laboratories and radiology services: "multispecialty care is the success of the medical home."

Each of the interviewees previously mentioned the role of both the hospital and the FQHC as the safety net for those who are underserved. This held true for the clinic CFO who validated that "the clinic offered services based on community" in addition to the invaluable role of the ED Navigator was "working on breaking the cycle." Once again, the goal to be self-sufficient and not reliant on federal grants was emphasized.

When asked about replication, this CFO stated the value of the partnership between the clinic and the hospital in recognizing the community need and what an FQHC can bring.

In an interview with the facility's Director for Practice Formation, the investigator obtained insights into projects that the primary facility is engaged in that align with the provision of services at the FQHC. The facility partners with the University of Texas Health North East in Tyler to subcontract for projects funded under the Delivery System Reform Incentive Payment (DSRIP) Program. Through this relationship four of the six funded projects involve the FQHC:

> Those four include expansion of primary care services and so through this funding, we have helped to assist in the expansion of primary care for that organization which has included the expansion of providers, the expansion of obstetric services, in addition to expansion of pediatric services. . . we have helped to subsidize all of these operations through DSRIP funding. . . . In addition to this, we have a project called our medical home project, which the core function is navigating patients who come into the ED who are not visiting the ED for true emergent care and with getting them established with a medical home. . . Our third project is regarding the expansion of the dental clinic operation which is also a need in our community so helping to support the dental clinic services there and to support and establish the clinic to provide financial support for the operations of that clinic. . . The fourth initiative is around pediatric mobile asthma program that includes a school-based program and a nurse practitioner who works on our mobile clinic; we travel to schools and help screen patients for asthma-

> related conditions and assist with self-management in an effort to reduce the potential for an ED visit.

This director continued with a detailed explanation of the programs and the defined measures of success:

> Each program has two categories of measurement for success one dealing with the patient population and one dealing with outcomes. Examples of the outcome-based metrics are a reduction in case sensitive readmissions, glycated hemoglobin to measure the average plasma glucose over a three-month period, and to reduce the number of primary dental visits in the ED.

Summary

Analysis of these interviews identified major themes and relationships which included an unwavering desire to provide a medical home for the underinsured and underinsured, a shared vision, recognition that continued success was dependent on a funding source, recognition that practices and processes must be in place to assist with navigation for those in need of services to seek care at the appropriate venue, and a belief that the infrastructure built to provide care was sustainable. All recognized the importance of funding for sustainability. These themes were triangulated with historical documents and literature which support the need for sustained leadership and commitment, community engagement, and the collaboration of multiple entities and providers to work collectively to address the issue of health care for the community. Chapter 5 will discuss these findings in relationship to the literature and make recommendations for social change.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

Access to health care for the underinsured and uninsured is a national problem. The most vulnerable are those who in the age group between 19 and 64 years old. Typically, this population is not eligible for governmental assistance, may be working, may not be able to afford health insurance, or may have insurance and cannot afford care because of high deductibles and copays. One community located in a border city in northeast Texas actively embraced the challenge of providing access to a medical home for everyone in their community. This community embarked on a journey that spanned a 12-year period. This descriptive, single case study research focused on exploring this journey. This journey describes how a community with minimal resources for health care for the uninsured and underinsured transitioned to a community with a thriving FQHC providing family practice, pediatrics, obstetrics, gynecology, dental care, and behavioral health services.

The purpose of the study was to explore and document the community's journey, the community's evolution, and to demonstrate the outcomes of their medical home strategy. An additional purpose was to note the challenges and the contributors to success that can serve as a guide for any community who may attempt to replicate the process.

I chose the case study design (Yin, 2014) because it allowed for the exploration and investigation of the community behavior of accessing the ED for nonurgent and episodic care. The investigation explores this phenomenon and assists in establishing if the patterns of behavior are similar to communities across the nation. The design of

choice was a descriptive single case study using mixed methods. The single case study was the medical home strategy and the many entities involved may be considered as the embedded units. The CDC's (2015) PRECEDE-PROCEED public health planning model was used for the process. This model is a logic model and adequately describes the framework used by the community stakeholders. The model supports an exploratory and structured approach to identifying the problem, to outlining the intervention, and to evaluating and measuring success. Through the discovery of literature review, document review, and interviews it was evident that the community clearly followed the steps outlined by the PRECEDE-PROCEDE model.

The journey started with a coalition composed of representatives from two acute care hospitals, members of the community, and representatives from local businesses, from both Miller County and Bowie County health departments, and from local colleges. All agreed that minimal resources were available in the community to serve the needs of the uninsured and underinsured and that access to nonurgent care, wellness screenings, and routine care was not present. The group acknowledged that many were seeking primary episodic care at the two EDs. A change was needed to break the cycle of episodic care and to provide an access point for health care. Several options were considered. The first was a community-sponsored free clinic. In this setting, physicians and nurses from the community volunteered services two nights a week. The community realized quickly that this clinic was only serving as a stepping-stone or bandage, and a more sustainable solution was needed.

