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Preparing for the Merit-Based Incentive Payment Structure: A Value-Based Business Plan

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Preparing for the Merit-Based Incentive Payment Structure: A Value-Based Business Plan

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Abstract

The notion of delivering value-based care while maintaining corporate vitality in health care is a multifaceted process. Shaping a business model to reflect this process requires the alignment of quality implications, reimbursement initiatives, a framework that takes into account stipulations on reimbursement for different types of clinicians, and an understanding and preparedness for emerging guidelines and nationally recognized structures for quality indicators. When organizations recognize the need for change, but are not yet prepared to implement it, a comprehensive business plan can help the organization visualize a path to success.

In this project, the foundation of requirements for a value-based business plan as described above was developed for a small home-based primary care practice in southwest Michigan. This project provided a pathway for preparation and compliance with the 2017 Medicare Merit-Based Incentive Structure. Compliance with the Medicare program has potential to improve the quality of care delivered and bring significant financial benefits if done well. As a result of this project, the home-based primary care service in southwest Michigan was considering the possible adoption of 29 new quality initiatives for the year 2017 and unlocked a potential gain of \$134,000 from Medicare over succeeding next four years.

Keywords: value-based care, strategy, Medicare, compliance, quality

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Executive Summary

In today's healthcare, tying value to a sustainable business model is more important than ever. The culture of healthcare has changed towards the provision of value-based care and reimbursement models have also evolved to reflect it. Many organizations are beginning to employ value-driven strategy to maintain viability in a changing marketplace. This DNP scholarly work highlights the difficulties of this process for a rural home-based primary care service in southwest Michigan, and the steps taken by a DNP student to prepare the organization for compliance with the Medicare Merit-Based Incentive Payment Structure (MIPS) program for the year 2017.

Theoretical models were utilized to identify needs and to help create a framework for systems level strategy aimed at increasing the quality and value of care delivered by the home-based primary care service providers. This scholarly project provided the home-based primary care the skills and knowledge necessary to successfully comply with the Medicare MIPS program in 2017, and was prepared to implement a total of 29 separate value-based initiatives. Under the project plan, the project had the potential to earn the home-based primary care an excess of \$134,000 in addition to neutral Medicare Part B payments between the years 2019 and 2022.

Beyond the quality and financial benefits noted, this project is a highly adaptable strategy for assessing a patient population and choosing MIPS metrics and can be employed in almost any specialty area and tailored to almost any patient population. Furthermore, the strategy developed for this project is an effective means to tie value to business; creating a value-based business plan.

Preparing for the Merit-Based Incentive Payment Structure: A Value-Based Business Plan

Value-based care is an initiative to encourage cooperation, continuity, and responsibility for patients as they move along the care continuum. The focus of value-based care is the notion of incentivizing quality rather than utilizing the historical system based on volume-based fee-for-service encounters (Gerhardt, Korenda, Morris, & Vadnerkar, 2015). The definition of quality in value-based healthcare is best explained and viewed through the operationalization of the Institute for Healthcare Improvement's (IHI) Triple Aim Initiative; the reduction of costs while improving population health and the patient experience (IHI, 2016), or a concept known as population medicine. "Population medicine is the design, delivery, coordination and payment of high-quality health care services to manage the Triple Aim for a population using the best resources available" (Lewis, 2014, para. 9). Along with a shifting of healthcare culture towards value, so have incentives, regulations, reimbursement structure and initiatives from government and private entities moved to value-based priorities. In the wake of this culture change, the need to adapt business practices to propagate value has never been greater. Neglecting to adopt business practices reflecting this culture has the potential to result in significant financial burden to a healthcare institution in the future (Gerhardt et al., 2015).

Value-based strategy as it relates to primary care includes the alignment of four aspects: quality implications, reimbursement initiatives, a framework that accounts for differences in reimbursement for different types of clinicians, and an understanding and preparedness for emerging guidelines and nationally recognized structures for quality indicators. Preparing for the Medicare's Merit-Based Incentive Payment System is an initiative aimed at aligning all of those aspects and providing a means in which health institutions on a fee-for-service platform can structure business (CMS, 2016).

The Medicare Merit-Based Incentive Payment System (MIPS) was developed to tie fee-for-service reimbursement models to quality outcomes, and streamline the Value-Based Payment Modifier (VBPM), Physician Quality Reporting System (PQRS), and the Medicare and Medicaid Electronic Health Record (EHR) Incentive into one program. Lack of preparation to participate could result in a withholding of a portion of total Medicare Part B payments soon after MIPS implementation (CMS, 2016).

In an era with increasing healthcare costs and poor health outcomes driving healthcare reform and the financial structure of healthcare, a healthcare organization in southwest Michigan had not developed a strategy to keep pace with a healthcare culture shifting towards the provision of value-based care. The organization had three main service lines, hospice, palliative care, and home-based primary care (HBPC). The HBPC service was the focus of this work. The purpose of this scholarly work is to demonstrate how the HBPC can effectively prepare for compliance with the MIPS program, while simultaneously increasing the value of the care they delivered.

Background

The organization's HBPC service began in approximately 2011 as a part of a large healthcare system in southwest Michigan. The HBPC service was developed in response to a high rate of hospital re-admissions and emergency room admissions coming from community dwelling patients being seen by a visiting provider service. Community dwelling patients reported the perception that there was not proper follow through by the visiting provider service or a sense of dedication to the people in their geographical area. As a result, the larger health system in southwest Michigan started the pilot HBPC service to address these issues.

The program began with 70-80 homebound patients that frequently utilized the emergency room for primary care needs, often being brought by ambulance and costing large amounts of taxpayer dollars. Although the original model was designed to meet the needs of the community, unfortunately, it was never able to demonstrate financial sustainability.

In April of 2015, organizational reporting structures were realigned and the HBPC became part of a community-based healthcare organization (CBHO). This CBHO had a long history with the larger healthcare system and an excellent reputation for providing quality care within the community. The objectives of this change were to improve the HBPC efficiency while still providing a much needed community service, and to link the CBHO and the larger healthcare system. As part of the plan to transition the HBPC to the CBHO, the CBHO became an affiliate of the larger healthcare system. As a result, the CBHO began providing home-based primary care in addition to their already established services: hospice, palliative, bereavement, and transitions of care.

Resulting from the new affiliation between the two organizations, the large health system acquired a seat on CBHO's board of directors. Following the initial transitioning of the HBPC, the patient census experienced rapid growth that began with approximately 250 clients and at the time of the DNP student's project it had 480 patients (Manager #2, personal communication, December 15, 2016). The following sections discuss the organizational assessment of the HBCO and provide a preview into the intricacies of daily operation and barriers faced. The information gained from the organizational assessment highlights the barriers faced by the HBCO.

The Burke-Litwin Model

The Burke-Litwin Model (Burke, & Litwin, 1992) is a systems science model that describes linkages among factors that affect performance and determine the change process in an

organization (see Appendix A). Use of the Burke-Litwin Model (BLM), is especially helpful in determining organizational factors that need to change in order to enhance the quality of care delivered by an organization. The illustration of the BLM model is organized in a descending fashion with factors that have the most influence to affect organizational change near the top of the model. There are 12 metrics within the BLM Framework: external environment; mission and strategy; leadership; organizational culture; structure; management practices; systems (policies and procedures); work unit climate; tasks and individual skill; motivation; individual needs; and performance; and individual and organization performance. For each dimension there are specific questions that help uncover factors that need change in an organization (Burke, & Litwin, 1992). The BLM served as the organizational assessment model used for this project. In the next sections, each dimension will be discussed as it relates to the organization of interest.

External Environment

The *External Environment* dimension of the BLM pertains to the most influential factors outside of an organization that impact operation. Specific questions focus on determining which external factors are the most salient, the magnitude of their impact, and the insight the organization has regarding their effects (Burke, & Litwin, 1992). In the case of the HBPC, the most notable external factors are the health culture shift toward the Triple Aim initiatives and the changing of payment structures that reward quality rather than quantity. The Triple Aim is a healthcare initiative that requires the pursuit of three simultaneous goals: improving the experience of care, improving health of populations, and reducing costs (Berwick, Nolan, Whittington, 2008). The Affordable Care Act of 2010 provided the framework to operationalize the Triple Aim by shifting focus from a volume-based system, to a population-based system known as Population Health Management (PHM) (Fielding, Teutsch, & Koh, 2014). The

changes of the Affordable Care Act led to a restructuring of payment models to more innovative methods that reward quality rather than quantity; including, but not limited to shared savings, bundled payments, shared risk, and global capitation. As healthcare system payment models change, the failure to adopt a business structure that reflects a value-based foundation may potentially result in significant financial burden to a healthcare institution in the future (Gerhardt et al., 2015). Due to the possibility of potential future financial burden caused by payment structure changes, PHM was an external factor with potential for a major impact on the CBHO's corporate vitality. At the onset of this project, leaders within the CBHO were aware that there would be an impact, but they were not prepared for the change. This scholarly project has served to highlight the full scope of the impact and as a guide for quality improvement initiatives.

Mission and Strategy

The second dimension of the BLM explores the mission and strategy of an organization. In this dimension, assessment of the management team and employees' perceptions of the organization's vision and strategy are assessed for clarity (Burke, & Litwin, 1992). The mission of the CBHO was a three-part mission: to serve, deliver, and guide. The CBHO aimed to "serve families and communities with great compassion and dedication. Deliver the best end-of-life care so that people experience a peaceful, pain-free, and fulfilling death within the context of their own life. Lastly, guide patients and families through the grieving process with reliable and consistent availability" (Caring Circle, 2016, para. 4). The HBCO does not currently employ a publicly known corporate strategy (Manager #2, personal communication, December 15, 2016). The mission and vision of the organization did not explicitly include mention of the HBPC service, but the underlying theme was that the CBHO aimed to provide quality care. The mission and vision seemed to be enacted by employees, but specifics were not easily called upon.

Furthermore, in the main office building the mission and values of the organization were not displayed in an easy-to-find location.

Leadership

The third dimension of the BLM is leadership. In this dimension, determination of who provides direction, who are the role models, the style of leadership that is employed, and what do the employees think are assessed (Burke, & Litwin, 1992). The key leadership roles in the CBHO are described in Figure 1. A board of directors provides high-level leadership to the CBHO. Manager #1 was the lead manager, responsible for overall operations. This Manager reported to the chief executive officer (CEO). The leadership structure was further divided by service line. Manager #2 was responsible for the HBPC service and the palliative care service, and Manager #3 was in charge of hospice. Managers #2 and #3 reported to Manager #1 and the CEO, who then answered to the board of directors. All three managers, as well as all clinical staff, act as role models to the staff in the organization. Managers #1 and #3 employed an authoritarian management style, which was demonstrated by their actions and decision-making processes, and Manager #2's style was more democratic, taking input from employees and providers prior to implementing changes.

Figure 1: CBHO Leadership Key

CEO: Chief Executive Officer
Manager #1: Lead Manager
Manager #2: Manger of the HBPC and Palliative Care Service
Manager #3: Manager of Hospice Service
Director #1: CBHO Medical Director

Figure 1. Key for the CBHO leadership team.

The board of directors was a diverse group of 12 individuals. The board was chaired by an attorney and included two retired vice-presidents of organizations, two retired bankers, dean of a college, a judge, a retired community college administrator, a funeral home director, and a physician. Beyond administrative leadership, the Director #2, a physician, provided clinical oversight for the two nurse practitioners who provided direct patient care. Director #1 was described as a transformational leader and he was positioned as CBHO's medical director.

Figure 2: Structure of the Larger Health Organization

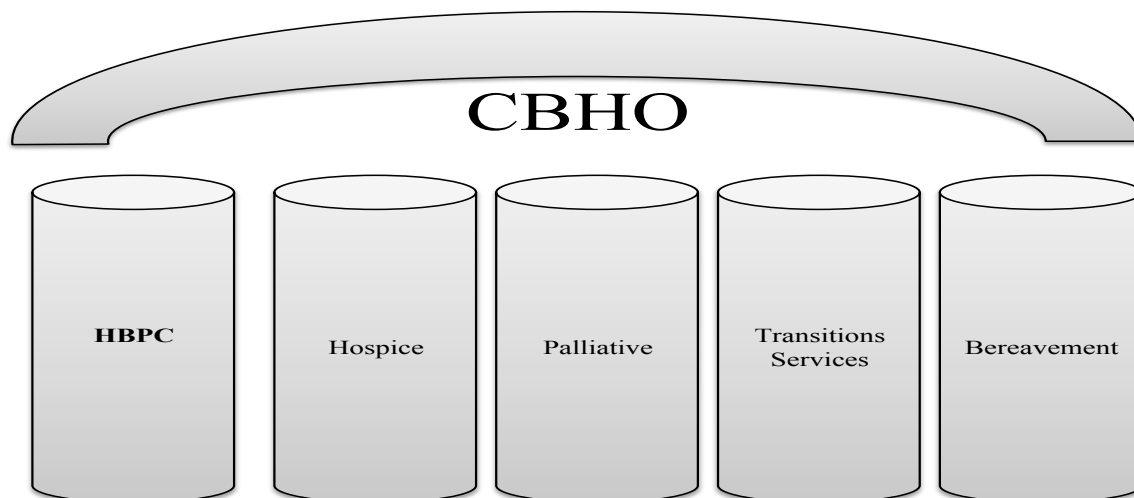
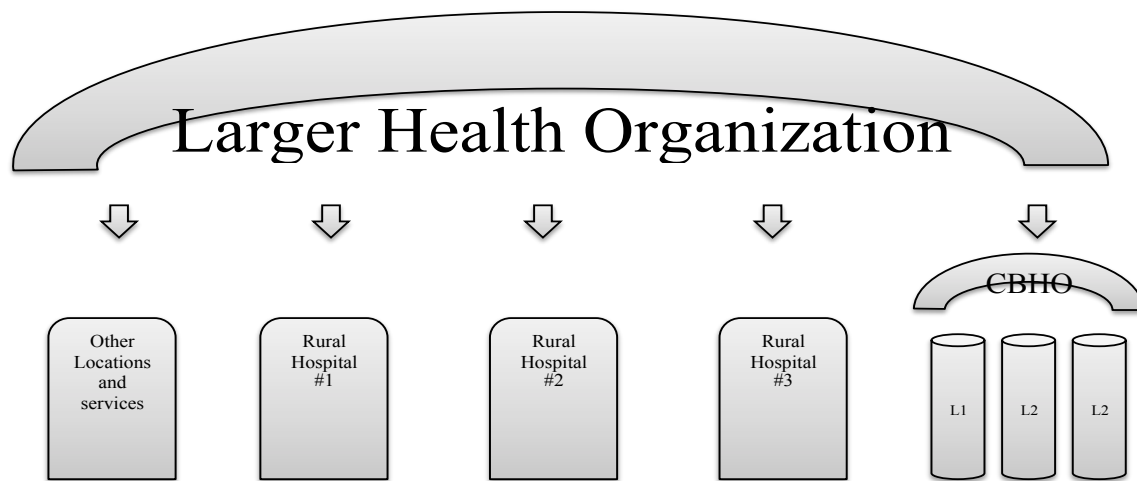


Figure 2. The above figure highlights the structure of the larger health organization and the three locations of CBHO. The three locations of the CBHO are illustrated above as L1, L2, and L3.

Organizational Culture

The fourth dimension of the BLM involves assessment of the organizational culture. In this dimension, the values, customs, principles, and rules that guide organizational behavior are assessed (Burke, & Litwin, 1992). The mission of the CBHO was mirrored by the organizational culture. The organizational culture was patient-centric, compassionate, and holistic. The organization employed an interdisciplinary care model; employing multiple professionals from several disciplines and professions including: pastoral care, hospice nurses, case management nurses, social workers, patient care assistants, and various types of volunteers.

Figure 3: Structure of the CBHO



Figure

3. The above figure highlights the existing services within the HBPC.

Although these professionals were employed in the CBHO, the services provided by these many different types of professionals were not a part of the HBPC service. They were a part of hospice and palliative care services. The CBHO employed a silo approach to the utilization of their resources, viewing each service as its own entity and not sharing resources. The silo-approach, contributed to a culture that propagated a lack of cooperation among service lines. In the hospice service line, there were 170 paid positions for roughly 250 patients. In organizational assessment, the number of fulltime equivalency (FTE) positions was unknown, due to the lack of transparency among service lines. It was estimated that hospice employed over 20 times the number of employees, for almost half the patient load of the HBPC service. Despite a vocalized need, none of the various services such as social work or additional case management provided by hospice were available for the HBPC’s patients. The organization recognized each service line as its own entity with its own patient populations, rather than one large patient population in need of different services.

Structure

The fifth dimension of the BLM was an assessment of the organizational structure. In this section of the organizational assessment, functions, responsibilities, and relationship dynamics of people are discussed (Burke & Litwin, 1992). The CBHO was divided into four services, hospice, palliative care, home-based primary care, and a transitions service. The HBPC service was relatively new to the CBHO and employed one manager, one physician, two nurse practitioners, two registered nurses, and two schedulers. The manager's job was to provide administrative oversight, resource planning, staff management, and budget allocation. The physician provided clinical guidance and oversight of two nurse practitioners. One nurse practitioner works 1.0 full time equivalency (FTE) for the HBPC service and 0.5 FTE for palliative care. The other works 0.5 FTE for the HBPC service and 0.5 FTE for hospice. The nurse practitioners were the sole primary care providers for all patients on the HBPC service. In total, there were one and one half nurse practitioner positions for all 480 patients, and a total of eight employees on the HBPC service team (Manager #2, personal communication, December 15, 2016).

The structure of the HBPC service line and the rapid growth of the service line resulted in the nurse practitioners having large patient loads; a three-month wait for initial appointments for patients new to the service; and longer periods of time between appointments for current patients. The types of patients on the HBPC service were typically higher acuity, higher risk, and many had a mental health concern. The structure of the HBPC at the start of the project was not adequate to provide care based on value, especially for its population.

Lack of adequate clinical time to follow up with patient needs by providers was a recurring theme in conversations with Manager #2, the manager of the HBPC service. Despite

the utilization of the patient portal provided by the large health system's interface, patients were calling the office for refills of prescriptions, to set up follow-up appointments, and for other general needs that management believed could be accomplished with smaller caseloads, regular visits, and more time dedicated to each patient (Manager #2, personal communication, December 15, 2016).

The financial structure of HBPC service operated on a fee-for-service model (Manager #2, personal communication, December 15, 2016), where revenue was generated by billing for each service provided to each patient. Historically in healthcare, this fee-for-service model was a profitable means of generating revenue (Gerhardt et al., 2015), but the HBPC service provided home-based primary care throughout several southwest Michigan counties which could require traveling up to 70 miles at a time to see patients. The travel time between patients varied, and limited the number of patients a provider can see in one day. The average number of patient visits from April to August 2016 was 208.2 patients per month, or 9.6 patients per day between 1.5 nurse practitioners. This was less than half of the HBPC census per month (see Appendix B). During the same time period, the average generated income from those visits was \$18,278.45 per month (see Appendix C). At that rate, the projected revenue generated over twelve months was \$219,341.40, which was used to cover operational costs and future internal investment.

At the start of the project the full operational costs of the HBPC service were unknown, as there was no previous attempted to calculate it. Estimating costs, based on salaries, supplies, utilities, travel expenses for providers, and other additional expenses, the HBPC service was operating at a deficit. Speculating solely on average salaries of nurse practitioners and registered nurses in southwest Michigan alone (Salary.com, 2016; Indeed.com, 2016), the operational costs far exceeded the revenue produced (House Calls, 2016a). The HBPC service was being

subsidized at \$20,000 per month from the CBHO organization and the support was written off as a loss in revenue for tax purposes (Manager #2, personal communication, December 15, 2016). If the CBHO did not make drastic changes to the way the HBPC service was run, the deficit was expected to grow unsustainably with the coming of new reimbursement structures.

