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Motivating and Engaging Pulmonary Rehabilitation Patients

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Running head: MOTIVATING PULMONARY REHABILITATION PATIENTS

Motivating and Engaging Pulmonary Rehabilitation Patients

By

Shelly May DuBois

A QUALITATIVE STUDY

Presented to Dr. Sharon Timberlake in Partial Fulfillment for the Degree of

Master's in Leadership Studies

Major: Master's in Leadership Studies

Class: LOS689 Master's Capstone II

Under the Supervision of Dr. Sharon Timberlake

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Dedication

I am dedicating my study to my mom who has COPD and was newly diagnosed in February 2019 with small cell metastatic lung cancer and given a year to live. As a respiratory therapist, I see what she goes through daily in my patients. Having seen my patients go through what she is going through gives me a greater understanding as to why she does the things she does. She hurries when she doesn't have to, leaving her with increased shortness of breath. She overuses her inhalers and cough syrups seeking relief from the symptoms of shortness of breath and coughing. She would benefit from pulmonary rehabilitation, but she seems to feel alone and isolates herself in her home due to the symptoms which embarrass her. I live as far from her as one could, me in Maine and her in California with little support, I am working on getting her closer in the next few months. With that in mind, it is even more important for me to be an advocate and support individuals who would benefit from pulmonary rehabilitation, helping them obtain a better quality of life. Today April 3, 2019, my mom's cancer has spread to her liver, her rib and back and she is in a lot of pain. I am working as fast as I can to get her here with my sister and me so she can endure her remaining time around family and not have to spend a day alone. My goal is to help her be comfortable and let her know she is loved! I Love my mom!

Acknowledgments

I thank my Lord and Savior Jesus Christ for making me who I am and giving me what it takes to get through my schooling. I thank him for my wonderful husband who supports all my efforts in life. He is my anchor and always has positive words of encouragement when I can't see the light at the end. I thank the rest of my family and friends as my schooling has left me having to choose over an easy and carefree fun-filled life of family activities over one that is more disciplined spending more time working on assignments than with my family and friends. I thank my co-workers for filling in for me when I had to put more significant amounts of time and effort into my studies. Lastly and not least I thank my professors and classmates for their support; as a team we kept each other lifted to success. With the help of all those mentioned, I could not have completed this work. Thank you all for your support!

Abstract

Lung disease compromises breathing and decreases quality of life for those who have it. The purpose of this qualitative study is to investigate innovative strategies used successfully by pulmonary rehabilitation leaders to keep patients motivated and engaged in completing pulmonary rehabilitation. An open-ended questionnaire asking participants questions pertaining to being a successful pulmonary rehabilitation. The results of this study may help pulmonary rehabilitation leaders to gain a better understanding of the full range of interventions taken by leaders to ensure patients complete pulmonary rehabilitation successfully. This study may help both pulmonary rehabilitation leaders as well as patients. It may help leaders learn better innovative strategies to keep patients engaged in pulmonary rehabilitation as well as motivated to complete rehabilitation. It is hoped that this study will help pulmonary rehabilitation leaders discover more innovative approaches to retain and motivate patients in the recovery process.

Keywords: pulmonary rehabilitation, quality of life, healthcare leaders, lung disease, breathing issues

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Chapter 1: Introduction

Although patient compliance is essential in disease management and quality of life, few studies have depicted ways that pulmonary rehabilitation leaders can help pulmonary rehabilitation patients stay engaged and motivated while completing pulmonary rehabilitation. While several studies have reflected on reasons that patients are noncompliant in pulmonary rehabilitation, they have offered few possible solutions to combat noncompliance. This study builds on the research of Sohanpal, Steed, Mars, and Taylor, 2015 and patient noncompliance, strategies that pulmonary rehabilitation leaders innovate to keep patients motivated and engaged to complete pulmonary rehabilitation.

The literature review that follows; shows various reasons why patients do not comply with treatments that aim to help manage their disease state leading to a better quality of life. Disease management can come in various forms such as taking medications, being physically active, and participating in an exercise routine as prescribed by a physician.