The next step in the journey was to open a community clinic supported by the community and AHEC, which had a family practice residency program in Texarkana. This clinic set up was as a look-alike FQHC. However, as a program associated with an Arkansas college, it was not possible to meet the requirements of an FQHC and support for the program was dependent on the community. Next was a second clinic designed to serve the uninsured and uninsured that was funded by the sponsoring congregation for one of the facilities. As one of the key stakeholders noted, it was essential to pursue an option that offered not only primary care but a medical home where all of the community needs for the uninsured and insured in addition to the insured could be met. Sustainability required an income, and the solution was an FQHC.

Once the community was able to demonstrate eligibility for FQHC, a search began for a sponsor. Finding a sponsor or group who could provide an FQHC in the community came with its own challenges, particularly considering that the community in need spanned two counties in two different states. Community leaders continued to pursue options, and after two failed attempts, they successfully found Genesis Prime Care who was operating three clinics in Texas within a 70 miles radius of Texarkana. After performing due diligence and discovery, it was determined that Genesis Prime Care could open a new access point, a satellite FQHC, in Texarkana, and serve the community as a FQHC. In 2013, Genesis Prime Care opened an FQHC in Texarkana with two family practitioners, a dentist, and a pediatrician, and in the first year, 5,000 visits were recorded. As of 2017, Genesis Prime Care operates out of two locations in the Texarkana

area and provided family practice, pediatrics, obstetrics, gynecology, dental care, and behavioral health services with over 40,000 visits.

Interpretation of Findings

The literature is replete with articles related to access to health care services. This problem is well known and documented in the United States. The literature review revealed multiple sources of evidence that validated and verified the need and benefits for communities to have a means of providing care to all. ED overcrowding is a common feature found in the literature and in multiple government documents. ED overcrowding with a disproportionate number of lower level visits typically associated with nonurgent care was a contributing factor to inefficiency within the large hospitals in the community. Furthermore, the community acknowledged the problems associated with a lack of preventative care: a higher mortality rate, a greater likelihood of presenting to the hospital with a complex condition, and lack of preventive screening that contributes to a greater severity of illness at the time of presentation. The literature confirmed the need for a medical home that offers comprehensive ongoing care both for illness and for screening.

The literature offered validation for the various models of care considered by the community, starting with the free clinic. Darnell (2011) performed a study involving 361 clinics in the US. Darnell's description of the free clinic model amply described the clinic that was operation in the northeast Texas community in the early 2000s. The next community step was a modified FQHC, which is described in the literature as one that meets the requirements of the HRSA Health Center program but does not receive Health Center Program funding (USDHHS, 2016). Under this model, the community partnered

with a university that offered a local family practice residency program. Initially, this appeared to offer a solution to the community's uninsured and underinsured vulnerable population. However, a full range of social and medical services was not available, and funding and sustainability continued to be a concern.

The next option implemented was designed to complement the modified FQHC. The acute care facilities were not seeing the downstream benefits of the modified health care center due to the large number of people seeking services in both the clinic and in the ED. In an effort to meet the community need, one of the visionary leaders reached out to his sponsoring congregation and received funding to operate a hospital-affiliated clinic. This clinic served the community for three years from 2010 through 2013 when an FQHC was opened. The FQHC proved to be an excellent resource for the community. An FQHC is described by Chaple et al. (2016) as a clinic that is required to provide services to all who present for care regardless of their ability to pay and to offer a sliding scale fee schedule based on the family's income. All sources of evidence pointed to the success of the FQHC, the literature, the document review, the research interviews, and the tremendous growth in visits over the three years since opening. The first six months, 5,000 people were served; this grew exponentially and in 2017 with over 40,000 visits recorded with the FQHC operating out of two locations that offer family practice, pediatrics, obstetrics, gynecology, dental care, and behavioral health services. During this same time period, a change was demonstrated in the collaborating ED volume (see Figure 3).

