Walden Dissertations and Doctoral Studies

Walden Dissertations and Doctoral Studies Collection

2017

# Evidence-Based Practice Project Proposal: Reducing CHFRR Through the Get Well Networks CHF Prevention Education Materials

Susan Kay Richmond
*Walden University*

Follow this and additional works at: https://scholarworks.waldenu.edu/dissertations

Part of the Nursing Commons

# Walden University

College of Health Sciences

This is to certify that the doctoral study by

Susan Richmond

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

Review Committee
Dr. Oscar Lee, Committee Chairperson, Health Services Faculty
Dr. Dorothy Hawthorne-Burdine, Committee Member, Health Services Faculty
Dr. Diane Whitehead, University Reviewer, Health Services Faculty

Chief Academic Officer
Eric Riedel, Ph.D.

Walden University
2016

Abstract

Evidence-Based Practice Project Proposal: Reducing CHFRR Through the Get Well

Networks CHF Prevention Education Materials

by

Susan Richmond


MSN, Walden, 2008


Project Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice


Walden University

November 2016

Abstract

In the United States, congestive heart failure (CHF) impacts 6.5 million adults and costs about $39 billion year with a projected incidence increasing by 25% by 2030. CHF can be addressed by advancing patient self-care knowledge through interactive patient education. For this project, the Health Beliefs Model guided a strategy to stimulate behavior modification based on perceived benefits of self-care. The purpose of this quality improvement project was to implement an interactive patient education video system, called the Get Well Network, to encourage patient self-care to reduce CHF readmission rates at a veteran's administration hospital. Four evidence-based CHF video order sets were developed with interactive multidisciplinary patient-provider teach back strategies and questions. The topics included: medication adherence, dietary restrictions, smoking cessation, and exercise.  During the period of project implementation, all veterans admitted with a diagnosis of CHF were given the opportunity to view the educational videos; the completed viewing rate increased from 3% to 30% during the initial 6 weeks.  An attempt was made to retrieve quarterly data on congestive heart failure patient readmission rates from the Veteran's Administration's computerized system.  However, recent changes in the ICD coding system have slowed the data gathering process and it continues to be ongoing. This project has the potential for positive social change by increasing veteran knowledge of self-care, thereby reducing the likelihood of CHF readmission.

Evidence-Based Practice Project: Reducing CHFRR Through the Use of the Get Well

Networks CHF Prevention Education Materials

by

Susan Richmond

MSN, Walden, 2008

Project Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

Walden University

November 2016

Dedication

I would like to dedicate this project to my brother, Howard Richmond. He taught me to reach for the stars and that I could accomplish anything if I worked hard enough. His interest in health care spurred mine. Through behavioral health modification strategies, he has successfully managed heart failure for a number of years and is the inspiration for this project.

Table of Contents

## List of Tables

## List of Figures

Section 1: Overview of the Evidence-Based Practice Project

According to the American Heart Association (AHA, 2014) in heart failure, the heart is unable to circulate an adequate supply of blood to the cells. The result is fatigue, shortness of breath and is often associated with excess fluid retention, though fluid redistribution is often at the root of the problem (Dunlap and Sobotka, 2013).

Congestive heart failure (HF) currently affects 6.5 million adults in the United States (Roger, et al., 2012) with a projected increase in incidence of 25% by 2030 (Heidenreich, 2011). CHF approximate cost is $39 billion annually in the US (Gerdes, et al., 2013). The 2009 data shows that the mean cost per CHF readmission was $13,000 with a 25.1 percent readmission rate (Rizzo, 2013). Rizzo (2011) goes on to add that this is equivalent to 118% the cost of an initial admission for CHF, which averaged $11,000 in 2009.

The purpose of this capstone project is to utilize evidence based clinical practice education toward the goal of decreasing congestive heart failure (CHF) readmission rates at Bay Pines VA Medical Center. Part one of this paper will include the project mission statement with an overview of the evidence-based scholarly project. This will include the complications associated with CHF, project goals and objectives. Part two will be a review of scholarly evidence. Part three will cover the approach and methods to be used in accomplishing the purpose and goal of this CHF readmission reduction project. The conclusion will cover a recap of project purpose and project outcomes to date.

**Preliminary Project Question.**

Project question: What is the relationship between the rise in incidence of CHF and lifestyle and can this relationship be altered through patient education?

**Overview of the Evidence-Based Scholarly Project**

*Mission Statement*

According to Zaccagnini & White (2011) a mission statement's purpose is to provide direction in a given project.  The mission statement for project is: The purpose of this project will be to decrease complications associated with CHF patient's through behavior modification education and improving and patient education programs toward the end goal of improving the CHF patient's quality of life, in addition to, decreasing the RSSR for CHF at Bay Pines Veterans Medical Center.

The intervention to be implemented will address the health problem of CHF and will be based in a quality improvement intiative. The risk factors of smoking, diet, sedentary lifestyle, cholesterol level, elevated blood pressure and weight are modifiable CHF risk factors. The fishbone diagram in Figure 1 represents the cause and effect of CHF readmissions. According to Kelly (2011) the head of the fish represents the problem and the causal categories are the bones. It is hoped that by teaching the benefit of healthy lifestyle and adhering to the prescribed medication regime and understanding when to contact their health care providers, better CHF symptom management can be obtained.

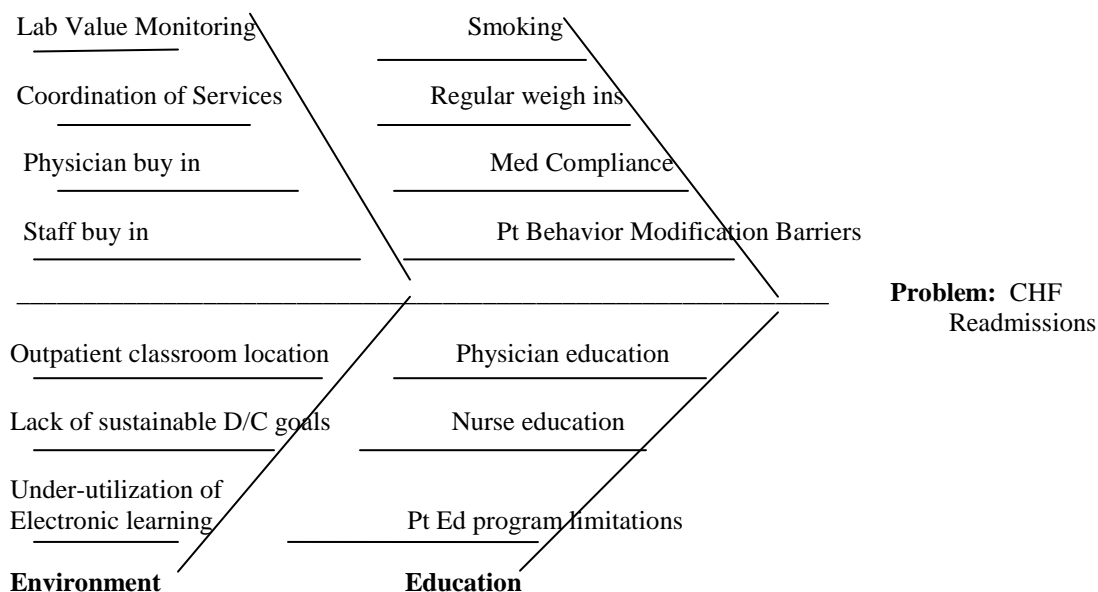**CHF program**                                    **Patients**