Pulmonary rehabilitation leaders trained in respiratory disease can help patients better comply with treatments. Pulmonary rehabilitation leaders are either doctors, registered or certified respiratory therapists or registered nurses who work with patients and design a care plan that is patient-specific and tailored to the individual. The leader helps keep individuals engaged and motivated through education and exercise to the completion of the pulmonary rehabilitation program. This study may help benefit pulmonary rehabilitation patients as the questions asked in the survey will explore

successful techniques utilized by leaders to keep patients engaged and motivated to the completion of pulmonary rehabilitation.

The following research reveals various reasons why patients are non-compliant and do not adhere proactively to treatment and disease management. Pulmonary rehabilitation leaders can support adherence to pulmonary rehabilitation practices by helping the patient overcome obstacles preventing them from completing the program.

Purpose

The purpose of this study is to investigate the various strategies pulmonary rehabilitation leaders can incorporate to keep patients motivated and engaged enough to complete their pulmonary rehabilitation program. This qualitative research focuses on innovative ways in which leaders in pulmonary rehabilitation successfully keep patients motivated while enhancing their performance and attaining their goal of completing pulmonary rehabilitation.

To gain a better understanding of the various ways that leaders keep patients motivated to complete pulmonary rehabilitation successfully, this researcher administered an open-ended questionnaire asking participants questions about successful pulmonary rehabilitation leadership. The results of this study may help both the pulmonary rehabilitation leaders as well as patients. It may help leaders discover innovative strategies to keep patients engaged in treatment and motivated to complete pulmonary rehabilitation.

Research Questions

The research conducted focused on the question: *how pulmonary rehabilitation leaders can help keep pulmonary rehabilitation patients motivated and engaged enough to complete pulmonary rehabilitation?*

In an attempt to answer the latter question, this researcher explored the question by asking the following questions:

1. As a leader in pulmonary rehabilitation, how do you help patients stay engaged enough to complete pulmonary rehab to its entirety?
2. How did you learn this method?
3. How do you measure its effectiveness?
4. Do you think that patient motivation and success can be enhanced through the pulmonary rehabilitation leader?
5. Why do you feel that patient motivation and success can be enhanced through support of the pulmonary rehabilitation leader?
6. If so, what results have led you to believe that patient motivation and success can be enhanced through the pulmonary rehabilitation leader?
7. What motivated you to design, develop and implement best practices for pulmonary rehabilitation?

Significance of the Study

Lung disease is any impairment in an individual's breathing that interferes with the normal function of the lungs. Patients with lung disease have difficulty breathing due to compromised lung function which can decrease an individual's quality of life. Patients

may be undereducated on their disease state, non-compliant to prescribed medication regimens, lack functional abilities required for daily living, and as a result, may socially withdraw and/or have a decreased quality of life. Pulmonary Rehabilitation can help an individual with lung disease by improving their quality of life. The success of improving the quality of life for a patient with lung disease is successful completion of pulmonary rehabilitation. Many patients are non-compliant in treatment, and this is where an investigation on how pulmonary rehabilitation leaders can help keep pulmonary rehabilitation patients motivated and engaged enough to complete pulmonary rehabilitation.

Chapter II: Literature Review

Introduction

Patient compliance with doctor orders for pulmonary rehabilitation is a topic of great importance in the recovery of affected patients. Pulmonary rehabilitation has become an important treatment modality for those with lung disease and is a non-pharmacological mode prescribed by a physician. Literature denotes the link between increased quality of life and pulmonary rehabilitation. Moore et al., (2016) writes that pulmonary rehab increases both the psychological as well as physical abilities of those with lung disease. And according to the research of Rochester et al., (2015) pulmonary rehabilitation helps to improve a patient's quality of life through education, breathing retraining, and exercise training.

Patient education is tailored to the disease and specific needs of the patient. Despite an expected increase in quality of life many patients who qualify for pulmonary rehabilitation either do not start or do not complete the program. The following studies discuss many reasons why patients do not comply with completion of pulmonary rehabilitation. Learning ways in which pulmonary rehabilitation leaders can help motivate patients to comply with pulmonary rehabilitation may enhance the patient's quality of life, may decrease hospital readmissions, and may cut medical costs.

