Implementation of an Employee-Family Health Clinic Within A Specialty Practice

Doctorate of Nursing Practice

Mississippi University for Women

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Capstone Project Approval

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Title of Capstone Project

Approval of Capstone Project by the Student’s Faculty Advisor

____________________________________  ________________
Faculty Advisor  Approval Date

Approval of Capstone Project by Committee Member

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Committee member  Approval Date

Successful Completion of the Capstone Project

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Faculty Advisor  Approval Date

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DNP Program Chair  Approval Date
Implementation of an Employee-Family Health Clinic Within A Specialty Practice

Abstract

Studies have shown that healthier employees prove to be more productive, have less work absences, and tend to stay with a company longer (Schultz and Edington, 2007). Larger corporations have implemented such work-site clinics for years. However, there is little research available for smaller companies. Nurse-led and pharmacist-led clinics in Europe have proven to have successful health outcomes (Briggs, Closs, Marczewski, & Barratt, 2008). Other such outreach clinics, such as pharmacist-led health clinics have become more widely accepted in the United States (Green, 2008). It was our aim to not only meet a great need for primary care services within our own practice, but in the community as well.

Research was conducted to establish guidelines for the implementation of an employee-family health care clinic within the current specialty practice. State licensure policies and practice protocols were researched as well. A proposed budget was approved, collaborative practice agreements were established with local primary practice physicians in accordance with practice laws, and staff and providers were educated on the purpose, goals, and policies of the employee-family health clinic.

Within the first year following the implementation of the employee-family health clinic the company saved significantly on the amount of health benefits claims paid, there was a noticeable decrease in employee absenteeism, strengthening of community collaboration, and an expansion in the nurse practitioners role to include educators, change agents, and primary care providers within the specialty practice.
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Introduction

In 2007, the United States alone reported $2.2 trillion in health care costs. That year, approximately 158 million United States residents under the age of 65 reported coverage by private health insurance through the workplace. Family health insurance premiums have increased by 114 percent in the United States since the year 2000. Productivity losses due to employee and family health problems cost United States employers $1,685 per employee per year, totaling $225.8 billion annually. In 2004, only 6.9 percent of worksites offered an on-site health program (CDC, 2013a).

On a global scale, the World Health Organization (WHO) suggested that without access to primary health care workers and their family members will not experience good health (Burton, 2010). With the implementation of a new national health care system, and a rise in insurance costs, the issue of access to care has become a national priority. Studies have shown that healthier employees are more productive, have lower absenteeism rates, have higher job satisfaction, and are motivated within the workplace (CDC, 2013a).

My current specialty practice has over 100 employees, and the owners provide health insurance coverage for these employees and their families. In addition, the organization provides for paid personal and sick leave. In 2013 alone, the practice averaged three employee absences per day due to employee or family illness. Utilization of insurance for minor acute illnesses and chronic stable conditions was high, and the organization suffered a 10 percent increase in insurance premiums in 2013, compared to 2012. These costs, combined with a lack of access to health care, produced a financial burden for the organization and can produce even more catastrophic economic losses for smaller independent medical practices.
Problem Statement

A needs assessment was performed following a company health insurance paid claims increase of $138,246.00 in 2013 from the previous year that resulted in a 10 percent premium increase for the organization. Management reported an increase in employee absences due to personal and family illnesses resulting in increased use of health benefits and personal time off. The nurse practitioners reported a high incidence of health inquiries from the staff regarding personal and family health issues during clinic hours.

Another outcome of the needs assessment was a lack of knowledge regarding the roles of nurse practitioners as change agents, educators, and community collaborators. This issue became evident during a board meeting with all providers and company stakeholders where questions regarding nurse practitioner practice and a poor understanding of practice restrictions emerged. Due to the compilation of these issues, it was determined that employees and family members under the current employers’ insurance plan could benefit from increased access to worksite primary health care.

Due to the increase in insurance costs, high absenteeism, and evidence that improved access to care could greatly affect both, the implementation of an in-house employee-family health clinic was suggested by the lead nurse practitioner for the clinic. At initiation, the goals of the proposed clinic included the improvement of employee, family, and community health, in addition to the possibility of significant savings for the company in health costs.

Purpose

The purpose of the project was to analyze the implementation of an employee-family health clinic within a specialty practice and to disseminate information regarding the process of
implementation. Goals of the project included increased access to health care for employees and their families, decreased absenteeism, lowering of insurance costs, increased leadership roles of the nurse practitioners, and improved community collaborative relationships.

**Project Environment**

The project environment was a central Mississippi specialty clinic that employed 108 individuals and included an additional 250 family covered under the employer’s insurance provider. Prior to implementation of the employee-family health clinic, the specialty practice employed two full-time nurse practitioners to provide specialty focused care with the collaboration of six specialty practice physicians.

**Target Population**

The target population for this project included the employees of a specialty practice clinic and their family members who were covered under the employer’s insurance provider.

**Conceptual Framework**

The World Health Organization’s Health Systems Framework (WHO, 2015) and Healthy Workplace Framework (Burton, 2010) provided the theoretical underpinnings for this project. The World Health Organization’s Health System Framework included six building blocks with corresponding outcomes necessary for a health care system to succeed. These building blocks included leadership, financing, a health workforce, medical products and technologies, information and research, and service delivery. All six building blocks were necessary for providing access to care with quality and safety assurance (WHO, 2015).