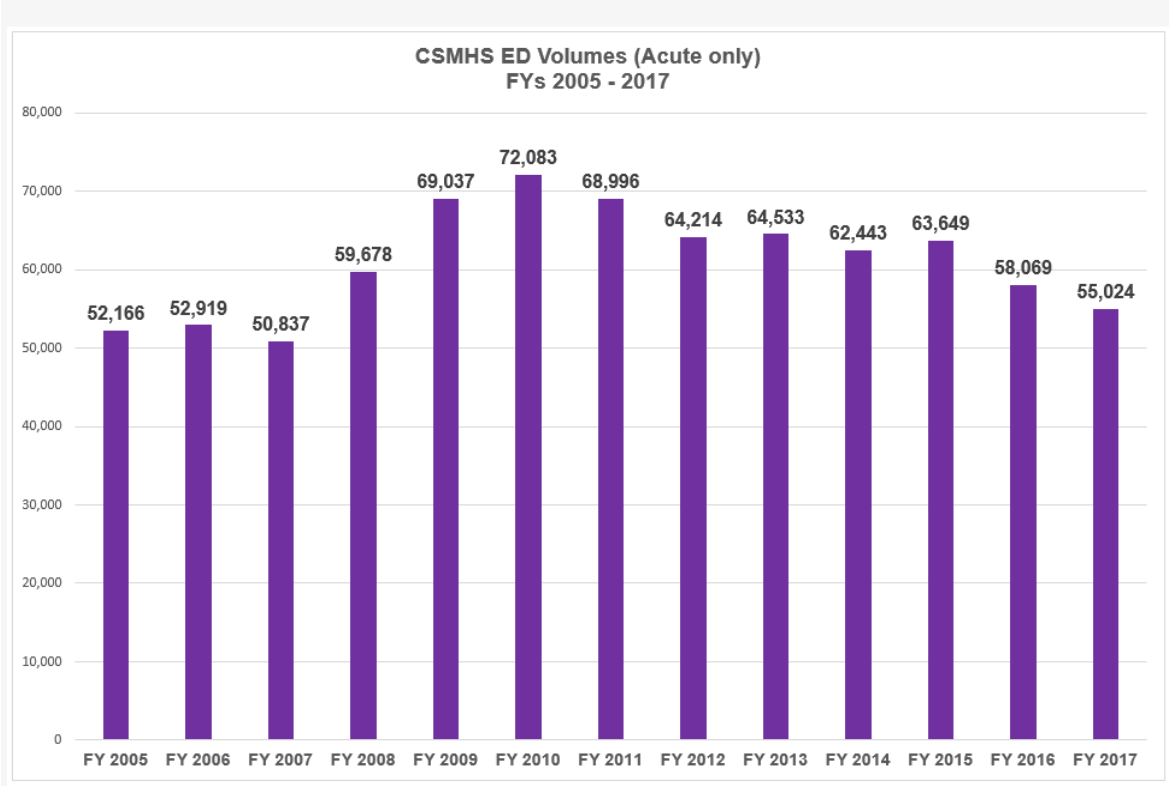


Figure 3. CSMHS ED volumes (acute only).

Limitations of the Study

The accurate reporting of this community's actions in response to the need for access to health care for the uninsured and underinsured was dependent on the participation of the identified stakeholders, in addition to access to any documented historical milestones, pertinent data, and measures of success. Limitations included access to stakeholders who had participated in the journey over the years. One example of this limitation was the identification of stakeholders from the second acute care facility that serves the community. Over time, this facility has changed ownership three times and access to those with historical knowledge of the community journey was not

available. An additional limitation was the perception of what "access to care" means. Access to care may signify geographic limitations, transport limitations, economic limitations, individual choice, or the perception of the quality of care available.

Recommendations

This study has highlighted the dilemmas faced by those in a small northeast Texas community who are either underinsured or uninsured as they attempt to access health care. Typically, this patient population has access to emergent care and may present for emergent care with later stages of chronic illness or with secondary problems related to chronic illness. The community-oriented solution provides this patient population with not only access to these services but also a referral to appropriate services and follow up upon presentation to another venue, the ED, or as a participant in a health fair screening.

This study focused on the journey that a northeast Texas community embraced in an effort to provide health care access to an underserved population in their community: the underinsured and uninsured. Community leaders recognized the need for a sustainable solution to access to care, to the provision of a medical home offering full services, and to continuity of care. This study demonstrates the relentlessness of one leader and his passion for providing a means for all in his community to have a medical home.

Recommendations for further study may include further exploration of the concept of offering navigator services in the ED. In this study, it was realized that the navigator in the ED was a key component in making referrals to the FQHC for initial follow up and the intention of establishing a relationship with the FQHC for further care. The Navigator is on site 12 hours day, seven days a week, and will meet with all who

present with a nonurgent complaint and do not have an established relationship with a primary care provider. For those who present outside of the hours that the Navigator is present, arrangements will be made the following business day by the Navigator. A speculative success not explored in this study is the accessibility of same-day appointments and the commitment to follow up appointments within 24-36 hours. Another recommendation for further study is the impact of the collaborative working relationship between the health care system and the FQHC. This relationship is deliberate and cultivated with a multidisciplinary group meeting monthly. The health system continues to promote working relationships with all of the key stakeholders and facilitates open communication regarding successes, challenges, process, and the sharing of key metrics indicative of success.

An additional consideration for further study, founded in feedback during the interview process, is to determine the correlation between chronic medical illness and a person's social environment and habits.