Lab Value Monitoring

Coordination of Services

Physician buy in

Staff buy in

Smoking

Regular weigh ins

Med Compliance

Pt Behavior Modification Barriers

**Problem:** CHF
Readmissions

Outpatient classroom location

Lack of sustainable D/C goals

Under-utilization of
Electronic learning

Physician education

Nurse education

Pt Ed program limitations

**Environment**

**Education**

*Figure 1. Fishbone diagram showing CHF cause and effect created by author.*

**Project Design and Methods**

The program design will be 2 pronged. One prong will be to gain nursing buy in; the

second prong will be to reduce CHF readmission rates. The objectives, approach and

retrospective data review plan are included in Table 1. The initial aim will be to gain

nursing buy in and support toward the goal of increasing the use of the Get Well Network

patient education video system. The project goal is through increased utilization of the

CHF patient education video, in conjunction with the inpatient programs currently in

place (cardiology team, CHF nurse and dietician) the intervention will impact CHF

readmission rates. The education will be delivered through the Get well Network, an

| **Objectives** | **Approach** | **Retrospective Data Review** *Pre & post data to be examined with the following questions in mind:* |
|---|---|---|

| | | |
|---|---|---|
| Track patients admitted with CHF over 6 month period. | Monitor patients admitted with CHF for a period of 6 months | When teaching patient's the value of CHF education videos, will viewer rate increase? |
| Increase Use of the Get Well Network. | Teach each Veteran how to use the electronic key pad | Can CHFRR be impacted through increase use of the Get Well Network CHF education videos? |
| Decrease CHF readmission rates. Provide education on how to manage symptoms of CHF to decrease CHF exacerbation. | Load CHF videos into the interactive viewers/educate each Veteran about the pertinence of this information in regard to their CHF diagnosis. | Can nursing utilization rates be increased through showing outcome improvements? |
| Increase nursing buy in of the Get Well Network. | Educate nurses on the importance of encouraging the patients to view the education videos and the use of the key pad. | Has nursing buy in been achieved? |

*Table 1. Objectives, Approach and Retrospective Data Review.*

interactive patient education program. The targeted intervention group will be the

inpatient CHF patient population at Bay Pines Medical Center. The timeline for the

program will run over six months with visits to the unit occurring two times per week

(See Figure 2).

The initial approach to nursing will be one to one. The union prohibits formal

surveys except in rare instances. Therefore, an informal semi-structured interview will be

conducted with each nurse. The tool used will be the following three questions have been

approved by the Chief Nurse of Education and will be asked of each nurse:

1. Do you see value in the Get Well Network?

2. What, if any, are the barriers to using the Get Well Network?

3. If shown the value of the Get Well Network, can you see yourself using the

   interactive patient education videos in patient education?

The reliability and validity of qualitative interviews can be preserved in so long as neutrality, consistency and truth value are maintained (Appleton, 1995). The author plans to memorize the questions so that consistency can be maintained in asking each question. The author will maintain a neutral stance when interviewing. Nursing responses will be taken at face value to maintain truth value. If a nurse chooses not to participate, it is her right to decline and this right to decline will be respected. If the nurse provides a no answer then further education will need to be developed for the CHF nursing staff to show the value of the Get Well Network.

Once this process has been completed, the cardiac rounding team plan to begin rounds and will encourage the use of the Get Well Network. The cardiac dietary team contacted this author and requested a meeting with herself and then the Section Head of Cardiology. Once the cardiac rounding team and cardiac dietician learned of the project details they showed great interest and readily agreed to participate in the project. The section chief felt that since CHF nurses on the cardiology units are members of the rounding team, they are ideal to load the patient education videos.

| Tasks | Collect Initial Data | Survey and Educate Nurses | Load Videos | Round on Nuses | Final Data Review |
|---|---|---|---|---|---|
| Date | 11/1/2015 | 12/01/15-1/2/2015 | 12 1, 2015-05 15, 2016 | 12/1/15-05/15/2016 | 05/15/2016-06/01/2015 |

*Figure 2. Timeline for project*

The plan will be to track patients admitted with CHF for a period of six months. According to Zaccagnini & White (2011) data can be analyzed in a number of ways, the data needs to be specific to the indicator. The data review will be of the Get Well Network use rates and the CHFRR. Data collection methods for CHFRR and Get Well Network use rates are already in place. This data will be compared with the same time period of the previous year. The video viewing rate will be tracked through the Get Well. The CHF readmission rates are tracked through the practicum site. Viewer rates will be tracked to observe for number of videos loaded and number of videos viewed. The CHF readmission rates will be compared with the same time period the previous year. It is

hoped that through providing education and strategies for managing exacerbation of CHF, that the CHF readmission rate will be reduced.

**Limitations**

The limitations of this project include the small sample size and the fact that this project relies upon nursing buy in and willingness of patient participation. As stated by Kelly (2011) when designing a project improvement team, consideration needs to be the knowledge required to understand the process and project design. She adds that the team should be designed so that it supports the goal of the group while circumventing limitations. Since this study will be conducted on an inpatient unit with a specific demographic, gaining buy in of, both, patient's and nursing staff is essential in overcoming this limitation.