The World Health Organization defined good health services as those that included delivery of safe, cost-effective, quality care to those in need of such services with minimal use of resources, and recommended a health information system that allowed for the production,
analyses, and dissemination of health related information. A good health service system allowed access to essential medical supplies and scientific, cost-effective technologies. Health financing systems provided the funds for use of health services and should be resistant to financial downfalls or economic hardships. Competent leadership and governance ensured essential oversight, regulation, and accountability for the health system (WHO, 2015).

The World Health Organization suggested that due to the complexity of health care systems, a single set of best practice guidelines do not exist for quality improvement. However, well-functioning health care systems shared certain characteristics. Some of these characteristics included delivery of medical interventions, a sufficient health workforce that is both competent and motivated, and the presence of a sustainable, equitable financing system (WHO, 2015).

The World Health Organization defined a healthy workplace as “one in which workers and managers collaborate to use a continual improvement process to protect and promote the health, safety and well-being of workers and the sustainability of the workplace” (Burton, 2010, pp.2). The authors listed two primary concepts of a healthy workplace. First, employee and organizational health are connected. Second, a healthy workplace environment should include access to both health protection and promotion. These two concepts served as the basis for the current employee-health clinic project. Needs of a healthy workforce were identified by the World Health Organization to include the availability of health resources in the workplace, and community involvement to improve the health of workers, their families, and the community as a whole (Burton, 2010).

The World Health Organization offered a framework for sustaining a health system and concepts for a healthy workplace. However, the framework did not encompass some of
the internal and external influences discovered with the implementation of the employee-family health clinic project. Therefore a model of these influences was developed by the project coordinator in order to ensure sustainability of the clinic by recognizing any real or potential influences on the clinic success or failure. A copy of the proposed model can be found in Figure 1.

**Employee-Family Health Clinic Model**

In the employee-family health clinic model, all possible influences perceived by the provider, employees, and stakeholders were depicted and relationships among these influences were drawn. The center focus of the model, as expected, was the employees and their families. Essential leaders in the project were the nurse practitioners providing direct patient care to the employees and their families. Perceived internal influences on the worksite itself included the
providers, managers, employees, business owners, current policies, and protocols within the health system. The care provided to the employees and their families came directly from the nurse practitioners whose practice is influenced by evidence-based guidelines, collaborative relationships, and their own leadership abilities. The access to care for employees and their families was externally influenced by governmental practice restrictions and policies, the number of primary health care providers in the area, and any community resistance that accompanied the implementation of the project. Goals and outcomes of the clinic included the creation of a healthy workforce, renewal, and retention of an aging or unhealthy workforce.

Definition of Terms

The following terms were used to define key concepts that were derived from the implementation process. Each term was defined both theoretically (common definitions) and operationally (specific to the project).

Workplace.

Theoretical. Any place (office, plant, etc.) where work is done (Merriam-Webster Online, 2015).

Operational. A specialty practice in central Mississippi that provides health insurance coverage for 108 employees and their family members.

Employee-Family Health Clinic.

Theoretical. A clinic offering health care treatment, prevention, and promotion to employees and their family members covered under the employer’s insurance provider for the purpose of improved employee, family, and community health (Merriam-Webster Online, 2015).

Operational. A separate clinic within a specialty clinic in central Mississippi opened for the specific purpose of offering treatment to employees and family members covered under its insurance provider.
Absenteeism.

Theoretical. The practice of being absent from work (Merriam-Webster Online, 2015).

Operational. Any recorded absence from work within the past year.

Insurance premiums.

Theoretical. The consideration paid for a contract of insurance (Merriam-Webster Online, 2015).

Operational. The amount of money charged for a certain amount of insurance coverage.

Literature Discovery

Search strategy included the utilization of multiple databases through a central host, Ebsco host. Strategies also included searching relevant systematic reviews through the Cochrane Collaboration. Key search words were entered into the host, allowing multiple databases to be searched using the key words. Key words were altered and re-entered to eliminate irrelevant material until an optimal amount of material to be reviewed was reached. Key words were recorded and used to search other sources if needed. A strategy map was used to delineate the search process and to maintain a record of key words and to maintain a record of the number of studies used or discarded in the process (Appendix A).

For example, the databases used to identify the following literature relevance were Medline, CINAHL, and Business Source. Key words such as Employee, Health, and Program were entered into each database, revealing studies that include the keywords. Depending on the number of positive results, the key words were altered by adding words such as Clinic and excluding words such as Program to further expand or narrow the search. This process was repeated until an adequate number of relevant studies to substantiate scientific evidence of a practice problem were obtained.
Review of Literature

A review of published research illustrated the implementation of a work-site employee health clinic could significantly increase employee health and morale, decrease absenteeism, decrease the number of work-site injuries, decrease employee stress levels, and improve production (Mitchell et al., 2013). Given the empirical outcomes in the following review, one could reasonably expect that a decrease in health care costs would follow.

The Centers for Disease Control and Prevention (CDC, 2013a) suggested that an investment in employee health may lower health care costs and insurance claims. Furthermore, the CDC suggested that a workplace health program may decrease the risk of unhealthy behaviors in healthy employees and improve health in unhealthy employees through health promotion, furthering lower insurance costs. The CDC conducted a systematic review of 56 studies on worksite health programs and reported that work-site health programs may produce up to 25 percent in savings on absenteeism and health care claims (CDC, 2013).

