IMPROVING PSYCHOSOCIAL DISTRESS SCREENING: A QUALITY IMPROVEMENT PROJECT USING STAFF EDUCATION

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A project submitted to the faculty at the University of North Carolina at Chapel Hill in partial fulfillment of the requirements for the degree of Doctor of Nursing Practice in the Psychiatric Mental Health Nurse Practitioner program in the School of Nursing.

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ABSTRACT

Melissa Butcher Holt: Improving Psychosocial Distress Screening: A Quality Improvement Project Using Staff Education
(Under the direction of Victoria Soltis-Jarrett)

Background/Purpose: Evidence shows that psychosocial care can improve cancer outcomes. Distress screening (DS), Standard 3.2 of the American College of Surgeons Commission on Cancer, provides oncology practices with a method of identifying their patient's psychosocial needs. This Quality Improvement (QI) project was implemented at an academic cancer center in the southeastern US. Planning meetings with administration identified problems impacting DS implementation, one of which was a need for education. The purpose of this project was to educate clinic staff on engagement strategies and the importance of DS to promote improved psychosocial care.

Methods: The Institute for Healthcare Improvement's Model for Improvement guided this project, which was focused on the staff employed in the Adult Oncology Clinic. Staff members were surveyed pre- and post-intervention. The intervention used education and coaching sessions that focused on how to engage with patients, the value of DS, and the importance of psychosocial care. A patient educational handout was created for staff to use as a tool when engaging patients in screening. A chi-square test was used to analyze responses reported from pre- and post-intervention surveys.

Results: A significant difference was found in 2 survey areas: the staff's perception of the importance of DS to patients, χ^2 (4, N = 38) = 10.41, p = .03, and the comfort level of staff in engaging in DS, χ^2 (4, N = 38) = 9.82, p = .04. Staff shared the following: they lacked comfort

in DS on the first visit, the patient handout helped make engagement go more smoothly, and the training helped improve their ability to talk with patients about distress.

Conclusions and Implications: Cancer centers should not assume that their staff understands the importance of psychosocial care or is comfortable with how to screen for psychosocial distress. A QI process can identify staff learning needs to improve outcomes.

To the hundreds of people with cancer that I have had the privilege to work with, your courage has inspired me to work towards improving your journey. I will be forever grateful for the lessons that you have taught me.

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LIST OF ABBREVIATIONS

ACSCoC	American College of Surgeons Commission on Cancer
AOC	Adult Oncology Clinic
AOSW	Association of Oncology Social Work
APOS	American Psychosocial Oncology Society
CCSP	Comprehensive Cancer Support Program
CMA	Certified Medical Assistant
ICU	Intensive care unit
IHI	Institute for Healthcare Improvement
IOM	Institute of Medicine
MEPS	Medical Expenditure Panel Survey
MFI	Model for Improvement
NCCN	National Comprehensive Cancer Network
ONS	Oncology Nursing Society
QI	Quality improvement
QOL	Quality of life
PDSA	Plan-Do-Study-Act
PFRC	Patient Family Resource Center
RN	Registered nurse
SPSS	Statistical Package for the Social Sciences

CHAPTER 1: INTRODUCTION

A diagnosis of cancer can bring challenges to patients emotionally, psychologically, spiritually, socially, and financially. All patients with cancer experience some degree of distress over their diagnosis and the unwelcome life changes that follow. Distress is an unpleasant emotional experience that inhibits coping effectively with cancer, its symptoms, and its treatments, leaving some patients to experience greater distress than others (National Comprehensive Cancer Network [NCCN], 2016). Approximately 33% to 50% of patients with cancer will have at least one of the following problems that can be classified as distress: clinically significant anxiety or depression, pain, fatigue, and/or insomnia (Fann, Ell, & Sharpe, 2012). Distress from having cancer can also contribute to non-adherence to cancer treatments, difficulty making treatment decisions, frequent emergency department and clinic visits, poor quality of life (QOL), decreased chance of survival, and decreased compliance with surveillance screenings (NCCN, 2016). Evidence indicates that distress screening and addressing psychosocial issues enhances quality of life (QOL) and may improve cancer outcomes (Pirl et al., 2014).

The Institute of Medicine (IOM) published a landmark report in 2007, Cancer Care for the Whole Patient, which stated that despite advances in cancer care, the management of the psychosocial sequelae of cancer has not kept pace and that adequate psychosocial care needed to be considered standard care for all patients (Pearman et al., 2015). Following this report, the NCCN started a distress management panel and recommended that distress screening and management needed to be provided to all patients with a diagnosis of cancer (Pearman et al.,

2015). The American College of Surgeons Commission on Cancer (ACSCoC) developed a new standard for accreditation (Standard 3.2) that took effect in 2015 requiring oncology clinics to screen all patients (not families) for distress of psychosocial health needs and provide further assessment, referral or treatment, and follow-up when moderate or severe distress is identified (American College of Surgeons Commission on Cancer [ACSCoC], 2012).

Problem Statement

Though there is evidence that psychosocial care can improve the lives of patients with cancer and the ACSCoC now requires distress screening to identify patients with psychosocial needs, there is little research focusing on distress screening education to best prepare oncology staff to provide adequate screening and engage patients in this process. After attending planning meetings with administration at a local adult oncology clinic, problems impacting distress screening implementation and ensuring that the process was meaningful and effective were identified. The team felt strongly that they needed staff education. Therefore, I designed a quality improvement (QI) project providing education to oncology clinic staff on the benefits of psychosocial care, distress screening, and how to engage patients in distress screening. The goal was to see if this improved the comfort level of staff in providing screening. This QI project was implemented at a southeastern United States academic medical center that was struggling with distress screening implementation issues.

Purpose of Project

The purpose of this QI project was to determine whether a staff education program that focuses on how to engage patients in distress screening, the purpose of distress screening, and the importance of psychosocial care will improve the comfort level of staff in providing distress screening to patients.

Clinical/Practice Question

Will a psychoeducational intervention that is grounded in increasing nurses' and certified medical assistants' (CMAs') understanding of distress and psychosocial care empower them to engage patients in distress screening by promoting increased comfort in distress screening engagement and more positive perceptions of required distress screening protocols?

CHAPTER 2: LITERATURE REVIEW

Chapter two, "Literature Review," provides a review of the literature on distress screening of patients with cancer. This review is divided into the following sections: a) Understanding Distress, b) the Financial Impact of Distress, c) Benefits to Screening for Distress, d) Understanding Standard 3.2 for Distress Screening Protocols, e) Distress Screening in the United States, f) Barriers to a Successful Distress Screening Protocol, and g) Education on Engagement.

Understanding Distress

Distress can be profound and destructive. "Distress results when patients possess insufficient internal and external coping resources to mediate the accumulation of stressors derived from the disease, treatment side effects, lifestyle changes, and other factors that are directly and indirectly related to living with cancer" (Allen, Zebrack, Wittmann, Hammelef, & Morris, 2014, p. 274). Some common psychosocial reactions to a cancer diagnosis and treatment are dependency, anxiety, postoperative depression, hypochondriac response, obsessive-compulsive reactions, and paranoid reactions (Grassi et al., 2014). Nearly 50% of all patients who have been diagnosed with cancer have also been diagnosed with adjustment disorders, anxiety, and/or depression, all of which are associated with maladaptive coping, reduction of QOL, impaired social relationships, risk of suicide, delayed rehabilitation time, poor treatment adherence, family dysfunction, and possibly shorter survival (Grassi et al., 2014). Studies have demonstrated that asking for help is difficult for patients, even when their problems are causing significant distress, which further explains the need for full distress screening implementation

(Loscalzo, Clark, Pal, & Pirl, 2013). Pre-existing psychological problems, substance abuse, stigma, and shame can interfere with patients requesting assistance (Loscalzo et al., 2013).