System (Policies and Procedures)

The sixth dimension of the Burke and Litwin model is known as the systems dimension. This dimension examines organizational policies and procedures, reward systems, management information, human resources, and resource planning (Burke, & Litwin, 1992). The HBPC service policy, and regulatory requirement, is that the patients accepted to its service had to be completely homebound based on Medicare homebound status criteria (CMS Manual System, 2013). Referrals came from other primary care services, hospitals, other community services, from patients, their families, or from other caregivers. Each patient was assessed for necessity of service based on his or her current condition. Despite an in-home consultation, the CBHO did not employ a standardized acuity assessment as a part of the intake process; instead it depends on practitioner discretion. Lack of a standardized acuity assessment resulted in an inability to assess which patients were at higher risk for morbidity, mortality and greater need of services, neither are there structured rounds on the HBPC service patients. The system in place treated all patient conditions as equal, and this lack of structure coupled with understaffed conditions, long distances for providers to travel, and high patient loads, inevitably some patients did not receive optimal and timely care, particularly for preventable ailments. Furthermore, the HBPC service had not developed a way to capture metrics for the assessment of ongoing patient outcomes.

The CBHO employed the use of EPIC[®] as its electronic health record. EPIC[®] became available after the completion of the affiliation with the large healthcare system, in April 2015.

Prior to EPIC[®], paper charting was used. However, while the project was completed, all patient visit information had to be transcribed into EPIC[®] after the care was delivered, due to the absence of cellphone coverage in the rural areas served. This issue limited the use of tablets or other electronic devices for real-time charting, making the use of EPIC[®] unavailable. It was also thought that the HBPC's patients could not easily be separated from the larger aggregate of primary care patients in the healthcare system. Such a dilemma made consistent monitoring of health and treatment outcomes and the utilization of that information for process improvement a significant challenge (manager #2, personal communication, December 15, 2016).

As the project was initiated, the HBPC service was not employing any type of reward system based on productivity for providers or employees such as bonuses or shared profits. Reimbursement was based on agreed-upon salaries at the beginning of employment, and at negotiations for each contract term. The human resources department of the large healthcare system handled all hiring, discipline, and compensation negotiations (Manager #2, personal communication, December 15, 2016).

Management of information and resource allocation were handled through the managers of specific service lines and the board of directors of the CBHO in conjunction with strategic planning specialists within the larger healthcare system. Management information ascended and descended from the manager level to the board of directors, and vice versa. The managers were the administrators who dispersed pertinent information to employees. Strategic planning began with a proposal template developed by the larger healthcare organization and utilized by the CBHO. Once the template for a proposal was completed, the proposal was then sent to the CBHO's CEO, and Director #1, the medical director. If the CEO and Director #1 approved the

proposal, it was then brought to the board of directors. If the board of directors also approves the proposal, then it was enacted.

Management Practices

The seventh dimension of the BLM involves evaluation of management practices. This dimension examines how management utilizes human and material resources, management style, and how they relate to subordinates (Burke, & Litwin, 1992). In the HBPC Manager #2 was relatively new to her position, only accepting it in April of 2016. One year later, Manager #2 was still trying to grasp a full understanding of how the HBPC service was integrated into the CBHO and how to best lead it, which was proving to be a time consuming task as the HBPC was also relatively new and seemingly in a constant state of transition. Given this scenario, manager #2 was taking charge with a democratic style of leadership and was utilizing the knowledge and expertise of her colleagues, as well as employing the help of a Doctor of Nursing Practice (DNP) student through the development of the scholarly project. Although not much was assessed in regards to other managers and their management styles, utilization of resources, or their relationship to subordinates. What was discovered was that Manager #2 employed a more democratic style of leadership rather than an authoritarian type. She tried to utilize the opinions of her colleagues and employees to make decisions, which in many situations was beneficial, but had recently contributed to a difference of opinion and conflict.

Work-Unit Climate

The eighth dimension of the BLM involves an in-depth look at the work climate (Burke, & Litwin, 1992). The dynamics among the employees on the HBPC service seemed to be tenuous at times, but most often copasetic. Any tension surrounding the HBPC service seemed to be related to ambiguity regarding personal responsibilities and direction of the service line. Until

just prior to the project, there were three nurse practitioners working for the HBPC. The third nurse practitioner (NP#1) primarily worked in palliative care, and was following patients from hospice service to the HBPC service. However, there was only a small volume of patients following this progression. This situation became contentious due to the low patient load, and that nurse practitioner was reassigned to another service line. The patients on her service were added to the patient loads of the other two nurse practitioners, contributing to their already strenuous censuses (NP#1, personal communication, December 15, 2016).

The atmosphere surrounding other service lines seemed to differ from that of the HBPC service. During an examination of multidisciplinary rounds of Hospice, there seemed to be an open forum opportunity to discuss needs and concerns of patients and employees that did not seem to carry any judgment or repercussion. Multiple professions and disciplines came together in a large room, sometimes around thirty people, to discuss each individual patient in what appeared to be an almost social event. The atmosphere was respectful and accepting of each opinion and the expertise of colleagues. The palliative care service of the CBHO operated in a similar way, but also rounded in one of the larger health system satellite hospitals. The doctors and nurses there seemed to really respect the palliative care service presence and had a very cordial relationship with the practitioners, an atmosphere different from that observed in the HBPC service.

Task and Individual Skills

The ninth dimension is known as task and individual skill and examines task requirements, individual skills and abilities, and knowledge in the organization. In this dimension the organization's ability to select appropriate candidates for the job tasked is weighed (Burke, & Litwin, 1992). Starting from the top level of the HBPC administration,

Director #1 is a board certified physician with ample experience who acts as the medical director for the CBHO service lines. The CEO was charged with oversight of all administrative and clinical operations within the CBHO. Manager #1 handled daily operations and defined the directions for the service line that should be pursued, pending final approval of the CEO, the medical director, and the board of directors. The two nurse practitioners, one full time and one part-time, were the only two employees that provided any hands-on patient care. The two nurse practitioners travelled to patients' homes, and provided primary care services such as assessment, delivery of treatment modalities, writing prescriptions, and recommending therapy options. The two nurses provided no hands-on patient care; rather, their jobs were primarily confined to office work. The nurses provided phone consultation, managed medication needs of the patients, coordinated follow-up with appointments and therapy needs, and brought urgent situations to the attention of the nurse practitioners. The schedulers managed patient and employee scheduling needs (Manager #2, personal communication, December 15, 2016).

Individual Needs and Values

The tenth dimension of the BLM is known as the dimension of individual needs and value. In this dimension a thorough evaluation of staff members' valuing of their work and the factors that would enrich their satisfaction are examined (Burke, & Litwin, 1992). Through observation, it was noted that all the employees working for the CBHO and HBPC valued their work. In particular to HBPC, the dedication and loyalty of practitioners towards patients was very evident, but it was offset by the logistics of ability to provide care in a timely fashion. As previously discussed, the practitioners' enthusiasm for their work was in such abundance that it seemed territorial at times; but regardless, they were understaffed, overworked, and unable to provide care to all patients. The census had grown so fast that the hiring of additional

professionals had not kept pace. The scale of the situation had grown to the point at which the average wait for an appointment was three months, and nurses were unable to do anything but work in the office coordinating care.

Manager #2, who also was enthusiastic about her position, is at a loss with the current state of the HBPC service. She wished to have patients seen in a more timely fashion, nurse practitioners with smaller caseloads so that they could manage all aspects of their patients' care, and wanted to add a social worker to their service line for the management of complex social situations frequent in the patient population they serve. Additionally, making the HBPC service a sustainable, if not a profitable service, and more efficiently operating, seemed to be the combined goals of all employees and administration.

Motivation

The eleventh dimension of the organizational assessment model is called motivation. In the motivation dimension, evaluation of whether or not employees are taking action to fulfill the organization's strategies, and uncovering which of the first ten dimensions is most impactful on employees' motivation, is encompassed (Burke, & Litwin, 1992). The most impactful dimensions that affected the work and motivation of the HBPC service were structure and systems (policies and procedures). The structure of the HBPC service was not set up to provide patient care based on value, nor were policies and procedures in place to support its provision. Given the methods in which the HBPC service operated, it was evident to all employees that change was needed. Recognizing the changing shift in healthcare culture towards a value-based initiative, Manager #2 enlisted the help of this DNP student to help the HBPC develop a value-based business plan. The administrative team seemed to be very motivated and excited for the

change, with plans to pursue new initiatives as early as fall 2017 (Manager #2, personal communication, December 15, 2016).

Individual and Organizational Performance

The last dimension of the BLM is individual and organizational performance. In the last dimension assessment of performance in terms of productivity, customer satisfaction, employee motivation, and quality is addressed (Burke, & Litwin, 1992). Much of this dimension was summarized as elements of the previous eleven dimensions; therefore this section will summarize some of the main points already covered. In terms of performance, the information that was available was only the amount of patients being seen, and the revenue generated from those visits. Evaluation of both patient visits and revenue generated highlighted vast room for growth and opportunity to restructure so that more patient visits could occur and more revenue could be generated. As the project started, patient satisfaction surveys were not being collected, and no outcome data in regards to quality could be obtained. As for motivation, the entire team of the HBPC service was ready for change, to not only improve patient care, but also working conditions.

SWOT Analysis

A tool used to evaluate the strengths and weaknesses of an organization or phenomenon is known as a SWOT analysis. Each letter in the acronym represents an area for exploration within a phenomenon of interest, and stands for strengths, weaknesses, opportunities, and threats (Moran, Burson, & Conrad, 2017). In the following paragraphs, a SWOT analysis is summarized concerning the HBPC service, for the purpose of assessing readiness for a shift to value-driven healthcare.

Strengths

The strengths of the HBPC service were many. The HBPC service was a relatively young service with dedicated and loyal staff, and it was a part of an organization affiliated with the largest health system in the region it served. This made access to professional resources more available and ready for use when necessary. The HBPC service had a growing patient census, which was a sign that their services in the region were needed, despite their very selective criteria for admittance. The HBPC service was part of an organization that was very patient-centric and motivated to provide the best patient care possible, which could make the transition to a value-based methodology an easier process in the future. Leadership of the HBPC service was already making accommodations in preparation for the transformation by making it a priority, and enlisting the help of this DNP student.

Weaknesses

Despite having a dedicated and loyal staff, there were only eight employees on the HBPC service for all 480 patients and 1.5 FTEs that delivered care. The weakness of having very few employees was exacerbated, by a recent influx of patients on the service, resulting in longer periods of time between appointments and difficulties in accepting new patients. In the same regard, there were only two nurse practitioners providing care for all 480 patients, making the process of keeping up-to-date with paperwork necessary for billing, difficult. The difficulty keeping up with paperwork directly affected reimbursement, because payment could not be received until charts were closed or completed (Manager #2, personal communication, December 15, 2016). The problem with charting was exacerbated by the method in which it had to be completed—after the visit, and upon return to the office.

The high patient loads the nurse practitioners carried made it difficult to keep up with patient care. The two registered nurses had to be in the office coordinating patient care such as making sure prescription were refilled, treatments were rendered, proper follow-up was completed, and many other tasks believed by management to be the nurse practitioners' responsibilities in an ideal scenario, were finished. The organization of this workflow did not allow the registered nurses to do patient visits for lower acuity patients, or to render any care. This meant that all patients had to be seen by the nurse practitioners.

Other areas of weakness in the HBPC service were that they were operating on a fee-for-service model without plans to prepare for the inevitable transition to reimbursement based on value. Operational costs of the service line were not known. The HBPC service did not utilize a structured method of assessing acuity on all patients, and operated on a provider-discretion basis. Also, the HBPC service did not employ a multidisciplinary rounding process, due to a lack of providers, time, and resources necessary to undertake such an endeavor. Rather, the physician provided oversight of patients' charts and was available for consultation with the nurse practitioners when needed. The HBPC service therefore had many opportunities for growth in each area of weakness. These will be discussed in the next section.

Opportunities

With the many strengths and weaknesses, there were many opportunities. The growing patient census left the HBPC service in a unique opportunity to expand and build upon the already established practice foundation. The HBPC service had the opportunity to take a struggling program and transform it to one that provides better care to a patient population that desperately needs its services (Berrien County, 2016). The HBPC service operated with one and one-half nurse practitioners providing care, which left potential room to grow, but prior to

undertaking that kind of movement, operational costs had to be better understood. The HBPC service also had the opportunity to change practices that were not conducive to a value-based program, such as a lack of acuity assessment; failure to utilize multidisciplinary rounds; not tracking outcome data or patient satisfaction; and using taxonomy codes not specific enough to capture full reimbursement. Furthermore, the HBPC service was in a unique position to capitalize on the motivation of their employees, especially the providers who were overworked and ready for change.

Threats

The biggest threat that the HBPC service faced, was a lack of preparedness for the eventual coming of value-based reimbursement models. The fee-for-service platform in which the HBPC service was built, was not sustainable. The entire service line depended on the work of two providers who were only capable of making 9.6 patient visits per day. At that rate, homebound patients on the HBPC service using it as their sole primary care could only be seen once every ten weeks. If one of those providers would have become ill or had left the practice, the service line would not have been able to function without an immediate replacement. In a reimbursement system dependent on outcomes and value of service there were simply not enough providers to handle the patient census, which meant patients that probably needed care were not receiving it in a timely fashion. The inability to provide care in a timely fashion could have opened the door to litigation in the future, posing another major threat to the organization.

The system in which The HBPC service operated was not equipped to track outcomes of its own patients. In addition to the ethical dilemma of not doing this, and failing to use data for continuous improvement, there was no way to show there was value within their current

practices. In the future, not doing so could mean the difference between being reimbursed for their work or taking a loss for their time (Gerhardt, Korenda, Morris, & Vadnerkar, 2015).

Lastly, the political climate in the United States at the time of this project had the potential to be a threat to The HBPC service if it chose to pursue restructuring to match reimbursement models afforded through the Affordable Care Act. The new president, Donald Trump, vowed to repeal the Affordable Care Act, and at the time of this project, the extent of that process was unclear and the programs to be affected were ambiguous. Therefore, if The HBPC service chose to restructure its service line to match a specific incentive program, efforts could become futile if the program was abandoned by the state or federal political administrations. Such a notion posed a great deal of risk to an organization when considering the costs of time and effort required to restructure.

Key Stakeholders

“Key Stakeholders are individuals or groups in an organization who touch the project in some way or have an interest in the outcome” (Moran, Burson, & Conrad, 2017, p. 130). In the HBPC service line, the stakeholders were as follows: the nurse practitioners, nurses, schedulers, manager, medical director, and the chief executive officer. In the CBHO as a whole, the board of directors, the accounting and finance department, and NP#1, who was also a committee member for this project, had a vested interest. In the larger health system, the information technology department was also a stakeholder in this process. All of the employees of the HBPC service were stakeholders in the conduction of this project because of to the vast impact it could have on the structure of their work, and how they do their jobs. The medical director and chief executive officer were also stakeholders because they had to give approval of the value-based business plan before it was presented to the board of directors, who were also stakeholders. The finance and

accounting department at the CBHO was a stakeholder because information necessary to move forward with initiatives and new processes was needed from the department, and it was the group that would see the financial impact of a changing reimbursement model most prominently.

Lastly, in addition to her other defined role, NP#1 was a stakeholder because she was also the gatekeeper to the organization for this DNP student completing this project, and was a member of that student's advisory team. In the following sections, the literature review for this project is presented and provides the evidence necessary to rationalize the purpose of this project.

Literature Review

The purpose of this literature review was to understand the implications of value in primary care, Medicare reimbursement models, payment models for clinicians, and the quality measures for home-based primary care and how they relate to the issues previously described. The literature reviewed in this document included information gathered from Google searches, Google Scholar, CINAHL Plus, Pub Med, and U.S. government sponsored sites. Inclusion criteria included the most recent rules and applicable regulations that govern provision of home-based primary care and reimbursement; the financial impact of employing or not employing value-based initiatives, and publication dates no earlier than 2006. The time period limitations of this document were because of implications of the Affordable Care Act of 2010 that changed the healthcare system in the United States and developed new rules, regulations, and incentives for healthcare institutions that receive government funding to support their operations. There was also need to include research relatively recent to its passing (HHS.gov, 2015). Some additional studies completed prior to 2006 were also included in this work, but were limited, and only meant to demonstrate the length of time a concept has been discussed in the literature. Furthermore, only Medicare value-based programs were explored because a large portion of

patients on the HBPC service were Medicare enrollees. Value-based programs that included becoming a part of an accountable care organization (ACO) or a primary care medical home (PCMH) were omitted because of an expressed desire of the HBPC service to avoid participation in either of those programs (Manager #2, personal communication, December 15, 2016). However, an overview of both ACOs and PCMH programs as they pertain to the provision of value in primary care, is provided.

Value Implications for Primary Care

In the following sections, the implications of value as it pertains to adult primary care are explored. For the sake of this literature review, the term *primary care* will be used to describe all types of adult primary care practices including, but not limited to, home-based primary care. The definition of *value implications* as it pertains to primary care, are care delivery strategies for the provision of high-quality care, while reducing cost and improving patient satisfaction, and methods to evaluate effectiveness. The following sections are meant to be an insightful look into the business and practice methodologies that organizations have employed as they transitioned to the provision of value-based care.

Needs-Based Strategy

A common theme in the literature in regards to integrating value into primary care is the requisite of a needs-based approach. The success of integrating and monitoring value in practices with diverse patient populations becomes difficult to measure when the focus is on the entirety of a being, rather than a specific disease, type of condition or condition group, or social determinant. The transition process towards value for primary care will take nothing short of a total restructuring of the traditional heterogeneous design that is meant to meet the needs of all patients. Rather, primary care should be reconstructed to meet needs of subgroups of patients.

Organizing services around subgroups of patients allows primary care providers to focus skills, and appropriately pair skill mixes from individuals and across disciplines to the needs and demands of a group of patients being treated. Essentially primary care becomes an integrated specialty care for patient populations, which allows efforts to be focused on providing value or population medicine. The idea is to meet care needs and improve health outcomes with better efficiency. Rather than having a primary care service see multitudes of different types of patients and developing individual care or treatment plans for each, patients are grouped together based on similar needs. This allows providers to anticipate care requirements and employ prevention measures necessary for the patient group. However, there is no universally agreed upon best method for categorizing patients into subgroups (Porter, Pabo, & Lee, 2012). However, the Agency for Healthcare Research and Quality (AHRQ) has made recommendations to identify populations based on modifiable risks, and align those with services and personnel appropriate to meet the needs of the populations (AHRQ, 2015).

Subgrouping patients into categories is not a theoretical concept. Call for care efficiency in the early 2000s led many primary care institutions to adopt a needs-based strategy. In the literature, as early as 2008 a needs-based approach, or remnants of this strategy, were being employed by institutions (Baron, 2008). The strategy started to emerge in primary medical homes as a means to stratify waste while improving efficiency (Milstein, & Gilbertson, 2009). The most notable use of a needs-based strategy was utilized in a private outpatient intensified primary care program for 740 Boeing employees and pre-Medicare retirees.

Boeing partnered with several insurance providers, including Regence BlueShield of Washington, Healthways, ValueOptions, and the Mercer Health hospital, and leaders of three physician groups. Patients were divided into groups based on health spending risks, and were

connected to a care team that included a dedicated care manager and a participating primary care medical doctor. Each patient received an intensive intake interview, physical exam, and diagnostic testing. The program was accomplished with frequent communication via contact in person, on the telephone, or with email. Continued education included self-management techniques for chronic conditions, rapid access to the care coordination, daily multidisciplinary huddling to discuss patient needs, and direct involvement of a specialist when feasible.

On the administrative side of care provision, weekly check-ins with the nurse care managers for joint problem solving took place. Quarterly collaborative meetings were held between the three physician groups to share learning, which resulted in refined care management engagement skills, more proactive care management techniques, and improved access to care providers. In the first year of the program, a 20% decrease in per-patient spending, an increase by 14.8% in physical function scores, and 16.1% increase in mental functioning scores compared to baseline, was noted. Additionally, for the study population a 17.6% increase in patient's ratings for ability to access care and 56.5% decrease in days missed from work were seen (Milstein, & Kothari, 2009). The Boeing study highlights four concepts that increase population health and patient satisfaction, while decreasing costs: care coordination, cooperation, communication, and accountability. The four concepts highlighted will be explored because they have implications for use in increasing the value of care delivered in a primary care setting.