The World Health Organization (WHO, 2015) reported many benefits to both the organization and the employees with the implementation of a workplace health program. The benefits to the organization included a caring image, improved staff morale, improved staff retention, decreased employee absenteeism, and improved productivity. Benefits for the employees included improved health and self-esteem, improved morale, better health behaviors, and increased job satisfaction.

Iverson, Lewis, Caputi, and Knospe (2010) conducted an online presenteeism/absenteeism survey to which 667 employees responded. The survey was focused on thirteen health conditions that included hypertension, heart disease, diabetes, cancer, and arthritis among others. The researchers discovered that presenteeism and absenteeism greatly
effect company productivity. The researchers concluded that early screening and detection among workers could significantly impact the effects that both psychological and physical health conditions have on productivity.

Allen, Lewis, and Tigliaferro (2012) analyzed the cost-effectiveness of a workforce intervention in a small organization, in which 172 employees underwent baseline and 12 month follow-up cardiac risk assessments. The results of the analysis showed than the introduction of one intervention produced marked improvement in LDL levels and employee cardiac risk factors. The researchers found that the potential of a work-site health clinic to perform cardiac and other risk assessments, along with disease management proved to be beneficial to a diverse group of employees.

In the current project, the primary objective of the employee-family health clinic was to provide easier access to health care, improve employee health, and produce cost savings. Schultz and Edington (2007) cited research showing that healthier employees prove to be more productive, have fewer work absences, and tend to stay with a company longer. Focus group evaluations reflected common health themes among workers health beliefs. The most commonly discussed health problems were stress and depression. Concerns over relationships between social and economic pressures, common health problems, and work dominated discussion among employees in the focus groups. Research showed that due to the moral influences surrounding common health problems and work, employees with health problems tend to miss less work due to their need to prove their self-worth to employers. Therefore, returning to work as soon as possible results in improved recovery time and health outcomes (Barnes, Buck, Williams, Webb, & Aylward, 2008).
Voit (2009) performed a systematic review of the literature regarding the effects of worksite employee health programs. Potential employee benefits included decreased body fat and weight, decreased heart rate and blood pressure, improved cardiovascular health, enhanced lifestyles, and emotional well-being. Employees may also experience increased job satisfaction, increased productivity, and decreased absences from work. Employer benefits included health care savings, and a positive image by both employees and the community as a whole.

There are few studies to demonstrate subjective data on the effects of leadership style on absenteeism. Dellve, Skager, and Vilhelmsson (2005) reviewed long-term longitudinal studies and discovered that leadership qualities such as reward, recognition, and respect result in higher work attendance, and leaders’ views on work-related health issues greatly influenced work attendance. Leaders who implemented multi-focus strategies that included health awareness had a prominent increase in work attendance (Dellve, Skager, & Vilhelmsson, 2005).

**Limitations**

Barriers and limitations identified in past studies included employee resistance or lack of participation, feelings of being forced to participate in a healthy lifestyle, and fear of retribution if they chose not to participate (Olson & Chaney, 2009). Significant limitations identified in the current project were the practice restrictions on nurse practitioners imposed by the state boards of nursing and medical licensure. The primary care physician shortage in the area resulted in fewer primary care physician collaborators, and produced the potential for great difficulties in opening the proposed clinic because of the particulars of collaborative agreements mandated by the state boards of nursing and medical licensure.

Another barrier to the project was the resistance by local providers who perceived the employee-family health clinic might generate competition for established primary care practices
in the area. The resistance produced a significant threat to the implementation of the employee-family health clinic due to the state boards of nursing and medical licensure requiring collaborative agreements between community physicians and nurse practitioners in order to practice in the state of Mississippi. Continued communication revealed a general lack of knowledge on behalf of local primary care providers and their associated health organizations regarding the purpose and goals of the clinic as an on-site employee-family health clinic.

Finally, there were organizational limitations for the project that had to be overcome. These included insufficient supplies and equipment, time consumption for implementation, inadequate staff training, and employee education regarding disease processes, health habits, and lack of knowledge and trust issues regarding utilization of the employee-family health care clinic.

**Project Design/Methods**

This was a dissemination project of the analyses and implementation process for an employee-family health clinic within a specialty practice. Methods used to ensure success of the employee-family health clinic included the Centers for Disease Control and Prevention workplace health program guidelines for ensuring success (CDC, 2013b). The CDC recommended a four step process for the successful implementation of a workplace health program. The first step was a health assessment focused on a specific target population, and consideration of all factors that may influence the health of the employees, both at work and outside work on an individual, organizational, and community level (CDC 2013b). For the current project a needs assessment was done in order to determine if there was an actual need for an employee-family health clinic, and if so, to determine the implications for this actions in terms of benefits and costs to the company. A meeting was held in December of 2013 with
providers, managers, and other stakeholders in the company, and it was determined that the company could benefit from offering on-site access to care for the employees and their family members related to the recent increase in absentees and insurance costs. The goals of the clinic would be to offer efficient, on-site, competent care in order to improve patient health outcomes, and employee productivity, and presenteeism, as well as to lower insurance premiums.