Some studies are exploring and identifying health outcomes potentially caused by distress in patients with cancer. Preliminary results of a study at the University of Iowa indicate that there is a statistically significant relationship between distress and survival of patients with advanced cancer, with high levels of distress resulting in a decreased life expectancy (Gilbertson-White, Sherwood, Donovan, & King, 2016). The City of Hope Comprehensive Cancer Center connected physical symptoms, social problems, and emotional problems in a study, and found that when there is a physical symptom, there is an emotional response, and when there is an emotional response, there is a physiological reaction (Loscalzo et al., 2013). "Educating patients about the negative impact of untreated [psychological] symptoms on quality of life and the potential benefits of available services may encourage patients to accept referrals" (Waller, Williams, Groff, Bultz, & Carlson, 2013, p. 393). A Canadian study of patients with lung cancer found that those who were screened for distress and triaged for follow-up psychosocial care showed significantly less cancer pain, breathlessness, coping issues, and family conflict at a 3-month follow-up than those patients who were not triaged for follow-up care. The reductions in pain are especially significant, because pain is extremely distressful for patients and interferes with sleep, QOL, and daily activities (Carlson, Waller, Groff, Zhong, & Bultz, 2013).

The Financial Impact of Distress

Data was used from the nationally representative Medical Expenditure Panel Survey (MEPS) to determine whether serious psychological distress increased health care use and expenditures; they concluded that it was significantly associated with the use of all types of health care (except dental care) and higher medical expenditures. These results also suggested

that addressing the psychosocial needs of patients with cancer may reduce the over-all economic and service burden of cancer to society (Han et al., 2015). Distress can cause longer inpatient stays and higher overall costs of health care (Allen et al., 2014). Screening, brief interventions, and referrals for treatment have demonstrated significant cost savings and reductions in risky and problematic health, mental health, and behavioral conditions (Zebrack et al., 2015).

Benefits to Screening for Distress

Distress screening benefits patients and families, the health care team, and health care delivery systems. The distress screening tool can start the conversation that the health care team is here to support patients with their psychosocial concerns by enhancing trust and teamwork, helping patients experience a sense of control and predictability, and helping organize conflicted patients/families to make coordinated and appropriate decisions. Psychosocial care provides patients the benefit of improving adherence to medical care, decreasing physical and emotional symptoms, decreasing substance abuse, increasing compliance with medical appointments, enhancing emotional regulation, enhancing problem-solving skills, and increasing longevity. The nursing staff and oncology providers benefit from having psychosocial team members help manage complex situations that physicians and many nurses do not have the training or time to adequately address, as they are focused on the cancer treatment of increasing numbers of individuals throughout the day. The health care team also benefits from enhanced team communication, enhanced clinical operations, and increased patient satisfaction and gratitude, all of which contribute to a calmer work environment, improved overall efficiency, decreased patient "no-shows," the ability to see more patients and thus increase revenue, and staff retention. The health care institutions, working with high patient volumes, staffing, and financial constraints, will appreciate the potential for a reduction in expenses due to fewer patient "no-

shows," decreased litigation risk, reduced intensive care unit (ICU) use, fewer non-beneficial interventions and readmissions, and a more efficient over-all use of resources. Institutions can also benefit by witnessing balanced budgets and increased revenues, decreased disruption to the health care team's workflow with increased efficiency, and a calmer, more confident institutional environment that exceeds community satisfaction and health care standards (Loscalzo & Clark, 2017).

Understanding Standard 3.2 for Distress Screening Protocols

In order to maintain high standards of care, thoughtful and systematic screening, management, and referral is essential. However, in order to plan for effective and efficient distress screening, the American College of Surgeons' Commission on Cancer standards are vague in that they lack a standardized model or process that could be adapted in each health care setting. Currently, Standard 3.2 states that distress screening needs to take place at "a pivotal medical visit" and that each cancer center can select its own distress screening tool as well as determine how to best link patients to psychosocial services if the tool is positive for distress (BrintzenhofeSzoc et al., 2015). The American Psychosocial Oncology Society (APOS), the Association of Oncology Social Work (AOSW), and Oncology Nursing Society (ONS) joined together to create a task force to develop consensus-based recommendations to guide the implementation of this mandate by the ACSCoC. It is the belief of the joint task force that integration of distress screening programs should be routine, focused on reducing the stigma often associated with mental health services (Pirl et al., 2014). Screening can normalize thinking about and discussing coping issues and help providers communicate and collaborate with patients and their families (Loscalzo & Clark, 2017). "Screening programs seek to provide the language, permission, motivation, and context in which to identify and manage problems

endemic to cancer" (Loscalzo et al., 2013, p. 414). Distress screening protocols can provide health care professionals with a brief method to prospectively identify, triage, and educate patients with cancer and their families on the need for psychosocial screening and commonality of cancer patients' need for psychosocial support to enable them to fully benefit from the medical care they receive (Loscalzo et al., 2013).

When designing and implementing a successful distress-screening program, one needs to be mindful that this implementation is usually a culture change for the cancer center. Changes in the ways that a system works and delivers health care will take time, perseverance, and vision to integrate into existing systems and practices. Understanding how key stakeholders, patients, and families perceive the direct benefits of distress screening is also essential to successful implementation of a distress screening protocol (Loscalzo, Clark, & Holland, 2011). Stakeholder buy-in is important because successful distress screening implementation is dependent on the extent to which oncology team members/providers accept distress screening as clinically useful and can be oriented to its value and application (Zebrack et al., 2015).

Distress Screening Implementation in the United States

Distress screening has not proceeded smoothly in the United States. Preliminary studies of cancer centers that have implemented distress screening protocols show that screening is not occurring consistently with all eligible patients and that documentation of psychosocial contact or referral has not occurred reliably with all patients who are screened and shown to be experiencing distress (Zebrack et al., 2015). Distress continues to be under-assessed and under-estimated in people with cancer, despite research evidence and recommendations for practice included in the National Comprehensive Cancer Network's Distress Management Guideline (Tavernier, Beck, & Dudley, 2013). The ACSCoC requires that a system be established for

administering the screening tool, reviewing screening results, conducting follow up assessments for patients identified as distressed, and referring for further evaluation, support, and treatment as needed (Pirl et al., 2014).

Barriers to a Successful Distress Screening Protocol

The assumption that distress screening will result in an uptake of supportive care services is not necessarily true. Evidence shows that despite the findings that there is a significant need for supportive care services for patients with cancer, many patients are not accepting this assistance. It is suggested that further work needs to focus on facilitating engagement and reducing barriers for this population to accept supportive care interventions (Funk, Cisneros, Williams, Kendall, & Hamann, 2016). Patients may not be open with their health care providers because they may feel that the provider is too busy, that it's not the provider's role, or they may feel that what they are experiencing is normal for someone with cancer and therefore something they need to deal with on their own (Waller et al., 2013). Each patient has their own unique belief system about health and cancer, and these beliefs can influence decision-making, treatment adherence, psychological distress, and clinical outcomes. Personal and cultural beliefs are influential in determining whether patients and/or their families believe they need support or psychosocial counseling, as well as whether these resources are acceptable to them (Allen et al., 2014).

Barriers to the health care team successfully implementing distress screening and follow-up include: (a) a lack of knowledge about the value of screening, (b) time pressures due to other duties, (c) a lack of training in managing others' emotional distress, (d) fears of not being able to respond to identified needs, (e) concerns about disrupting clinic processes, (f) a lack of knowledge of available resources, (g) an absence of a screening implementation strategy, (h) an

uncertainty about the receipt of appropriate aftercare, and (i) resistance to patient- and family-centered culture change (Loscalzo et al., 2013).

Education on Engagement

Facilitating patient engagement and reducing barriers is a priority in addressing psycho-supportive care (Funk et al., 2016). It is critical that the staff members providing the screening are appropriately trained and receive ongoing support (Carlson, Waller, & Mitchell, 2012). Staff may find that talking with patients about highly emotionally charged topics may not be in their skill set and therefore fear that they will create more anxiety for the patient or the other staff members (Loscalzo et al., 2011).