**II. Section 2: Review of scholarly evidence**

In 2008 the Centers for Medicare & Medicaid Services (CMS, 2014) issued a letter to State Medicaid directors stating they would no longer reimburse the extra cost associated with certain hospital acquired infections. According to the Centers for Disease Control & Prevention (CMS, 2014) common medical errors account for in excess of $4.5 billion in preventable health care spending annually. The CMS now requires monitoring of CHF readmission rates within 30 days of discharge.

As stated by Lefevre (2014) cardiovascular risk factors are common in adults, these include: diabetes, obesity, hyperlipidemia and hypertension. The

U.S. Preventive Services Task Force (USPSTF) recommends that in order to improve CHF outcomes (LeFevre, 2014) smoking cessation, exercise and dietary behavior modification programs are required to aid the traditional healthcare approach. These programs should be inclusive of education and counseling programs for all adults diagnosed with or who present with risk factors associated with cardiovascular disease (LeFevre, 2014).

The Veteran's Administration (VA) has 153 hospitals. Therefore, the VA benchmarks against itself.  Nationally the VA sets their 30-day Risk Standardized Readmission Rate (RSRR) benchmark at the 10th percentile. For 2013 the rate was 18.792. At Bay Pines VA Hospital, the 2013 CHF RSSR was 19.478. In order to meet bench, the metric will need to improve by 0.686 percentile points.

*Literature Review*

A literature search revealed that behavior modification has been shown to be effective in reduction of CHF and associated symptomology. As stated by Nielson (as cited in Hines & Randall, 2010) the Institute for Healthcare Improvement developed a transition focused project that reduced HF 30-day readmission rates from 15% to 6% over a one year and one month period, July of 2006 through August 2007. This was accomplished through a comprehensive model redesign which included enhanced staff and patient education initiatives. (Nielsen et al., 2008). If the principles of this project were applied to a program at Bay Pines, since they were successful in attaining a 9% reduction over a one year

and one month period, it would be hoped that a 0.686 reduction could be achieved.

The Get Well Network is a comprehensive education program already a component of the Veteran's Health Administration (VHA) patient education program. The Get Well Network (GWN, 2015) delivers wellness programs to motivate patients toward adapting healthy lifestyle changes to inpatients in hospitals across the U.S. At the author's practicum site, policies are in place for its use, though due to a lack of nursing buy in, at Bay Pines, the use rate is one of the lowest in the region of VISN 8. Less than 25% of the nurses use this learning tool. Hopefully, through showing the nurses how this tool can benefit patient outcomes, the author would be able to gain buy in and see a rise in use. The VHA collects data locally, as well as, at the national level, so processes are already in place for the collection of the Get Well Network data.

<div align="center">Theoretical/Conceptual Frameworks</div>

***Dorothy Orem's Self Care Theory***

Dorothy Orem viewed nursing as a human health service. Her Self-Care Deficit Theory has its roots in the fundamental idea that certain factors need to be met for optimal health is to occur in an individual. Orem's theory stresses the need for nurses to provide the activities of daily living a patient may not be able to accomplish on their own by assessing and accommodating patient self-care deficits. She goes further to state that not only is it nursling's responsibility to provide these needs, but to teach the family to provide care as well.

Orem's theory, based in three concepts: self-care, self-care deficit, and nursing systems. "The power of nurses to design and produce nursing care for others is the critical power that is operative in nursing. This human power with its constituent capabilities and disposition is named "nursing agency". (Parker, p 143.) Improving self-care is at the root of this projects purpose making Dorothy Orem's theory appropriate for this project.

### *Health Belief Model (HBM)*

A well founded theory that would seem appropriate to address this problem is Health Belief Model (HBM). As stated by Croyle (cited by Nursing Theories, 2013) the HBM is a suitable model to address behavioral problems which create health concerns. The HBM is relevant to this project because heart failure is the end result of all diseases affecting the heart. Causative factors include smoking, alcoholism, obesity, cholesterol level, and a sedentary life style are lifestyle choices which are behavioral in nature. These lifestyle choices create the circumstance which makes the HBM appropriate for this project.

This model proposes that the likelihood of a behavior modification is based upon the individual's perception of the benefit of making the change (Kettner, Moroney & Martin, 2008). In the HBM model the person's perception of "the severity of a potential illness, the person's susceptibility to that illness, the benefits of taking a preventive action, and the barriers to taking that action" (Nursing Theories, 2013) are what determines an individual's health associated actions.

The recommended strategies are: conducting a health risk appraisal to determine who is at risk, communicating the risk of associated unhealthy behaviors, communicating recommended actions to nullify or diminish risk and clarifying benefits, aid in identifying barriers and ways to decrease barrier influence and provide incentives and, reducing anxiety, demonstration of new skills, role modeling and reinforce benefits of improved self-efficacy (Nursing Theories, 2013). The diagnosis of CHF identifies the risk, the Get Well Network education videos are designed to communicate the risk and clarify the benefit.

The Health Belief Model (HBM) has been widely used in the field of nursing. According to Baghianimoghadam (2013) the HBM "is one of the most widely used models in public health theoretical framework" (p. 52) and is used by nurses worldwide.  A pertinent example would the heart failure (HF) study conducted in Iran of patient's self-reported perception of heart disease. This study was conducted to gain a better understanding of the patient's attitudes, behaviors and educational needs of the HF population (Baghianimoghadam et al., 2013). These authors went on to add that the HBM can be utilized to develop effective intervention strategies and has the potential to be used to develop educational for programs for individuals and communities (Baghianimoghadam et al., 2013). Since this model has been used successfully in the past for heart failure education programs, it should be a good choice for this project as well.

*Formulation of Evidence-Based Practices and Action Plan*

The diagnostic model that will be used to determine the primary cause of CHF readmission and possible ways to reduce them is the Root Cause Analysis (RCA). As stated by Wald and Shojania (cited by Nicolini et al., 2011) RCA is a retrospective structured investigative process for examining events. It can also be utilized to understand why a process is not working the way it should. The steps, as stated by Amo (cited by Nicolini et al., 2011) include: identifying the incident, team organization, study of the work process, fact collecting, analysis of data and search for causative factors, corrective action and evaluation of action outcomes.

Data can be used to determine trends, develop procedures to improve quality and set standards. "Evidence ultimately must be used to create evidence-based practice protocols based on best care as defined by those care processes that routinely produce safe, effective care, and are validated in real-world settings" (Asher et, al., 2014, p. 137). According to (Nicolini et al., 2011) collecting data, is a time-consuming, labor intensive process, care must be given to this process to ensure the accuracy. An efficient way to organize data is through charts and graphs. The fishbone diagram in Figure 1 represents the cause and effect of CHF readmissions. According to Kelly (2011) the head of the fish represents the problem and the causal categories are the bones.