What motivates one patient may not be a motivator for another; thus, it is important to determine an individual's motivation. To support the literature, responses to survey questions on ways in which leaders in pulmonary rehabilitation use to motivate individuals in pulmonary rehabilitation will be shared.

Definitions

The National Library of Medicine ([NLM], 2016), defines lung disease as being any disease that impairs normal lung function. Bethesda writes diseases that impair lung function include but are not limited to chronic obstructive pulmonary disease (COPD), asthma, interstitial lung disease (ILD), congestive heart failure (CHF), pneumonia, tuberculosis, and lung cancer.

The authors Rochester et al., (2015) provide a definition for pulmonary rehabilitation (PR) in an official American thoracic society/European respiratory society policy statement: Enhancing implementation, use, and delivery of pulmonary rehabilitation. The authors define PR as a comprehensive intervention. According to the authors, patients are assessed and based on the outcomes of the assessment an individual treatment plan is created. The individual treatment plans consist of education, exercise, and behavior change; adherence to the later helps improve quality of life (QOL) by improving the psychological and physical conditions of individuals with lung disease.

The American Lung Association (2019) defines those who teach pulmonary rehabilitation as a team which includes doctors, nurses, respiratory therapists, exercise physiologists, and dieticians. With the latter definition Leaders in Pulmonary Rehabilitation for purposes of this study will be defined as those individuals who are medically trained in respiratory and are either doctors, registered or certified respiratory therapists, exercise physiologist, or nurses.

Prevalence

There is a lot of literature regarding the benefits of pulmonary rehabilitation and patient noncompliance and reasons why PR patients don't successfully comply with the doctor's order and complete PR. Mulhall, Lachi, Krzywkowski-Mohn, Welge, and Panos, (2013) write that the management of COPD is costly and that treating the disease involves both prescribed medications and therapies such as pulmonary rehabilitation.

The authors Fischer et al., (2009) write that various studies have shown that noncompletion of PR by patients range from 20 – 70%. Mulhall et al., (2013) in the article Therapeutic paralysis in Veterans with COPD, state that reasons for noncompliance among veterans with COPD are due to patient perception. A systematic review of qualitative studies by Sohanpal et al., (2012) was conducted to discover what influences patient participation in PR. The authors found that patients attended PR as it helped improve their QOL. Patient chose not to attend due to perceived organizational barriers that interfered with their attendance. The authors noted that patients dropped out as they saw no progress or improvement in QOL.

Fischer et al., (2009) found that if pulmonary rehabilitation leaders focused on barriers and intervened with solutions that the latter barriers can be overcome thus improving COPD outcomes and QOL. With the later in mind, the focus is on how leaders can keep PR patients motivated to completing PR.

The literature is lacking regarding how pulmonary rehabilitation leaders can help pulmonary rehabilitation patients comply with physician prescribed treatments. To better understand why pulmonary rehabilitation patients, stay motivated and comply

successfully with prescribed treatment, this researcher took into consideration the reasons patients are noncompliant and unmotivated to prescribed treatment. In addition, pulmonary rehabilitation technicians were surveyed on strategies used to successfully motivate pulmonary rehabilitation patients to achieve success.

Pulmonary Rehabilitation Compliance Studies/ Related Research

Study 1

According to Mulhall et al., (2013) COPD is a common disease that affects QOL and leads to death and mortality. The authors write that the management of COPD is costly and that treating the disease involves both prescribed medications and therapies such as pulmonary rehabilitation. Mulhall et al., (2013) writes that pulmonary rehabilitation is a treatment that is tailored to the individual's needs and involves education, smoking cessation, and exercise. With the debilitating effects COPD has on individuals the authors conduct a study measuring veterans' perceptions of the disease and how it affects their health and quality of life.

To measure veterans' perceptions, Mulhall et al., (2013) mailed 1000 surveys to veterans with COPD. They received 493 completed surveys back, and of the four hundred ninety-three, 428 knew they had COPD, two hundred and nine veterans reported that their PCP was the best educator regarding their COPD and its treatment.

Three hundred eighty-two veterans expressed some sort of negative emotion due to their disease and its effects on their quality of life. Four hundred fifty veterans reported they had an inhaler prescribed to them. Four hundred one veterans stated they had education provided on how to use the inhaler while the others reported no education on

inhaler use and were unsure of how and when to use it or questioned on whether the inhaler was functioning correctly.