Care Coordination, Cooperation, and Communication

According to the Institute of Medicine (IOM) report titled *Improving Diagnosis in Health Care*, a deficiency in the quality of care coordination is one of the leading causes for diagnostic error (Balough, Miller, & Ball, 2015). Although it is hard to predict the impact on overall healthcare value, it is estimated that 5% of adult outpatients experience a diagnostic error. It is

easy to foresee the quality and financial implications of incorrect diagnosis of 5% percent of the outpatient population, and how that could negatively affect overall long-term costs, health outcomes, and patient experiences. The answer that the IOM puts forth is the improvement of care by encouraging teamwork among health professionals and patients. The IOM outlines several strategies and care designs that have been shown to improve care coordination, cooperation, and communication among care professionals and patients that ultimately result in improved patient health outcomes and increased value. The strategies include the adoption of care reforms such as Patient-Centered Medical Homes (PCMHs) and Accountable Care Organizations (ACOs), treatment planning conferences, diagnostic management teams, integrated practice units, morbidity and mortality conferences, and multidisciplinary rounds (Balough, Miller, & Ball, 2015).

The Agency for Healthcare Research and Quality (2016) proclaims “care coordination involves the deliberate organizing of patient care activities and sharing of information among all of the participating concerned with the patient’s care to achieve safer and more effective care” (AHRQ, 2016, para. 1). Furthermore, the Agency for Healthcare Research and Quality (AHRQ) asserts the main goal of care coordination is the meeting of patients’ needs and preferences within the process of delivering quality and value-based care. The AHRQ suggests two approaches to care coordination, broad or specific. Broad care coordination involves teamwork, care management, medication management, health information technology, and patient-centered medical homes. Specific care coordination includes the establishment of accountability and agreement on responsibility, communication and knowledge sharing, the provision of transitions of care, the assessment of patient needs and goals, creating a proactive care plan, monitoring and follow up that includes responding to changes in patient needs, support of patient self-

management goals, the linking to community resources, and the alignment of resources with patient and population needs. In the above sections under the main heading titled *Value Implications for Primary Care*, most concepts offered by the AHRQ have been covered or incorporated into other topics. In the following paragraphs, the benefits of personalized, inclusive, and proactive care management; transitional care; and health information technology will be covered to conclude the review of care coordination, cooperation, and communication implications for value in primary care.

PCMHs & ACOs. PCMHs are meant to foster a better relationship between patients and providers. In PCMHs, practices are designated to patients and accountable for their care. Essentially, a PCMH consolidates patients' health providers into a hub that coordinates all of their healthcare needs (Balough, Miller, & Ball, 2015). There is evidence of better communication among providers and improvement of the care experience for both patients and providers following consolidation of health care services. Reduced hospitalizations have also been observed after creation of PCMHs (Health Affairs, 2010). Although shown to address aspects of the Triple Aim, high upfront costs for the integration of the technology infrastructure required, and difficulty incentivizing outside clinicians to cooperate has deterred many practices from pursuing PCMH status (Cratbee et al, 2010; Rittenhouse, Shortell, & Fisher, 2009).

ACOs are groups of care providers, practices, services, and hospitals that come together to provide coordinated care. Like PCMHs, ACOs assume responsibility for patient care and align resources to better communicate and coordinate care along the continuum of health and illness (Balough, Miller, & Ball, 2015). ACOs have become increasingly popular; the current total of ACOs was over 800 at the end of 2016 (Muhlesstein, & McCellen, 2016). ACOs have been shown to improve patient health outcomes and reduce healthcare costs in the Medicare,

Medicaid, and private insurance populations (Center for Health Care Strategies, 2016). Similar to PCMHs, ACOs also require large initial investments for information technology, which has deterred providers from restructuring (Rittenhouse, Shortell, & Fisher, 2009). Additionally, there has been some ambiguity regarding changes to PCMHs and ACOs that may result with a new executive administration in U.S. government. Regardless of the administration political agenda, it is thought that neither will be dissolved because of the current culture shift emphasizing value, and the success of both PCMHs and ACOs in operationalizing the Triple Aim (Muhlesstein, & McCellen, 2016).

Treatment planning conferences. Treatment planning conferences are multidisciplinary case reviews for individuals with cancer. Planning conferences bring together care team members in a manner that fosters communication of information and opinions regarding complex cases. Although it is inconclusive whether this process improves accuracy of an initial diagnosis, it has been noted in multiple studies that reviews in planning conferences have corrected multiple diagnoses (Cohen et al., 2009; Newman et al., 2006; Pawlik et al., 2008). Although it is typically oncology teams that engage in the diagnosis of cancer, similar strategies can be used for the diagnosis and evaluation of other ailments in other areas of care— such as primary care (Balough, Miller, & Ball, 2015). In an article by Porter et al. (2013), similar recommendations were made to help enhance teamwork and improve patient outcomes. The idea is to use monthly practice meetings for the discussion of patient care and practice operations.

Diagnostic management teams. Diagnostic management teams (DMTs) are groups of diagnosticians who come together to provide clinical guidance to providers regarding the necessity of tests and result interpretation. DMTs are services either within an institution, or outsourced. Although effective at reducing overall healthcare costs for patients, the initial costs

to utilize such services are enough to deter many practices or health institutions from participating (Seegmiller et al., 2013). Although this is a viable option to reduce costs due to unnecessary testing, higher reliance on informatics capabilities to aid in this effort are becoming more common (Khalifa, M., & Khalid, P. 2014; Segal et al., 2013).

Integrated practice units. Integrated practice units (IPUs) are groups of healthcare professionals, both clinical and non-clinical, that focus on a specific condition and the associated complications. Such units work together to provide care throughout the continuum, which includes inpatient, outpatient, and education. Examples of conditions around which IPUs are framed include breast cancer, joint replacement, stroke, and spinal cord injury, as well as many more (Porter and Lee, 2013). Although shown to be successful, IPUs are not necessarily conducive to primary care, but highlight the benefits of subgrouping patients. The concept provides merit to the idea of a needs-based strategy.

Morbidity and mortality conferences. Morbidity and mortality conferences bring an opportunity for clinicians to discuss medical errors or adverse events. The conferences are typically structured in a non-judgmental way aimed at understanding how errors occurred, how faults in work systems contributed to the errors, and the development of strategies to prevent errors or adverse events in the future (AHRQ, 2008). Although no federal regulation mandates the use of morbidity and mortality conferences, most care providers find learning from mistakes helpful in preventing them from being repeated in the future. Furthermore, review of mistakes and adverse events lead to improved and safer care— an implication of value (Epstein, 2012).

Multidisciplinary rounds. In multidisciplinary rounds, “different disciplines come together to coordinate patient care, determine care priorities, establish daily goals, and plan for potential transfer or discharge” (IHI, 2017, para 1). Although this approach is typically utilized

in an in-patient setting and shown to improve patient safety and cooperation among health professionals (Ybarra, 2015), the idea is not well researched for benefits in primary care. However, a multidisciplinary approach in care planning in the primary care setting has been studied, and has shown improvement in care coordination, the delivery of preventive services, and patient satisfaction (Mitchell, Brown, Erikssen, Tieman, 2008). As seen in the study by Milstein and Kothari (2009), a multidisciplinary approach in primary care fulfills the Triple Aim. The adoption and tailoring of a care strategy such as multidisciplinary rounding so that it compliments use in a primary care setting, may be a beneficial tool to help increase the efficiency of care coordination and overall value of care delivered.

Patient-centered care management. As outlined by the AHRQ (2016), the assessment of patient needs and goals, creation of a proactive care plan, monitoring and follow-up on care that includes responding to changes in patient needs, support of patient self-management goals, and linking to community resources are specific approaches to care coordination. The concepts are not new and have been found in the literature as early as the late 1990s (IOM, & NRC 1999). The conglomeration of terms used to describe the collection of concepts, except those that pertain to care planning, are patient centered-communication or shared decision-making. The concept of patient-centered care management is derived from coupling patient-centered communication with planning patient care within a practice setting. The end result is a greater focus on patients and their family's needs, and desires, and their ability to make informed decisions in regards to their care. The specific outline offered by AHRQ (2016) calls for a more aggressive approach to this concept in which care planning reaches farther than medical concerns and into other aspects that impede efficiency, cooperation among primary care practices,

specialties, and community resources, and the assurance that medical conditions are understood by patients (AHRQ, 2016).

Transitions in care. A transition in care is when a patient is transferred from one care setting to another. Periods of transition put patients at highest risk for poor experiences and outcomes that have high rates of resulting in hospitalization (Naylor & Keating, 2008). Along with safety concerns, provision of poor transitional care carries reimbursement implications. Hospitals that have readmission rates higher than the national average will begin to receive lower reimbursement under Medicaid and Medicare services as part of a provision of the Affordable Care Act of 2010 (CMS, 2015a). In addition to penalizing hospitals for higher readmission rates, provisions under the Affordable Care Act (ACA) incentivized the provision of transitional care services for primary care institutions and have become known as transition-of-care-management. Aggressive transitional services in primary care have been shown to reduce remittance to hospitals at 30, 50, and 180 days post discharge (Verhaegh et al., 2014). The provision of transition of care management (TCM) has been shown to be an effective strategy to increase care coordination across settings. It also fulfills the Triple Aim (Naylor, Aiken, Kurtzman, & Hirschman, 2011).

Health information technology and care coordination. Health information technology (HIT) has a major role in care coordination. According to Powers et al. (2013), measurement of outcomes and cost are essential aspects to improving the value of primary care. HIT makes doing so easier with the use of electronic health records. Data can be collected to validate and guide choices, aid clinicians in learning from one another, and motivate collaboration. HIT is an integral part of care coordination and, as described in previous sections, serves a pivotal role in many structures within practice. Although HIT has its limitations within care coordination, such

as aiding collaboration with clinicians outside of a practice group, new frameworks are being developed. In a framework developed by Rudin and Bates (2014), HIT that supports good care coordination is described as having the capability to achieve four activities: identifying collaborators across practice settings; the ability to contact collaborators once identified; the ability to communicate among clinicians and record care and treatment plans with input from multiple providers; and the ability to monitor patients, tasks for their care, and the responsibilities of everyone involved. The push for value has increased the stakes for institutions to become more accountable for patient outcomes and care. The intentional use of HIT is a method to improve that capability, and in doing so, also the value of care in institutions that effectively employ it (Rudin, & Bates, 2014).

Evaluating care coordination in primary care. Care coordination has been shown to be a major strategy for value in primary care, but often institutions are unaware of its strengths, weaknesses, and gaps. In a document sponsored by the AHRQ and created by Stanford University, two tools specific to assessing care coordination using patient input are suggested. The two measurement tools are the Client Perceptions of Coordination Questionnaire (McGuiness, & Sibthorpe, 2003) and the Primary Care Assessment Tool-Adult Edition (Shi, Starfield, & Xu, 2001). The Client Perceptions of Coordination Questionnaire (CPCQ) is a self-administered survey for patients that contain 31 items regarding care coordination. The test has a strong validity and reliability, but the tool does not encompass facilitating transitions in care or connection to community resources; nor is there any information in regards to how long it takes to complete. The Primary Care Assessment Tool-Adult Edition (PCAT-AE) is a more suitable tool for assessing transitions. The PCAT-AE is a 131 question administered or self-administered tool that measures care coordination quality and quality of primary care. The survey takes

approximately 40 minutes, and requires a high-school reading level. Although the PACT-AE has weaker validity than the CPOQ, the tool encompasses a broader concept than just care coordination, and that is accountability in practice. Both tools can be used to identify areas of weakness within an organization's practices, and as a measurement tool to evaluate effectiveness of changes (McDonald et al., 2012).

Accountability

The concept of accountability has multiple definitions but only three crucial elements, clarity, commitment, and consequence. Clarity in regards to the meaning of accountability is the notion that goals are clear and specific. Commitment is the understanding and agreement to dedication towards that goal or an objective. Lastly, consequences are the results for achieving or not achieving clarity, commitment, or a goal or objective (Rachel, 2012). The concept has been adopted by governmental agencies, such as the Centers for Medicare and Medicaid Services (CMS, 2016a) and used as the premise for putting responsibility on organizations to increase the value of care they deliver.

Other Implications for Value in Primary Care

Other implications for value in primary care are the need to enhance consumer engagement, provider-led care management teams (Deloitte, 2015), and an emphasis on the utilization of outcome data to drive decisions (Deloitte, 2015; Porter, 2010). Consumer engagement and active participation in care decisions are vital to the emergence of value in primary care. Consumers have the power to determine the best value among organizations by using online data and outcome information to choose best services and providers. Engaging consumers via social media or other online entities so that they actively participate in their care,

is one implication for value. Being transparent with data is a method to foster that process (Deloitte, 2015).

Plan-Provider-led Care management Teams

It is predicted that within the next three to five years, care management will require a hybrid-type, plan-provider-led care management model. Historically, insurance companies have been the drivers of many parts of care management, pre-authorizations, denials in care, and determinants of services, dependent on health care plan and population. The push for value, especially in high-risk patients with chronic disease, will require more of a provider-led approach in which providers play a larger role in determining which service, methods, and treatment modalities are best for their populations. The plan-provider-led approach will be most meaningful in shared-risk reimbursement models. However, insurance companies will still have a hand in the process, such as in enabling standardized maintenance and support services that encompass chronic disease support, maintenance, and prevention (Deloitte, 2015).

Utilization of Outcomes to Determine Value and Direction

Use of outcome data to determine value takes a determination of true cost-of-care, which includes all expenditures associated with the delivery of care (utilities, salaries, etc.). Once true cost-of-care is known, health outcomes can be compared to the cost of health conditions. Understanding the costs associated with individual conditions can aid providers in making informed decisions in regards to the types and structure of care delivery models they wish to employ (Deloitte, 2015). The use of outcomes in this matter can aid in the process of reducing overall costs by using financial incentives to drive decisions and push for performance improvement, a Triple Aim initiative (Porter, 2010).

Reimbursement Models

There are four main types of value-based payment models: shared savings, bundled payments, shared risk, and global capitation. Shared savings utilizes the fee-for-services model but weighs annual spending against a set target price. If costs are below the target, then the organization gets to share in the savings associated. Bundled payments are payments linked to a particular condition that follow a patient from hospital admit through service rendered after discharge, for a set amount of time. Shared risk is an addition to shared savings; if an institution goes over their target price, it must repay part of the difference as a penalty. Finally, global capitation is a set price paid for each patient per month, regardless of the care they need (Gerhardt et al., 2015).

Unsustainable costs, push for value, and governmental support for new payment innovation is driving many to invest heavily in value-based care. Insurance companies like Aetna and Blue Cross Blue Shield are pledging large portions of future spending to value-based initiatives (Gerhardt et al., 2015). The creation of the Centers for Medicare and Medicaid Innovation (CMMI) was devised as part of a provision in the Affordable Care Act that tests innovative payment methods. Currently, the CMMI is testing the bundled payment care initiative (BPCI) (CMS, 2016a). Nearly 7,000 health institutions participated in the BPCI to date and over 200 health institutions participated in the Medicare Shared Savings Program in 2014 (Gerhardt et al., 2015).

Choosing which type of value-based model to use to design organizational business models is a difficult task that has prompted many organizations to first employ a “test drive”. As reported by Gerhardt et al. (2015), the adoption of value-based models by healthcare organizations will likely begin with those that have the least financial risk for providers such as

shared savings plans. Organizations that would like to push further towards models that are predicted to be the eventual standard, such as shared savings with shared risk, bundled payments, and global capitation, should first employ a “test drive”. In the following paragraphs, current reimbursement models will be explored.

Value-Based Reimbursement Models

The Centers for Medicare and Medicaid Services (CMS) have multiple value-based reimbursement models, but not all apply to primary care. Most of the value-based reimbursement models discussed in this section are provisions of the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA). Value-based incentives include the value-based payment modifier (VBPM), physician quality reporting system (PQRS), Medicare EHR Incentive Programs, Merit-Based Incentive Payment System (MIPS), and Advanced Alternative Payment Models (AAPMs).

VBPM. The VBPM is a differential payment to a physician or group of physicians under the physician fee schedule (PFE), based on two pillars of the Triple Aim: cost and quality. Under the VBPM, Medicare payments are adjusted based on the quality of care rendered compared to the cost during a performance period, and applied to the level of taxpayer identification number employed. The VBPM consists of three quality and six cost measurement components in addition to requirements under the PQRS. The additional value components under the VBPM are composite measurements of hospital admissions for acute and chronic conditions and 30-day all-cause hospital readmission. The cost measurements under the cost portion of the VBPM are total per capita cost for all beneficiaries, total per-capita costs for diabetes, coronary artery disease, chronic obstructive pulmonary disease, and heart failure, and a measure of Medicare spending per beneficiary (CMS, 2016c).

The value-based modifier has a timeline of progression for introduction into practice. The timeline changes annually at the beginning of each calendar year and is relative to organization or practice size. The year 2015 was the first year in which the VBPM was implemented and applied to physicians and eligible professionals (EPs) in groups of 100 or more. Eligible professionals are defined as physician assistants, nurse practitioners, clinical nurse specialists, and certified registered nurse anesthetists. Groups were required to choose a PQRS group practice reporting option and report at least one measure, or elect to use the CMS-calculated administrative claims option (CMS, 2016c). The CMS-calculated claims option is an analysis performed by CMS to determine whether a group practice performed services applicable to certain PQRS quality measures (CMS, 2014). To avoid automatic value modifier practice adjustments to overall Medicare Part B payments, groups have to comply with the reporting process. In 2015, the automatic value modifier payment for non-compliance was -1.0%. In 2016, the VBPM applied to physician groups of 10 or more EPs and the automatic value modifier payment became -2.0%. In 2017, the VBPM applies to physician solo practitioners in groups of two or more EPs. The automatic value modifier payment is -2.0% for this group but grew to -4.0% for physician practices with 10 or more EPs. In 2018, The VBPM applies to all solo practicing or groups of two or more physicians, physician assistants, nurse practitioners, clinical nurse specialists, and certified registered nurse anesthetists. The automatic value modifier payments remains the same, except the -2.0% adjustment begins to apply to solo providers (CMS, 2016c).

PQRS. The PQRS is a quality-reporting program that uses negative payment adjustments to incentivize the reporting of quality outcome criteria by providers or groups of providers that care for Medicare Part B patients. The reporting of PQRS quality outcomes is the performance

portion of the VBPM. Providers or groups of providers choose which individual quality measures to pursue as part of their participation in the PQRS. Individual providers and groups choose at least nine measures that cover three national quality strategy domains, or a measure group. Additionally, groups are required to report one crosscutting measure. Crosscutting measures are broad measures that apply across multiple settings, eligible professionals, and group practices within different specialties. In 2018, an automatic -2.0% for practices with 2-9 eligible providers and -4.0% for groups or 10 or more will be deducted. To avoid the 2018 negative option, practices must have participated and met the requirements for reporting in 2016 (CMS, 2017a).

Medicare and Medicaid EHR incentive program. The Medicare EHR Incentive Programs were part of the provisions of the American Recovery Act and Reinvestment Act of 2009 (CMS, 2017b). The incentive programs aims to provide incentive payments to eligible professionals, hospitals, and critical access hospitals that provides financial assistance to EPs and hospitals that adopt, implement, upgrade, or demonstrate meaningful use of their EHRs. EPs and hospitals can qualify for as much as \$44,000 through Medicare and \$63,750 through Medicaid for demonstrating Meaningful Use (HealthIT.com, 2013). Meaningful Use (MU) is the utilization of EHRs to improve quality, safety, efficiency, and reduce health disparities, engage patients and families, improve care coordination and population and public health, and maintain privacy and security of patient health information. The goal of MU “is to improve patient and population health outcomes, increase transparency and efficiency, empower individuals, and increase the capability to research data on health systems” (HealthIT.com, 2015, para. 1).

The EHR incentive program has three stages. The first stage, which began in 2011 and ended in 2012, was the establishment of requirements for clinical data that needs to be captured

by the EHR and the provision of electronic copies of health information to patients. The second stage, which began in 2014, encourages the use of health information technology for continued improvement of patient care at the time it is delivered, and the structured exchange of health information (CMS, 2016b). The last stage, which began in 2016 and is known as the final rule, limits the reporting period to 90 days aligned with each calendar year, and removes redundant or overused quality measures from the incentive program. The third stage is optional, but failure to participate may result in downward reimbursement of the incentives offered (CMS, 2015b). In total, eligible programs can receive up to two million dollars in EHR incentive payments (HealthIT.com, 2013).