An understanding of data analysis and the power of literature review is essential when conducting an RCA. Review of literature and data analysis will provide a baseline and direction to find the tools we need to improve best practices. This knowledge will aid

in understanding underlying causative factors. This understanding can facilitate change and improve the management of chronic disease.

The U.S. Preventive Services Task Force (USPSTF) reviewed 74 CVD behavioral health intervention trials of preventive services designed to aid patients in engaging patient in healthy behaviors while limiting unhealthy behaviors. The behavioral health education/counseling focused upon combined approaches to healthier lifestyle development. The USPSTF study found that a substantial number of participants were obese or overweight and that these interventions proved beneficial.

The evidentiary review showed that in adults with cardiovascular risk factors the interventions made small but important changes in health behavior outcomes. The USPSTF report, according to by Lefevre (2014) showed that cholesterol levels were reduced by approximately 0.08 to 0.16 mmol/liter and low density lipid levels were reduced from 1.5 to 5 mg/dL. Blood pressures decreased by 1 to 3 mm Hg and 1 to 2 mm Hg, systolic and diastolic, respectively (Lefevre, 2014). Diabetes incidence decreased by as much as 42% in trials reporting outcomes after 3 years (Lefevre, 2014). Weight decreased by an amount equal to a BMI reduction 3 kg" (Lefevre, 2014). Of the 74 trials only 6 reported adverse events and these were minor. Additional qualitative information which would aid in the project is a review of current process of the work process, policies, and current patient and staff education.

In reviewing the fishbone diagram (Figure 1.) and the data presented above, it becomes clearer that the focus of the project should be two pronged. One prong or sub-group should concentrate on behavior modification education and the other prong or sub-

group will focus upon staff and patient education. In reviewing the literature above, targeted patient education areas should include: Smoking Cessation, Nutritional Management, Lipid-lowering Drug Therapy and Exercise Training.

**III. Section 3: Approach/methods to accomplish purpose and meet goals of the project**

The project goal will be to reduce CHFRR through use of the Get Well Networks CHF prevention education materials. The process/approach will be:

1. Cardiac rounding team will see patients admitted with a CHF diagnosis for a period of 6 months,

2. Rounding will occur Monday-Friday.

3. Cardiac dietary staff will ensure that each Veteran understands how to use the electronic key pad.

4. CHF nursing staff will load the CHF videos into the interactive viewers and educate each Veteran about the pertinence of this information in regard to their CHF diagnosis; with cardiac rounding team reinforcement Monday-Friday.

5. Data review and analysis.

6. Post data review and follow up with nurses. Topic will be program outcomes and the importance of continuing to encouraging the patients to view the education videos and the use of the key pad.

The work will be accomplished by an interdisciplinary team. The cardiologist has agreed to encourage the nurse to load the patient education videos during the

cardiac team patient rounds. The cardiac dietician has agreed to teach the patients how to use the soft key pad. These rounds will be conducted Monday-Friday.

The data review will be of the Get Well Network use rates and the CHFRR. This data will be compared with the same time period of the previous year. Data collection methods for CHFRR and Get Well Network use rates is already in place. Pre and post data will be examined with the following questions in mind:

1. With patient education on the value of the education videos, will viewer rate increase?

2. Can CHFRR be impacted through increase use of the Get Well Network CHF education videos?

3. Can nursing utilization rates be increased through showing outcome improvements?

**Approach/Methods**

Preliminary Project Question or Hypothesis.

My Project question: What is the relationship between the rise in incidence of CHF and lifestyle and can this relationship be altered through patient education aimed toward behavior modification in the CHF population?

*Project Method*

The study design the author plans to use to address the health problem of CHF is a quality improvement initiative with retrospective data analysis. A quality improvement project utilizes current evidence-based knowledge and best patient practices which apply to a given patient population to address

opportunities to improve outcomes or deficiencies (Stausmire & Ulrich, 2015).

Since it is the author's intent to examine the relationship between patient

education aimed toward adopting healthy behaviors and the effect on CHF

readmissions in a limited practice environment through the use of an existing

process, the quality improvement project design is a good fit for this project.

The tenets and assumptions that support the use of this design is the

limitation of a single inpatient environment (the project site) and the short term

duration of the project necessitating inclusion of all patients admitted with CHF

so that an adequate number of project subjects may be obtained. Since, the initial

plan will be that during the 5 month project period, all inpatient Veterans with,

either, a primary or secondary diagnosis of CHF will be offered the opportunity to

watch the Get Well Network CHF education videos. Therefore, regardless of

participation status, all Veterans will be offered the opportunity to participate in

the Wellness Network education videos.  Written educational materials regarding

the adoption of healthy behaviors will be offered to study participants for home

use will be provided the CHF nurse educator and discharge pharmacist. The

participants will then be followed outpatient for a period of six months.

According to Friis & Sellars (2014) factors that can contribute to error include

poor precision, sampling error, variability in measurement and systematic errors.

Since this is a targeted study of all participants who enter the hospital,

randomization will not be a factor, though their voluntary status is recognized as a

potential for bias. Another potential for bias in this study will be due the

limitation of it begin offered only to those ill enough to be hospitalized. Though,
these variables have the potential to introduce bias into the study, it is hoped
through precise interpretation of the data collected that the error potential will be
reduced. Confounding variables that will be reviewed are extraneous factors
which can affect the participant's ability to adopt healthy behaviors and their
willingness to participate in the study.

This project will include a retrospective review of data. Since it is the
author's intent to examine the variable between increased use of the inpatient
learning videos, patient outcomes and the impact on gaining nurse buy in this
method would seem appropriate.

**Stakeholder Involvement in Developing Mission Statement, Goals, and Objectives**

It is important to have representatives from the target population when developing
program objectives and goals because these stakeholders possess culturally sensitive
knowledge which may be crucial to the success of the program. According to Hodges &
Videto (2011) stake holder's input regarding existing health problems, health concerns
and quality of life can provide valuable insight when determining the goals and
objectives for a program. Through involving the target population in the development of
goals and objectives, the cultural needs and health concerns of a given population can be
more easily met.

One way to involve target population in program design is through providing the
fundamental training necessary so that a basic understanding of the program design

theory chosen for the project can be achieved. The AHA's Essential Elements of Project guide their projects. One project principle they adhere to is: "ensure that all stakeholders are involved, as appropriate, in project activities" AHA (2015).