Study 2

The authors Moore et al., (2016), conduct a systematic review and meta-analysis of the effects of pulmonary rehabilitation on reducing the number of hospitalizations of individuals with COPD. The authors write that a sudden exacerbation of an individual's COPD significantly affects the use of the healthcare system and furthermore, studies have proven that participation in a pulmonary rehabilitation program reduces both unscheduled visits to the emergency room as well as hospitalizations.

Of the eighteen studies that the authors analytically reviewed, it was found that pulmonary rehabilitation reduces hospitalization. Pulmonary rehabilitation utilizes a multi-disciplinary team that helps educate the patient about their disease state and educates them on how, what, when, where and why of respiratory medications. An Individualized treatment plan (ITP) is developed and specifically tailored to the patient's needs. ITP's include exercise prescription, education, and behavioral changes. PR is intended to get the patient back to their highest functional capability improving both their physical and psychological well-being and promoting long term adherence to healthy behaviors. The study proved that pulmonary rehabilitation improves quality of life.

Study 3

The authors Fischer (2009) write that various studies have shown that noncompletion of PR by patients range from 20 – 70%. The authors go on to say that nonparticipation in PR decreases the benefits the patient may receive from attending.

According to the author's dropout and attendance may or may not be something the patient can control. The authors conduct a study to better understand why patients drop out or do not attend pulmonary rehabilitation. The authors also investigate whether patient perceptions of their current illnesses affect the probability of their attending pulmonary rehabilitation.

The authors selected patients with COPD who had been referred to the pulmonary rehabilitation program from November 2005 to 2007 for participation in the study. The patients who agreed to participate were sent a questionnaire to be completed and returned before they started pulmonary rehabilitation. Patients were also asked for written permission to access their medical records. The authors classified patients as non-completers if they missed functional post-rehabilitation tests or stopped attending before the program ended. Attendance was recorded from a comparison of the patient's scheduled appointment and the therapists work logs. Reasons for non-attendance were compiled from both the work logs and the patients' medical records.

Study participants were asked to complete a questionnaire that included questions related to their sociological and demographic characteristics, as well as a questionnaire that indicated how the patient perceived their illness before starting pulmonary rehabilitation. Three hundred thirty-one patients permitted the researchers to contact them. Of the three hundred thirty-one (331) patients two hundred sixty-three (263) patients agreed to participate in the study and therefore received a questionnaire. Nine of the two hundred sixty-three patients were disqualified as they had another diagnosis other than COPD, leaving two hundred fifty-four (254) participating patients. Of the two

hundred sixty-three (263) patients two hundred seventeen (217) returned their questionnaires.

The questionnaires revealed that more men than women completed the questionnaire, but no sociodemographic differences were noted. It was noted patients reported having a partner, being unemployed, and being an ex-smoker. Of the two hundred fifty-four patients who started pulmonary rehabilitation only one hundred sixty-seven had completed the program. Patient dropout was noted to be due to factors such as medical problems, lack of patient interest, as well as the rehabilitation center excluding the patient for various reasons. The authors did not find sociodemographic, clinical or perceptual differences of their illness between those who completed rehabilitation and those who did not. The author Fischer (2009) noted that neither education nor level of perceived dyspnea was significant predictor of drop out.

Patient attendance was obtained from one hundred sixty-one (161) of the one hundred sixty-seven (167) patients who completed pulmonary rehabilitation. The author Fischer (2009) noted various reasons for nonattendance. Nonattendance due to pulmonary rehabilitation was divided between causes that patients had no control over versus those they could control. The authors found that over twenty-one percent of the time patients had no control over the reason they had missed their appointment and that over seventy-seven percent of the time the patient had a choice and controlled whether they attended pulmonary rehabilitation. Doctor appointments were the number one reason why patients missed their appointment which the authors considered beyond the patient's control. Followed by missed appointments due to doctor's appointments was

rehabilitation canceled, poor planning, absent staff, hospital admissions, and lastly transportation issues.