Implications for Social Change

While conducting research, the principal investigator found the study participants to be in general agreement that access to care for the purpose of this study was related to the accessibility of health care providers to those who are uninsured or uninsured. The community has a minimal number of providers who offer affordable options for those who have minimal resources, in addition to accepting patients who receive Medicare or Medicaid reimbursement. The FQHC undoubtedly has served to bridge this gap and will offer a first time visit for a minimal fee and make arrangements for follow up according

to a sliding scale. This approach has made care accessible from a financial point of view. Another limitation to access to care is the hours of operation. The FQHC has worked on the provision of a flexible schedule and will open the clinic at 7:00 am on weekdays and offer two late evenings each week. Currently, the clinic is looking at an option to offer services on a Saturday.

This study focused on one community's journey to establish a solution to access to health care for the underinsured and the uninsured. This journey spanned a 12-year period and was driven by a relentless visionary leader who wanted to provide a medical home for all in his community. Initially, this vision was influenced by the high volume of uninsured and underinsured who were presenting to the ED for care. It was noted that this care was not only episodic in nature, but it did not promote wellness and sources for referrals for follow up were not available. Various options were considered; however, sustainability continued to be a concern. The community did find a solution and was successful in bringing an FQHC to the environment. The FQHC is a federally-funded option for a medical home that offers full services, including primary care, pediatrics, obstetrics, gynecology, dental care, and behavioral health services. The FQHC continues to develop relationships with other providers outside the scope of the clinic and has referral sources and agreements with specialists for specialized care in a number of areas outside of the local community.

In the course of conducting research, it was noted that the needs of this community are not isolated to this small northeast Texas community. The literature demonstrates that access to care outside the ED is a global problem. In addition to

addressing a gap in the literature, this study serves to demonstrate lessons learned. An overcrowded ED in a community can be indicative of a failure to meet the community's needs. One of the investigator's goals is that this case study may serve to motivate other communities to pursue change. This northeast Texas community was able to bring the valuable resource of an FQHC to the community in addition to the development of a process to actively make referrals and access services offered. In addition to making referrals, the ED Navigator will follow up with referred patients to ensure that the arranged appointments are kept. The Navigator will also assist with identifying any additional barriers and work with the patients and the FQHC staff to accommodate the patient's needs. These needs may include travel to keep appointments or assistance with medication or may involve reiteration of the appointment time and where to go. One strategy noted during the research process was the connection between chronic illness and the need for behavioral health services. In one interview, the interviewee noted the connection between social history and medical history. This connection is so extensive that the FQHC has complimented medical care with a group of licensed social workers in and are in the process of recruiting more.

This case study may also be used to demonstrate to the decision-making bodies and legislatures a viable solution to meeting a community access to care need and the need for expansion at the federal and state level.

Conclusion

This study has served to highlight a significant problem that is not isolated to any one community in the US. The problem is limited access to health care for the uninsured

and underinsured. Those in the age group between 19 and 64 years old who are not eligible for government funded program are particularly vulnerable. This vulnerability is demonstrated by the high number of people who access the EDs for nonurgent or nonemergent care. Additionally, the knowledge that the lack of insurance or a paying source is associated with a lack of preventive care, a higher mortality, a greater likelihood of presenting with a complex medical condition, and minimal preventative care or screenings compared to the insured population (Christopher, et al., 2016).

This single case study follows the 12-year journey of a northeast Texas community that recognized a need for a sustainable solution to access to health care for their identified vulnerable population. The hospitals were serving as a safety net and were providing emergent and episodic care; however, clearly this did not meet the needs of the community and it was not an affordable or sustainable option for the delivery of care. A relentless and visionary leader vowed to work with his community to seek an alternative to the overcrowded ED. This journey spanned a 12-year period and included the identification and involvement of key stakeholders in the community at large, in addition to those directly involved in the delivery of care.

Many options were explored prior to the realization of a successful strategy. These options included running a free clinic in a church basement staffed with medical professional volunteers, supporting a children's clinic designed to serve children in the Medicaid and Children's Health Insurance program (CHIP), setting up a community clinic initially funded by one of the community hospital, setting up a community clinic in partnership with AHEC, and finally, opening an FQHC in 2013.

Relentless resilience is demonstrated in this journey. This is evidenced by the multiple options explored and the ability of the community leadership to recognize that as each clinic served an identified need, the infrastructure was not in place for maintenance and sustainability. Since opening in 2013, the FQHC has demonstrated unprecedented growth. In the first six month of operations in 2013, 5,000 visits were recorded. This number grew exponentially and in fiscal year 2017 with over 40,000 visits were recorded. Important lessons for the stakeholders were the need for leadership, the need for engagement of both the leadership, and the need for a governing body to efficiently manage operations and process. Key elements of this learning process included engagement of the Board members in the operations of the clinic and the clear need for collaboration between the clinic and the referral sources.

References

170 Congressional Record 6453. (2004). The Greater Texarkana Peoples' Clinic. *Congressional Record, V. 150, Pt. 5, March 30, 2004 to April 19, 2004*. Washington, DC: Government Printing Office.