Influences in adopting the proposed practice change were researched. These included, but were not limited to, employee hesitancy, state collaborative practice restrictions, supply costs, time consumption, insufficient understanding of nurse practitioner roles and practice regulations, lack of education for schedulers on the charging, coding, and scheduling for primary care patients compared to specialty practice, insufficient guidelines for the implementation of primary care within specialty care. Unexpected influences in adopting the proposed practice change included community provider resistance, time dedicated to staff training, over-time for assistance with an added work load, time dedicated to updating electronic health record templates and codes for primary care, employee instruction for making appointments with the employee-family health clinic, and restrictions of the health clinic.

The second step in the implementation of a workplace health program was described as the planning process by the CDC. The CDC recommended the use of “enterprise governance” to ensure direction, leadership, and organization of the plan (CDC, 2013b). Dedicated leaders for the project were chosen. One primary researcher for the project was assigned, a lead nurse practitioner, was assigned the roles of establishing a plan for implementation of the employee-family health clinic, researching the legal, ethical, and practice implications for the project, analyzing costs, and contacting local primary care providers to establish collaboration agreements.
Research was conducted to determine how previous programs were implemented, the benefits and costs of such programs, and the effects of these programs on employees and the organization as a whole. Initial contact was made with the Mississippi Board of Nursing to determine any practice restrictions or concerns with the practice of family nurse practitioners functioning as primary care providers within a specialty practice. The primary practice restriction was the regulatory restrictions for nurse practitioners. In Mississippi, nurse practitioners are mandated to have collaborative agreements with physicians who practice within the same field of practice as the majority of the practitioners’ practice. Because the nurse practitioners’ current collaborators were specialists, local family practice, internal medicine, and pediatric physicians were contacted in regard to establishing possible collaborative agreements. This process required two months of meetings, e-mails, phone conferences, and contract negotiations with local physicians to establish agreements.

Initially, there was significant resistance by local providers who perceived that the employee-family health clinic might generate competition for established primary care practices. Reassurance and education on the purpose of the clinic, and contract reviews with local health systems, resulted in an increased understanding followed by decreased resistance. Eventually, collaborative agreements were established with two internal medicine physicians and two pediatric specialists. These agreements satisfied all requirements established by both the Mississippi Board of Nursing and the Mississippi Board of Medical Licensure.

Cost analyses were conducted and an initial supply list was devised with a proposed budget of $929.71. The supply budget was approved at a board meeting along with approved collaborative practice agreement costs for the primary care providers per month as part of the state mandated collaborative review and co-signing between nurse practitioners and their
collaborating physicians for 10 percent or 20 charts per month. The clinic would be established within the pre-existing practice and thus would not require new practice space.

Adjustments were made in the nurse practitioners schedules in order to accommodate the primary care patients among their existing specialty patients. Electronic health record templates were established by one lead nurse practitioner and one manager, therefore, no additional time was required of other staff members to create these templates. This process required three weeks to finalize with three two hour sessions to finalize.

Educational meetings for schedulers, clerical staff, and eventually all employees were held during three separate one hour meetings after regularly scheduled clinic hours. Approximately 50 percent of the employees were in attendance at each meeting. The purpose, goals, and benefits of the employee-family health clinic were reviewed along with questions and concerns of the staff regarding access to the clinic, cost of utilizing the clinic, and who would be providing care for the employees and their family members. Scheduling of employee and family members for the health clinic was explained. Urgent visits would be worked into existing schedules and chronic care visits or physicals would be conducted at the last visit time available of the day. Incentives for participation included free care, free annual physicals to exclude obstetric and gynecological care, and free lab work for employees and their family members covered by the current company insurance. Yearly physical exams were also presented as a benefit to the workers.

Step three in the CDC workplace health program plan was implementation. The CDC stressed the importance of including both individual and organizational strategies to influence health. The strategies should include: health related programs, health-related policies, health benefits, and environmental support (CDC, 2013b). Opening date of the clinic was set for
February 2, 2014. Data would be complied through a third party and provided on a quarterly basis. Collaborators would be allowed access on a monthly basis for signing charts. All contracts would be honored. Schedulers would allow for 15 minute visit time per primary care visit, and physicals would be given 30 minutes. The provider would be notified of any additional appointments and any urgent appointments. The nurse practitioners would be responsible for maintaining supplies, orders, and testing. Quarterly meetings would be held with board members to discuss progression and milestone of the clinic.

Step four in the CDC workplace health program process was evaluation of the program, benefits, and costs, resources, and support (CDC, 2013b). Quarterly costs analyses were performed to determine the effects of the clinic on health benefit claims paid, supply and staff costs, and a quarterly count of employee absentees was kept. The results of which, would be presented in the quarterly board meeting with providers, managers, and stakeholders. Evaluation of the community effect through the clinic was determined by the maintenance of collaborative agreements. Leadership roles of the nurse practitioners would continue to be expanded through continuous change agent roles, policy critiques, facilitating, and maintaining the primary care of employees and their families.