The author Fischer (2009) found that most patients gave no reason for missing an appointment. The next most commonly cited reasons were respiratory complaints, other health-related complaints social activities, family emergencies, aquaphobia or fear of swimming, inconvenience or just plain forgetfulness. The authors further divided attendance between patients who excelled in attending and those with poor attendance. Those patients who had excellent attendance had an increase in body mass index (BMI) and an increase in the fat-free mass index (FFMI) than those with poor attendance. The authors noted that females, smokers, and individuals without a partner had the poorest attendance. Patients' perceptions of their illness influenced their attendance. Patients with poor attendance had little confidence that pulmonary rehabilitation would be effective. The authors found no sociodemographic relationship but did find that FFMI was lower in women than men.

The author Fischer (2009) found that despite the many variables for drop out or attendance, patient completion of pulmonary rehabilitation is high. The authors write that over seventy-five percent of patients participating in the study completed pulmonary rehabilitation. The authors were successful in gathering information and limiting the study to patients with COPD. However, a study done with patients with other lung diseases or one done over a longer period may have had different results. Since the patients knew they were taking part in a study this have contributed to their adherence to pulmonary rehabilitation as they may have felt a greater need or obligation to attend. The

authors also classed the fear of water as being controllable which may not be true in all cases.

Conclusion

The literature reveals that patient compliance is an issue for various reasons. Knowing that patient compliance is an issue and that pulmonary rehabilitation increases the patient's quality of life, leads to the question: How can leaders in pulmonary rehabilitation help motivate patients to success? The leaders in pulmonary rehabilitation should be first in line to assist patients with various techniques that enhance motivation to complete pulmonary rehabilitation while continuing to learn more about the design, support and implement strategies that facilitate motivation and optimal performance.

Chapter III: Research Methods

Qualitative Research Design

This qualitative study utilizes a descriptive design for gathering information perceived through the eyes of pulmonary rehabilitation leaders. This research investigates the various strategies that have been developed by pulmonary rehabilitation leaders to successfully keep patients motivated and engaged thus enhancing their performance and attaining their goal of completing pulmonary rehabilitation. To gain a better understanding of the various ways that leaders keep patients motivated to complete pulmonary rehabilitation successfully, this researcher administered an open-ended questionnaire asking participants questions pertaining to being a successful pulmonary rehabilitation leader.

The results of this study may help both the pulmonary rehabilitation leaders as well as patients. It may help leaders learn innovative strategies to keep patients engaged in pulmonary rehabilitation and motivated to complete pulmonary rehabilitation. It may help pulmonary rehabilitation leaders to learn innovative strategies to retain and motivate patients in attending pulmonary rehabilitation to completion. It may help the patient attain a better quality of life through the completion of pulmonary rehabilitation. The key to patient success and motivation may lie in the actions of the pulmonary rehabilitation leader.

Sample

Participants over 18 years' old who are leaders in pulmonary rehabilitation, and members of Maine Society CardioVascular and Pulmonary Rehabilitation (MSCVPR)

are potential participants. The sample size will consist of members who are willing to participate and are pulmonary rehabilitation leaders. The study is cross-sectional (collection of data at one time), and this researcher conducted a survey electronically using the internet to collect and analyze data.

Instrumentation

An electronic web-based using SurveyMonkey was the primary instrument used to collect data. The survey was administered electronically via email to pulmonary rehabilitation leaders who are members of the MSCVPR (defined above). Email addresses of pulmonary rehabilitation leaders who are members of the MSCVPR were obtained from a group email that was sent to members. An online survey instrument is a preferred method of collecting data for research because it can create a survey with the use of templates if needed and the survey can be emailed to participants. This survey method is convenient as it eliminates time spent stuffing and addressing envelopes. This survey approach is less expensive as it does not require stamps and yields for faster turnaround time.

Procedure

Emails describing the study was sent to prospective candidates who are pulmonary rehabilitation leaders and members of the MSCVPR. The email detailed the study and asked participants who are pulmonary rehabilitation leaders to participate in the study and to watch for an email with more information and an attached link to a survey for them to complete. After the generation of the first email, a follow-up email was sent two weeks later to the same candidates with a description of the study with a link to a

questionnaire attached again asking the candidates to fill out the questionnaire on the attached link. Another email was generated after two weeks to the same candidates with a description of the study with a link to a questionnaire attached again asking the candidates to fill out the questionnaire on the attached link if they have not already done so and wish to participate in the survey.