Patient engagement necessitates adopting an empathic, shared, collaborative interaction style when talking with patients. Engaging patients in a conversation does not necessarily mean that the time with the patient will be longer; it only means that the staff member is behaving differently (Fisher, Polonsky, Hessler, & Potter, 2017). A patient's knowledge, attitudes, beliefs, experiences with the health care system, self-efficacy, and functional capacity can affect their motivation and willingness to engage with staff. Low health literacy and cognitive decline may challenge their ability to do so. Evidence nevertheless shows that improving the partnership between patients and their care providers can lead to improved outcomes (Carman et al., 2013). Patients want to feel connected to and understood by their clinicians and want to feel as though they have personal control over their care. The adoption of a more holistic and empathic mindset can help providers understand the experience of the patient. In particular, the use of motivational interviewing has proven to be helpful, because it consists of engaging, affirming, reflecting, and advising (Fisher et al., 2017).

CHAPTER 3: THEORETICAL FRAMEWORK

The Neuman Systems Model was selected for this project because it is grounded in strategies to attain optimal wellness through prevention. Distress screening is a preventive strategy in psychosocial care. This middle-range nursing model is dynamic and considers the patient's continuous relationship to environmental stress factors, which potentially can change the patient system (Neuman, 2011). The purpose of healthcare practice is to assist individuals in retaining, attaining, or maintaining stability among five patient system variables: 1) physiological; 2) psychological; 3) sociocultural; 4) developmental, and 5) spiritual. Practice problems of interest can be actual or potential reactions to stressors, which can be intrapersonal, interpersonal, or extrapersonal. The patient's perception of and reaction to stress determines the extent of stability of the patient system. The goal of the professional relationship that patients have with nurses is to help them achieve the highest possible level of system stability. Practice goals are negotiated between the patient and the health care worker, with the patient being a full participant in determining the desired outcomes. Practice must be directed by evidence-based research findings (Freese, Russell, Neuman, & Fawcett, 2011). This project coalesces well with this model by considering the three prevention strategies (primary, secondary, and tertiary) with the implementation of distress screening protocols. The Neuman Systems Model provides primary prevention by educating patients about distress and cancer, secondary prevention by using the distress-screening tool to identify when patients are distressed, and tertiary prevention by referring patients for further assessment and supportive resources (Hammonds, 2012).

CHAPTER 4: METHODOLOGY

In order for staff to effectively learn how to engage with patients, they need both classroom education and hands-on training to develop these skills. Therefore, this project focused on both of these learning modes to assure effective application of these specific skills (Fisher et al., 2017). The education took place during a mandatory, scheduled staff meeting, and the training was in the form of supportive assistance with the presence of the investigator for a period of time after the staff meeting to assure the nurses that assistance was immediately available if any problems occurred (Loscalzo et al., 2011).

Design

This quality improvement project was grounded in the Institute for Healthcare Improvement's (IHI) Model for Improvement (MFI). The MFI provides a template for learning over time and "adjusting as we go" (Institute for Healthcare Improvement [IHI], 2016). This model has two parts: answering three fundamental questions and using the Plan-Do-Study-Act (PDSA) cycle. The MFI was chosen because it helped clarify the direction of the project and the PDSA cycle provided a way to quickly test changes on a small scale, observe what happened, make changes as necessary, and then test again. The MFI goes through clear steps of setting an aim statement that is time-specific and measurable, establishing measures, identifying changes, testing changes using the PDSA cycle, and implementing changes (IHI, 2016). This approach was selected for this clinical problem because it provided a systematic guide that is outcomes-driven and can consider domains such as quality of life, clinical outcomes, and satisfaction (Speroff & O'Connor, 2004). A diagram of the MFI is included in Appendix 1.

Setting and Resources

The project was implemented in the Adult Oncology Clinic (AOC) in a southeastern US academic medical center with a cancer hospital and a dedicated comprehensive cancer support program. The AOC is located in the only public cancer hospital in the state, treats patients from every county in the state, and assesses and treats adult patients with various cancer diagnoses. The staff is composed of registered nurses (RNs) and certified medical assistants (CMAs) and is managed by one nurse manager with one assistant nurse manager. The nurse manager was instrumental in staff recruitment for the project and required that all nurses and CMAs receive the education intervention. The university that this investigator attends provides free access to Qualtrics for survey implementation; therefore, no financial resources were required to complete this project. Also, the cancer hospital employs an oncology patient education coordinator to approve all patient education materials, make certain that all handouts are written at a 5th grade reading level, and use a template to maintain consistency in the appearance of all handouts.

The AOC utilizes the NCCN's Distress Thermometer for their distress screening tool. They started using this tool in 2015 to comply with the ACSCoC requirement. The Distress Thermometer was developed to rate a patient's level of distress from 0 (no distress) to 10 (highest level of distress). It was also devised to assess specific potential stressors that may be affecting or impacting the patient's score. The potential stressors are listed in check boxes and include: (1) practical problems (such as childcare, housing, financial issues, transportation, work/school issues, or treatment decisions); (2) family problems; (3) emotional problems (depression, fears, nervousness, sadness, worry, or loss of interest in activities); (4) spiritual issues; and/or (5) physical problems (NCCN Distress Thermometer for Patients, 2013). See Appendix 2 for a copy of the NCCN Distress Thermometer.

History of Distress Screening at the AOC

In 2015, during the initial rollout of distress screening, nurses did receive education on the new ACSCoC requirement, the chosen distress screening tool, and the policy of accessing the Patient and Family Resource Center (PFRC) for patients with a screening score between 4 and 7 and the Comprehensive Cancer Support Program (CCSP) for those with a score of 8 or above. The staff did not receive education on how to engage patients in talking about distress or why distress screening is important. The clinic management chose to implement distress screening by having patients complete the NCCN Distress Thermometer in the waiting room while waiting for their appointment. The receptionist provided each patient with a laminated screening tool form and a dry erase marker to complete the tool at every clinic visit. No education was provided to the patients on why they were being asked to complete the distress screening tool. Patients would give a staff member the screening tool prior to meeting with their oncology provider. The nurse would enter the data from the laminated form into the hospital's electronic health record and follow the protocol of encouraging the patient to go to the PFRC or access the CCSP, depending on the patient's score. The policy was to screen all patients at every clinic visit.

In 2016, the AOC underwent major personnel restructuring to improve clinic efficiency and patient support through the addition of medical assistants, increasing the clinical responsibilities of the nursing staff, and discontinuing the use of nursing assistants because the abilities of this role are limited in the outpatient setting. Formal distress screening education was not provided to any new staff after the clinic went through this significant personnel change. Compliance with the distress screening protocol was not carefully monitored. The clinic did receive feedback that the patients were experiencing screening fatigue by being asked to complete the tool at every clinic visit and not fully understanding why they were being asked to

do so. There was a sense from the staff that the clinic's current practices lacked meaning and were not helpful to patients.

In 2017, the AOC nurse manager, the care access and navigation manager, and the quality/organizational excellence leader identified the need to improve distress screening practices and composed a team of professionals from the cancer hospital to address this need. This team of professionals made the decision to change the screening to only once per year, focusing on screening patients during their first visit to the clinic. This policy change took effect on July 3, 2017. From this point forward, all distress screening was expected to be provided by the RN or CMA who was preparing a patient for the oncology provider in the examination room at the beginning of a clinic visit. According to the ACSCoC, patients need to be screened at least once per year at a pivotal visit, and the AOC decided to make this change at the first patient visit in order to catch all patients, provide consistency, eliminate screening fatigue, and identify psychosocial issues early.

Sample

A convenience sample of the nurses and CMAs working in the AOC was used in this project. The nurse manager required all of the nurses and CMAs to participate in the education intervention and agreed to recruit subjects to complete the pre-intervention surveys. All nurses and CMAs on the unit were included, regardless of experience. There were no exclusion criteria.

Ethical Approval and Consent

The project was reviewed by the Office of Human Research Ethics at the university, and it was determined that it did not constitute human subjects research as defined under federal regulation and thus did not require Institutional Review Board approval. The Nursing Research Council at the southeastern US academic medical center approved the project.