340B Health. (2018). *Overview of the 340B drug pricing program*. Retrieved from https://www.340bhealth.org/340b-resources/340b-program/overview/

Agency for Healthcare Research and Quality. (2016). *Report shows gains in access to and affordability of health insurance*. Retrieved from http://www.ahrq.gov/news/blog/ahrqviews/qdr-report-2015.html

Arkansas Area Health and Training Center. (2012). *The history of AHEC and regional programs.* Little Rock, AR: Author. Retrieved from http://regionalprograms.uams.edu/wp-content/uploads/2015/06/2012AHECAnnRptFINAL.pdf

Benoot, C., Hannes, K., & Bilsen, J. (2016). The use of purposeful sampling in a qualitative evidence synthesis: A worked example on sexual adjustment to a cancer trajectory. *BMC Medical Research Methodology, 16*(1), 21. doi:10.1186/s12874-016-0114-6

Berk, M. L., Schur, C. L., & Cantor, J. C. (1995). Ability to obtain health care: Recent estimates from the Robert Wood Johnson Foundation National Access to Care Survey. *Health Affairs (Project Hope), 14*(3), 139-146. doi.10.1377/hlthaff.14.3.139

Blumenthal, D., Abrams, M., & Nuzum, R. (2015). The Affordable Care Act at five. *New England Journal of Medicine Online, 372*(25), 2415-2458. doi:10.1056/NEJMhpr1503614

Brennan, V. (2013). *Free clinics: Local responses to health care needs*. Baltimore, MD: John Hopkins University Press.

Brown, D. S., & McBride, T. D. (2015). Impact of the Affordable Care Act on access to care for US adults with diabetes, 2011-2012. *Preventing Chronic Disease, 12,* E64. doi:10.5888/pcd12.140431

Burke, T. (2014). Federally facilitated insurance exchanges under the Affordable Care Act: Implications for public health policy and practice. *Public Health Reports, 129*(1), 94-96. doi:10.1177/003335491412900114

Carthon, J. B., Wiltse Nicely, K., Altares Sarik, D., & Fairman, J. (2016). Effective strategies for achieving scope of practice reform in Pennsylvania. *Policy, Politics & Nursing Practice, 17*(2), 99-109. doi:10.1177/1527154416660700

Centers for Disease Control and Prevention. (2011). *Introduction to program evaluation for public health programs: A self-study guide*. Atlanta, GA: United States Department of Health and Human Services Centers for Disease Control and Prevention, Office of the Director, Office of Strategy and Innovation. Retrieved from https://www.cdc.gov/eval/guide/cdcevalmanual.pdf

Centers for Disease Control and Prevention. (2012). *Program performance and evaluation office – Program evaluation. Introduction to Program Evaluation for*

Public Health Programs: A Self-Study Guide. Atlanta, GA: Author. Retrieved from http://www.cdc.gov/eval/guide/index.htm

Centers for Disease Control and Prevention. (2015). *Assessments and planning models, frameworks and tools. PRECEDE/PROCEED*. Atlanta, GA: Author. Retrieved from https://www.cdc.gov/stltpublichealth/cha/assessment.html

Chaple, M., Sacks, S., Randell, J., & Kang, B. (2016). A technical assistance framework to facilitate the delivery of integrated behavioral health services in Federally Qualified Health Centers (FQHCs). *Journal of Substance Abuse Treatment*, *60*(1), 62-69. doi:10.1016/j.jsat.2015.08.006

Cheak-Zamora, N., & Farmer, J. (2015). The impact of the medical home on access to care for children with autism spectrum disorders. *Journal of Autism & Developmental Disorders*, *45*(3), 636-644. doi:10.1007/s10803-014-2218-3

Christopher, A. S., McCormick, D., Woolhandler, S., Himmelstein, D. U., Bor, D. H., & Wilper, A. P. (2016). Access to care and chronic disease outcomes among Medicaid-insured persons versus the uninsured. *American Journal of Public Health*, *106*(1), 63-69. doi:10.2105/AJPH.2015.302925

CHRISTUS St Michael Health System. (2005a). Outline of presentation. Texarkana, TX: Author

CHRISTUS St Michael Health System. (2005b). Summary of community stakeholders meeting. Texarkana, TX: Author

City of Texarkana, Arkansas. (2005). *Comprehensive annual financial report*. Texarkana, AR: Author. Retrieved from

http://arkansas.txkusa.org/departments/financial/documents/ComprehensiveAnnualFinancingReport.PDF

Centers for Medicare and Medicaid Services. (2016a). *Emergency department patient experiences with care (EDPEC) survey*. Baltimore, MD: Author. Retrieved from https://www.cms.gov/Research-Statistics-Data-and Systems/Research/CAHPS/ed.html

Centers for Medicare and Medicaid Services. (2016b). *Federally qualified health center factsheet.* Baltimore, MD: Author. Retrieved from https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/Downloads/FQHC-Text-Only-Factsheet.pdf

Centers for Medicare and Medicaid Services. (2016c). *Medicaid, keeping America healthy*. Baltimore, MD: Author. Retrieved from http://www.medicaid.gov/

Community Tool Box. (2016). *The community tool box. A service of the work group for community health and development*. Lawrence, KS: Center for Community Health and Development at the University of Kansas. Retrieved from http://ctb.ku.edu/en/table-contents/overview/other-models-promoting-community-health-and-development/preceder-proceder/main

Connor, S.V. (2010). *Handbook of Texas Online, Miller County Arkansas*. Austin, TX: Texas State Historical Association. Retrieved from http://www.tshaonline.org/handbook/online/articles/hcm91

Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research* (2nd ed.). Thousand Oaks, CA: Sage.