Analysis

With a thorough analysis of data from surveys, detailed information as to the number of studies completed and not completed will be provided as well as a descriptive narration of the analyzed data will be dictated for each variable in the study.

Survey Questions

Survey Title: Motivating and Engaging Pulmonary Rehabilitation Patients

Motivation is the reason we do things each day. How do you help pulmonary rehabilitation patients stay motivated and engaged in successfully completing pulmonary rehabilitation? Your participation will help me gain a better understanding of the various ways that leaders keep patients motivated to successfully complete pulmonary rehabilitation.

1. As a leader in pulmonary rehabilitation, how do you help patients stay engaged and complete pulmonary rehabilitation?
2. How did you learn this method?
3. How do you know this is effective?
4. Do you think that patient motivation and success can be enhanced through the pulmonary rehabilitation leader?

5. Why do you feel that patient motivation and success can be enhanced through the pulmonary rehabilitation leader?
6. If so, what results have led you to believe that patient motivation and success can be enhanced through the pulmonary rehabilitation leader?
7. What motivated you to design, develop and implement best practices for pulmonary rehabilitation?

The results obtained from the study will depict how leaders in pulmonary rehabilitation keep patients motivated and engaged in completing pulmonary rehab. The data from the survey will have to be compiled and assessed filtering the different ways that leaders in pulmonary rehabilitation use innovative strategies to keep patients motivated and engaged.

The results may be helpful to other leaders in pulmonary rehabilitation as the literature will present ideas on how to keep patients motivated and engaged. Pulmonary rehabilitation leaders may be able to take the new-found information and apply it to the patients they lead by creating situations that aid the individuals in successfully completing pulmonary rehabilitation.

Leaders in pulmonary rehab as well as others who take interest will be able to see from the data collected that it is indeed beneficial to learn what motivates patients to successful completion of pulmonary rehabilitation thus enhancing quality of life. Once a leader learns what motivates patients they can innovate some of the tactics to enhance motivation and engagement.

Chapter IV: Findings and Results

Results

The results of the above survey are summarized below, and full survey downloaded from SurveyMonkey can be seen in Appendix C. Sixteen emails were sent notifying candidates that they had opportunity to participate in the research study investigating the various strategies that pulmonary rehabilitation leaders innovate to keep patients motivated and engaged in pulmonary rehabilitation. Of the sixteen emails sent a response from one candidate was received asking to be taken off the list as they were no longer in pulmonary rehabilitation leaving a prospective fifteen candidates. Out of the fifteen potential survey candidates, two individuals completed the survey.

In question one of the surveys, the respondents were asked how they helped patients to stay engaged and complete pulmonary rehabilitation. A summary of the responses shows that constant positive reinforcement, maintaining flexibility in scheduling, integrating things into the program that patients enjoy (television, music of choice, play games), giving individualized attention, placing patients in social networks that work for them, and providing healthy foods were used to keep patients engaged. Just keeping the environment fun and offering any needed assistance including psychosocial, resolving home care issues, medication issues, and were also mentioned in the results.

Question two of the study asked how they learned the method of keeping the patients engaged in completing pulmonary rehabilitation; respondents answered as follows: Respondent one wrote that they have learned a lot from their previous boss as well as from the AACVPR and the many conferences that they have attended.

Respondent two wrote that listening to patient's needs, incorporating motivational techniques, and being flexible help to keep patients motivated. Respondent two also writes that patients have both good and bad days and pulmonary rehabilitation leaders need to be able to adapt to these needs.

Survey question three asked respondents how they knew if the method they used was effective. In response to the question, respondent one wrote that survey results from patients, as well as patient observation, and direct conversations of the patient's opinion of likes and dislikes all depicted their method works. Respondent two wrote, patient attendance improved significantly with program flexibility.

A summary of the two respondents for questions four through seven is as follows: Both Pulmonary Rehabilitation leaders who completed the survey believed that patient success and motivation could be enhanced through the pulmonary rehabilitation leader. Success factors according to respondents consisted of paying attention to the patient's needs and helping them to resolve any problems when they arose as well as creating an environment that is positive and supportive.