Model for Improvement: Part One

The planning phase started by first considering the Model for Improvement's three fundamental questions:

1. **What are we trying to accomplish**? The clinic staff will increase their understanding of distress, psychosocial care, and comfort in engaging patients in distress screening within six weeks (2 weeks to educate all staff, followed by 4 weeks of the investigator visiting the clinic to provide support and coaching).
2. **How will we know that a change is an improvement**? By surveying the staff pre- and post-intervention, we can learn whether their attitudes and comfort level toward distress screening has changed. The desired outcome was an increased comfort level with engaging patients in distress screening and a perceived improved knowledge about distress screening and psychosocial care.
3. **What change can we make that will result in improvement**? Prior to implementation, change concepts were explored to come up with a possible change that would result in improvement. The change concept chosen was to conduct training. This idea was discussed openly with the administrative team working to improve distress screening practices in the AOC. This team had independently recognized the need for education prior to working with this investigator and welcomed this education and QI project.

Model for Improvement: Part Two

Plan. The plan included the following:

- Survey the staff using Qualtrics before providing the education intervention;
- Develop a patient education handout and receive approval from the Oncology Patient Education Coordinator at the cancer hospital prior to implementation;

- Educate the AOC staff during their mandatory staff meeting and provide a make-up education session if needed to make certain all staff members receive the education;
- Provide follow-up clinic visits to troubleshoot any issues, provide further education, gather informal data from staff on the new distress screening process, and encourage or coach staff members when using the new engagement strategies;
- Survey the staff post-intervention using Qualtrics; and,
- Meet with a statistician to determine whether the survey results were significant.

Do. The nurse manager was instrumental in recruiting staff to complete the pre-intervention survey. Refer to Appendix 3 to see this document. The pre-intervention survey was reviewed prior to the education session to assess staff knowledge of distress screening. On 7/20/2017 (prior to the education session scheduled for 7/26/2017), the nurse manager sent a link to the Qualtric survey to each staff member via email, with a message explaining that his or her participation would be anonymous. Refer to Appendix 4 for a copy of the recruitment email.

The investigator developed a patient education handout that was edited, approved, and field-tested by the Oncology Patient Education Coordinator at the cancer hospital. The investigator provided this handout to the staff to help guide them when engaging patients in distress screening and provide additional information for patients to refer to over time, as patients' needs may change during the course of treatment. See Appendix 5 for a copy of the patient education handout.

Positive feedback was received about the patient education handout and the staff education sessions. The interactive, 35-minute educational session took place during a regularly scheduled clinic staff meeting for CMAs and RNs. A make-up session was held a week later for

those who were unable to attend the original education session. All staff members were educated within those two sessions. The education sessions covered the following material:

- Basic information about the various psychosocial needs of patients with cancer (3 minutes).
- The importance of addressing psychosocial needs and why screening is important (3 minutes).
- Understanding the screening process and the role of the staff completing the screening. Explain the American College of Surgeons Commission on Cancer standards for accreditation (3 minutes).
- Barriers to screening and how to address them (3 minutes).
- Understanding your resources (3 minutes).
- Engaging patients in screening. Nonverbal strategies: sitting at eye level, making eye contact, talking with the patient instead of to the patient, and listening to the patient. Words and ways of talking with patients were suggested via a script. Here is a sample of the script taught to the staff:

  "Dr. _____ has asked that you complete this distress screening tool. By completing this tool, you will help us to learn more about you and how we can best work with you as a team to provide you with the best care possible. We are here to support you with any of these items, because we know that cancer can cause many difficulties that can affect all areas of your life. Here is a handout that will provide you with more information about distress and cancer" (Loscalzo & Clark, 2017, p. 47) (10 minutes).

- Discussion (10 minutes).

After the 2-week educational period, the clinic implemented their new strategies by engaging patients in distress screening. The investigator attended clinic randomly throughout the next 4 weeks to troubleshoot any issues, provide further education, and coach staff on using engagement strategies.

A problem did arise during this time, which led the investigator to meet with the nurse manager to strategize steps to resolve the problem and make necessary adjustments to the plan. The problem was that the staff was expressing discomfort in screening patients during the patient's first clinic visit. The nurse manager invited the investigator to the next scheduled mandatory staff meeting to openly discuss solutions to their concerns as a group. The staff freely expressed their concerns at the meeting, and the investigator provided suggestions on how to engage in distress screening when establishing rapport with a patient and how to use this as an opportunity to educate the patient about normal and abnormal distress reactions.

On 9/11/2017 (after completion of the education and follow-up coaching sessions), the investigator sent an email to all staff requesting anonymous participation in the post-intervention survey using Qualtrics. Refer to Appendix 6 for a copy of the recruitment email to complete the post-intervention survey and Appendix 7 for the post-intervention survey.

Study. The investigator worked with a statistician and a Chi-square test was used to analyze the data. The data was presented at the next administrative meeting in the presence of the quality/organizational excellence leader, the director of the Comprehensive Cancer Support Program, and the care management manager. The results were shared via email with other team members who were unable to be present for this meeting.

Act. Compliance data was discussed at the administrative meeting, and it was determined that distress screening challenges remain for the AOC due to lack of compliance. Further

discussion will follow with the administrative team to determine another PDSA or QI initiative. A definitive plan was not possible due to lack of participation with the absence of key team members.

CHAPTER 5: DATA ANALYSIS

This chapter presents the results of the data analysis, including the quantitative survey results; answers to the open-ended qualitative questions, and feedback provided by the staff during investigator clinic visits. Demographics and key findings are presented.

The pre-intervention survey was available for staff to complete from 7/20/17 up until the education intervention on 7/26/17 at the AOC staff meeting. Implementation started with the education intervention on 7/26/17 and a make-up session on 8/2/17 for those unable to attend the previous week's staff meeting. The staff was instructed to start using the skills learned during the education intervention on 8/14/17. The patient handout to be used while staff members were engaging in distress screening was made available to the staff on 8/14/17. The investigator visited the AOC intermittently for 4 weeks to provide coaching to staff members who were expressing concerns or challenges and to collect data on staff perception of the practice change. The post-intervention survey was provided for staff to complete from 9/11/17 through 9/18/17.

A total of 21 staff members (9 CMAs and 12 nurses) responded to the pre-intervention survey, for a response rate of 77.8%. CMAs represented the highest proportion of respondents (9 out of 11, or 82%), while nursing was close in representation (12 out of 16, or 75%). The post-intervention survey was distributed to the 11 CMAs and 11 nurses who participated in distress screening during the intervention period. A total of 17 staff members (9 CMAs and 8 nurses) responded to the post-intervention survey, for a response rate of 77.3%. Again, CMAs represented the highest proportion of respondents (9 out of 11 CMAs, or 82%), while nursing followed (8 out of 11 nurses, or 73%).

The pre-intervention survey measured attitudes and beliefs with 5-point Likert scale questions ranging from strongly disagree to strongly agree for four of the questions and ranging from extremely important to not at all important for one of the questions. The post-intervention survey included the same five questions as before, with the addition of two 5-point Likert scale questions ranging from strongly disagree to strongly agree. These additional questions assessed the attitudes and beliefs about the patient handout provided and the distress screening training that had been provided. Both the pre- and post-intervention surveys ended with an opportunity for the staff member to provide additional comments about distress screening.