Target population members are subject knowledge expert that can provide invaluable advice regarding the culture. According to Donna Shambley-Ebron (Laureate, 2011) two types of knowledge are important in program planning: expert of knowledge and the holder of the local knowledge. As first hand holders of knowledge, the holder of local knowledge can aide in the identification of barriers, strengths and opportunities.

Strategies to navigate a lack of interest or disagreements include a good understanding of team/group team dynamics and team building skills include developing a leadership style which engages the growth a change environment. A transformational leader can help to gain buy in because it they foster a positive growth environment through the enculturation of trust and inspired vision (Schwartz et al., 2011). This is accomplished through personalized team member recognition and empowering team members to challenge the status quo.  Challenging the team members to embrace and engage change can help to dispel a lack of interest. Lewin's Theory of Planned Change can be used to gain buy in. According to Zaccagnini & White (2011) the DNP prepared nurse leader will be able to integrate concepts of change theory with leadership theory.

**Plan to Gain Nursing Buy In**

A transformational leader can help to gain buy in because it they foster a positive growth environment through the enculturation of trust and inspired vision (Schwartz et al., 2011). This is accomplished through personalized staff recognition and empowering staff to challenge the status quo.

An understanding of team dynamics and management of systems is essential to gaining buy in. Additionally, by instilling a vision into staff so they understand why the change is necessary aids in gaining buy in (Mitchell, 2013). The leaders of this project will need to have insight into potential problems that will arise so that they may forestall them before they start. Potential problems that could arise include allocation of resources, scheduling conflicts, staffing challenges and a lack of educational resource tools. These types of problems can deter buy in and hamper the group process.

As stated by Cecelia Wooden (Laureate, 2011) the effective manager will have a good understanding the stages of team development, which are forming, storming, performing. She adds that the successful team leader will know what the goals are of the group and have a timeline in mind prior to arriving at the first meeting. This will aid in giving the team a vision of what is to be accomplished and enable them to seed into the end result.

According to Zaccagnini & White (2011) the DNP prepared nurse leader will be able to integrate concepts of change theory with leadership theory. Giving the team a sense of how this project can improve patient outcomes will help keep team members vested. Helping the team members to see the value in the project will encourage members to become actively involved. As the caregivers will be the end users, including them into

the planning process will not only provide valuable input, it gives a sense of ownership

toward the end goal. Involvement of direct the care nurse is an effective way to gain buy

in (Smith, Laureate, 2011) as this process gives direct care staff a sense that it was their

project and their design. That is how incorporating the nurses into the change, vests, both,

them and their work into the project and engages buy in.

Lewin's Theory of Planned Change can be used to gain buy in. This model can

aid in achieving meaningful and successful organizational change through the stages of

unfreezing, moving, and refreezing.  The unfreezing phase, could be utilized to gain an

understanding of the current process, how it works and to provide education to the nurses

about why change is necessary. As stated by Radtke (2013) a good way to engage nurses

in the change process is though showing how the change in practice can improve patient

outcomes.

In the moving or transitional stage, change agents (Shirey, 2013) look at change

as a process with the understanding that a component of transitioning is the stance or

inner motivation that individuals take in reaction to a proposed change. As stated by

Shirey (2013) during this stage a detailed plan of action will be developed and as the staff

may be plagued with uncertainty, they will require mentoring and coaching to help them

to keep on track and not lose sight of the goal. Showing the nurses how to this change can

improve outcomes in their patient population, will encourage them to try out the proposed

change.

According to Shirey (2013) the refreezing stage requires incorporating the change

so that it becomes entrenched into existing systems, policies and the organizational

culture. She adds that the refreezing stage is crucial as this phase locks in the process over time. After about 5 or 6 weeks people have a tendency to revert to old ways of doing things so during the refreezing, reinforcement and any additional education will help lock in the new process.

As with changing any ingrained pattern, resistance is natural. There are ways to effectively manage through resistance. During the needs assessment, opposing and motivating factors can be identified. As stated by (Zaccagnini, & White, 2011) while there will always be driving and resistive factors, Lewin's change theory of unfreezing, moving, and refreezing can be used to unfreeze an opposing situation and aid in implementing change.

*Systematic Evaluation*

It is essential to quantify and evaluate any scientific intervention (Friis & Sellars, 2014). To accomplish this a systematic evaluation must be conducted. The primary purpose of the evaluation will be to examine if there is a causal effect between the intervention and outcome. The outcome data must be measured and then evaluated with scientific methodology. As stated by Friis & Sellars (2014) the Four Stages of Evaluation are Formative Evaluation, Process Evaluation, Impact Evaluation and Outcome Evaluation.

The Formative Evaluation begins as soon as the program idea is conceived (Friis & Sellars, 2014). An element of the Formative Evaluation is to determine project feasibility (Tudor-Locke et al., 2002). In this project, it was hypothesized that the

intervention of the Get Well Network as an education tool could lead to the adoption of

healthy behaviors (smoking cessation, adoption of healthy eating habits, and developing

an exercise program) which in turn could lead to lower CHF readmission rates in the

T2D. The use of increased physical activity levels and manipulation of dietary intake has

been shown to be effective in reducing CHF risk factors (Thomas et al., 2010). Since

previous project has shown behavior modification education as beneficial, this project

should meet the qualifier of feasibility.

As stated by Friis & Sellars (2014) the Process Evaluation is used to determine if

the program will serve the target population as intended; this evaluation process should

go into effect as soon as the program begins. This purpose of this project is to aid in the

reduction of the CHF readmissions and to improve usage rates of the Wellness Network

in the inpatient population. This Process Evaluation plan will include an assessment of

whether the number of the target population being served is as expected (Friis & Sellars,

2014). In this instance the target population is the CHF inpatient population.

The Impact Evaluation measures the change in knowledge, attitudes, beliefs and

behaviors of the target population. A similar project to the one proposed was conducted

in Thailand. This group conducted a quasi-experimental study of 30 elders with

uncontrolled T2D against a control group (Ounnapiruk et al., 2014). They examined

effectiveness of educational empowerment, and the topics of diet and exercise education

on blood sugar levels. The program ran for 12 weeks. While fasting blood sugars did not

improve significantly, the education initiative had improved the patient's knowledge of

diabetes, as well as, their perceived self-efficacy and adherence to a proper diet and medication regime than the control group (Ounnapiruk et al., 2014). It is hoped that this project will perform at the same level or better.