**Conclusions/Results**

The organization suffered a ten percent increase in insurance premiums in 2013 due to increased use of health benefits. In order to evaluate the effectiveness of the employee-family health clinic, beginning in February, 2014, financial data were collected and compared to those of the previous year. Data regarding the total dollar distribution for health claims paid for 60 employees and 51 dependents were evaluated. Cost analysis for the year 2014 revealed a decrease in cumulative paid claims from $375,882.82 in 2013 to $305,573.37 in 2014. This
resulted in an annual cost savings of $70,309.45 in health benefits paid. This outcome substantiates that there was an increase in utilization of the employee-family health clinic with a dramatic reduction in health benefits paid. The significant decrease in health benefits paid allowed the organization to decrease the costs of insurance premiums for employees. The net result was a decrease in insurance costs for each employee from $106.00 monthly to $60.00 monthly.

Figure 2 depicts the distribution of paid health benefits according to age. The majority of health benefits paid in 2014, the first year of implementation of the employee-health clinic, was found to be in the range of 30-39 years of age. The lowest amount of paid health benefits occurred in the 60 and older age group. These findings suggested the increased need for age-specific health education, and the assessment of individual health influences.

![Health Benefits Paid By Age](chart.png)

Figure 2. Paid Health Benefits by Age of Employee or Dependent

Data were also collected on the number of employee absences due to employee or family illnesses for 2014. The results of these data are reflected in Figure 3. There was a dramatic
decrease in employee absences, due to personal or family illnesses, within the first quarter following the opening of the employee-family health clinic. Absences have stabilized, and average 2 to 4 per month, whereas, in the previous year the company averaged 7 to 10 absences per month. This decrease in absences was also evident by the decreased amount of paid time off utilized by the workers in 2014 compared to 2013, although specific date regarding 2013 absenteeism were not available for publication. However, the reduction was confirmed by senior management at the quarterly board meeting in January of 2015.

![Employee Absences](image)

**Figure 3. Employee Absences**

Role expansion for the nurse practitioners was evident by the increased involvement of the nurse practitioners in policy critique and changes, employee education presentations, such as in sterile technique and hand washing to improve patient outcomes and employee health, and involvement in company growth and expansion. The nurse practitioners now actively participate in policy updates and changes, electronic health record updates, patient flow issues, emergency
plans, occupational safety and hazard training, new employee training, and annual vaccination programs for the employees.

Ownership of the benefits of the employee-family health clinic by the employees was established through a healthier employee pool with fewer work absences, increased productivity, and improved disease management as seen by less time off from work due to illness. Employees expressed a greater interest in group health activities, utilized a pedometer step program, and increased participation in yearly physicals and lab reviews. The employee-family health clinic has been the source of improved employee health competitiveness as evident by the increased participation of employees and their families in organizational healthy eating programs, fitness challenges, and incentive programs.

Efforts on behalf of the nurse practitioners and employees were made to build trusting provider-patient relationships as evident by the number of employees who utilized the employee-family health clinic for themselves and their families in 2014. Success of these efforts was demonstrated in the increased utilization of the employee-family health clinic, with a total of 164 patients treated in 2014. There was an increase in Healthy You visits for annual screenings and physicals from 34.5 percent in 2013 to 39.5 percent in 2014, with 95.45 percent of this utilization in office visits for physicals.

Stability was also measured in the sustained collaboration among selected primary physicians for both adult and pediatric primary care. Collaborative relationships between the contracted physicians and the nurse practitioners were maintained and have been extended for a second licensing cycle. Quarterly face-to-face meeting between the nurse practitioners and these primary care physicians allows for discussion regarding care provided to the employees and their families by the nurse practitioners. Although these meetings are conducted because of state
licensing board requirements, the nurse practitioners form the specialty practice have noted that these relationships have become much more friendly and collegial as area providers recognize that the new employee-family clinic poses no threat to any outside entities. Community collaborations remain strong with a current collaborative practice team of three nurse practitioners, two internal medicine physicians, one with pediatric certification as well, and one other pediatric physician. The team continues to grow.

Overall success of the project resulted in decreased company health care costs, increased access to care for employees, decreased absenteeism, and expanded practice roles for the nurse practitioners, and improved community collaborative relationships. After success of the project was demonstrated, the outcomes and the steps taken in order to facilitate its implementation were disseminated in the form of a national nurse practitioners’ conference.

Future Practice Implications

The outcomes of the project provided strong implications for future employee-family health clinics. The current clinic resulted in increased access to care, a decrease in employee absenteeism, and decreased use of paid health benefits. Perhaps the most impactful outcome that would lead other organizations to consider implementing a similar clinic was the demonstrable cost savings that occurred with the implementation of the employee-family health clinic within a specialty practice. Family nurse practitioners who work in specialty practices across the country are uniquely positioned to propose and develop such clinic. Nurse practitioner-led employee health clinics can offer organizations improved employee health, increased productivity, increased job satisfaction, and employee retention.

There was opportunity for increased community collaboration and improved community health through a healthier workforce. Nurse practitioners, especially the DNP student
demonstrated role expansion as educators, mentors, entrepreneurs, business and patient advocates, and change agents for health policies on an individual, organizational, and community level. Additionally, conduction of the project underscored the problematic scenarios that accompany practice restrictions on nurse practitioners. These issues included decreased access to care for employees, a shortage of physician collaborators for employee-family health clinics, and incongruent organizational and community goals due to these barriers. These barriers strongly imply the need for nurse practitioner leaders to advocate for a relaxation of practice restrictions in the state in which the project was conducted.