Table 1. Pre-Intervention Survey Answers

1. Distress screening is helpful to patients.	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
CMA (9 participated)	1	0	4	2	2
RN (12 participated)	3	3	2	3	1
Total (21)	4	3	6	5	3
2. I understand how distress impacts patients.	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
CMA	0	0	1	1	7
RN	1	0	0	1	10
Total	1	0	1	2	17
3. I am comfortable administering the Distress Screening Thermometer to patients.	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
CMA	1	1	3	1	3
RN	2	1	2	7	0
Total	3	2	5	8	3
4. How important is distress screening in the care of clinic patients?	Extremely important	Very important	Moderately important	Slightly important	Not at all important
CMA	2	2	4	1	0
RN	3	5	1	1	2
Total	5	7	5	2	2
5. I am comfortable referring patients to the Patient & Family Resource Center or	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree

paging the Comprehensive Cancer Support Program when patients score 4 or above.					
CMA	0	3	0	2	4
RN	1	3	0	1	7
Total	1	6	0	3	11
6. Please provide additional comments about distress screening.	"I can usually feel when a patient is stressed, and when I ask patients who don't seem to be stressed, I get funny expressions as to why I asked them." "I don't know what the Patient and Family Resource Center is or how it relates to distress screening." "In our clinic we have built a relationship with our patients that they feel free to let us know they need to see some one or maybe in life this is just a rough week. They are dealing with a tough disease and not all days are going to be great but many people do not need to talk to someone they just need someone to listen and I think this is addressed on a clinic level. Just some of my thoughts." "I will page CCSP if patient requires it due to being upset or in distress, but not always do they need it if its over 5 or a 10. I make patients upset by asking the Distress Screening. I don't think is necessary for everyone, we should use it if a patient is in Distress only. Some patients refuse to answer, they don't like it. I do it since its required on new patients now, but don't think is necessary or useful. Another thing, if they don't have a cancer diagnosis if in distress, we can't page CCSP." "Patients have a difficult time differentiating between 'stress' and 'distress' even after lengthy explanations. Also, many patients decline intervention with CCSP. I think it should be at the discretion of the RN during or based upon the patient assessment whether or not to administer the screening tool as if someone is distressed, there are often signs that can be picked up during triage." "Patients are seen many times sometimes in same week and do not want to fill it out."				

Table 2. Post-Intervention Survey Answers

1. Distress screening is helpful to patients.	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
CMA (9 participated)	0	0	1	4	4
RN (8 participated)	0	1	0	5	2
Total (17)	0	1	1	9	6
2. I understand how distress impacts patients.	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
CMA	0	1	0	2	6
RN	0	0	0	1	7
Total	0	1	0	3	13
3. I am comfortable administering the Distress Screening Thermometer to patients.	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
CMA	0	0	0	2	7
RN	1	0	1	3	3
Total	1	0	1	5	10
4. How important is distress screening in the care of clinic patients?	Extremely important	Very important	Moderately important	Slightly important	Not at all important
CMA	4	3	2	0	0
RN	2	5	1	0	0
Total	6	8	3	0	0
5. I am comfortable referring patients to the Patient & Family Resource Center or paging the Comprehensive Cancer Support Program when patients score 4 or above.	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
CMA	0	1	1	0	7
RN	2	1	0	1	4
Total	2	2	1	1	11
6. The new handout is helpful when engaging patients in distress screening.	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
CMA	0	0	2	4	3
RN	0	0	0	3	5
Total	0	0	2	7	8
7. The Distress Screening training helped improve	Strongly Disagree	Somewhat Disagree	Neither Agree nor	Somewhat Agree	Strongly Agree

my ability to talk with patients about distress.			Disagree		
CMA	0	0	2	4	3
RN	0	0	0	6	2
Total	0	0	2	10	5
8. Feel free to provide additional comments about Distress Screening or the recent training.	"I understand why distress screening is done on the first visit but believe this is probably not the best time because patients are unclear of their plan. I do think the training re: the distress screening was very helpful and helped me feel much more comfortable speaking with patients about it."				

The investigator attended clinic intermittently to assist the staff with any questions or concerns and address challenges that they were experiencing. Also, the new patient handout was field-tested during this time. The staff and nurse manager provided excellent feedback to improve the handout, and the investigator took these suggestions to the nurse educator at the cancer hospital, who made the changes. Several staff members said that the handout was helpful when educating patients about distress. One staff member struggled with it because it wasn't readily available in each patient room, but the majority of the staff members felt like it did not need to be kept in the patient rooms. A copy of the Distress Screening Thermometer was provided outside of each patient room for staff to have readily available. The common theme from the nurses and CMAs was that they did not feel comfortable providing distress screening on the first visit, which was a clinic policy change that took effect on 7/3/17. Here are a few of the comments made:

- "It doesn't feel right to ask people about distress when we don't have a relationship with the patient yet."
- "How do I know if the patient knows she has cancer? I don't want to screen if she doesn't know."
- "This is awkward on the first visit."

- "Some people come to our clinic for benign reasons, and this isn't appropriate."

The investigator took these concerns to the nurse manager, and a decision was made for the investigator to attend the next staff meeting on 8/23/17. The staff confirmed that their biggest concern was that they found it challenging to screen on the first visit for the same reasons mentioned above. The investigator provided suggestions on how to combat the uneasiness of providing distress screening on the first visit by considering this as an opportunity to educate new patients about normal and abnormal distress along with letting them know that the clinic has resources available to patients if help is needed. The nurse manager and investigator agreed with the staff that distress screening should not take place if the patient is visiting the clinic for a benign issue and does not have a cancer diagnosis, but that documentation is needed explaining why the screening did not occur.

Due to a small sample size, a Chi-square test was used to see if there was a statistically significant difference between the answers from the pre-intervention survey and the post-intervention survey. Table 3 displays the results, derived from the Statistical Package for the Social Sciences (SPSS).

Table 3. Chi-Square Test Results—Pre-Intervention vs. Post-Intervention (N = 38)

Question	Value	df	p-value
1. Distress screening is helpful to patients.	10.49	4	.034
2. I understand how distress impacts patients.	3.349	4	.501
3. I am comfortable administering the Distress Screening Thermometer to patients.	9.816	4	.044
4. How important is distress screening in the care of clinic patients?	4.284	4	.369
5. I am comfortable referring patients to the Patient & Family Resource Center or paging the Comprehensive Cancer Support Program when patients score 4 or above.	3.956	4	.412

A significant difference was found in 2 survey areas: the staff's perception of distress screening being helpful to patients, χ^2 (4, N = 38) = 10.41, p = .034, and the comfort level of staff in administering the distress screening tool, χ^2 (4, N = 38) = 9.82, p = .044. This significance is illustrated in Figure 1 and Figure 2, below.

Figure 1.