Darnell, J. (2011). What is the role of free clinics in the safety net? *Medical Care*, *49*(11), 978-984. doi.10.1097/MLR.0b013e3182358e6d

Emergency Nurses Association. (2016). *Position statement. Access to quality healthcare*. Des Plaines, IL: Author. Retrieved from https://wwww.ena.org/SiteCollectionDocuments/%20PositionStatements/AccessQualityHealthcare.pdf.

Fang, J., Yang, Q., Ayala, C., & Loustalot, F. (2014). Disparities in access to care among U.S. adults with self-reported hypertension. *American Journal of Hypertension*, *27*(11), 1377-1386. doi:10.1093/ajh/hpu061

Federal Reserve Economic Data. (2018). *United States Bureau of the Census (2018). Resident population in Texarkana, TX-Texarkana, AR (MSA) [TEXPOP]*. St. Louis, MO: FRED, Federal Reserve Bank of St. Louis. Retrieved from https://fred.stlouis.org/series/TEXPOP

Friedberg, M. W. (2016). What do you mean by medical home? *Annals of Internal Medicine*, *164*(6), 444-445. doi:10.7326/M16-0058

George, F., & Evridiki, K. (2015). The effect of emergency department crowding on patient outcomes. *Health Science Journal*, *9*(1), 1-6. CINAHL Plus with Full Text

Hacker, K., Santos, P., Thompson, D., Stout, S. S., Bearse, A., & Mechanic, R. E. (2014). Early experience of a safety net provider reorganizing into an accountable care organization. *Journal of Health Politics, Policy & Law*, *39*(4), 901-917. doi:10.1215/03616878-2744284

Himmelstein, D. U., & Woolhandler, S. (2016a). Public health's falling share of US health spending. *American Journal of Public Health, 106*(1), 56-57. doi:10.2105/AJPH.2015.302908

Himmelstein, D. U., & Woolhandler, S. (2016b). The current and projected taxpayer shares of US health costs. *American Journal of Public Health, 106*(3), 449-452. doi:10.2105/AJPH.2015.302997

Health Resources and Services Administration. (2016). *About HRSA.* Rockville, MD: U.S. Department of Health and Human Services Health Resources and Services Administration. Retrieved from https://www.340bhealth.org/340b-resources/340b-program/overview/

Joint Commission. (2018). *Specifications manual for national hospital inpatient quality measures.* Oakbrook Terrace, IL: Author. Retrieved from https://www.jointcommission.org/specifications_manual_for_national_hospital_inpatient_quality_measures.aspx

Kaiser Family Foundation. (2016). *Key facts about the uninsured population*. Menlo Park, CA: Author. Retrieved from http://kff.org/uninsured/fact-sheet/key-facts-about-the-uninsured-population/

Kern, L. M., Edwards, A., & Kaushal, R. (2016). The patient-centered medical home and associations with health care quality and utilization: A 5-Year cohort study. *Annals of Internal Medicine, 164*(6), 395-405. doi:10.7326/M14-2633

Kirkham, H. S., Clark, B. L., Bolas, C. A., Lewis, G. H., Jackson, A. S., Fisher, D., & Duncan, I. (2015). Which modifiable health risks are associated with changes in

productivity costs? *Population Health Management*, *18*(1), 30-38. doi:10.1089/pop.2014.0033

Leung, L. (2015). Validity, reliability, and generalizability in qualitative research. *Journal of Family Medicine and Primary Care*, *4*(3), 324-327. doi:10.4103/2249-4863.161306

Levesque, J.-F., Harris, M.F., & Russell, G. (2013). Patient-centered access to health care: Conceptualising access at the interface of health systems and populations. *International Journal for Equity in Health*, *12*(1), 18. doi:10.1186/1475-9276-12-18

Liem, R., O'Suoji, C., Kingsberry, P., Pelligra, S., Kwon, S., Mason, M., & Thompson, A. (2014). Access to patient-centered medical homes in children with sickle cell disease. *Maternal & Child Health Journal*, *18*(8), 1854-1862. doi:10.1007/s10995-013-1429-0

Matiz, L. A., Robbins-Milne, L., Krause, M. C., Peretz, P. J., & Rausch, J. C. (2016). Evaluating the impact of information technology tools to support the asthma medical home. *Clinical Pediatrics*, *55*(2), 165-170. doi:10.1177/0009922815596070