MIPS. MIPS is a program to streamline the VBPM, PQRS, and the Medicare and Medicaid EHR incentive into one program. MIPS also adds an additional component that pertains to clinical practice improvement activities. The goal is to ease clinical burden by combining all processes into one and providing a score used to determine incentive reimbursement. Starting in 2019, reimbursement of plus or minus 4.0% will be adjusted to overall Medicare Part B payments and based on data delivered before the 2017 deadline. Each year the program increases the payment adjustment until reaching a maximum of plus or minus 9.0% in 2022.

The quality portion of the MIPS is similar to the PQRS in that it requires a self-selection of quality measures, but it reduces the number required by three. The MIPS score weight on this program in the first year is 50.0%. The resource use performance category adds 40 different episode specific measures to address specialty concerns, and carries a MIPS score weight of 10.0% in the first year. The clinical practice improvement activity category adds a list of over 90 different activities to demonstrate participation in this category. Examples of activities include

care coordination, shared decision-making, safety checklists, and expansion of practice access.

The clinical practice improvement category represents a weight of 15% of the MIPS score in the first year.

In the last category, the advancing care information performance category, the overall weight towards the MIPS score is 25%. The advancing care information category has a point system in which at least 100 points must be acquired to receive the full weight of this category. A MIPS composite performance score is derived from the combination of weight received in all MIPS categories. The MIPS composite score is compared to a MIPS threshold score, and practices that report as a group or individual providers who report independently, that fall below 25.0% of the threshold will receive a negative adjustment to Medicare Part B reimbursement, which will grow in subsequent years. However, participation in 2017, regardless of composite score, will ensure at least neutral reimbursement in 2019.

If the MIPS composite performance score is above the threshold, then up to a 12.0% adjustment is possible based on the degree to which the composite score exceeds the threshold and the distribution among MIPS criteria. An additional bonus of up to 10.0% is also available for composite scores that exceed an additional performance threshold, defined as the 25th quartile of possible value above the composite score threshold. Potentially, with exceptional performance, the adjustment rate could be maximized to three times the standard adjustment for meeting the MIPS score threshold, plus an additional 10.0% for exceptional demonstrations of quality (CMS, n.d.).

Advanced alternative payment models. AAPMs are payment models in which participants use EHRs, hold a certain amount of financial risk associated with care delivery, and use quality measures similar to MIPS for the basis of payments. In 2017 there are seven

qualifying AAPMs under Medicare, and of those, four pertain to deliverable care in a primary care setting. These are comprehensive Primary Care Plus (CPC+), Medicare Shared Savings Program Track 2, Medicare Shared Savings Track 3, and the Next Generation ACO model. Although each tract pertains to primary care, an institution must be part of an ACO to participate. For that reason, none of the advanced payment models will be covered in this literature review because the organization has expressed no desire to become part of an ACO. Rather, the organization would like to make steps towards the provision of value-based care under the fee-for-service platform.

Understanding Payment Models for Physicians and Nurse Practitioners

Physicians are paid primarily in five ways: fee-for-service (FFS), capitation, salary, blended remuneration, and pay-for performance. In the FFS model, physicians are paid per service provided for each patient. The FFS is an historic method of care reimbursement that incentivizes quantity rather than quality. Capitation offers a payment per patient over a period of time. In capitation methods, providers share financial risk in patient care because in this method the capitation payment is meant to cover the entirety of patient care needs for the payment period. If care needs surpass the capitation expense, the clinician or practice obtains the financial burden. Likewise, if care needs are less than the capitation payment then the clinician or practice benefits.

Salary is a fixed payment over a period of time. Salaries are thought to incentivize the reduction of quantity of care, but come at a risk of reduced productivity and underproviding appropriate care. Blended remuneration is a combination of the above three types of physician reimbursement, and comes in different forms. Capitation can be combined with FFS so that a small fee is delivered per patient over a period of time for defined services and anything that falls

outside of the defined services is billed independently. FFS can be combined with capitation so that a majority of the care provided is billed independently, but a small fee per patient over a period of time is still delivered. Salaries can also be combined with FFS so that physicians get scheduled fixed payments while being able to also receive a percentage of the billing under FFS as further remuneration. Pay-for-performance is payment based on achievement of clinical and quality goals. Pay-for-performance is controversial in that some believe that it may incentivize the reduction in overall quality and limit quantity so that clinicians can focus on performance goals (Rudmik, Wranik, & Rudisill- Michaelsen, 2014).

Nurse practitioners (NPs) are paid in similar ways as physicians, except that in most circumstances there are more stipulations on how they practice and the way they are reimbursed by Medicare and third party insurances. NPs who work with patients primarily in acute settings, or in-patient, must adhere to a set of principles. Principles include the service in which they bill must be a physician service; the service must constitute an entirety of a service provided, and not just one part of a bundled service such as a pre- or post-exam for a surgical procedure; the services provided must be within the confines of NPs' scope of practice for their state; must be medically necessary; the NP must qualify under the payer's credentialing requirements; the documentation must conform to the payer's specifications; most services should be billed under the NP's provider number, only one charge per day, patient, and specialty for evaluation and management billing; services of students or residents cannot be billed under the NP; and NPs must accept payments under Medicare as the full payment for services. Furthermore, hospitals cannot bill under Medicare part B for NP services if the hospital receives any reimbursement for their salary under the hospital cost report (JWCON, 2011).

The credentialing process and billing codes used for NPs and physicians are similar. Both disciplines have to meet credentialing requirements of paying services such as Medicare or other private insurers to be reimbursed. Both disciplines also have to utilize billing and procedure codes such as current procedure terminology (CPT) and evaluation and management codes (E&M). The use of CPT codes is meant to provide a systematic method of coding for procedures and services performed by providers. E&M codes are CPT codes that refer to the specific provider-patient encounter, and pertain to visit and consultation provided. For instance, CPT codes are used to describe the removal of stitches, and E&M codes are meant to provide a description of the encounter such as chief complaint and physical exam findings (JWCON, 2011).

Quality Measures for Home-Based Primary Care

Approximately four million adults in the United States have difficulty acquiring primary care because of their frailty, physical or mental limitations, or overall vulnerability. The costs associated with caring for these individuals are among the highest expenses for any population. The reason for such a high expense is a prevailing relationship among multiple comorbidities, difficult social circumstances, and the care needs for this population that are not typically met by traditional care services. The end results are more frequent emergency room visits, hospital stays, and increased overall costs associated with care (Leff, Carlson, Salib, & Ritchie, 2015).

Home-based primary care is a means to deliver medical care needs in a fashion that is more suitable to the needs of this population. Care is delivered in the home or place of primary residence—such as an assisted living facility. Despite increased use of home-based primary care and recent interest by Medicare, such as with the Independence at Home Demonstration (CMS, 2017c), there are no nationally recognized quality measures. As a result, payers and providers

have to utilize individual disease quality metrics, which often don't reflect the unique needs of this population nor demonstrate the concept of quality in the care delivered (Leff et al., 2015). Attempts at development of frameworks for quality metrics for home-based primary care have been made, but mostly involve condition-specific metrics (Smith, Soriano, & Boal, 2007). Furthermore, the Joint Commission accreditation for home-based primary care standards does not align with Medicare performance payments. Therefore, the expense of becoming accredited is foregone by many practices and used by only a few across the country (Leff et al., 2015).

In a recent survey of 272 home-based primary care practices across the country, it was found that only one third used defined quality improvement processes. The quality improvement processes included regularly scheduled team meetings to discuss specific patients, utilization of surveys for patients and their family members to capture care experience, and utilization of the national committee for quality assurance patient-centered medical home model. It was also uncovered that almost all practices provided 24 hour coverage for urgent care needs and use electronic health records (Leff, Weston, Garrigues, Patel, & Ritchie, 2015). The top-performing home-based primary care services also utilize a robust team of professionals that consists of nurse practitioners, physicians, physician assistants, social workers, case managers, mental health professionals, and skilled therapists. Another characteristic of top performing organizations is that their care delivery models are designed around the capability to deliver, coordinate, and focus care for medical, functional, and social needs (Leff et al., 2015).

In response to the absence of a nationally recognized framework for quality outcomes in home-based primary care, the Home-Based Primary and Palliative Care Network was created. Two authors, Bruce Leff and Christine Ritchie, began creating the network in 2013 with hopes to define a quality-of-care framework specific for the home-based primary care population with

national benchmarks for quality domains, standards, and indicators. At the point of completion of this DNP project, the network was still testing quality indicators for feasibility and clinical validity, as well as attempting to gain endorsement from the National Quality Foundation. Although not ready for full implementation, the hope was that in the future the model described would set practice guidelines and standards of quality for the delivery of primary care services to homebound patients. Progress towards the development of a nationally recognized quality outcomes framework has been made, but at this point no nationally recognized framework for home-based primary care exists (Leff et al., 2015).

Needs, Feasibility, and Significance

It has been stressed throughout this project that The HBPC service is not structured to provide care based on value-based reimbursement. In an era in which reimbursement models are changing to reflect and reward value, The HBPC service faces a major threat because of its lack of preparation for new payment models. The HBPC service stands to increase the working deficit at which it already operates, to become unable to provide service due to the financial burden caused by lack of preparedness for value-based reimbursement. These financial issues threaten the longevity of the organization.

As already discussed, there are many ways in which The HBPC service can improve the value of its services. The HBPC service can begin the push for value by using the current electronic healthcare record to track outcome data of its patients and use it for improving practices. Full utilization of the electronic outcome data can help providers understand the patient population and their needs (HealthIT.gov, 2016). Outcome and productivity data can be the evidence necessary to rationalize the need for more providers as well as deliver evidence that interventions and structure changes within the HBPC service are paralleling a value-driven

approach. More than just collecting outcome data and using it, certain practice changes such as the use of risk assessments tools to identify patients at greatest risk of hospitalization and functional decline can help direct resources and stratify further healthcare costs incurred by preventable causes (Haas et al., 2013).

Beyond implications of understanding health information and care coordination aspects of The HBPC service, the operating costs associated with the service need to become transparent. The lack of understanding of operational costs by leaders makes responsible budgeting for restructuring of service resources difficult, if not impossible. Furthermore, it is imperative that tax ID be changed so that it reflects the services delivered.

Although the scope of this project, which will be discussed in a later section, does not incorporate all of the immediate needs of this organization, it provides a framework to prioritize efforts toward becoming compliant with Medicare's MIPS program and will be examined in a later section. As discussed earlier, 2017 is the first year The HBPC service has to provide a report that is compliant with MIPS requirements, or it will face an automatic decrease of -4% of overall Medicare Part B payments in 2019. The HBPC service has the capability to deliver this report with minimal intervention. The problem is that The HBPC service has not employed a strategic framework to do so, and in neglecting the use of a framework, they are not implementing a value-based business strategy.

Problem Statement

Neglecting to adapt to a value-based business strategy has the potential to result in significant financial burden to healthcare institutions (Gerhardt et al., 2015). The historical progression of healthcare reimbursement models led to an era in which incentives for overuse are quickly disappearing and instead, operationalization of the Institute for Healthcare

Improvement's Triple Aim is becoming the new standard (Berwick, Nolan, & Whittington, 2008). Failure to adapt current business and patient care strategies to meet changing regulations and reimbursement incentives may be an important factor in whether a health institution stays viable in the future. To date, the HBPC service has not prepared a value-based business strategy.

Project Scope

The scope of this project pertains to the organizational preparedness to meet reporting requirements for the 2017 Medicare MIPS program. It does not include an implementation piece, rather preparation for reporting under the Medicare MIPS via a strategy developed by the DNP student. The strategy is aimed at making the program more meaningful to the HBPC service and the service more capable of increasing the value of care they deliver. The scope of this project primarily pertains to the success factors on the divisional, operational, and individual levels of the CBHO (see Figure 3), and will be discussed further in the next section. To date, the organization is not ready to comply with the MIPS program and faces a -4% reimbursement on all provider Medicare Part B payments in 2019.

Theoretical Framework

Critical Success Factors (CSFs) is the theoretical framework used to guide this work and pertains to specific factors in an organization that must go well to ensure success. Ronald Daniel originally developed the idea of CSFs in the 1960s when he began discussing problems with the capturing of insufficient information by management teams to be used to drive objectives, strategy, informed decision making, and the ability to measure goals. Daniel proclaimed that organizations should be focusing on specific factors that determine success. Daniel coined the term success factors to represent those key areas (Gates, 2010).

Daniel's original work was aimed at the industry level, and has been expanded upon over time to include four other areas: organizational, division, operational units, and the individual (see Figure 4). The hierarchy in which CSFs are organized begin with the industry area, which influence organizational CSFs. Organizational CSFs then drive the division area's CSFs, which in turn, drive the operational unit's CSFs, and finally are supported by individuals and their CSFs (Gates, 2010).

Identifying and Strategically Using CSFs

As explained in the last section, CSFs are essential factors that must go well to succeed. The concept of CSFs is explicitly used within the realms of business for the purpose of bringing applicable information to managerial attention for the setting of priorities and resource management. CSFs reveal the variables that have the greatest impact on success or failure of organizational or managerial goals. Therefore, the use of CSFs is pivotal for strategic planning (see Figure 5) (Gates, 2010).

Identification of CSFs has six steps (Mindtools, 2017). The first step is establishing the mission and strategic goal. The second step is the determination of activities that are essential to this process. The third step is to evaluate the list of potential activities to determine which ones are absolutely essential to achieving success. The fourth step is determining how to monitor and measure each success factor. The fifth step is the dissemination of the CSFs and other elements of the business or project strategy to those on the individual level. The last step is the continued monitoring and reevaluation of critical success factors to ensure progress.

Figure 4. Critical Success Factor Hierarchy

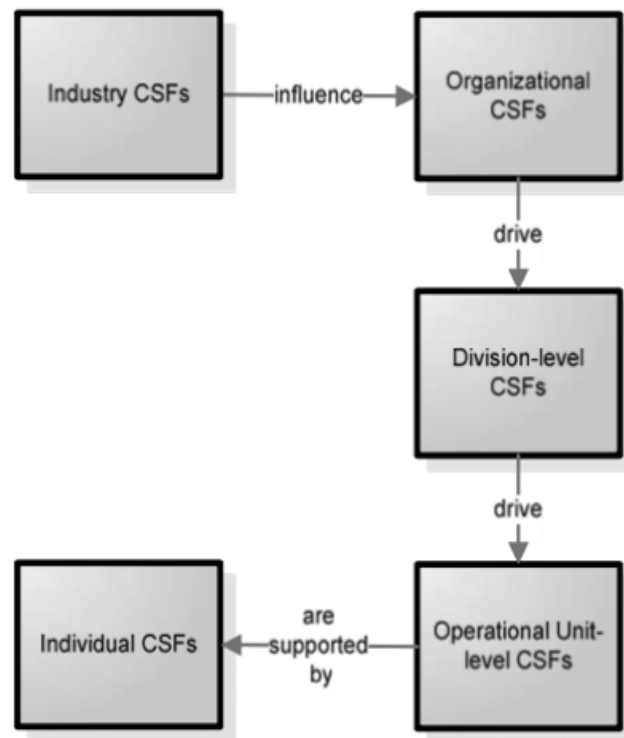


Figure 4. Critical Success Factor Hierarchy. From Strategic planning with critical success factors and future scenarios: An integrated strategic planning framework (p. 10), by L. P. Gates, 2010, Pittsburg, PA: Carnegie-Mellon University, Software Engineering Institute. Reprinted with permission.

Figure 5. Critical Success Factors and Strategic Planning

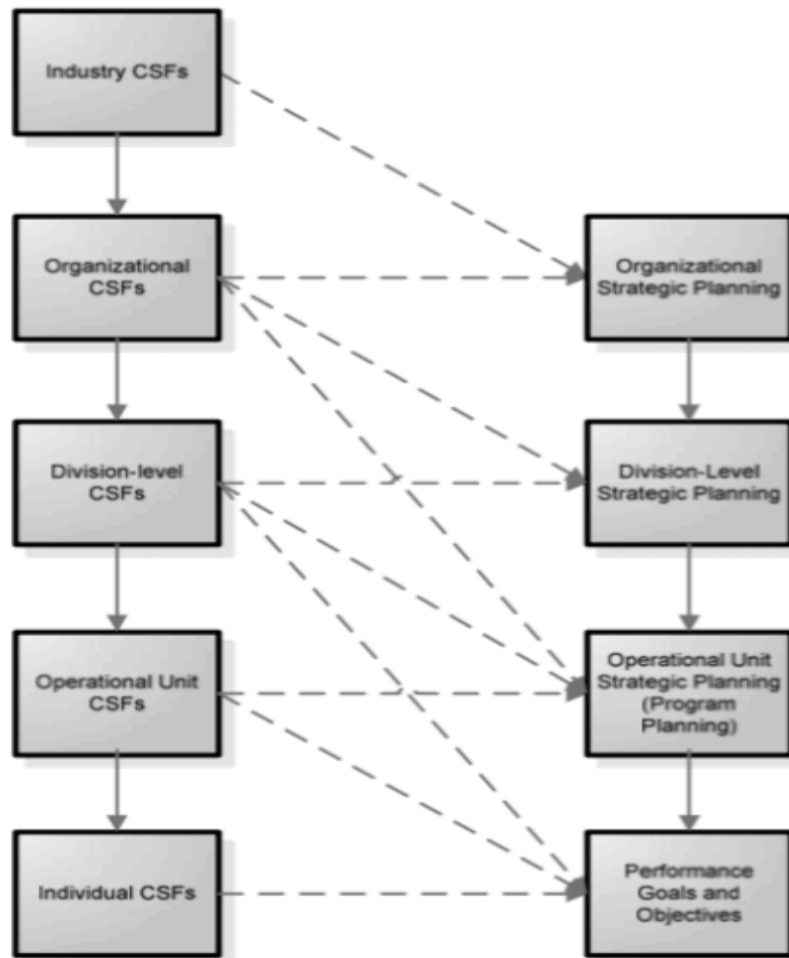


Figure 5. Critical Success Factors and Strategic Planning. From Strategic planning with critical success factors and future scenarios: An integrated strategic planning framework (p. 26), by L. P. Gates, 2010, Pittsburg, PA: Carnegie-Mellon University, Software Engineering Institute. Reprinted with permission.