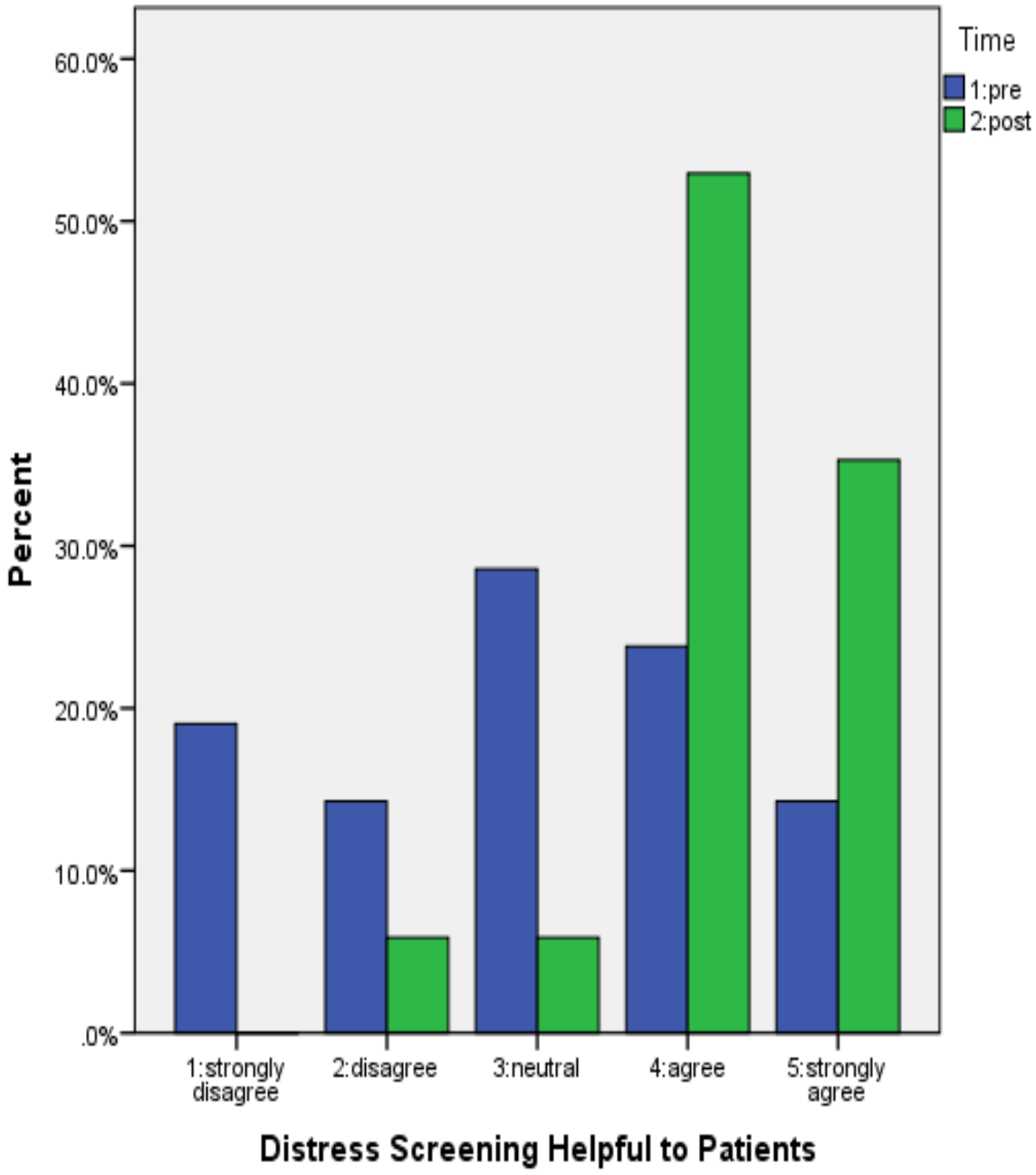
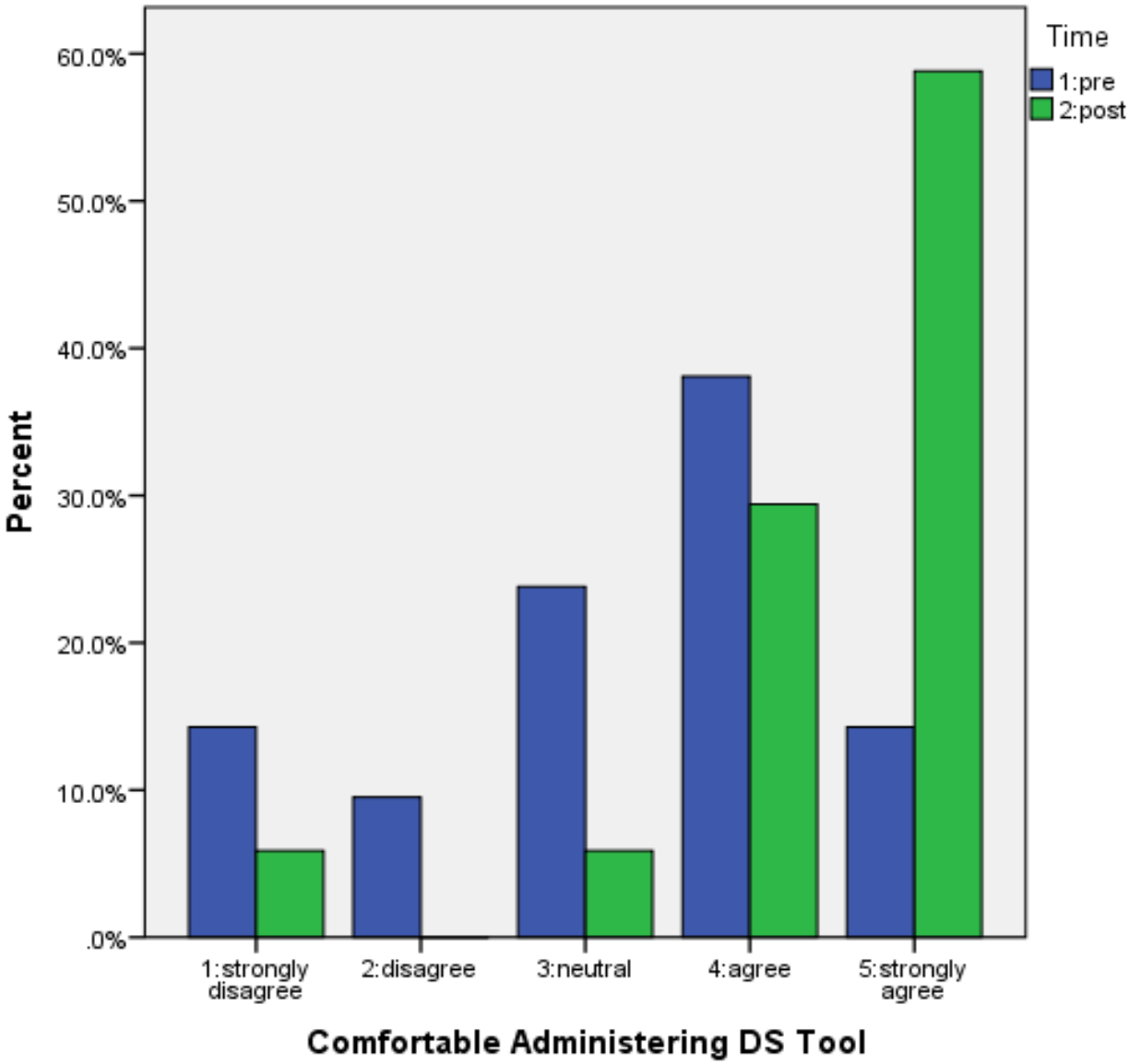


Figure 2.



Data was requested to look at the compliance rates of distress screening pre-intervention (July 2017) vs. post-intervention (September 2017). Compliance data was only provided for the months of August, September, and October. In August 2017, only 21.25% of the patients were screened on the first visit. In September 2017, only 20.84% of the patients were screened on the first visit. In October 2017, only 18.07% of the patients were screened on the first visit. Without

the July 2017 data, there is no way of knowing whether the education intervention provided an improvement in compliance regarding screening. Regardless, these compliance rates are low and not acceptable to clinic management.

CHAPTER 6: DISCUSSION

Distress from a cancer diagnosis or side effects from cancer treatment can bring emotional, psychological, spiritual, social, or financial challenges that, left unaddressed, can lead to serious coping difficulties, poor QOL, and possibly poor physiologic cancer outcomes. Distress screening provides a method of identifying when distress might need further assessment or a referral and treatment for psychosocial care. With the requirement from the ACSCoC to provide distress screening and follow-up psychosocial care, cancer centers are trying to successfully integrate this screening into clinic workflow. Education is often overlooked due to oncology providers and nursing staff perceiving themselves as compassionate experts already, but talking with patients about highly emotionally charged topics may not be in their skill set and can create personal distress for themselves and possibly lead to burnout (Loscalzo et al., 2011). This QI project's intention was to determine whether a staff education program that focused on how to engage patients in distress screening, why distress screening is important, and the importance of psychosocial care improved the comfort level of front-line staff (nurses and CMAs) who are charged with providing distress screening in the clinic.

Key Findings

The key findings of the study are that educating staff on how to engage patients in distress screening and the importance of this screening and psychosocial care does provide a significant improvement in the staff's perception of whether distress screening is helpful to patients as well as in their comfort level in administering the distress screening tool. There was some change in the perception of the importance of distress screening in the care of clinic

patients, but these results were not significant. The staff was open with the investigator about their belief that they have a strong understanding of their patients' struggles and that they have little difficulty connecting with patients, so there is little surprise that the education did not change their perception of their understanding of how distress impacts patients or their ability to access in-house resources to get assistance for patients.

The individual comments on the anonymous surveys reiterated this feeling that they develop strong relationships with these patients, know when a patient is struggling, and that distress screening and referrals may not be necessary. One person felt that the nurse should be able to use his or her own clinical judgment whether or not to pursue distress screening. A lack of understanding on why they were being asked to complete the screening and a lack of knowledge of in-house resources was evident in the pre-intervention survey. Discomfort with screening on the first visit prior to establishing rapport with the patient was a common theme throughout the training, and it was reported on the post-intervention survey. Also, the staff reported a concern that patients without cancer are seen in their clinic, and sometimes patients are not aware that they have cancer when they arrive at the clinic. This leaves the staff feeling vulnerable, feeling that screening all new patients for distress puts them in a position that is inappropriate for their role. Staff did share with the investigator that the training improved their ability to talk with patients about distress and that the patient education handout helped make engagement in distress screening go more smoothly.