McMorrow, S., Kenney, G. M., & Goin, D. (2014). Determinants of receipt of recommended preventive services: implications for the Affordable Care Act. *American Journal of Public Health*, *104*(12), 2392-2399. doi:10.2105/AJPH.2013.301569

Medicare.gov Hospital Compare. (2016). *The official U.S. Government site for Medicare. Hospital Profile. Timely and effective care. CHRISTUS St. Michael Health System*. Baltimore, MD: U.S. Centers for Medicare & Medicaid Services. Retrieved from https://www.medicare.gov/hospitalcompare/profile.html#prof

National Committee for Quality Assurance. (2016). *PCMH walkthrough*. Washington, DC: National Committee for Quality Assurance. Retrieved from http://www.ncqa.org/programs/recognition/practices/patient-centered-medical-home-pcmh/pcmh-walkthrough

Nguyen, N. D., Moore, J. B., McIntosh, N. P., Jones, M. L., Zimmerman, J., & Summers, R. L. (2013). Emergency department triage of low acuity patients to a Federally Qualified Health Center. *Journal of The Mississippi State Medical Association*, *54*(10), 280-283. MEDLINE with Full Text, EBSCO*host*

Office of Disease Prevention and Health Promotion. (2018). *Access to health services.* Rockville, MD: U.S. Department of Health and Human Services. Retrieved from https://www.healthypeople.gov/2020/topics-objectives/topic/Access-to-Health-Services

Rollow, W., & Cucchiara, P. (2016). Achieving value in primary care: The primary care value model. *Annals of Family Medicine, 14*(2), 159-165. doi:10.1370/afm.1893

Rowe, B. J. (2009). *Historic Texarkana: An illustrated history. A publication of the Texarkana Museum System*. San Antonio, TX: Historical Publishing Network.

Sangster-Gormely, E. (2013). How case study research can help to explain implementation of the nurse practitioner role. *Nurse Researcher, 20*(4), 6-11. doi:10.7748/nr2013.03.20.4.6.e291

Saunders, M. R., Ricardo, A. C., Chen, J., Chin, M. H., & Lash, J. P. (2016). Association between insurance status and mortality in individuals with albuminuria: an observational cohort study. *BMC Nephrology, 17,* 27. doi:10.1186/s12882-016-0239-1

Sukpraprut-Braaten, S., Hendeson, J.C., Kinchen, D. L., Baker, W.B., Melton, C., Steele, J. … Waggoner, D. (2016). 180 medical screening exams utilized to manage emergent and non-emergent patients presenting to the emergency department. *Annals of Emergency Medicine, October Supplement*, *68*(4), S171 – S171. doi:10.1016/j.annemergmed.2016.08.193

Tapley, H., & Patel, R. (2016). Using the PRECEDE-PROCEED model and service-learning to teach health promotion and wellness: An innovative approach for physical therapist professional education. *Journal of Physical Therapy Education*, *30*(1), 47-59. doi:10.1097/00001416-201630010-00007

Teddlie, C., & Tashakkori, A. (2009). *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences.* Thousand Oaks, CA: Sage.

Texas Department of State Health Services. (2007). *East Texas community health needs assessment*. Austin, TX: Author. Retrieved from www.dshs.state.tx.us/easttexas/docs/shbowie.doc

Texas Department of State Health Services. (2013). *2002-2011 Texas hospital utilization and financial trends. Total uncompensated care adjusted for inflation*. Austin, TX: Author. Retrieved from https://www.dshs.texas.gov/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID

Tricco, A.C., Tetzlaff, J., & Moher, D. (2011). The art and science of knowledge synthesis. *Journal of Clinical Epidemiology, 64*(2011), 11-20. doi:10.1016/j.jclinepi.2009.11.007

United States Department of Health and Human Services. (2016). *HRSA Health Center Program. Health Center Program look-alikes.* Washington, DC: United States Author. Retrieved from http://bphc.hrsa.gov/programopportunities/lookalike/index.html

Vandenberg, H. R., & Hall, W. A. (2011). Critical ethnography: extending attention to bias and reinforcement of dominant power relations. *Nurse Researcher, 18*(3), 25-30. doi:10.7748/nr2011.04.18.3.25.c8460

Yin, R. K., (2014). *Case study research design and methods* (5th ed.). Thousand Oaks, CA: Sage Publications.