Figure 6. HBPC Success Factors and Strategy

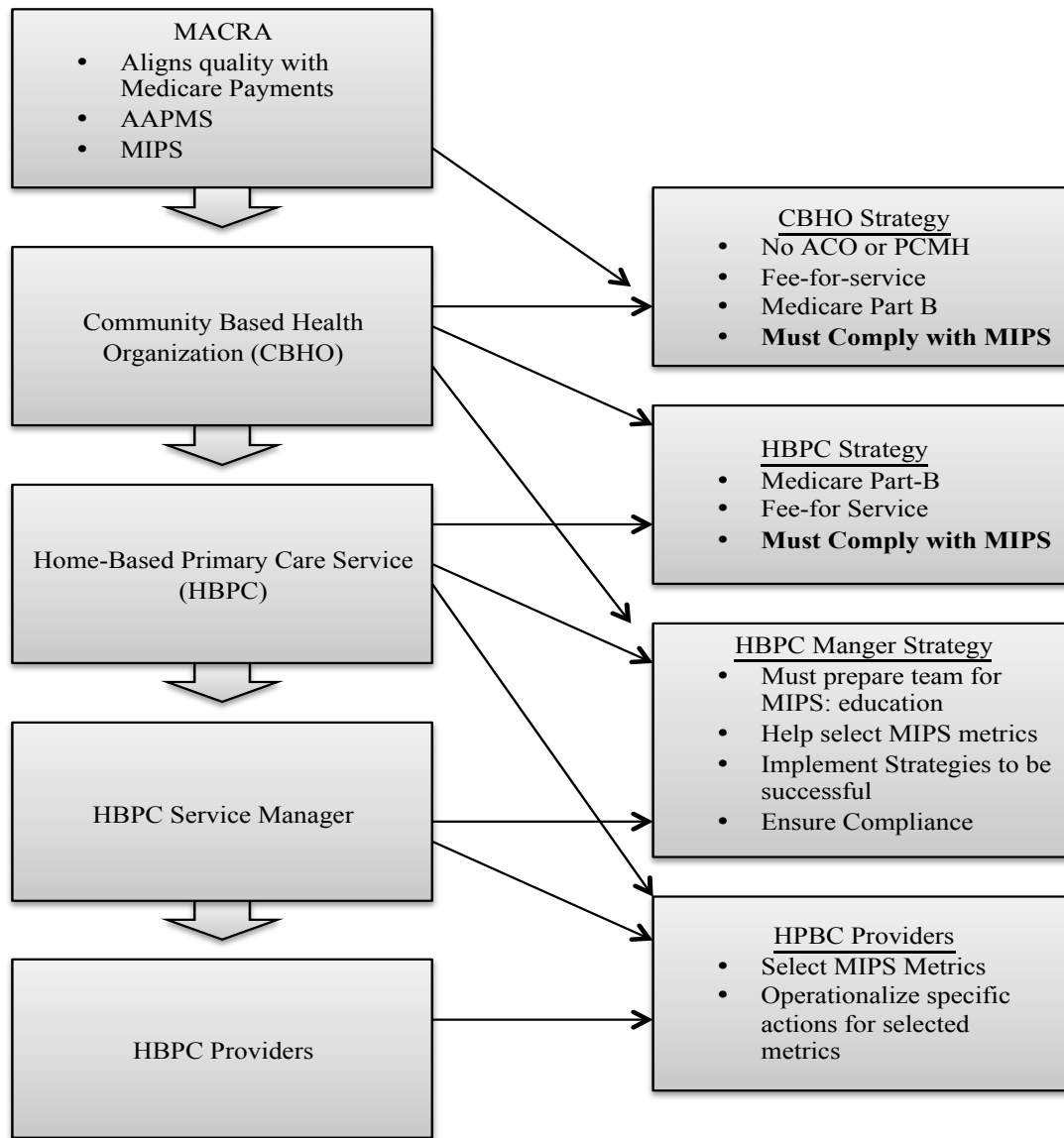


Figure 6. HBPC Success Factors and Strategy. Modified from *Strategic planning with critical success factors and future scenarios: An integrated strategic planning framework* (p. 26), by L. P. Gates, 2010, Pittsburg, PA: Carnegie-Mellon University, Software Engineering Institute. Modified with permission.

In the case of the HBPC service, CSFs can be identified and used for strategic planning (see Figure 6). The first step is already accomplished and pertains to the desire to provide high

quality care. The mission and values statement of the CBHO doesn't directly address the HBPC service, but the underpinning and overall message pertains to the delivery of quality care. The second step could be seen as the need to develop a business strategy that aligns the delivery of quality care with financial incentives. The second step is directly influenced by a changing culture in the healthcare industry towards the provision of quality and value. The change in healthcare culture has influenced reimbursement strategies and thereby, organizational priorities, towards the need to develop a value-based business plan for their service lines so that they remain successful. The third step is the evaluation of the activities that are absolutely essential. In the case of the HBPC service line, avoidance of withheld reimbursement for services rendered to Medicare Part B patients is what the organization has determined is pivotal to success. The fourth step is determining how to measure a business strategy that ties quality and financial incentive. The HBPC service has elected to cooperate in the Medicare MIPS program. As discussed in a previous section, the MIPS has specific quality initiatives with outcome criteria chosen by the organization that must be met or exceeded for primary care. Meeting or exceeding quality criteria directly influences the amount of reimbursement rendered from Medicare to the HBPC service. Therefore, a business strategy that pursues compliance with the MIPS program is a success factor for the organization. The specific quality initiatives pursued under the MIPS program by the HBPC service are divisional success factors and should be chosen according to the needs of the patient population. The fifth step is operationalized by disseminating the information about organizational and the divisional success factors to the manager of the HBPC service, the operational unit, and the providers at the individual level. The last step, is continued monitoring to ensure success. The success factors at the operational level are the assurance that performance goals and objectives at the individual level are met to support the success factors at

the divisional, organizational, and industry level. The success factors in the individual level are the actions taken to support the performance goals and objectives and, therefore, the success factors of all other areas (Mindtools, 2017).

Literature, Benchmarks, and Supporting Data

Although development of a value-based business plan is multifaceted, The HBPC service is now required to be compliant with the MIPS program or face a penalty in the form of decreased Medicare Part B payments in 2019. The use of the CSFs framework has highlighted the need to pursue a strategy that complies with Medicare requirements is critical to the immediate financial security of the organization and the development of a more expansive plan in the future. The measurement of success for compliance with the MIPS program is the successful capturing of data and comparison to Medicare standards in each MIPS category. The CSF strategic model (see figure 5) was used as the guiding framework for development of the plan to accomplish this process and is highlighted on the managerial and individual levels of the HBPC success factor strategy (see figure 6).

The MIPS program encompasses a needs-based approach for quality improvement that includes selection of quality metrics, improvement activities, and advancing care information metrics specific to an organization's patient population needs. The data required to demonstrate quality initiatives is meant to be specific to the population served. Improvement activities are specific activities that the organization agrees to pursue, and many pertain to coordination of care; a major implication of delivering value-based care. As discussed in the literature review, utilization of outcome data for process improvement is also essential for the provision of value-based care. By continually collecting and evaluating outcome data compared to Medicare quality standards, changes in processes, interventions, and protocols, could result as efforts towards

ensuring success. The MIPS program requires the use of electronic health records to advance care information. The advance care information portion of the MIPS program requires fulfillment of initiatives that improve safety, access, and coordination, areas discussed in the literature review that increase the value of care delivered.

The possibility of receiving decreased payments for not meeting Medicare standards is an accountability measure. This is another concept discussed in the literature review as an implication of value. The overall goal of using the MIPS program for the HBPC service is to utilize the financial incentive to increase care quality, coordination, and accountability via a needs-based approach, therefore, addressing the CSFs of the CBHO and the HBPC and employing a value-based business plan. Utilization of the MIPS program will ultimately lead to the HBPC service using quality initiatives as a strategic means to capture full or excess reimbursement for Medicare payments.

Objectives

The objectives of this project were to development a framework/strategy to prepare for compliance with the MIPS program. The first objective of this project was to assess the House-Calls patient population to understand their needs. Demographic information pertaining to age, primary diagnosis and reason for being on the HBPC service was collected. Based on the collected information, the second objective was to develop a list of MIPS metrics that match reporting requirements and the needs of the population. Descriptive information directly from the Medicare website of each metric was delivered to the organization for review. Once the organization chose their metrics, the third objective was to create a procedure manual for the collection of data required for reporting each chosen metric. The fourth objective was the creation of a toolbox consisting of intervention examples from the literature for each chosen

metric. The fifth objective was to develop and deliver a Microsoft Excel file format for tracking the metrics after implementation. All deliverable objectives were designed based on the critical success factors of the HBPC's divisional, operational, and individual levels. All deliverables will be given to the organization after final approval from the DNP committee.

Congruence with HBPC Strategic Plan

The mission of The CBHO is to serve, deliver, and guide. The CBHO aims to “serve families and communities with great compassion and dedication. The next mission is to deliver the best end-of-life care so that people experience a peaceful, pain-free, and fulfilling death within the context of their own life. The last mission is to guide patients and families through the grieving process with reliable and consistent availability” (Caring Circle, 2016, para. 4).

However, The CBHO does not employ a publicly known mission or strategic plan aimed specifically at the HBPC program. Looking specifically at the mission of the CBHO, there is an obvious undertone of the effort to deliver the best high quality service. As stressed throughout the entirety of this document, the push for value in today's healthcare environment requires a strategic effort to stay viable. By becoming compliant with the Medicare MIPS program, the CBHO can tie the quality care they aim to deliver, to financial benefit for the HBPC program. Therefore, despite absence of a public mission or strategic plan for the HBPC service, pursuing compliance with the MIPS program meets organizational goals and contributes to the viability of the service.

Rationale For Actions and Methods

The notion of delivering value-based care while maintaining corporate vitality in home-based primary care is a multifaceted process. As discussed in the literature review, shaping a business model to reflect this process requires the alignment of quality implications,

reimbursement initiatives, a framework that takes in account stipulations on reimbursement for different types of clinicians, and an understanding and preparedness for emerging guidelines and nationally recognized frameworks for quality indicators. Development of a strategic business plan of this extent was beyond the scope of this DNP project, rather, this project guided the HBPC service as it prepared for compliance with the Medicare MIPS program. The reason for choosing this portion of the process, is because it is most tangible to the organization, a high priority to the organization at this time, and has the potential to aim incentives at many areas in which quality needs to be improved. A lack of preparedness for MIPS will result in a financial penalty, while compliance will result in a possible financial and quality improvement benefit. Furthermore, the MIPS program creates a framework for continuous needs-based improvement, care coordination, accountability, and attention to cost. The sum of all aspects of the MIPS program is meant to fulfill the Triple Aim.

Setting and Group

Preparation for the organization to meet reporting requirements for the Medicare MIPS program began with a data query from the electronic health record. Together with the HBPC service manager, the charts of 25 randomly selected patients on the HBPC service were reviewed for age, primary diagnosis, and reason for needing home-based primary care. The data were collected from the EHR and served as contributing information for choice of required reporting metrics. Individuals involved in this process, included Manager #2 and the HBPC service providers. All data inquires and group decisions were made at the CBHO headquarters in St. Joseph Michigan.

Implementation Methods, Tools, and Measures

In addition to capturing data to better understand the HBPC service population and utilizing it to choose most applicable and meaningful reporting metrics, a procedure manual, toolbox, and a recording tool were constructed. The information collected was used to determine which Medicare MIPS metrics are most applicable to the population and the Medicare description of each was delivered to the organization. Once the organization chose their metrics, a procedure manual was constructed and aligned with the required data for reporting of each item. A toolbox for each applicable metric was also constructed. The toolbox included examples from the literature for each applicable metric that highlighted potential interventions for the service to employ that have shown success in recent studies. The last piece of the deliverable to the organization was the construction of a recording tool to keep track of metrics. The recording tool is in the form of a Microsoft Excel document.

Resources/Supports, Risk/Threats, Benefits

The resources required to do this project were the monetary in-kind donation from this DNP student and the time of the HBPC service management team, providers, and information technology specialists in charge of the EPIC[®] software. The in-kind donation from this DNP student included tuition dollars spent during the process of working on this project, totaling \$16,369; travel expenses to and from the facility, \$1500; computer expenses, because one was not supplied, \$2,000; an hourly wage comparable to the student's experience, \$32, for a total of 350 hours working on this project, \$11,200; the total in-kind donation from this student was \$31,069 (see figure 7). The amount of time required from people in the organization could not be quantified into a dollar amount due to unwillingness of the organization to provide staff's salaries. However, organization employee time can be seen as a support measure of daily

operations. Whether this student was present or not, the organization would have to utilize time to fulfill some sort of plan to adjust to changes in healthcare reimbursement and reporting.

Therefore, the organization already has all the necessary information to quantify the cost of implementing the MIPS program, and did not need to be done by this student.

Figure 7. Resources/Supports, Risk/Threats, Benefits

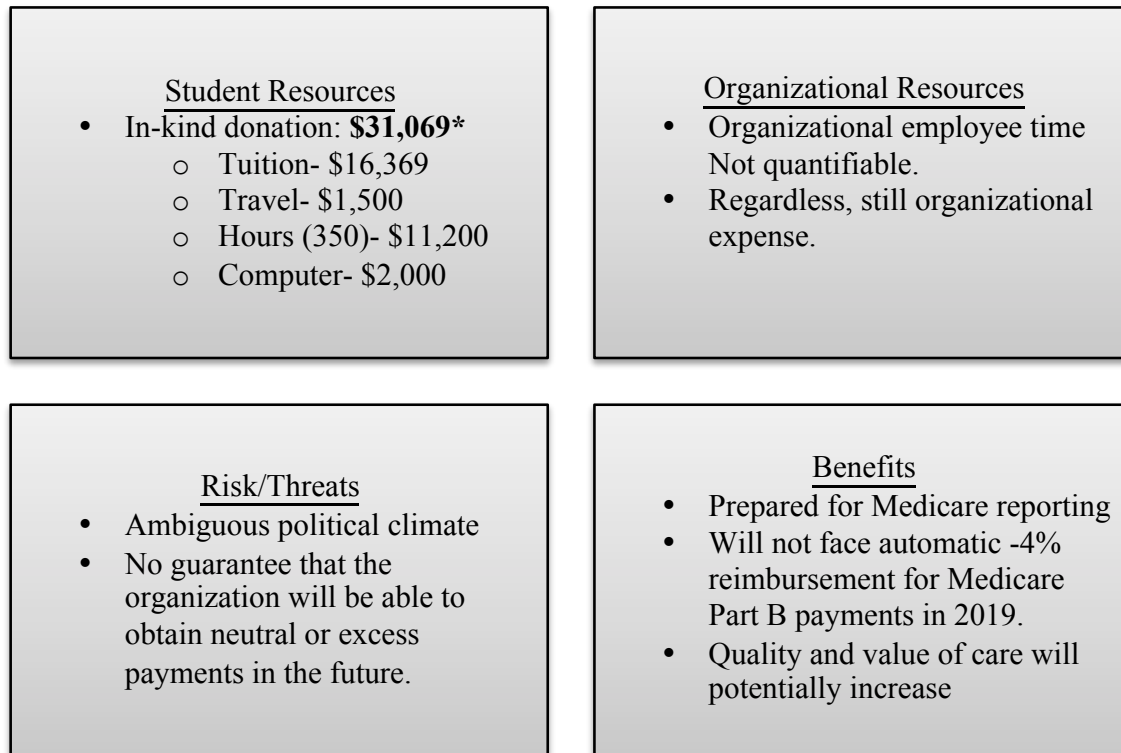


Figure 7. The above figure highlights the in-kind donation by the DNP student and the organizational resources required, the risk and threats, and benefits associated with this project.

The risks of pursuing compliance with the Medicare MIPS program included an ambiguous political climate in which the future of Medicare incentives was uncertain, and there was no guarantee that the organization would be able to successfully gain neutral or excess Medicare payments in the future, regardless of reporting compliance. The executive branch of the federal government at the time of the project was threatening to make drastic changes to the healthcare finance of the country, but the nature and breadth was uncertain. If changes from the

executive branch of government terminated Medicare incentives, then the efforts and investment from this DNP student and the organization will have been futile. A second risk was, despite the direction provided in this project, delivery of the agreed upon framework, and supporting documents, the organization might still receive negative Medicare Part B reimbursement. To receive neutral or increased Medicare part B payment, the organization needed to actively pursue value-based improvement and own the reporting pieces of the MIPS process.

The benefits of pursuing the use of the Medicare MIPS program were that the organization was prepared if Medicare incentives did not end, and the preparation provided an opportunity to increase care value and revenue. If Medicare incentives were not dissolved, and there was lack of preparation for value-based improvements, there was an absolute penalty for not being prepared. Regardless if Medicare incentives were terminated, the initiative to improve value and quality paralleled the mission and values of the organization, and is therefore, was worthwhile doing.

Analysis

The first analysis pertained to organization preparedness for successful reporting under the Medicare MIPS program. This analysis occurred throughout the organizational assessment, unless otherwise indicated. The findings revealed that they were not. The second point of analysis included gaining a better understanding of the patient population demographics from a sample of 25 current patients. Collection of data included age, reason for needing HBPC services, and primary diagnoses of 25 current patients served as the data sample for analysis. The demographic data collected and used for this project were aimed at doing two things, helping the organization understand its patient population better, and assisting it to make informed decisions in regards to choosing reporting metrics for the MIPS program. The data aided this process

because it was analyzed for age range of the patient population; age distribution among decades of life; the distribution of reasons for needing HBPC services; and the distribution of primary care, which highlighted patient needs, care gaps, and potential opportunities for improvement.

A procedural manual, recording tool, and toolboxes were created and are associated with each applicable metric chosen by the organization. The manual provided a basis for the organization to compare what they were actually collecting, to what is required. It was expected that the organization would be able to use the manual to do the comparisons during their reporting periods.

The recording tool was created to allow the organization to have a continuous glimpse of how they compare to Medicare standards as they collect data and update the tool, providing valuable ongoing information. The toolbox was designed to provide examples of how the organization can improve metrics, so it can meet or exceed Medicare benchmarks in deficient or sub-performing areas. Essentially, this project confronted a systems malfunction, and provided a structure to align it with financial and quality/value-based programming. The framework, provided by this tool, allowed the organization to analyze itself and use results for continued quality improvement, as well as the successful capturing of data used to determine Medicare Part B reimbursement.

Ethics and Human Subject Protection

As determined by the Grand Valley State University Human Research Review Committee, this project did not meet the determination for human research. This project was determined to be a quality improvement initiative, and therefore did not require internal review board supervision and monitoring.

Outcomes

Utilizing information from 25 randomly selected charts, data pertaining to age, reason for needing HBPC service, and primary diagnoses were captured and reviewed. The randomization of charts at the time of data collection was done by opening the entire HBPC census list and randomly choosing 25 charts of current patients. The data was manually extracted then put into a Microsoft Word file. The results were then analyzed and delivered to the organization with the list of applicable MIPS metrics. In the following paragraphs, the analyzed information is disseminated. Furthermore, discussion of findings and how they were used to guide the selection of each metric will be discussed.

HBPC Age

The analysis of age from the 25 HBPC patient charts highlighted some fruitful information. It was uncovered that the mean age of patients included in the data selection was 74.6 years, with the youngest being 49, and the oldest 96. The data pertaining to age was also analyzed for distribution of patients by decades of life to provide the organization with a more thorough understanding of their patient population (see figure 8). Individual providers used the distribution data to justify the selection of some MIPS metrics, such as geriatric depression screening, because of the greater amount of older patients. The analysis highlighted an equal distribution ($n = 6$) of patients in their 60th, 80th, and 90th decade of life. The rest of the distributions, in descending order of decades of life, were 50s ($n = 4$), 70s ($n = 2$), and 40s ($n = 1$).

Figure 8: HBPC Age Distribution

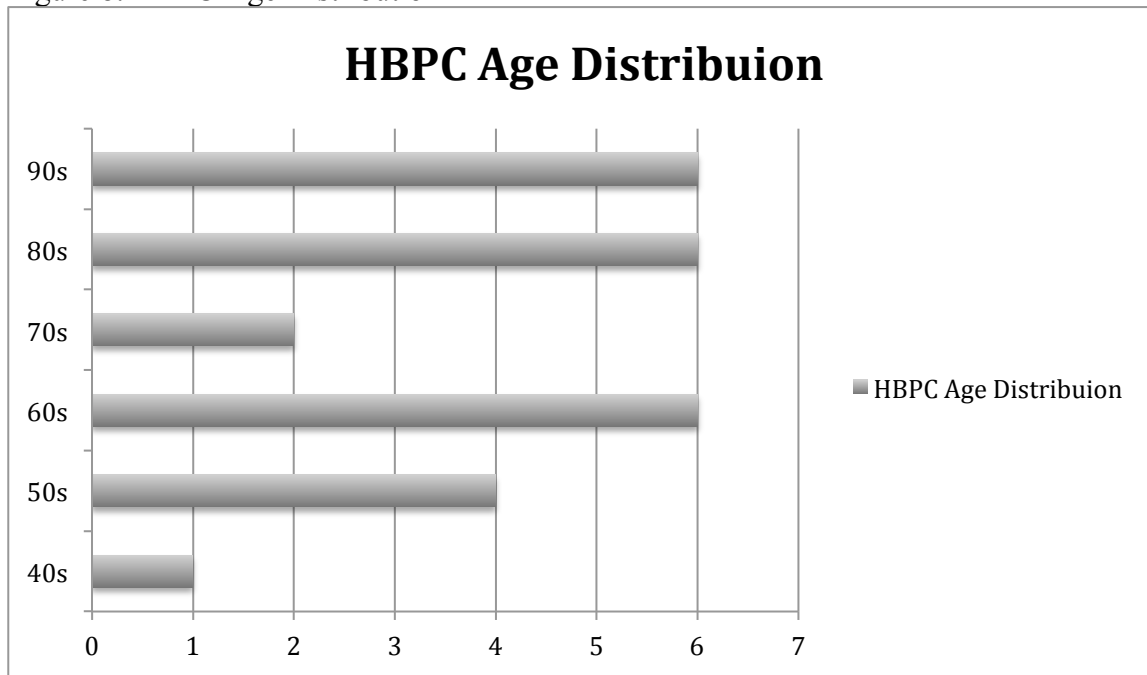


Figure 8. The graph depicts the distribution of collected age data by number of patients in each decade of life.