Currently, in the state of Mississippi, nurse practitioners practice under mandated physician collaborative agreements. Due to a shortage of primary care physicians in rural Mississippi the mandated collaborative agreements restrict access to care for Mississippians. Nurse practitioners collaborate daily with other primary care providers in their community and with specialists. This type of collaboration should not be mandated but rather appreciated for its facilitation of continuity of care, improved outcomes through specialty consultations, increased collegiality in community practice relationships. Nurse practitioners can further improve patient outcomes through greater access to care by having full practice scope authority. This can only be accomplished through increased participation of nurse practitioners in political action committees, increased membership in nurse practitioner advocacy organizations, and improved communication between governing and licensing entities in regard to nurse practitioner education, training, and leadership skills that greatly impact patient health outcomes.

Nurse practitioners who hold a Doctor of Nursing Practice (DNP) degree possess leadership skills essential to building practice guidelines, implementing organizational policy changes, and supporting political agendas aimed at improving health outcomes for a those
patients currently without access to primary care. The leadership skills of the DNP nurse practitioner student in the implementation of the employee-family health clinic was evidenced by the increased request by organizational physicians and management for greater involvement of this nurse practitioner in employee hiring processes, employee educational in-services, employee health programs, patient education materials, and community liaisons between primary and specialty care providers.

The current electronic age of health care requires adaptation, versatility, empowerment, and advanced knowledge in the use of technology. Today’s DNP nurse practitioners must be proficient in the use of technology in the care, education, and privacy protection of their patient population. The DNP nurse practitioner uses information technology to manage patient information, improve patient education and participation in health outcomes, implement policy and organizational changes, and evaluate the outcomes of these changes. This proficiency was clearly illustrated in the current project as the nurse practitioner was able to track and demonstrate nurse practitioners’ value within an independent practice, a health care system, and the community through new electronic health record templates, measurably improved patient outcomes, cost savings, increased productivity, community referrals, and collaborative agreement requirements such as the number of co-signed charts.

Theoretical implications in nursing that emerged from the implementation process of the employee-family health clinic included the development of collaborative frameworks among primary care and specialty care providers, and the impact of advanced nursing practice regulation and restrictions on community health. The success of the model used in the project implied DNP nurse practitioners can be significant resources for organizational change-agents, patient and provider advocacy, improved community collaborative relationships, and pioneers in the
theoretical development of collaborative team frameworks providing care among multiple disciplines.
References


http://www.wpro.who.int/health_services/health_systems_framework/en/.
Appendix A

Search Strategy Map

[Diagram showing the search strategy map with details of the number of returns and retained or discarded searches for Medline, CINHAL, and Business Source, using various keywords and combinations of keywords related to employees' health and health programs.]
Appendix B
### Synthesis Table