Another function of the Impact Evaluation includes collecting baseline data (Friis & Sellars, 2014). This data collection will help to inform the project developers about whether or not they are making progress toward their goals (Friis & Sellars, 2014). The nurse's pre and post surveys and the CHF readmission rates will aid in determining the program's impact on the target population.

The Outcome Evaluation process includes data review at selected intervals (Friis & Sellars, 2014) and will be two pronged. One arm will be the evaluation of the nursing staff and whether or not there was increased use of the Get Well Network. The second arm will examine the CHF readmission rates to determine if the educational intervention may have had impact. The goal of the Outcome Evaluation is to see how well the program met its goals (Friis & Sellars, 2014). It is hoped at program completion, the program goals will have been met.

**Human Subjects Protection**

The study has been approved by the Institutional Review Board Project and Development (R&D) Service at Bay Pines VA Healthcare System.

**Study Timeline and Plan for Data Analysis**

**January 2015-June 2016**

During this time period patients admitted with CHF will be education on how to use the Get Well Network's soft key pad. The CHF education videos will be loaded into the viewers. Data will be tracked to compare the number of videos loaded with the number of videos viewed. The number of CHF readmissions will be tracked each month as well.

**May-June 2015**

Data analysis will be conducted and completed. A report of the project findings will be written at the projects conclusion. Once written, upon receipt of approval from the project site,  final paper which outlines the project, overall goals and outcomes will be submitted for publication in a peer reviewed nursing journal.

**IV. Section Four: Discussion and Implications**

**Summary and evaluation of findings**

I am in the implementation phase of my project, which is the DO step of the PDCA cycle. The CHF readmission rate is 20.481 for the fourth quarter of 2015 (VA SAIL Report, 2016). I will need to wait until the 2016 1$^{st}$ quarter reports come out to compare the CHF readmission rate pre and post intervention. The ICD codes changed from ICD 9 to ICD 10 (CMS, 2016). ICD 9 had 7 diagnostic categories for CHF and ICD 10 has 13. The ICD 10 coding at my practicum site is still being built by the data warehouse information technology staff. Completion is not expected for at least 3 months. The initial completion rate for viewing of the GWN patient education videos was 3%. The first month of the project showed an increase to 26% of videos viewed.

**Implications (for practice/action, for future research, for social change)**

The initial findings suggest that there has been an increase in the completed patient education videos viewed of 26%. It will be interesting to watch this trend over the next 2 months. At the completion of the project, the CHF Readmission Rate will be examined to see if they have decreased. If so, it may be possible to show an association between the viewing rates and the current CHF rate.

Future implications for this project if shown to be successful include an expansion of this project to other diagnostic groups within the practicum site. A change in process utilizing emerging technologies, according to Dunlap and Sobotka (2013) could improve follow up care through an enhanced staff and patient education process. Additionally, if these outcomes are sustainable, it is possible to expand this project to other VA hospitals.

**Strengths**

Since this project is being conducted on a single inpatient diagnostic group, patients admitted with CHF, this adds strength to the choice of the PDCA design. An additional strength of this project includes the use of an interdisciplinary team. Through collaborative brainstorming, additional benefits are gained through an interdisciplinary team that might not otherwise be attained through a single discipline (Zaccagnini & White, 2011). The interdisciplinary team greatly assisted in the development of this project.

Strength of the project includes the chosen data collection method. The data collection systems for the interactive patient education videos and the CHF readmission rates are already in place. Therefore, data points exist which can be used to compare outcomes from the year previous. I am using aggregate data to compare an increase in Get Well Network Use Rates against CHF Readmission Rates. Aggregate data is information that is compiled into percentages or rates and is tracked over time often to compare benchmarks (Ryan & Thompson, 2002). The CHF Readmission Rates are already being collected by the VA for distribution at the national level. Additionally, the pre-tested reliability of the interactive patient education videos adds rigor as well.

The patient education documentation template which was built for the electronic medical record makes it easier for the nurses to document the patient education. Ease of use increases nursing engagement which adds to the strength of the project design.

**Limitations**

The limitations include a relatively small sample size when compared with the number of individuals with CHF. Heart failure (HF) currently affects (Roger, et al., 2012) 6.5 million adults in the United States. However, minor projects can lead to larger initiatives if they prove to be effective. Another limitation includes the limitation of a single inpatient environment (the research site) and the short term duration of the project necessitating inclusion of all patients admitted with CHF so that an adequate number of research subjects may be obtained.

Additionally, the project success is dependent upon behaviors of the CHF patient. As stated by Dr. Kristen Mauk people have to be willing to change or to listen to what you've discovered" (Laureate, 2012). In order for the project to be successful, the patient must engage in medication and symptom management as well as elimination of unhealthy behaviors.

The project is being conducted within the VA systems which provide Veterans with a comprehensive health care system. This limits the ability to duplicate the project in the private sector. Duplication of results is an important aspect of any project.

**Opportunity for improvement**

An opportunity for improvement for future a project includes further investigation of data collection methods. If I had looked into the ICD coding prior to project initiation, I might have started the project earlier or postponed the implementation date so that I would have congruent data. Another opportunity for improvement is the limitation of being a student. As such, I am not always available to meet with the team, the team members as cardiology staff members are able to make decisions and make changes to the project without my input. If I were a full-time staff member of the hospital, it could make the communication process easier and I might have more influence as the project leader.

**Analysis of self**

Self-analysis is a necessary task to undertake if growth is to occur. A key component of self-analysis is an assessment of strengths and weaknesses

(Roberts, 2014). As a DNP student, I feel that I have experienced a great deal of growth. Not only from the practicum project, but through the opportunities offered in the practicum experience. I have gained expertise in critiquing articles for their scholarly value and am now the facilitator for the Nursing Journal Club and the secretary for the Nursing Research Committee. I work with other nurses to critique articles for presentation and assist them with honing their presentation skills.

My expertise as a project developer has grown through this experience secondary to the learning opportunity afforded me though the insights offered through an interdisciplinary team and the opportunity to work with the Chief Nurse of Research and the Chief Nurse of Education. Overcoming barriers and moving through the IRB process has afforded a great learning experience. When one encounters delays and barriers that need to be worked through, a greater learning opportunity can become available than if the project went smoothly from start to finish.