Reason for HBPC Service

Analysis of the reasons for needing HBPC services was divided into three broad categories: limited mobility, fatigue, and behavioral limitations (see figure 9). The data were selected from the patient chart under the patient diagnoses list. The data were only included if the diagnoses were also documented by providers in their most recent notes. Although only three reasons were documented, most patients had more than one reason for needing services. The three reasons were limited mobility (n = 18), followed by fatigue (n = 15), then finally behavior limitations (n = 12). The limited mobility and fatigue documentation was derived from specific diagnosis codes present in the chart. However, the behavior limitations category included multiple diagnoses pertaining to different levels of mental disability or psychotic disorders and variables attributed. All patients in the behavioral limitation category had documented reasons why they could not, or should not, seek care in a traditional primary care office.

Figure 9: Reason for HBPC Services

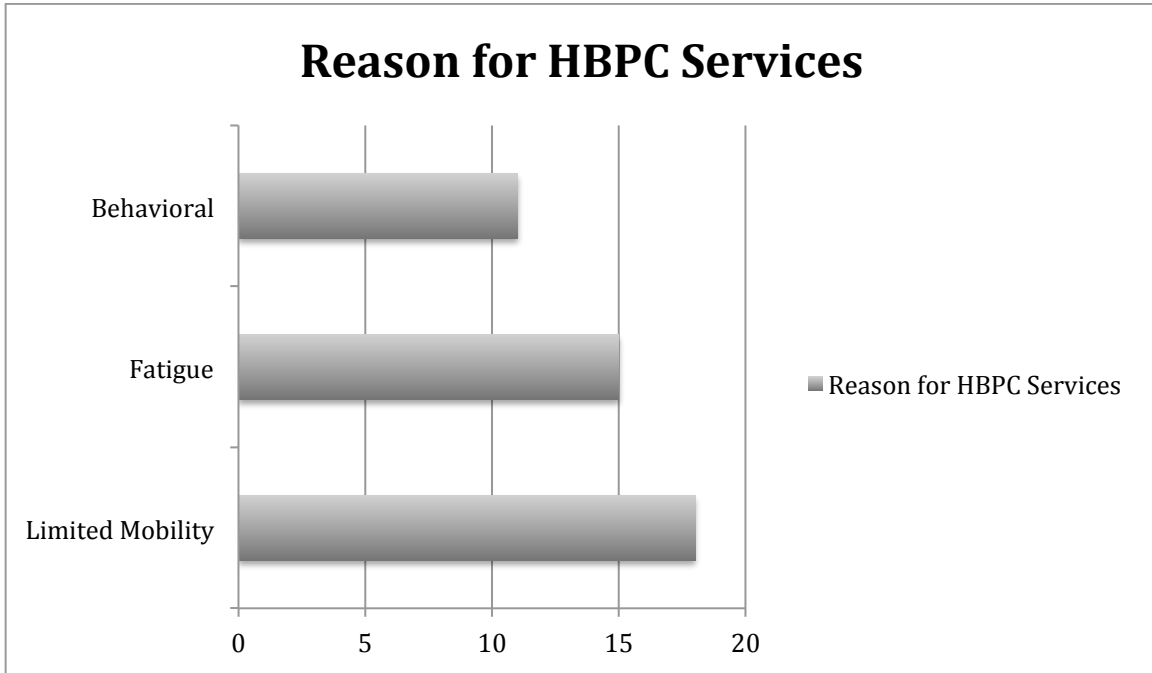


Figure 9. The chart depicts the distribution of the three reasons noted for requiring the HBPC services.

Primary Diagnoses Distribution

Similar to the reason for needing HBPC services, multiple patients also had more than one primary diagnosis. In total, there were 13 different diagnoses, but diabetes mellitus type one and two were combined into one category, as well as chronic obstructive pulmonary disease and cystic fibrosis. The diagnoses were combined for ease of displaying data, and are noted in figure 10. The data produced eleven diagnoses once the above combinations were made: hypertension (n = 13), dementia (n = 9), diabetes mellitus (n = 5), chronic obstructive pulmonary disease (n = 2), coronary artery disease (n = 1), congestive heart failure (n = 1), hyperlipidemia (n = 1), chronic kidney disease (n = 1), seizure (n = 1), depression (n = 1) and arthritis (n = 1).

Figure 10: HBPC Primary Diagnosis Distribution

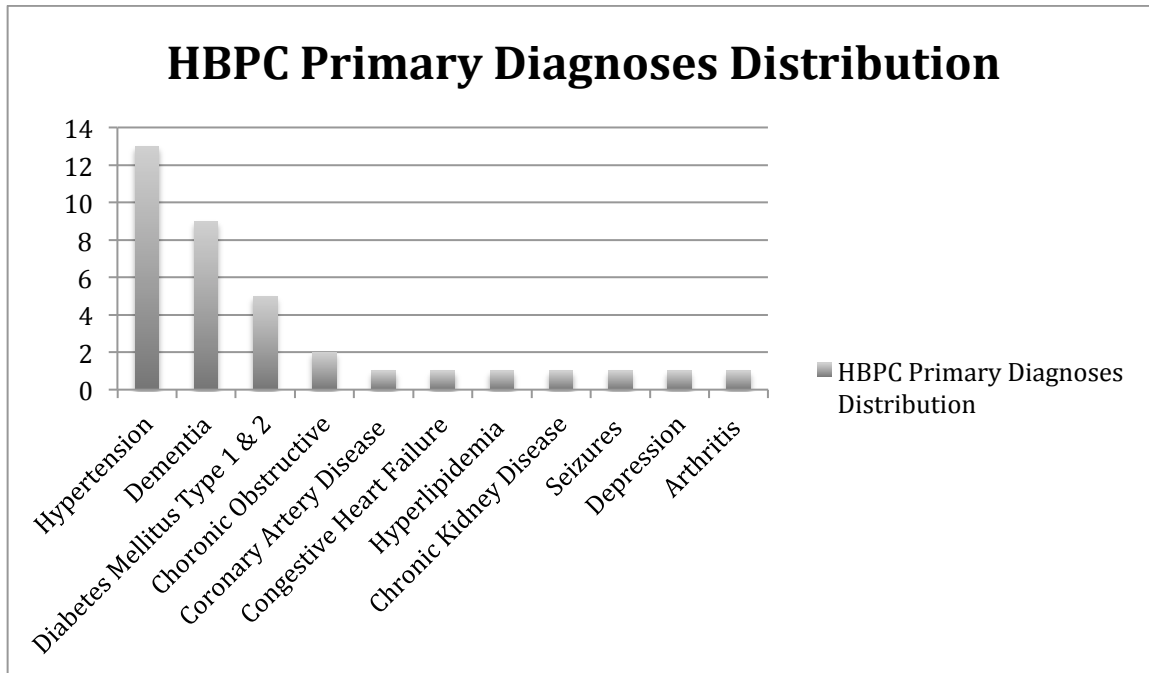


Figure 10. The graph depicts the range and prevalence of primary diagnoses from the data sample.

Data Collection Discussion

The collection of data from the 25 charts identified possible bias within the data, and gaps in care, and insight to population needs. The possible bias in the data existed within the limited number of providers seeing patients (three nurse practitioners) and the documented reasons for needing the HBPC services. Only three reasons for needing HBPC services were produced from the data collection and could be due to a habitual charting pattern from the HBPC providers. However, that information cannot be verified due to a relatively small sample size. Also, data were not collected regarding the proportion of each provider’s patients represented in the data sample.

The possibility of gaps in care also exists. The age distribution of the patients revealed the majority age to be over 80 years, and 20 out of the 25 patients were over 60 years of age. The reasons for needing services and the primary diagnoses distribution (see figure 11), highlighted

the possibility of care gaps in addressing geriatric depression and functional mobility. For example, when the project was completed, the prevalence of geriatric depressions was estimated to average 10.3 percent for adults over the age of 60 worldwide (Barua, Ghosh, Kar, & Basillio, 2011). In the collected data from the HBPC, there was one case, which is consistent with the world average, but the prevalence estimated as 12-30% in institutional settings (Park, & Unutzer, 2011). Institutionalized patients make up a large portion of the patient population seen by the HBPC. It would be expected that there would be more patients with a depression diagnosis, which raises suspicion of whether geriatric depression was being missed. Furthermore, only one case of arthritis was noted, which also elicited suspicion given the high rate of limited mobility within the data sample.

MIPS Quality Metrics

Under the description of the MIPS program, there are three MIPS categories that require metric selection and documentation: quality, advancing care information, and improvement activities. In the quality measures section, on the Centers for Medicare and Medicaid Services website for the MIPS program (CMS, 2017d), a search engine populated applicable metrics by care specialty. Metrics have to be applicable to a care specialty in order to receive credit for reporting. The collected data drove the care specialty selection for the HBPC, which included general practice/family medicine, internal medicine, mental/behavioral health, and preventive medicine. The combination of specialties produced 12 possible metrics for reporting (see figure 11).

All of the applicable metrics, except *Tobacco Use and Help With Quitting Among Adolescents*, were included in the document given to the organization prior to their metric selection. The reason for excluding the above-mentioned metric was due to a practice policy, in

which only adult patients are seen. Prior to metric selection, a description of each metric from the CMS website (CMS, 2017d) was given to the organization. The analyzed data collected from the 25 charts was also disseminated to the organization. Also included in the document given, was the analyzed data collected from the 25 charts. This information, the descriptions of the metrics, and personal knowledge of the client base, guided selections of the metrics. In total, eight quality metrics were chosen (see figure 12).

Figure 11: HBPC Possible Metrics

- Breast Cancer Screening
- Care Plan
- Controlling High Blood Pressure
- Diabetes: Hemoglobin A1c (HBA1c) Poor Control (>9%)
- Documentation of Current Medications in the Medical Record
- Osteoarthritis (OA): Function and Pain Assessment
- Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up Plan
- Preventive Care Screening: Influenza Immunization
- Preventive Care and Screening: Screening for High Blood Pressure and Follow-Up Documented
- Preventive Care and Screening: Tobacco Use and Cessation Intervention
- Preventive Screening: Unhealthy Alcohol Use: Screening & Brief Counseling
- Tobacco Use and Help with Quitting Among Adolescents

Figure 11. The above list depicts all of the applicable quality metrics for the HBPC service.

The HBPC service providers chose not to pursue the *Care Plan*, *Controlling High Blood Pressure*, and *Diabetes: Hemoglobin A1c (HBA1c) Poor Control (> 9%)* metrics. The reason the *Care Plan* metric was not included was due to an unsuccessful attempt by the organization to track the same metric under the PQRS program in the past, and no adjustments, since then, have been made. The metric *Controlling High Blood Pressure* metric was not included because providers felt that the main outcome measure of keeping blood pressure under 140/90mmHg for patients 18-85 is not best practice. At the time of this project, the American Heart Association

recommended to begin treating blood pressure greater than 150/90 in patients over the age of 60 (AHA, 2017). The last metric, *Diabetes: Hemoglobin A1c (HBA1c) Poor Control (>9%)*, was not included because the HBPC felt that it would not be very impactful because they do not have many patients with an HBA1c greater than nine.

Figure 12: HBPC Chosen Metrics

- Breast Cancer Screening
- Documentation of Current Medications in the Medical Record
- Osteoarthritis (OA): Function and Pain Assessment
- Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up Plan
- Preventive Care Screening: Influenza Immunization
- Preventive Care and Screening: Screening for High Blood Pressure and Follow-Up Documented
- Preventive Care and Screening: Tobacco Use and Cessation Intervention
- Preventive Screening: Unhealthy Alcohol Use: Screening & Brief Counseling

Figure 12. The above list depicts the quality metrics chosen by the HBPC.

Despite not collecting demographic data on gender of the patients in the data sample, the HBPC service providers chose to include the *Breast Cancer Screening* metric. The reporting guidelines for this metric, and all of the other quality and advancing care information metrics, were derived from zip files downloaded from the CMS MIPS educational resource webpage (CMS, 2017e). The metric specification page was included in the procedure manual with the toolbox for this metric. The specification pages include all information necessary for reporting. The toolbox includes a description of successful strategies for increasing mammography use for at-risk women in hard-to-reach populations. Four citations were included in the toolbox for this metric and include high-level evidence of successful strategies (Gardner, Adams, & Jeffereys, 2014; Krueter et al., 2005; Puschel et al., 2010; Russell et al., 2010).

The *Documentation of Current Medications in the Medical Record* metric only requires documentation of all known prescriptions, over-the-counter medications, herbals, and vitamin/mineral/dietary nutritional supplements, and medications' name, dosage, frequency and route of administration. However, according to Tarn et al. (2009), there are ten topics that should be addressed when updating a medication lists. The topics include: medication efficacy, directions for use, potential side effects, medication adherence, laboratory or other monitoring of medications, medication supply or refills, directions for changing or adjusting chronic medications, directions for continuing chronic medications, medication dosing, and medication cost or insurance issues. The Tern et al. list was included in the toolbox in order to improve safety and could result in the avoidance of preventable hospitalizations. Therefore, if the information provided is utilized, it has potential to increase the value of care delivered. Value as it pertains to this scenario, is the fulfillment of the Triple Aim: improving outcomes, reducing costs, and improving the patient experience (IHI, 2016).

The *Osteoarthritis (OA): Function and Pain Assessment* metric was chosen by the organization because of the high prevalence of functional limitation within its patient population, demonstrated in the data sample. The toolbox for this metric included descriptions and citations of the two assessment tools detailed in the specification sheet for this metric, which were the Medical Outcome Short-form 36-item health survey (SF-36) and the American Academy of Orthopedic Surgeons Hip and Knee Questionnaire (AAOS) (Nilsdotter, & Bremander, 2011; Ware, & Sherbourne, 1992). The specifications of this metric do not stipulate that the SF-36 or the AAOS have to be used, but at the time of creating the toolbox, the assessment tools available within the EHR were unknown. If the HBPC would choose later to pursue the use of different

assessment tools, then the organization would need to update the toolbox and educate the providers on its use.

The next metric chosen by the HBPC service providers was the *Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up Plan*. The toolbox included practice guidelines beyond the required documentation. The practice guidelines for recommended screening in overweight and obese patients from the Association of Clinical Endocrinologist (AACE) and the American College of Endocrinology (ACE) were included (Garvey et al., in press).

The *Preventive Care Screening: Influenza Immunization* metric was chosen by the HBPC service providers because of the high mean age, 74.6, of their patient population and the prevalence of assisted living facility and adult foster care dwelling. The toolbox for this metric included strategies that had shown success in increasing compliance with influenza immunizations for hard-to-reach populations. Recommendations for addressing compliance included interventions at three levels: patient, provider, and structural (Vlahov, Coady, Ompad, & Galea, 2007). The toolbox also included strategies from the Centers for Disease Control (2007) to maintain a steady supply of the influenza vaccine for use. Additionally, by choosing this metric, the organization was choosing their 90-day reporting period, between October 2, 2017 and December 31st, 2017.

The *Preventive Care and Screening: Screening for High Blood Pressure and Follow-Up Documented* metric was chosen due to the high prevalence of hypertension as a primary diagnosis in the data sample and provider experience (see figure 8). The HBPC providers found this metric to be more suitable than the *Controlling High Blood Pressure* metric, because it does not stipulate a specific treatment goal; rather, blood pressure is being screened and an

individualized plan developed and documented for each case of hypertension found. The toolbox for this metric included pharmacological treatment recommendations from the eighth Joint National Committee (James, et al., 2014), and non-pharmacological recommendations shown to be successful in reducing blood pressure (Oza, & Garcellano, 2015).

The rationale for choosing the *Preventive Care and Screening: Tobacco Use and Cessation Intervention* metric was because of personal experiences with the patient population. The HBPC providers felt that this would be an easy metric to accomplish during their performance period because it does not require much effort to meet requirements. The toolbox for this metric included information about products, precautions, dosing, adverse effects with each product, descriptions of the advantages and disadvantages, and the cost for daily use of the three Food and Drug Administration approved medications: nicotine replacement, bupropion, and varenicline (AAFP, 2016). The toolbox also included examples of non-pharmacological behavioral interventions that have shown success in aiding nicotine cessation (Aveyard, & Raw, 2012).

The last metric, *Preventive Screening: Unhealthy Alcohol Use: Screening & Brief Counseling*, was also included by the HBPC providers because of the ease of data collection. The HBPC providers were already collecting these data and decided to include this metric, and the tobacco cessation metric, in hopes of receiving extra credit in the quality measure category. Despite intent, a toolbox was created and included information on alcohol use screening techniques (CDC, 2014), behavior counseling techniques to use in the primary care setting (Moyer, 2013), outpatient management of alcohol withdrawal (Herbert, Yasinian, & Oge, 2013), and pharmacotherapy for adults with alcohol use disorders for use in the outpatient setting (Jonas et al., 2014).

MIPS Advancing Care Information Metrics

The advancing care information category included 15 different metrics and all addressed optimizing the use of the EHR. Five of the metrics in this category (see figure 13) were required, just to be eligible for receiving any points in this section. The five metrics made up a base score that accounted for half of the total score of the category. The remaining metrics (see figure 14) were to be electively chosen and made up the remaining portion of the total score for the category (CMS, n.d.b). All 15 available metrics in the advancing care information category were to be included in 2017 reporting.

Figure 13: Required Advancing Care Information Metrics

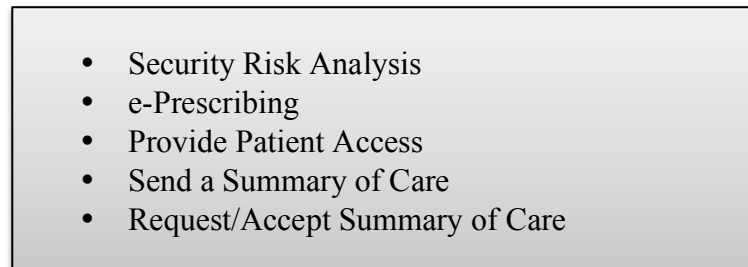
- 
- Security Risk Analysis
 - e-Prescribing
 - Provide Patient Access
 - Send a Summary of Care
 - Request/Accept Summary of Care

Figure 13. The five metrics that are required for the base-score in the advancing care information category of the 2017 Merit-based incentive Payment Structure.

The HBPC service used the EHR supplied by the affiliated larger health system, and they received technical assistance from the information technology department to make metric choices and report style. Leaders in the information technology department chose to include all 15 metrics. However, no toolkits were developed for metrics in this category because required documentation for each metric was based on utilization and capabilities of the EHR, and the reports derived. The directions given on the specification sheets for each metric included sufficient information for individual provider actions, and further examples of interventions were not necessary.

Figure 14: Complete List of Advancing Care Information Metrics

- Security Risk Analysis
- e-Prescribing
- Provide Patient Access
- Send a Summary of Care
- Request/Accept Summary of Care
- Patient-Specific information
- View, Download and Transmit (VDT)
- Secure Messaging
- Patient-Generated Health Data
- Clinical Information Reconciliation
- Immunization Registry Reporting
- Syndromic Surveillance Reporting
- Electronic Case Reporting
- Public Health Registry Reporting
- Clinical Data Registry Reporting

Figure 14. The above list includes all advancing care information metrics for the 2017 Merit-based Incentive Payment Structure.