<table>
<thead>
<tr>
<th>Citation</th>
<th>Purpose/Design</th>
<th>Results</th>
<th>Conclusions</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allen, J., Lewis, J., and Tigliaferro, A. (2012).</td>
<td>To see if a work-site health program intervention can improve health risks and if it can be cost-effective for small employers.</td>
<td>12-month follow up showed significant difference in LDL, total cholesterol, and metabolic syndrome markers between comparison and intervention groups. In the intervention group, there was a $10.17 per percentage-point reduction of LDL, and $454.23 per point reduction in coronary heart disease risk.</td>
<td>This study showed there could be significant cost-effectiveness with a worksite health promotion in small companies.</td>
<td>Mod; helps to show how small interventions can make a difference.</td>
</tr>
<tr>
<td>Barnes, M., Buck, R., Williams, G., Webb, K., and Aylward, M. (2008).</td>
<td>Qualitative; focus groups; To investigate beliefs about common health problems and beliefs in regard to illness and work among varying ages, genders, and socioeconomic status.</td>
<td>Discovered common themes among certain health problems and beliefs in regard to illness and work.</td>
<td>Remaining or returning to work in employees with chronic health problems may not only improve recovery time, but improve productivity and thus decrease absences as well.</td>
<td>Mod; aids in needs assessment and to determine barriers in success of program.</td>
</tr>
<tr>
<td>Dellve, L., Skagert, K., and Vilhelmsson, R. (2007).</td>
<td>Focused on the impact leadership styles have on sick leave and employee health promotion.</td>
<td>Leadership qualities in which a reward system was used were associated with higher work attendance. Leader who focused on workplace health significantly affected presenteeism. Health promotion programs that</td>
<td>Leadership qualities and work health program initiatives can significantly impact work attendance and workforce health.</td>
<td>High; focus is on leadership and ownership of employee health.</td>
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<tr>
<td>Author(s)</td>
<td>Title</td>
<td>Study Type</td>
<td>Findings</td>
<td>Type of Impact</td>
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<td>Iverson, D., Lewis, K., Caputi, P., and Knospe, S. (2010).</td>
<td>The Cumulative Impact and Associated Costs of Multiple Health Conditions on Employee Productivity. <em>Journal of Occupational and Environmental Medicine, 52</em>(12), 1206-1211.</td>
<td>Mixed study; Investigated the impact of physical and psychological health problems on work productivity. N=667; utilized self-reports of presenteeism and absenteeism. Compared data from surveys to the company’s presenteeism. Thirteen health problems were associated with the majority of lost annual productivity, 27 sick days, and equaling 12.3 percent of employee capacity.</td>
<td>The amount of health conditions per employee has a significant effect on presenteeism and absenteeism in the workforce with psychological conditions leading in costs and decreased productivity.</td>
<td>High; compares cost to presenteeism and productivity.</td>
</tr>
<tr>
<td>Mitchell, R., Ozminkowski, R., and Serxner, S. (2013).</td>
<td>Improving Employee Productivity Through Improved Health. <em>Journal of Occupational &amp; Environmental Medicine, 55</em>(10), 1142-1148.</td>
<td>Participating in health promotion programs can help improve productivity levels among employees and thus save employers money. Employees who participated in a program and improved their health care or lifestyle showed improvements in lost work time. Employees saved an average of $353 per person per year/about 10.3 hours in additional productive time annually. Participating in health promotion programs can help improve productivity levels among employees and thus save employers money.</td>
<td>Mod; focused on productivity and costs rather than absenteeism</td>
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<tr>
<td>Reference</td>
<td>Summary</td>
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<td>Olson, A., and Chaney, J. (2009). Overcoming Barriers to Employee Participation in WHP Programs. <em>American Journal of Health Studies</em>, 24(3), 353-357.</td>
<td>Reviewed barriers to participation in Worksite Health Program (WHP); Suggested ways to possibly overcome these barriers.</td>
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<td>Authors developed five guidelines to increase employee participation in WHP programming.</td>
<td>A needs assessment is necessary to anticipate employee participation in a WHP, to help identify potential barriers, and to promote program success.</td>
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<td>Found many health conditions and health risks are associated with presenteeism.</td>
<td>Certain health risks or health conditions likely have more of an impact on presenteeism in certain types of jobs than in others; there is no generally accepted method of measuring presenteeism.</td>
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<td>High, very significant.</td>
<td>High; supports need for health risk assessment.</td>
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<td>Voit. (2001). Work-site health and fitness programs: Impact on the employee and employer. <em>Work</em> (16), 273-286.</td>
<td>Researched the impact of work-site health and fitness programs on employee physical and mental health, employee work performance, and the employer; investigated the effectiveness of programs and of the interventions that were used.</td>
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<td>Suggested the implementation of employee health and fitness programs can have positive effects for both the employee and the employer. Programs that are structured using a variety of physical fitness programs, education, and counseling have proven to be most beneficial.</td>
<td>Implementation of an employee health and fitness program can have positive lasting effects on both the employee and employer.</td>
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<td>Mod; very informative; helps to promote all stakeholders in the program.</td>
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Committee Meeting

MINUTES

MAY 28, 2014

3:00

MISSISSIPPI UNIVERSITY FOR WOMEN

<table>
<thead>
<tr>
<th>MEETING CALLED BY</th>
<th>Lorraine Gaddis, Kristi Acker</th>
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<tr>
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<td>Lorraine Gaddis, Kristi Acker</td>
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<tr>
<td>NOTE TAKER</td>
<td>Alena Lester</td>
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<td>TIMEKEEPER</td>
<td>Alena Lester</td>
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<tr>
<td>ATTENDEES</td>
<td>Alena Lester, Lorraine Gaddis, Kristi Acker</td>
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Agenda topics

30 MINUTES

DNP PROJECT

**DISCUSSION**

Formalization of project purpose was discussed as well as how the project will be presented.

Possible decisions were a dissemination project or pilot study, and possible business application for step-wise approach to creating such a clinic. Purposes included increased access, decreased absenteeism, and decreased health costs to the organization. IRB approval process was discussed.

**CONCLUSIONS**

The purpose of the project was determined to be to provide health access to the employee and their families in order to decreased absenteeism, and decrease insurance costs for the organization and the employees. Plans were made for future discussions regarding possible dissemination project.

**ACTION ITEMS**

<table>
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<tr>
<th>ACTION ITEMS</th>
<th>PERSON RESPONSIBLE</th>
<th>DEADLINE</th>
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<tbody>
<tr>
<td>Confirm purpose of project and presentation of information. Prepare for IRB approval.</td>
<td>Alena Lester</td>
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</table>
## Committee Meeting

**MINUTES**

**JULY 29, 2014**  
**3:30**  
**MISISSIPPI UNIVERSITY FOR WOMEN**

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<td>Alena Lester</td>
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<tr>
<td>ATTENDEES</td>
<td>Alena Lester, Sally Pearson</td>
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</table>

### Agenda topics

**30 MINUTES**  
**DNP PROJECT**

| DISCUSSION | Would the clinic include workman’s compensation as well? If not, then where would these cases be sent or how will they be handled. Would dissemination include publication or possible conference? What goals are we trying to accomplish with this project? How will we communicate the projects goals and outcomes? How will community backlash be handled? |
| CONCLUSIONS | Dissemination would be most likely in an educational format and possible conference. Workman’s compensation cases would be handled from an outside part. Goals of the project would include increased access to care for employees and their families and resulting improved health. Community concerns were addressed via email and phone conferences with local providers. |

### ACTION ITEMS

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<tbody>
<tr>
<td>Dissemination of project and determine any other barriers to the project</td>
<td>Alena Lester</td>
<td>September 1, 2014</td>
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</table>
Committee Meeting

MINUTES
SEPTEMBER 11, 2014 12:30 MISSISSIPPI UNIVERSITY FOR WOMEN

MEETING CALLED BY Lorraine Gaddis

TYPE OF MEETING Committee Meeting

FACILITATOR Lorraine Gaddis

NOTE TAKER Alena Lester

TIMEKEEPER Alena Lester

ATTENDEES Alena Lester, Lorraine Gaddis

Agenda topics
60 MINUTES DNP PROJECT

Dissemination of project. Possible educational conference in the form of poster or podium presentation or possible publication. Several national and state wide conference opportunities and deadlines for abstract were discussed and application processes were reviewed.