Appendix A: Wordcloud, Identifying Themes From Interviews

Appendix B: Code Book

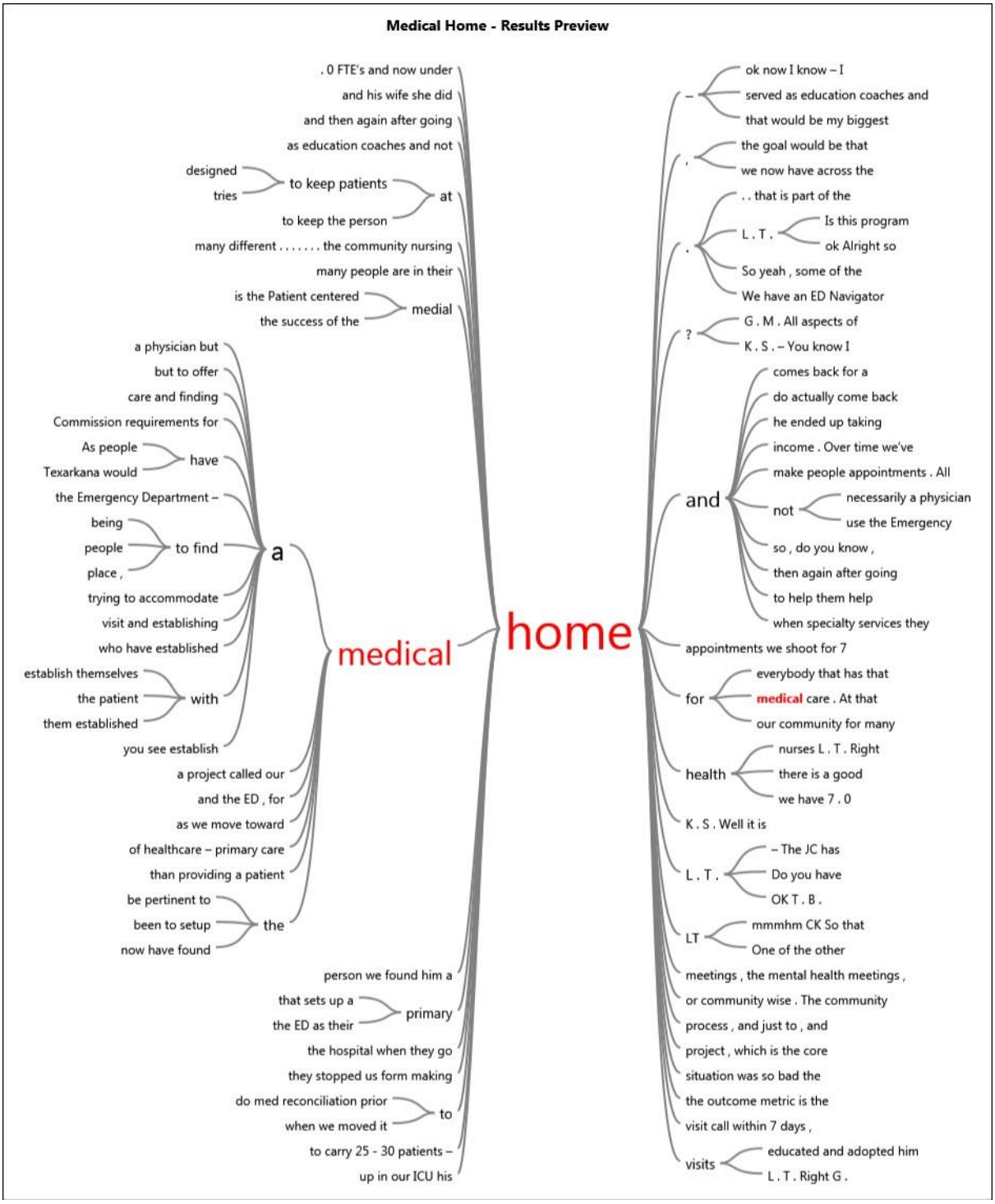
A Community Oriented Solution to Access to Care

Nodes

Name	Description
Advise for replication	
DSRIP	Delivery System Reform Incentive Payment Program
Medical Home	A medical home is used to describe receiving primary care from a specific source where a relationship is developed between the provider and the patient and a medical history is available for reference
FQHC	Federally Qualified Health Center
FQHC Funding	Funding sources for FQHC
Medical Home	A medical home is used to describe receiving primary care from a specific source where a relationship is developed between the provider and the patient and a medical history is available for reference
Historical perspective	Various efforts to provide solution
All for Kids Clinic	A pediatric clinic designed to care for underinsured or uninsured children
CSM OB Clinic	Established to meet a community need
Spirit of St Michael	
Texarkana Community Clinic	A clinic set up in the AHEC Building
The Greater Texarkana	A free clinic offered in a Church Basement

Name	Description
Peoples Clinic	
Navigation	An essential element for culture change
Transition of Care Program	Outreach program designed to keep people at home
Shared Vision	A vision for the community expressed by different sources
Sustainability	Funding and actions vital to continued success

Appendix C: Text Search Query Medical Home



Appendix D: Node Hierarchy

Nodes

Name	Sources	References
Underinsured or not insured	3	6
Sustainability	6	25
Shared Vision	8	27
Navigation	6	45
Transition of Care Program	2	10
Medical Home	10	311
Historical perspective	5	108
FQHC	10	195
DSRIP	2	8
Advise for replication	4	39