Improving distress screening compliance was not the focus of this project, but I was curious to know whether the education intervention improved compliance. To get a true measure, I needed compliance results pre-intervention (July 2017) vs. post-intervention (September 2017). Despite my request, the clinic was only able to provide compliance data for August, September,

and October of 2017, instead of July 2017 vs. September 2017. With August showing 21.25% compliance, September showing 20.84% compliance, and October 18.07% compliance in screening patients during their first visit to the clinic, nurses were not screening at an acceptable rate and the trend was worsening the further they were removed from the July education intervention. Without the July pre-intervention data, there is no way of knowing whether the education actually improved compliance; but regardless, the screening rates were not acceptable to clinic management and the team is taking further steps to improve practice.

Understanding the Findings

With cancer and the side effects of cancer treatment causing differing levels of distress unique to each patient, distress screening clearly falls within the Neuman Systems Model and provides a prevention strategy to help avoid challenges that can negatively affect a patient's QOL. The Neuman Systems Model looks at each patient as a system with physiological, psychological, sociocultural, developmental, and spiritual variables, and with stressors that can be intrapersonal, interpersonal, or extra-personal. Neuman's theory tells us that how a patient perceives and reacts to stress plays a huge factor in each patient's stability (Freese et al., 2011). The practice of engaging patients in distress screening in a meaningful way that helps educate them in understanding their reactions to distress can suggest both primary and secondary prevention strategies. The hope is that providing the screening and education about when to seek help, and the knowledge that resources are available, can lead to a tertiary prevention strategy for those patients agreeing to and seeking further assistance (Hammonds, 2012).

The administration was open to the investigator using education in a QI project to improve distress screening. They understood that the ACSCoC requires distress screening and that non-compliance could risk their institutional accreditation. However, despite explaining this

requirement to staff in the education session, it was not a motivating force to change their practice. “The group culture may need to be changed and this takes time, effort, persuasiveness, and patience” (Morelli, 2016, p. 1220). Group culture is most likely a key barrier in the AOC, and the cultural elements of resistance to change need to be identified in order to establish a plan to overcome these barriers (Morelli, 2016). Improvements have been seen in other clinic settings where there was a culture shift allowing distress screening to become more integrated into care processes and where providers also gained a deeper appreciation of screening and psychosocial care (Riblet et al., 2014). Provider (physician, nurse practitioner, and physician assistant) buy-in should not be difficult to obtain, given that providers frequently find that patient psychosocial issues can slow down clinic work flow, whereas connecting patients with early psychosocial care can increase productivity. If oncology providers fully understood that screening can prospectively improve clinic efficiency and manage psychosocial issues that typically slow down clinical encounters, their influence on staff could help to create a culture where everyone was more comfortable with distress screening (Loscalzo et al., 2011). All key stakeholders need to understand how the practice change directly benefits them, as well as how it benefits patients and families (Loscalzo et al., 2011). “Culture change takes time, perseverance, vision and responsibility for any fallout to be anticipated and managed” (Loscalzo et al., 2011, p. 457).

Implications for Practice

QI principles, notably the use of PDSA cycles, have been successful in prior settings where distress screening implementation improvements were needed (Riblet et al., 2014). In this particular setting, further PDSA cycles could prove to be helpful by working beyond the blessing of administration and including nursing, CMA, and provider champions in helping to explore change concepts and further understand and affect culture change. It appears that further

incentives are needed to change staff behavior beyond providing education, but this does not take away from the importance of providing education. The need for incentives further justifies the inclusion of staff in the planning phase of the PDSA. It is also possible that the education needs to expand to oncology providers so that all clinic personnel understand the importance of recognizing distress and connecting patients with psychosocial care resources.

Limitations

The investigator was fortunate to have previously worked in the AOC as a nurse navigator and had forged valuable relationships with numerous administrative personnel and staff members prior to starting this project. However, the investigator had not been employed by the cancer center since 2015, was a guest in the clinic, and had limited access to day-to-day decision-making there. There was no one designated as a nursing or CMA champion of distress screening, and while numerous oncology providers were supportive of the project, there was no designated provider champion to help work toward a culture change.

There was also the risk of response bias since the sample was a small convenience sample wherein the nurse manager recruited the staff members. They may have been concerned about their ability to be truthful in their responses, knowing that their manager would eventually see the results. The results of the analyses are limited by the fact that pre and post-test responses from the same participants were not matched. A chi square analysis assumes independence of pre and post measurement, which is unlikely to hold given the same participants may have responded to both pre and post measurements. In addition, the investigator created the survey, so there had been no previous testing to determine the reliability and validity of this instrument. While embedded in the clinic after the education intervention, the investigator spent time with each staff member asking questions, providing further education, and coaching as needed. The

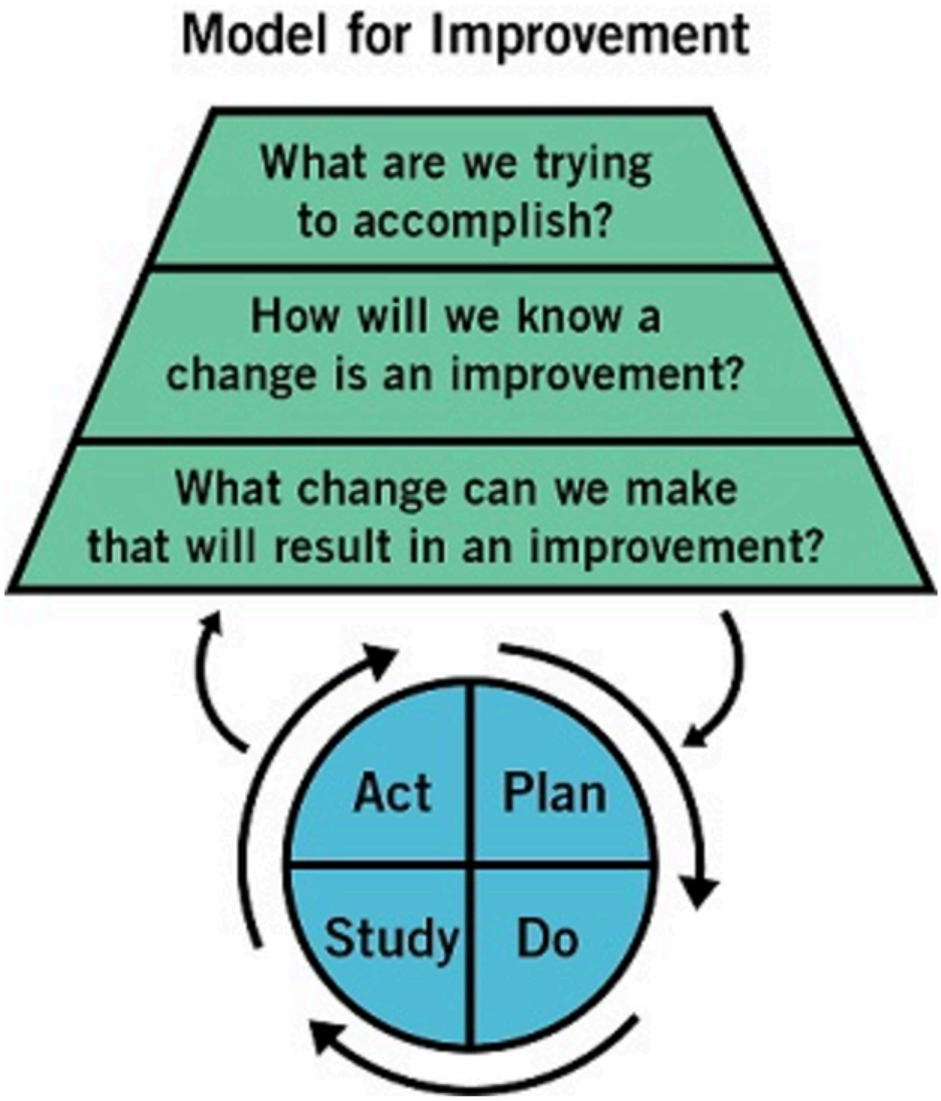
investigator worked to establish rapport with the staff, and the staff did share their triumphs and concerns with the investigator. Finally, the generalizability of the findings is challenging, considering that the sample size was small and was gathered in a unique context and setting.