The survey respondents both felt that leaders influence patient motivation and success. Respondent one felt that the PR leader possess the skills and knowledge to engage the patient and learn patient interests. Improvements in QOL, depression, and functioning are a few indicators of patient motivation and success noted by the respondents. Both respondents were motivated to design, develop and implement best practices for pulmonary rehabilitation for their patients and their patient's families. Respondent one was motivated by seeing the disease process and its effects on both the

patient and family. Respondent two was motivated by improvement in patient's overall status. Improvements were measured with a rating tool as well as comments from surveys as to pulmonary rehabilitation being helpful.

Limitations and Suggestions for Future Research

The results of this study were limited as the survey was only sent to members of the MSCVPR who specialized in pulmonary rehabilitation. Maine Society CardioVascular and Pulmonary Rehabilitation as its name indicates reaches only members in Maine. The MSCVPR has members who specialize in cardiac and pulmonary rehabilitation. Cardiac and pulmonary rehabilitation leaders often work with the same patients focusing on helping them have a better quality of life.

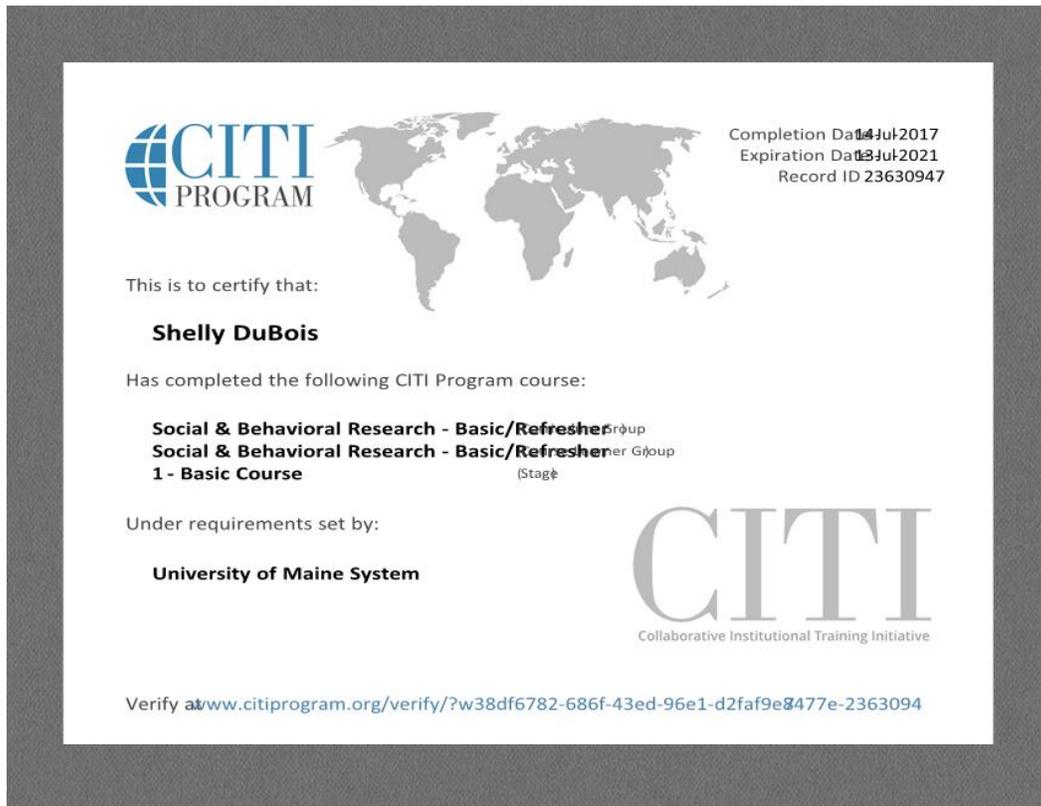
To reach a wider pool of potential survey candidates, a future survey could target pulmonary rehabilitation leaders across the United States. Another option is to send a survey to members of American Association of CardioVascular and Pulmonary Rehabilitation (AACVPR) thus reaching a wider pool of candidates. Surveying greater numbers of pulmonary rehabilitation leaders may result in more innovative ideas to keep pulmonary rehabilitation patients motivated and engaged to completion of pulmonary rehabilitation. Furthermore, if the study was sent to both PR leaders as well as cardiac rehabilitation leaders in Maine or across the United States survey responses may potentially increase. Offering incentives for completing surveys may also encourage participation increasing potential survey responses.