MIPS Improvement Activity Metrics

The MIPS improvement activity category included 92 metrics, eleven metrics found to be applicable to the organization based on needs noted in the organizational assessment and the collection of data (see figure 15). The HBPC providers were required to pursue two to six improvement activities, depending on their tax identification designation and the metric weight (CMS, n.d.c). At the time of the project conclusion, the HBPC providers narrowed their choices to seven of the eleven metrics, and planned to make their final decisions soon (see figure 16). Unlike the cases of quality and advancing care information categories, Medicare did not develop specific requirements or benchmarks for outcomes in the improvement activity category (Medicare Representative, personal communication, April 27, 2017). Rather, Medicare assessed completion of each metric via a yes or no questionnaire. Yes, meaning that the organization

pursued the metric and met the objectives of the descriptions on the CMS webpage (CMS, n.d.c), or no, they did not.

Due to the large number of metrics in this category, only the selected metrics will be discussed. With the chosen metrics, is a toolbox consisting of recent literature, suggested ways to maintain accurate documentation, and the weight of the overall category score for each metric. Although Medicare did not require specific documentation, keeping an organizational record was a suggested strategy in case of an audit by Medicare. However, documentation requirements were largely ambiguous (Medicare Representative, personal communication, April 27, 2017). The following discussion includes the eight metrics preliminarily chosen by HBPC service providers.

Figure 15: DNP Student Selected Improvement Activity Metrics

- Collection and Follow-Up on Patient Experience and Satisfaction Data on Beneficiary
- Collection and Use of Patient Experience and Satisfaction Data on Access
- Completion of the AMA Steps Forward Program
- Depression Screening
- Glycemic Management Services
- Implementation of Methodologies for Improvement in Longitudinal Care Management for High Risk Patients
- Implementation of Formal Quality Improvement Methods, Practice Changes or Other Practice Improvement Processes
- Use of QCDR to Promote Standard Practices, Tools, and Processes in Practice For Improvement in Care Coordination
- Implementation of Integrated Primary Care Behavior Health Model
- Leadership Engagement in Regular and Demonstrated Commitment for Implementing Practice Improvement Changes
- Provide 24/7 Access to Eligible Clinicians or Groups who Have Real-Time Access to Patient Medical Records

Figure 15. List of Improvement activities compiled by DNP student for consideration by the HBPC services providers.

Figure 16: MIPS Improvement Activities Being Considered

- Collection and Follow-Up on Patient Experience and Satisfaction Data on Beneficiary
- Completion of the AMA Steps Forward Program
- Depression Screening
- Glycemic Management Services
- Implementation of Formal Quality Improvement Methods, Practice Changes or Other Practice Improvement Processes.
- Use of QCDR to promote Standard Practices, Tools, and Processes in Practice For Improvement in Care Coordination.
- Leadership Engagement in Regular and Demonstrated Commitment for Implementing Practice improvement Changes.
- Provide 24/7 Access to Eligible Clinicians or Groups who Have Real-Time Access to Patient Medical Records

Figure 16. A list of the potential improvement activities being considered by the HBPC service providers.

The title and description of the first metric chosen by the HBPC service providers was *Collection and Follow-Up on Patient Experience and Satisfaction data on Beneficiary Engagement, including Development of Improvement Plan*. Data for this Metric had not been collected this data and could be used it to drive organizational changes or implement interventions. The Medicare description for this metric was the same as the title (CMS, n.d.c). The toolbox for this metric included citations for two supporting articles (LaVela, 2014; Shafir et al., 2016). The first article (LaVela, S., 2014) provided a step-by-step process for creating a patient experience evaluation tool tailored to a patient population. The second article (Shafir et al., 2016) aided in the creation of an evaluation tool and highlighted areas of particular importance to the patient population, in order to guide the creation of improvement activities post-evaluation. Suggested documentation included three steps: documentation of the tool and method of evaluation; recording the number of surveys sent out and returned, so that a level of compliance could be established with the survey method; and documentation of the practice changes or modifications in response to the survey data.

The second metric chosen was the *Completion of the AMA STEPS Forward Program*. The STEPS Forward program is a practice-based initiative developed by the American Medical Association that was meant to help organizations reach the quadruple aim— decrease cost and improve patient outcomes and patient and professional satisfaction (AMA, 2017). The AMA STEPS Forward program was web-based and included modules for each provider to complete, with hopes that providers would integrate the knowledge gained into practice and share it with colleagues. The toolbox for this metric included only the AMA STEPS Forward program website. No interventions or research beyond simply completing the modules was necessary for this metric. The suggested documentation for this metric was the saving of proof-of-completion pages by each provider in electronic and paper form. Additionally, copies were to be given to the organization to maintain a record of completion for each provider.

The third metric, *Depression Screening*, addressed regular engagement of the HBPC providers in the assessment and treatment of co-occurring depression with other mental health ailments. This metric was chosen because of the high rate of dementia and behavioral health concerns seen in the data sample. Although the HBPC providers did not manage severe mental health disorders, there was a large number with anxiety disorders and less severe disorder that they did manage. The HBPC service partnered with a mental health service organization in the area, which managed the most severe cases. The HBPC service providers managed the primary care concerns for those patients.

The toolbox for this metric included citations to practice guidelines for the treatment of depression from the American Psychiatric Association (Gelenberg et al., 2010), nursing practice protocols for patients with depression (Harvath, & McKenzie, 2012), and an article pertaining to a systematic approach for the treatment of depression with pharmacotherapy agents (Mulsant, et

al., 2014). The suggested documentation method for this metric was to include a list of patients seen with co-occurring mental health conditions managed by the HBPC service providers that also received depression screening and/or treatment. The rationale for maintaining a list was to generate a report from the HER, if audited.

The fourth metric was *Glycemic Management Service*, individualizing care of at least 60% of the patients being treated with anti-diabetic agents, such as insulin or sulfonylureas, based on age, comorbidities, and risk for hypoglycemia. Each patient was also required to be reassessed annually. This metric was selected because diabetes mellitus was the third most prevalent diagnosis in the data sample. The HBPC service providers agreed with the importance of this metric. The toolbox for this metric included a citation to a 2016 American Diabetes Association report on the standards of medical care in diabetes. Recommended documentation included running a query within the electronic health record for the presence of diagnostic codes pertaining to diabetes in the HBPC census, followed by a review of how many patients were seen in the previous year and had their diabetic care individualized based on the requirements. This maintained an ongoing accurate list.

The fifth metric was *Implementation of Formal Quality Improvement Methods, Practice Changes or Practice Improvement Processes*. The Medicare description stipulated that the organization could use one of the following methods:

Train all staff in quality improvement methods; Integrate practice change/quality improvement into staff duties; Engage all staff in identifying and testing practices changes; Designate regular team meetings to review data and plan improvement cycles; Promote transparency and accelerate improvement by sharing practice level and panel level quality of care, patient experience and utilization data with staff; and/or Promote

transparency and engage patients and families by sharing practice level quality of care, patient experience and utilization data with patients and families (CMS, n.d.c, para. 35).

This metric was selected because the HBPC service had integrated any formal quality improvement methodology. The HBPC providers also saw the value in it. The toolbox for this metric included the examples of treatment planning conferences and morbidity and mortality conferences highlighted under the headings titled *Value Implication for Primary Care*. The recommended documentation for this metric included the creation of meeting minutes and a sign-in sheet. Furthermore, copies were to be made for each individual provider to maintain in a personal log, in addition to the one created within the organization.

The sixth metric in the improvement category was, *Use of QCDR to Promote Standard Practices, Tools, and Processes in Practice for Improvement in Care Coordination*. The QDCR stands for qualified clinical data registry. It was a CMS-approved entity for collection of clinical data on behalf of clinicians for data submission. The QDCR services could collect data on 30-measures beyond the MIPS metrics that related to clinician and group assessment of healthcare providers and systems (CAHPS), National Quality Forum (NQF) endorsed measures, measures used by boards or specialty societies, and measures used by regional quality collaborations. This metric was included by the student was because of the high burden of reporting, particularly with so few employees on the service. The use of this objective was contingent upon whether or not the HBPC receives a rural tax identification number designation, and if there were at least 25 providers included in it, per program stipulations. At the time of project implementation, that information was unknown, which was why this metric was still being considered. The toolbox for this metric included the CMS website (CMS, 2017f) for the QDCR, but no documentation recommendations. The CMS website had specific documentation requirements for participation.

The seventh metric was, *Leadership Engagement in Regular and Demonstrated Commitment for Implementing Practice Improvement Changes*. The Medicare description for this metric was similar to *Implementation of Formal Quality Improvement Methods, Practice Changes or Practice Improvement Processes*, except the leadership team was required to have a larger role. This metric was chosen because the HBPC service was relatively new to the CBHO and leadership guidance could be beneficial for directing quality improvement initiatives. The HBPC service providers saw benefit in this metric, but needed further input from leadership to determine if they were willing to make that commitment. The toolbox for this metric was the same as the *Implementation of Formal Quality Improvement Methods, Practice Changes or Practice Improvement Processes* metric, but the suggested documentation was different. The suggested documentation for this metric included the leadership role within the meetings, highlighted in the meeting minutes. The maintenance of the minutes and sign-in sheet did not change.

The last metric was *Provide 24/7 Access to Eligible Clinicians or Groups who have Real-Time Access to Patients Medical Records*. The Medicare description of this metric was related to maintaining 24/7 electronic access to patient charts by clinicians for urgent care needs. Suggestions were given by Medicare that provided examples on how to increase access, such as expanded hours, e-visits, phone visits, group visits, home visits, and alternate locations and/or same-day or next day appointments with clinicians. This metric would help the HBPC service make adjustments to the practice to reduce the high rate of emergency room use by HBPC patients for urgent care needs. However, the HBPC providers considered choosing this metric because they were already meeting the requirements in the description and would not have to make immediate practice adjustments. The HBPC providers stated that they would consider

making adjustments in the future, but considered this metric as already completed and an easy way to maximize their score in this category. No toolbox was compiled for this metric because the Medicare description provided sufficient examples of methods to improve access. The suggested documentation for this metric included tracking all on-call schedules and patients seen afterhours, or who were provided responses outside of office hours.

Monetary Outcome

The monetary outcome from this project was contingent on successful completion of 2017 reporting. As a result of this project, the CBHO was preparing for partial participation in the MIPS Program, which made them eligible for neutral or positive Medicare Part B payments in the year 2019. Based on the total 2016 Medicare Part B reimbursement to the HBPC, an average of \$14,895 Medicare Part B dollars were received per month. The total Medicare Part B reimbursement for 2016 was \$178,742. The MIPS program stipulated that failure to participate in 2017 would result in a -4% automatic deduction in 2019 reimbursement. Using the 2016 total reimbursement data, the minimum amount mitigated by pursuing compliance with the MIPS program in 2017, was \$8,937 for 2019 reimbursement (see figure 17). The maximum amount of potential excess reimbursement earned by participating in 2017 and doing well, was +12% above neutral payments, or approximately \$21,449 in additional money. Although the maximum amount of potential financial reward for 2017 was less than this DNP student's project donation (see figure 7), the lessons learned in the first year were expected to aid in reporting for following years.

Figure 17. Project monetary Outcome

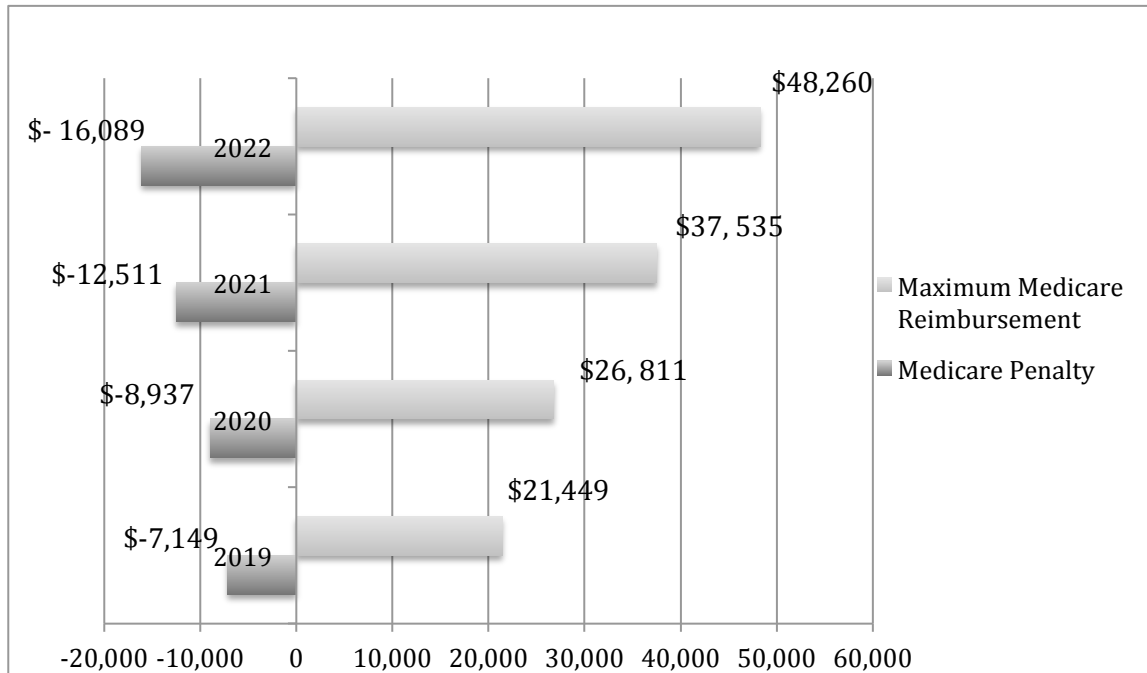


Figure 17. The above figure represents the monetary outcome for 2017 reporting as a result of this project and the financial potential of this project for the years 2019, 2020, 2021, and 2022.

When the project was ending, Medicare had decided the reimbursement penalty and benefit for years 2019 through 2022. By using the knowledge and experience gained with the MIPS program in 2017 and the data from 2016 Medicare Part B total reimbursement. Reasonable predictions could be made for the monetary value of this program for the HBPC service in a four-year trajectory (see figure 16). In 2018, the penalty for not participating would be a -5% reduction on total Medicare Part B reimbursement, or approximately \$-8,937 in 2020. Depending on budget neutrality calculations, the MIPS program might have been able to continue to offer the same extra incentives for high performance, 3x the statutory percentage (Thinkstock, 2017). If current CMS regulations continue, the maximum potential reimbursement in 2020 would total +15% above neutral payments, or \$26,811. In 2021, the penalty for not participating would be -7%, which equates to \$-12,511, and a maximum potential of +21%, or \$37,535. In 2022, the

penalty would be -9% or \$-16,086, and the maximum potential estimated as +27%, or \$48,260. The total four-year, potential penalty cost avoided by pursuing participation with the 2017 MIPS program and meeting baseline requirements in 2018-2020, was \$44,683. The four-year maximum potential gain in excess of neutral payments was \$134,055.

Procedure Manual and Recording Tool

As discussed throughout the outcomes section of this project, a procedure manual was created for this project. The procedure manual included a list of the HBPC services chosen and potential metrics, an information page with a list of CMS websites to streamline information gathering, the specification page for each metric in the quality and advancing care information categories, toolboxes that contained pertinent literature, suggested documentation methods for metrics in the improvement activity category, and instructions for use of the recording tool. Claims reporting and registry reporting specification sheets were also included for each applicable quality metric.

The recording tool was formatted in a Microsoft Excel document designed to capture required data outlined on the specification pages for quality and advancing care information categories. Space was provided for the improvement activities and allowed for yes or no recording. The tool was meant for internal tracking, and not a sanctioned method for Medicare reporting. The tool and the procedure book were delivered to the organization on an encrypted universal serial bus (USB), after approval by the DNP project committee.

Implications for Practice Discussion

In the following sections, discussion of the implications of this project for practice is presented. The topics include important successes, difficulties encountered, strengths, weaknesses, and sustainability, relationship to other evidence/healthcare trends, and limitations.

Additionally, there will be a reflection on the ways this project provided for the enactment of the DNP essential competencies will be discussed.

Important Successes

The framework/strategy of the student was a very successful means for preparing the HBPC service for value-based reporting. At baseline, the HBPC service was not aware of their requirement to report under the Medicare MIPS program for 2017. This project enabled the organization to grasp an understanding of its patient population, identify organizational weaknesses and strengths; select Medicare metrics for reporting; determine its reporting period; and prepare to enact 29 separate quality initiatives. By successfully reporting in 2017, the organization would avoid a -4% penalty on all Medicare Part B payments in the 2019 reimbursement period. An additional result of this project was that the organization as a whole, was provided experience in preparing for this program, which could become a strategy for reporting in all service lines that accept Medicare Part B payments in 2017 and in future years.

Difficulties Encountered

The main difficulty in this project involved bringing the relatively young organization to an informed and knowledgeable level of the Medicare MIPS program. This required many hours of self-education and multiple information sessions with the HBPC providers, leadership team, and other staff. The amount of work outside of this written document and the procedure manual accounted for numerous additional hours beyond those mentioned as donation by the student. The number of additional hours was not included due to the 350-hour limitation in the DNP curriculum. All hours above the reported 350 hours, were not accounted for.

Project Strengths

A project strength is the strategy employed that prepared the HBPC service for reporting under the Medicare MIPS program. The systems perspective used in developing this project would lead to an improvement of value in the care delivered by the HBPC service, and to help the HBPC service maintain corporate viability in a changing healthcare culture. The project also filled a knowledge gap in the organization and can lead to all service lines that accept Medicare Part B payments to pursue compliance with the MIPS program in 2017. The organization had potential to operationalize more than 29 different metrics and a much larger financial reward. Additionally, the student developed an affective strategy to navigate the Medicare MIPS program that can be adopted and tailored to almost any care area.

Project Weaknesses

Pay-for-performance is a controversial method of reimbursement. The blended remuneration platform, a mix between pay-for-performance and fee-for-service, that the MIPS program incentivizes, led to the HBPC providers' choices to capitalize on some metrics that are easier than others to attain. Although the metrics chosen still address important quality initiatives, others may be more impactful to patient care and overall care quality. This weakness is a flaw with the MIPS program, not the strategy employed by the student. Furthermore, the metrics selected by the organization in this project could not be implemented prior to project completion. Rather the student had to develop a sustainability plan and find an organization champion willing to own the implementation piece of this project, Manager #2.

Project Sustainability

The sustainability of this project was grounded in the fact that the MIPS program required yearly reporting. The experience gained and the lessons learned by the HBPC service

were intended to prepare them for future participation, although some details of the MIPS program were expected to change in coming years. Staying consistent with organizational theory but focusing on excellent planning, can bring this organization, that is behind the curve of value-based initiatives, to a more sustainable, profitable, and capable state of providing best quality care.

Manager #2 was prepared to own the rest of the process for MIPS 2017 reporting for the HBPC service as the project ended. Continued communication was needed between Manager #2 and informational technology specialists within the larger health system to improve data mining capabilities. Because of this project, patient on the HBPC service has been isolated within the EHR; a process thought to be unavailable prior to the project.

The CBHO wanted another student to help them with preparation for MIPS participation for their palliative care service. The combination of knowledge and experience gained by the CBHO not only made participation in the MIPS program sustainable, but also increased the likelihood of further improving care value and capturing additional financial rewards.

Relation to Other Evidence/Healthcare Trends

As part of the Medicare Access and Chip Reauthorization Act of 2015 (MACRA), Alternative Advanced Payment Models (AAPMs) were created in addition to the MIPS program (CMS, n.d.a). Many of the AAPMs had similar reporting requirements as the MIPS program, but most required a specialty area or an organization to be a PCMH or ACO, and have added financial benefits. Although the CBHO expressed no interest in becoming a PCMH or ACO, depending on their success with the MIPS program, they might want to reconsider, particularly if the 2017 MIPS reporting was very successful.

Limitations

The first limitation is related to the strategy used to gather the data captured for analysis. Age, reason for needing HBPC services, and primary diagnosis were collected on 25 charts; however, some metrics pertain to sex specific ailments. For instance, the first quality metric chosen by the HBPC, *Breast Cancer Screening*, is aimed at women. The decision to include that metric was based on provider experience, and not raw data. Although this limitation did not make a significant impact on the outcome of this project, if the CBHO chose to employ the same strategy in other care areas, the impact could be more significant.

The second limitation is related to the number of charts examined for the capturing of data. No statistical analysis was done to determine that number. In the future, HBPC service could keep a running list of all four data points on all patients. The result will lead to a more accurate depiction of the HBPC service population need.