It was agreed that the project would best be presented as a dissemination project. Plans were made to apply for three separate conferences: one non pf conference and two national advance practice conferences would be considered. If no acceptance was offered, then publication would be an alternative route for dissemination.

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<tr>
<th>ACTION ITEMS</th>
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<tbody>
<tr>
<td>Abstracts were sent to AANP, AACN, and NONPF</td>
<td>Alena Lester</td>
<td>September 20, 2014</td>
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</table>
Committee Meeting

MINUTES

JANUARY 28, 2015
4:30
MISSISSIPPI UNIVERSITY FOR WOMEN

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Agenda topics

30 MINUTES

**DNP PROJECT**

**DISCUSSION**
Progression of project. Deadlines for defense and project completion for committee members to review and essential components of project manuscript.

**CONCLUSIONS**
Deadline for completion of manuscript set for 1st week in April. Information is to be sent to each committee member before defense. Defense date was set for April 15, 2015.

**ACTION ITEMS**

<table>
<thead>
<tr>
<th>Prepare defense and have manuscript to committee members one two weeks prior to defense.</th>
<th>Alena Lester</th>
<th>April 1st, 2015</th>
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</table>
## Committee Meeting

**MINUTES**

**MARCH 7, 2015**

**CENTRAL LOCATION**

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### Agenda topics

**90 MINUTES**

**DNP PROJECT**

### DISCUSSION

Project manuscript proofing and edits were discussed. Introduction in particular was revised to support the need for the project. Approval and authorization forms were organized and added to manuscript.

### CONCLUSIONS

Final edits are to be made. Committee signatures are to be obtained and plans were made for a future meeting before final defense on April 15, 2015 after manuscript is sent to committee.

### ACTION ITEMS

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<tbody>
<tr>
<td>Prepare defense and have manuscript to committee members two weeks prior to defense.</td>
<td>Alena Lester</td>
<td>April 1st, 2015</td>
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</table>
Appendix D – IRB Approval Letter

October 2, 2014

Lorraine Gaddis, Ph.D.
Mississippi University for Women
College of Nursing and Speech-Language Pathology
MUW-910
Columbus, Mississippi 39701-5800

Dear Dr. Gaddis:

I am pleased to inform you that the members of the Institutional Review Board (IRB) have reviewed the following proposed research and have approved it as submitted:

Name of Study: Outcomes of Implementation of an Employee-Family Health Clinic within a Specialty Practice

Investigator(s): Alena Lester

Research Faculty/Advisor: Lorraine Gaddis

I wish you much success in your research.

Sincerely,

Thomas C. Richardson, Ph.D.
Interim Provost and Vice President for Academic Affairs

TCR/jh

pc: Tammie McCoy, Institutional Review Board Chairman
LETTER OF INFORMED CONSENT

To Managers and Stakeholders of Columbus Orthopaedic Clinic:

I am currently pursuing a Doctoral in Nursing practice degree at Mississippi University for Women in Columbus, Mississippi. As a doctoral nursing student, it is my goal to evaluate current practice policy and procedures and to offer practice change, based on evidence-based practice guidelines, which may influence patient or practice outcomes. At a recent company board meeting, initiation of an on-site employee-family health clinic was suggested due to an increase in employee absences due to illness and a recent rise in health insurance premiums.

I am requesting data regarding the number of employee absences due to illness quarterly, as well as, information regarding quarterly company insurance claims and premium payouts following initiation of the employee-health clinic. My goal is to analyze and evaluate the effects of our on-site employee-family health clinic on employee absenteeism and health care costs to determine if on-site access to care can significantly affect these concerns.

I am aware that I will need to maintain the confidentiality of all information collected from the medical records. I agree to undergo or consent to any HIPPA requirements set forth by your practice regarding patient privacy and confidentiality. The data collected will be recorded per a Data Collection Worksheet to be kept on a confidential electronic flash drive stored in a secure location, with access only to the researchers. At termination of the analysis, this information will be destroyed by incineration of the drive, per HIPPA guidelines. No clinic or patient identifiers will be used in the study.

The results of the analysis will be made available to you upon completion, and may have such beneficial use as decreased employee absenteeism, increased employee satisfaction and retention, and decreased insurance premiums for the practice.

If you have any questions concerning this implementation, please contact Alena Lester at 662-299-2985.

Sincerely,

Alena Lester, MSN, FNP-C

I have read the above letter of consent and agree to the utilization of this clinic for the above mentioned project. I understand that HIPPA regulations will be strictly followed and the confidentiality of each chart chosen will be maintained. I also understand that the results of the study will be made available to me at the analysis end.

[Signature]

Name, Title

Date 1/29/15