**Professional**

One component of professional growth where I have observed growth is through the development of an interdisciplinary team. As stated by Zaccagnini and White (2012) gaining an ability to appreciate the similar and dissimilar perspectives of other interprofessional team members is necessary function of the professional nurse. Through working with an interdisciplinary team with members

from different areas of the world has allowed me to gain a greater understanding of the value that a differing perspective can add to the team.

Another area of professional growth has been in the area of systems management. According to Roberts (2014) systems thinking is a leadership expectation of the nurse executive. Through the learning opportunities afforded me through this program, I feel more confident in systems management.

**Summary and Conclusion**

As previously stated the Bay Pines VA, the 2013 CMS 30-day Risk Standardized Readmission Rate (RSRR) was 19.478 (VHHC, 2015). The 2015 fourth quarter showed it to be 20.481. The VA national benchmark is set at the 10th percentile (17.792).  The mission of this project will be to decrease the RSSR for CHF to the national benchmark toward the aim of improving quality of life for CHF patients. The outcome of this project is yet to be seen, however, I am hopeful that we can establish a positive association between the CHF readmission rate and an increase of viewer rates. As stated by Beth Houser (Canter, 2001) to be effective, nursing leaders  must be "agents of change". Hopefully, this change initiative will be accomplished through a nursing and patient education project which will be focused upon a patient education initiative to enhance and promote healthy behaviors.

**V Section Five: Scholarly Product for Dissemination**

The scholarly product for dissemination includes a PowerPoint Presentation for dissemination of project to staff (see Figure 1) , a poster

presentation for Nurse's Day 2016 (see Figure 2) and a manuscript for publication

(see Figure 3). Secondary to the change in the ICD 9 codes to ICD 10, there will

be a delay in obtaining the CHFRR data. This data will be added to the

manuscript prior to submission for publication consideration.

References

American Heart Association (2014) Affordable Care Act: Providing

    Patients with No-Cost Preventative Services. Retrieved from

    http://www.heart.org/HEARTORG/Advocate/Affordable-Care-Act-Providing-

    Patients-with-No-Cost-Preventative Services_UCM_460978_Article.jsp

American Heart Association (2014) About heart failure. Retrieved from

    http://www.heart.org/HEARTORG/Conditions/HeartFailure/AboutHeartFailure/

    About-Heart-Failure_UCM_002044_Article.jsp

Appleton, J. (1995). Analyzing qualitative interview data: addressing issues of validity

    and reliability. Journal of Advanced Nursing, 22(5), 993-997 5p.

    doi:10.1111/j.1365-2648.1995.tb02653.x

Asher, A. L., Devin, C. J., Mroz, T., Fehlings, M., Parker, S. L., & McGirt, M. J. (2014).

    Clinical registries and evidence-based care pathways: raising the bar for

    meaningful measurement and delivery of value-based care. *Spine,* 39(22), S136-8.

    doi:10.1097/BRS.0000000000000543

Baghianimoghadam, M. H., Shogafard, G., Sanati, H. R., Baghianimoghadam, B.,

    Mazloomy, S. S., & Askarshahi, M. (2013). Application of the health belief

    model in promotion of self-care in heart failure patients. Acta Medica Iranica,

    51(1), 52-58.

Burns, N., & Grove, S. K. (2009). The practice of nursing research: Appraisal, synthesis,

    and generation of evidence (6th ed.). St. Louis, MO: Saunders Elsevier.

Butler, J., & Kalogeropoulos, A. (2012). Hospital strategies to reduce heart failure

    readmissions: where is the evidence? *Journal Of The American College Of*

    *Cardiology (JACC)*, *60*(7), 615-617. doi:10.1016/j.jacc.2012.03.066

Canter & Associates. (Executive Producer). (2001). Dr. Beth Houser (video recording).

    Available from Canter and Associates, 12975 Coral Tree Place, Los Angeles, CA

    90066-7020.

Centers for Medicare & Medicaid Services. (2014). Efforts to improve patient safety

    result in 1.3 million fewer patient harms, 50,000 lives saved and $12 billion in

    health spending avoided. Retrieved from

    http://www.hhs.gov/news/press/2014pres/12/20141202a.html

CMS (2016). CMS Releases ICD-10 Assessment and Maintenance Toolkit. Centers for

    Medicaid and Medicare Service. Retrieved from

    https://www.cms.gov/medicare/Coding/ICD10/index.html

Dunlap, M. E., & Sobotka, P. A. (2013). Fluid re-distribution rather than accumulation

    causes most cases of decompensated heart failure... J Am Coll Cardiol. 2013 Jan

    29;61(4):391-403. *Journal of the American College of Cardiology (JACC)*, *62*(2),

    165-166. doi:10.1016/j.jacc.2013.02.081

Friis, R. H., & Sellers, T. A. (2014). Epidemiology for public health practice (5th ed.).

    Sudbury, MA: Jones & Bartlett.

Gerdes, P., & Lorenz, R. (2013). The Effect of an Outpatient Interdisciplinary Heart

    Failure Education Program. *Journal for Nurse Practitioners*, *9*(7), 422-427.

    doi:10.1016/j.nurpra.2013.04.005

Heidenreich P.A., Trogdon J.G., Khavjou O.A., Forecasting the future of

    cardiovascular disease in the United States: a policy statement from the

    American Heart Association. *Circulation*. 2011;123:933-944.

    CrossRef | PubMed

Hines, P., Yu, K., & Randall, M. (2010). Preventing heart failure readmissions: is your

    organization prepared?. *Nursing Economic$*, *28*(2), 74-86.

Heuston, M. M., & Wolf, G. A. (2011). Leadership Development. Transformational

    Leadership Skills of Successful Nurse Managers. *Journal of Nursing*

    *Administration*, 41(6), 248-251. doi:10.1097/NNA.0b013e31821c4620

Kelly, D. L. (2011). *Applying quality management in healthcare: A systems*

    *approach* (3rd ed.). Chicago, IL: Health Administration Press.

Kettner, P. M., Moroney, R. M., & Martin, L. L. (2008). Designing and managing

    programs: An effectiveness-based approach (3rd ed.). Thousand Oaks, CA: Sage.

    Laureate Education, Inc. (Executive Producer). (2011). Organizational and

    systems leadership for quality improvement: Groups and teams. Baltimore:

    Author.

Laureate Education, Inc. (Executive Producer). (2012d). Factors affecting

    implementation of an evidence-based practice project. Baltimore, MD: Author.