Chapter V: Conclusion

Pulmonary Rehabilitation has become an important treatment modality prescribed by doctors for those with lung disease. With Pulmonary Rehabilitation being a non-pharmacological aspect of care that increases an individual's quality of life, it is pertinent that we help patients and learn strategies to keep them motivated to attain greater health and well-being through completion of pulmonary rehabilitation. We can take the information gained from the literature of reasons why patients don't comply as well as responses gained from leaders in PR to enhance patient compliance. Listening, support, socialization, comfort, and education all increase QOL for patients with lung disease and all help increase the likelihood that patients will be motivated to complete pulmonary rehabilitation.

Appendices

Appendix A: IRB Certificate



Appendix B: Survey Questions**Motivating and Engaging Pulmonary Rehabilitation Patients**

Motivation is the reason we do things each day. How do you help pulmonary rehab patients stay motivated and engaged in successfully completing pulmonary rehab? Your participation will help me gain a better understanding of the various ways that leaders keep patients motivated to successfully complete pulmonary rehab.

1. As a leader in pulmonary rehab, how do you help patients stay engaged and complete pulmonary rehab?
2. How did you learn this method?
3. How do you know this is effective?
4. Do you think that patient motivation and success can be enhanced through the pulmonary rehab leader?
5. Why do you feel that patient motivation and success can be enhanced through the pulmonary rehab leader?
6. If so, what results have led you to believe that patient motivation and success can be enhanced through the pulmonary rehab leader?
7. What motivated you to design, develop and implement best practices for pulmonary rehabilitation?

Appendix C: IRB Approval**IRB****Approved Protocols**

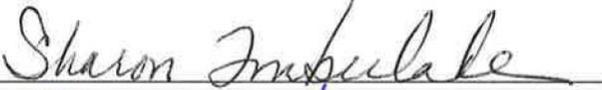
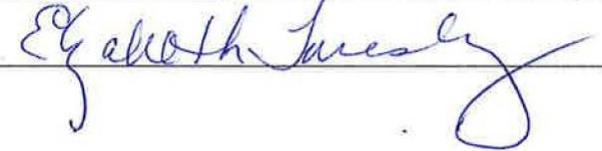
<u>Protocol ID</u>	<u>Principal Investigator</u>	<u>Title</u>	<u>Approval Date</u>	<u>Last Approval Date</u>	<u>Expiration Date</u>	<u>Review Decision</u>	<u>Form Type</u>
<u>17-07-943</u>	Shelly DuBois	Motivating and Engaging Pulmonary Rehabilitation Patients	12/01/2017	09/21/2018	N/A	Expedited Review	AMENDMENT

FINAL APPROVAL FORM

THE UNIVERSITY OF SOUTHERN MAINE

May 11, 2019

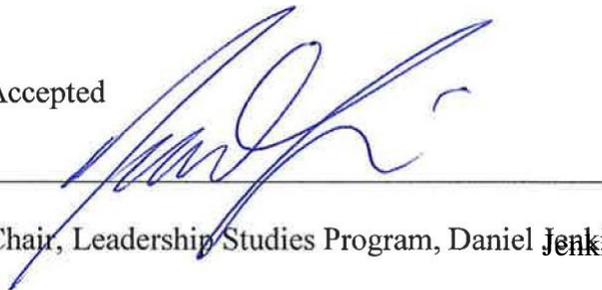
We hereby recommend that the thesis of Shelly May DuBois entitled *Motivating and Engaging Pulmonary Rehabilitation Patients* be accepted in partial fulfillment of the requirements for the Degree of Master of Leadership Studies.

Advisor, Sharon Timberlake,
PhD

Second Reader, Elizabeth Turesky,
PhD

Accepted



Chair, Leadership Studies Program, Daniel Jenkins, PhD

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