The third limitation of the project arises from the MIPS program. As discussed in the literature review, there are many implications for value. Although the MIPS addresses many of them within the multitude of metrics available, not all are included. The limitation arises from the pay-for-performance model employed by the MIPS program. The pay-for-performance model limits the quality initiatives the HBPC providers are willing to adopt; to concern only those that are outlined by Medicare and have a financial incentive.

The last limitation is related to the project design and completion of the CSFs. The project design employed the use of the CSF model and highlighted the critical factors associated with success at all the levels within the organization. However, due to the timeframe of this project, not all of the success factors identified could be completed. The uncompleted success

factors became the responsibility of Manager #2, the HBPC, and the organization as a whole, with hopes that they would accomplish them during the MIPS metric reporting period.

Reflection on Enactment of DNP Essential Competencies

The essential competencies of DNP education include the use of a scientific underpinning in practice, leadership in quality improvement, clinical scholarship and analytical methods for evidence-based care, information technology to improve and transform current practices, healthcare advocacy, interprofessional collaboration to improve care and outcomes, a clinical prevention and population health perspective for improvement of the nations health, and a demonstration of advanced nursing care (AACN, 2006). In the following sections, reflection on how all eight of the DNP competencies were addressed will be discussed.

Essential I: Scientific Underpinning for Practice

The competencies in Essential I pertain to the scientific underpinning for practice (AACN, 2006). The work in this document reflects the combination of knowledge taken from multiple domains of science and the use of theory to guide practice to develop a strategy for Medicare MIPS compliance. The underpinnings are evident throughout the entirety of this project and reflect nursing practice contribution at the highest level.

Essential II: Organizational and Systems Leadership for Quality and Systems Thinking

Essential II encompasses three competencies: evaluate best practices for care delivery; ensure accountability for care quality; and develop strategies for inherent ethical dilemmas in practice or research (AACN, 2006). The project addressed all three competencies at the systems level. The first competency was demonstrated by conducting a literature review that included the implications of value in primary care, Medicare reimbursement models, payment models for clinicians, and quality measures for home-based primary care. That information was used to

rationalize the need for systems level change. This competency was also exhibited by developing toolboxes that highlight best practices for each applicable metric chosen by the HBPC service. The project addresses accountability of care quality by linking a value-based approach to a monetary outcome via the Medicare MIPS program. Lastly, the third competency was demonstrated by helping the organization understand the ethical dilemma in not collecting and utilizing outcome data for quality improvement. The initiative in the last competency led to the development of a new method to collect data, in which HBPC patients can be separated from the larger organization aggregate within the EHR; a capability originally thought to be unavailable.

Essential III: Clinical Scholarship and Analytical Methods for Evidence-Based Practice

Essential III pertains to the use of clinical scholarship and the analytic methods to determine best practices, based on evidence, and the capability to implement them within a care setting (AACN, 2006). This essential was addressed through the consultative role taken within the project. Multiple education sessions were utilized to educate the HBPC service providers about the MIPS program, which helped them select metrics based on data from their patient population and develop a procedure manual, toolboxes for applicable metrics, and a recording tool. The overall methodology highlighted the expression of this essential within this project.

Essential IV: Information Systems/Technology and Patient Care Technology for the Improvement and Transformation of Health Care.

Essential IV includes competencies in the design selection, use, and evaluation of programs to monitor patient outcomes. Essential IV also includes competencies in the ability to analyze and communicate critical elements necessary for program selection; develop an evaluation plan; provide leadership in solving ethical dilemmas involving information technology; and evaluate consumer health information (AACN, 2006). This competency was

fulfilled in helping the HBPC service providers realize the need to prepare for compliance with the MIPS program, and identified the data that were going to be necessary. Helping the HBPC service providers realize the need to comply with the MIPS program took multiple education sessions delivered by this student. Furthermore, this competency was exhibited in the creation of the recording tool. The recording tool to track MIPS metric outcomes uncovered the capability to collect necessary data and used the HBPC patient information to highlight dilemmas in care; as well as rationalize the selection of MIPS metrics.

Essential V: Healthcare Policy for Advocacy in Health Care

Essential V involves the critical analysis of health policy and the demonstration of leadership with its use. Essential V also involves influencing policy makers, educating others, advocating for the nursing profession, developing and evaluating policy, and advocating for social justice. Not all competencies were addressed in this DNP essential within this project. However, the ability to critically analyze Medicare programs was demonstrated by showing leadership in navigating the MIPS program and educating the HBPC providers about its use.

Essential VI: Interprofessional Collaboration for Improving Patient and Population Health Outcomes.

Essential VI competencies refer to the ability to effectively communicate and collaborate, lead, and employ consultative and leadership skills within teams with multiple types of professionals. All competencies within this essential were demonstrated throughout this work. The completing of this work required collaboration with multiple types of professionals and in a leadership role within the CBHO. Multiple education sessions on the MIPS program for providers and employees within the CBHO were delivered. The employee groups in attendance included nurses, nurse practitioners, physicians, physician assistants, and office personnel.

Essential VII: Clinical Prevention and Population Health for Improving the Nation's Health

Essential VII encompasses competencies that pertain to the analysis of data from a population health perspective, synthesis of that information, and evaluation for the selection of best delivery models. The analysis of data highlighted demographic information representing current needs of a patient population. That information helped the HBPC providers select metrics in the Medicare MIPS program that best matched those needs. Furthermore, this competency was demonstrated with the creation of the recording tool that helped the HBPC service evaluate its chosen metrics during the reporting period.

Essential VIII: Advancing Care Information

The last DNP Essential includes competencies in navigating culturally sensitive situations; using therapeutic interventions; sustaining therapeutic relationships and partnerships; demonstrating advanced levels of judgment and systems thinking, mentorship; and use of skills for the evaluation of linkages between practice, organizational, population, fiscal, and policy issues. Not all aspects of this competency were addressed within this project. However, the development and maintenance of partnerships with the professionals in the HBPC service was demonstrated. The student mentored and educated HBPC providers and staff were mentored throughout the entirety of this project and maintaining partnerships with them was vital to the completion of this work. Additionally, throughout this work, the student used theoretical models were used to demonstrate the linkages described above to provide rationale for the purpose, importance, and methodology used within this project.

Dissemination

The dissemination plan for this scholarly work was enacted be in three stages. The first was to defend the dissertation and receive approval from the student's DNP committee. The second stage was to upload the student project to ScholarWorks™. Last, a final presentation was given to HBPC providers and the procedure manual and encrypted USB that contains the recording tool was delivered.

Conclusion

Recommendations from this project are aimed at organizations using the Medicare MIPS program, and include strategic steps to make it more impactful. The first step is to gain an understanding of organizational needs and the patient population. Use of a formal organizational assessment model, such as the Burke and Litwin model, and an analysis of demographic data on age, gender, reason for needing services, and primary diagnoses from the patient population is a way to achieve this. The collected information from the organizational assessment and the data collection can be used to drive the selection of MIPS metrics.

The second recommendation is to select more than the minimum amount of Medicare MIPS quality metrics. Medicare accepted the top performing quality metrics for reporting and there was no limit on how many an organization could choose to adopt. The strategy in doing so ensured a better opportunity to receive a higher composite score and, ultimately, increased value in care and more financial reward.

The third recommendation included development of a procedure manual and the building of a toolbox for each applicable metric. The procedure manual should be comprised of Medicare MIPS metric specification sheets for the quality and advancing care information MIPS categories. The section containing improvement activity category metrics should include a

detailed method for documenting and safeguarding information that highlights evidence of participation. A toolbox that provides examples from the literature on methods to improve quality for each applicable metric chosen should be included in the procedure manual. The toolbox highlights ways to improve care and could be used as a guide when deciding the best method to improve quality.

The fourth recommendation is to frequently collect data on all MIPS metrics before and during the MIPS reporting period. The collection of data pertaining to MIPS metrics provides a baseline for comparison during the reporting period. Ongoing assessment of MIPS metrics in comparison to baseline data and at data collection intervals can emphasize the need for changes in practice throughout the reporting period.

The last recommendation is to assign an individual or group of individuals to own the reporting process. The Medicare MIPS program is a complex program with multiple metrics that required large amounts of data to be collected. Having MIPS champions or process owners is an effective strategy to ensure project completion.

Beyond the quality and financial benefits noted as outcomes of this project, a highly adaptable strategy for using patient population data to drive choice of MIPS metrics and developed a MIPS recording tool that can be used in almost any care setting to capture MIPS metric data and compute overall composite scores was produced. This project highlighted a method to effectively navigate a changing healthcare culture, so that business and corporate financial security was not foregone in the pursuance of increasing care value. Rather, the pursuance of value and business were combined towards a singular goal, the creation of a value-based business plan.

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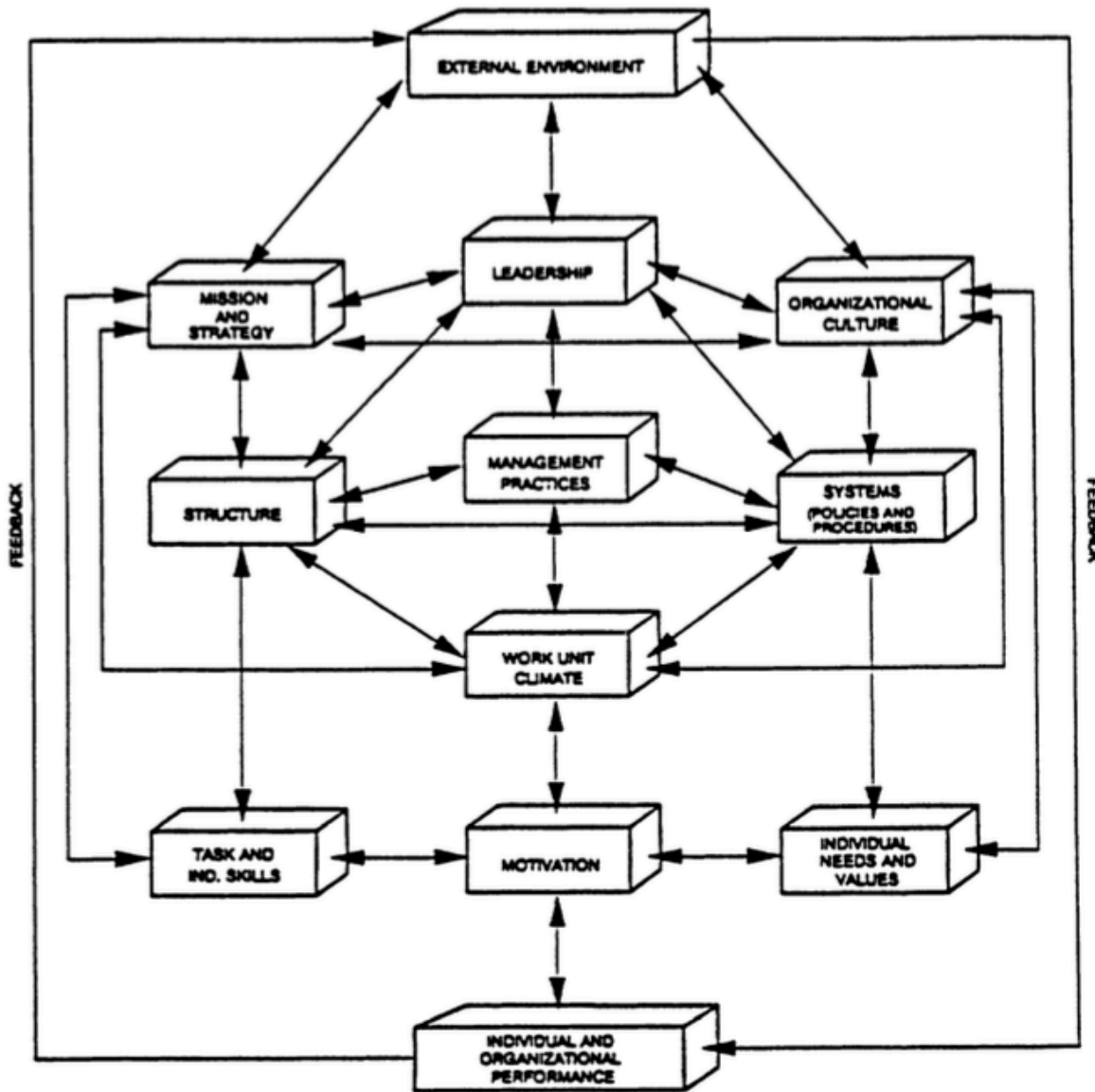
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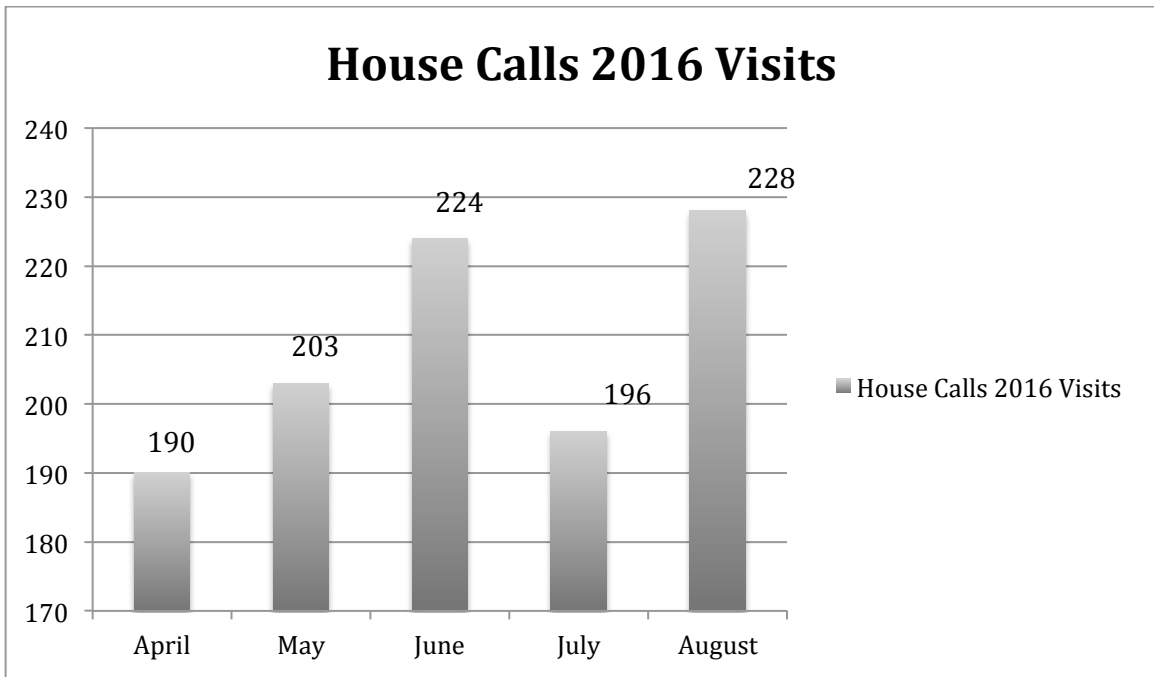
Appendix A
Burke-Litwin Model



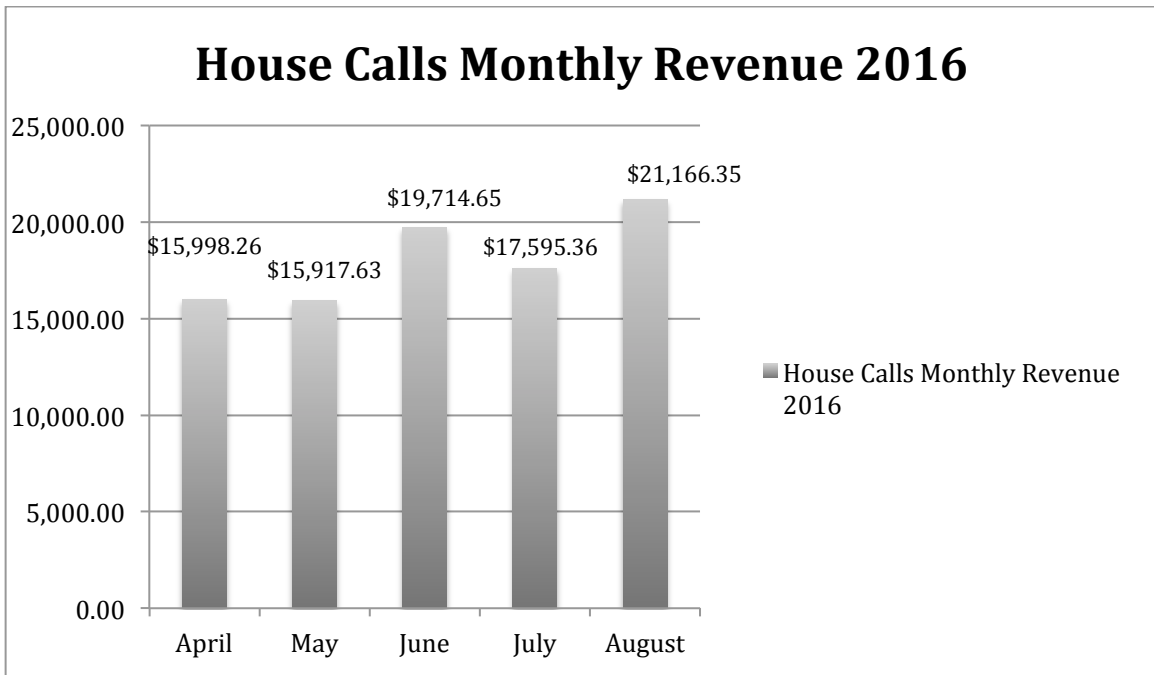
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Appendix B
HBPC Patient Visits



Appendix C
HBPC Revenue From Patient Visits



Appendix D
HBPC MIPS Recording Tool

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19		
1	2017 MIPS Category and %	Metrics	Denominator	Numerator	Priority	Weight	Yes/No	MC	MO	RF	ACIT	T-cases/# Q-Cases (≥20)	CS≥50%	TT	PT	Score	C-Score	T-Score	TC-Score	
3	Quality 60%																			
4		Quality Metric 1*																		
5		Quality Metric 2*																		
6		Quality Metric 3*																		
7		Quality Metric 4*																		
8		CC Quality Metric 5*																		
9		Outcomes Metric 6*																		
10		Additional Metric																		
11		Additional Metric																		
12		Additional Metric																		
13		Additional Metric																		
14		Additional Metric																		
15		Additional Metric																		
16	Advancing Care Information 25%																			
17		Security Risk Analysis*																		
18		e-prescribing*																		
19		Provide Patient Access*																		
20		Send a Summary of Care*																		
21		Request/Accept Summary of Care*																		
22		Patient Specific Education																		
23		View, Download, And Transmit																		
24		Secure Messaging																		
25		Patient-Generated Health Data																		
26		Clinical Information Reconciliation																		
27		Immunization Registry Reporting																		
28		Syndromic Surveillance Reporting																		
29		Electronic Case Reporting																		
30		Public Health Registry Reporting																		
31		Clinical Data Registry Reporting																		
32	Improvement Activities 15%																			
33		Improvement Activity*																		
34		Improvement Activity*																		
35		Improvement Activity																		
36		Improvement Activity																		
37		Improvement Activity																		
38		Improvement Activity																		
39	Cost 0%																			
40		No data required for 2017 submission																		
41		Total per capita cost for all HCP																		
42		Medicare spending per beneficiary																		
43		Episode Measures																		
44	Total Composite Score for the Reporting Period																			

Key

<p>Denominator- Eligible cases</p> <p>Priority- Medicare Quality Metric Priority</p> <p>Yes/No- Completed or collecting status</p> <p>MO- Measure outcome</p> <p>T-cases/# Q-Cases (≥20)-Total cases/Qualified cases</p> <p>CS- Consistency Standard</p> <p>PT- Present Time</p> <p>C-Score- Composite Score</p> <p>TC-Score- Total composite Score for reporting period</p>	<p>Numerator- Clinical action required for reporting.</p> <p>Weight- IA activity points</p> <p>MC- Measure Criteria</p> <p>RF- Reporting frequency</p> <p>TT- Total Time</p> <p>Score- Metric Score</p> <p>T-Score- Total metric score for reporting period</p>
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