LeFevre, M. L. (2014). Behavioral counseling to promote a healthful diet and physical

    activity for cardiovascular disease prevention in adults with cardiovascular risk

    factors: U.S. preventive services task force recommendation statement. *Annals of*

    *Internal Medicine*, *161*(8), 587-593. doi:10.7326/M14-1796

Nicolini, D., Waring, J., & Mengis, J. (2011). Policy and practice in the use of root cause

   analysis to investigate clinical adverse events: Mind the gap. *Social Science &*

   *Medicine, 73*(2), 217–225. doi:10.1016/j.socscimed.2011.05.010

Nielsen G.A., Bartely, A., Coleman, E., Resar, R., Rutherford P., Souw D., Taylor J.

   (2008). *Transforming care at the bedside how-to guide: creating an ideal*

   *transition home for patients with heart failure*. Cambridge, MA: Institute for

   Healthcare Improvement. Retrieved from

   http://www.ihi.org/resources/Pages/Tools/TCABHowToGuideTransitionHomefor

   HF.aspx

Peter D., Robinson P., Jordan M., Lawrence S., Casey K., Salas-Lopez D. (2015).

   Reducing Readmissions Using Teach-Back: Enhancing Patient and Family

   Education. *Journal of Nursing Administration*, 45, 35-

   42.doi:10.1097/NNA.0000000000000155

Radtke, K. (2013). Improving patient satisfaction with nursing communication using

   bedside shift report. Clinical Nurse Specialist: *The Journal for Advanced Nursing*

   *Practice*, 27(1), 19-25. doi:10.1097/NUR.0b013e3182777011


   Raheja, D. (2013) Performance improvements in healthcare. *Mentor Health*

*Webinar.* Retrieved from http://www.prlog.org/12093929-performance-improvement-

methods-in-healthcare.html


Rizzo, E. (2013) Becker's Infection Control & Clinical Quality. 6 stats on the cost of

   readmission for cms-tracked conditions. Retrieved from

http://www.beckershospitalreview.com/quality/6-stats-on-the-cost-of-

readmission-for-cms-tracked-conditions.html

Roberts, Julia. 2014. "Landing the job: A guide to successful transition." Nursing

Management (Harrow, London, England: 1994) 21, no. 5: 18-21. MEDLINE with

Full Text, EBSCOhost (accessed March 27, 2016).

Roberts-Turner, R., Hinds, P. S., Nelson, J., Pryor, J., Robinson, N. C., & Wang, J.

(2014). Effects of leadership characteristics on pediatric registered nurses' job

satisfaction. *Pediatric Nursing, 40*(5), 236-242.

Roger V.L., Go A.S., Lloyd-Jones D.M., Heart disease and stroke

statistics-2012 update: a report from the American Heart Association.

Circulation. 2012;125:e2-e220.

Runy, L. (2007). Which performance improvement method is right for your

hospital? H&HN: Hospitals & Health Networks, 81(10), 49-56.


Ryan, S., & Thompson, C. (2002). The use of aggregate data for measuring practice

improvement. Seminars For Nurse Managers, 10(2), 90-94 5p.

Schwartz, D. B., Spencer, T., Wilson, B., & Wood, K. (2011). Transformational

leadership: implications for nursing leaders in facilities seeking magnet

designation. *AORN Journal*, *93*(6), 737-748.

doi:10.1016/j.aorn.2010.09.032Bernard, M. S., Hunter, K. F., & Moore, K. N.

(2012). A review of strategies to reduce the duration of indwelling urethral

catheters and potentially reduce the incidence of catheter-associated urinary tract

infections. *Urologic Nursing, 32*(1), 29-37.

Shirey, M. R. (2013). Strategic Leadership for Organizational Change. Lewin's Theory of

Planned Change as a Strategic Resource. *Journal of Nursing Administration*,

43(2), 69-72. doi:10.1097/NNA.0b013e31827f20a9

VHA (2011) 2010 Report to the Community. VISN 8. Veteran's Health Administration.

Retrieved from

http://www.visn8.va.gov/VISN8/news/annualreports/North_Florida.asp Wilson,

B. (2015).Root Cause Analysis, What is it? Retrieved on February 26, 2008 <u>from</u>

<u>http://www.bill-wilson.net/root-cause-analysis</u>

Veterans Health Administration. (2013). VHA Facility Quality and Safety Report Fiscal

Year 2012 Data. Retrieved from

<u>http://www.va.gov/HEALTH/docs/VHA_Quality_and_Safety_Report_2013.pdf#</u>

<u>page=14&zoom=auto,-39,202</u>

Zaccagnini, M. E., & White, K. W. (2011). *The doctor of nursing practice essentials: A*

*new model for advanced practice nursing.* Sudbury, MA: Jones & Bartlett

Publishers.

Appendix A:  Heart Failure PPT for Dissemination

Appendix B: CHFRR Poster for Dissemination

Appendix C: Bay Pines IRB Approval Letter

**DEPARTMENT OF VETERANS AFFAIRS**
Bay Pines VA Healthcare System
Post Office Box 5005
Bay Pines, Florida  33744

In Reply Refer To:
516/151

Sarah Richmond, RN
DNP-Evidence Based Practice Student
Nursing Service
511/118H

Dear Ms. Richmond:

Research and Development (R&D) Service reviewed your project *"Evidence-Based Practice Project: Reducing CHFRR through use of the Get Well Networks CHF prevention education materials"* on September 29, 2015, and has deemed it to be a Quality Assurance (QA) project that is exempt from IRB review. Please retain a copy of this letter for 5 years with your project documents as evidence of the review. Any changes to the project should be reported to the Research and Development Service *prior to implementation* to assure compliance with QA/QI activity regulations.

*Please note that this determination does not constitute approval; nor does it supersede or substitute for any departmental, facility, or other regulations pertaining to this project.*

Presentation or publication of findings from this project must be routed through the R&D Service and your supervisor for approval before submission to any entity outside of Bay Pines VA Healthcare System (BPVAHCS). Information about presentations and publications may be found in Bay Pines VAHCS MEMORANDUM 516-13-151-003 available on the SharePoint site.

If you have any further questions please contact Maisha Standifer at Maisha.Standifer@va.gov or by calling 727-398-6661 extension 14392.

Thank you for the opportunity to review your project.

Best Regards,

ALLISON E.
WILLIAMS 314734

Allison E. Williams, ND PhD RN
Associate Chief of Staff/Research