Conclusion

Cancer centers should not assume that oncology nurses and medical assistants understand the importance of psychosocial care or are comfortable with how to engage patients in distress screening. Medical staff that work with patients with cancer on a daily basis often are very good at compassionate care and recognize their strengths in developing rapport with patients, but this doesn't necessarily mean that they cannot learn how to improve their engagement skills and increase their understanding of distress and psychosocial care.

Providing distress screening seems to be uncomfortable for staff to engage in on the patient's first visit to an oncology clinic, and it may be wise to reconsider which visit makes the most sense in providing distress screening annually for all patients with cancer. Now that all cancer centers are required to provide distress screening for accreditation, QI initiatives are needed to help find a way to make it work in individual clinics to best match the culture of the staff and providers. Even so, one cannot assume that implementing distress screening will automatically result in more effective care processes and better outcomes. Effective strategies to facilitate best practices in psychosocial care and distress management are essential for a quality response (Howell, Hack, Green, & Fitch, 2014). A QI process can identify staff learning needs to improve outcomes. Considering the positive outcome of this project's education intervention when it came to improving the staff's perception of distress screening and their comfort level with doing so, education should be a component of QI initiatives when working to improve distress screening protocols.

APPENDIX 1: INSTITUTE FOR HEALTHCARE IMPROVEMENT'S MODEL FOR IMPROVEMENT



(IHI, 2016)

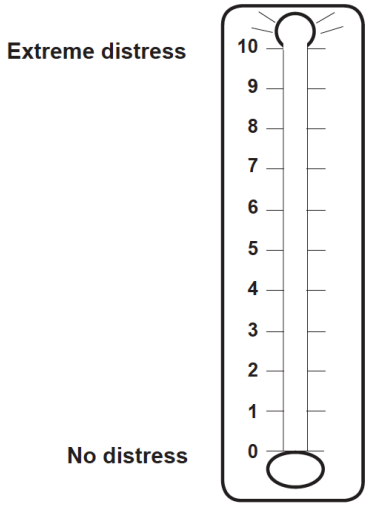
APPENDIX 2: DISTRESS SCREENING TOOL

National Comprehensive Cancer Network®

NCCN Distress Thermometer and Problem List for Patients

NCCN DISTRESS THERMOMETER

Instructions: Please circle the number (0–10) that best describes how much distress you have been experiencing in the past week including today.



PROBLEM LIST

Please indicate if any of the following has been a problem for you in the past week including today.

Be sure to check YES or NO for each.

YES	NO	Practical Problems
❑	❑	Child care
❑	❑	Housing
❑	❑	Insurance/financial
❑	❑	Transportation
❑	❑	Work/school
❑	❑	Treatment decisions
		Family Problems
❑	❑	Dealing with children
❑	❑	Dealing with partner
❑	❑	Ability to have children
❑	❑	Family health issues
		Emotional Problems
❑	❑	Depression
❑	❑	Fears
❑	❑	Nervousness
❑	❑	Sadness
❑	❑	Worry
❑	❑	Loss of interest in usual activities
❑	❑	**Spiritual/religious concerns**

YES	NO	Physical Problems
❑	❑	Appearance
❑	❑	Bathing/dressing
❑	❑	Breathing
❑	❑	Changes in urination
❑	❑	Constipation
❑	❑	Diarrhea
❑	❑	Eating
❑	❑	Fatigue
❑	❑	Feeling swollen
❑	❑	Fevers
❑	❑	Getting around
❑	❑	Indigestion
❑	❑	Memory/concentration
❑	❑	Mouth sores
❑	❑	Nausea
❑	❑	Nose dry/congested
❑	❑	Pain
❑	❑	Sexual
❑	❑	Skin dry/itchy
❑	❑	Sleep
❑	❑	Substance abuse
❑	❑	Tingling in hands/feet

Other Problems: _____

_____

(NCCN, 2013)

APPENDIX 3: PRE-INTERVENTION SURVEY

1. Distress screening is helpful to patients.	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
2. I understand how distress impacts patients.	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
3. I am comfortable administering the Distress Screening Thermometer to patients.	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
4. How important is distress screening in the care of clinic patients?	Extremely important	Very important	Moderately important	Slightly important	Not at all important
5. I am comfortable referring patients to the Patient & Family Resource Center or paging the Comprehensive Cancer Support Program when patients score 4 or above.	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
6. Please provide additional comments about distress screening.					

APPENDIX 4: PRE-INTERVENTION RECRUITMENT EMAIL

Email sent from nurse manager to clinic staff on 7/20/2017:

Good Afternoon,

Melissa Holt, a former Nurse Navigator and 4 Oncology nurse at UNC Cancer Hospital, is working on her DNP at UNC Chapel Hill. Her DNP project is looking at how to improve Distress Screening in the Adult Oncology Clinic. She will be attending your staff meeting next week on Wednesday, 7/26, and needs to collect information via a short survey prior to the staff meeting. Please follow this link to complete the survey. It should only take a couple of minutes. All responses are anonymous.

https://unc.az1.qualtrics.com/jfe/form/SV_8ukMeFqXDOCqPK1

Thanks!
Stephanie

Stephanie Duncan BSN, RN, CCRN | PSM III
Adult Oncology Clinics
UNC Hospitals
101 Manning Drive CB 7218
Chapel Hill, NC 27599-7218
p (984) 974-8203
Stephanie.Duncan@unchealth.unc.edu

APPENDIX 5: PATIENT EDUCATION HANDOUT

Cancer is Stressful!
How To Get Help

UNC HEALTH CARE
UNC CANCER CARE

All patients with cancer feel distress. **Distress** is unpleasant feelings that may cause problems as you cope with cancer and cancer treatments. When you are distressed, you may feel sad, hopeless, scared, anxious, depressed, guilty, powerless, or discouraged. At the N.C. Cancer Hospital, we ask about distress to find out when you may need extra support.

When Distress is Serious

Having some distress is normal because everything about cancer is stressful. Here are some examples of when distress is **not normal**:

- Feeling overwhelmed to the point of panic
- Becoming overcome by a sense of dread
- Feeling so sad that you think you can't go through treatment
- Being unusually irritable and angry
- Having trouble concentrating
- Having a hard time making decisions
- Having trouble sleeping or eating
- Questioning your faith or religious beliefs that once gave comfort
- Feeling hopeless, worthless, or useless

Why You Should Get Help

✓ It can improve your ability to solve problems

✓ It can help you manage your emotions

✓ It can improve your motivation for treatment

✓ It can help you live longer

How to Get Help

Talk to your care team. We can help you sort out resources for problems with your finances, emotions, spiritual beliefs, and social life. There's also help for anyone facing substance abuse or family challenges.

For more information, visit the Patient and Family Resource Center in the Main Lobby

Or ✆ Call **984-974-8100**

[1] American Cancer Society (2017). Retrieved from: https://www.cancer.org/treatment/treatments-and-side-effects/emotional-side-effects/distress/normal-or-serious-distress.html

[2] Loscalzo, M., & Clark, K. (2017, March). Your guide to implementing comprehensive biopsychosocial screening. In M. Loscalzo, & K. Clark (Chair), *Implementing comprehensive biopsychosocial screening*. Symposium conducted at the City of Hope Medical Center, Duarte, CA.

8/2017

APPENDIX 6: POST-INTERVENTION RECRUITMENT EMAIL

Email sent from investigator to clinic staff on 9/12/2017:

Hello everyone,

I want to thank each of you for working with me the past few months. I have enjoyed spending time with you, learning about your challenges, and trying to help make distress screening go more smoothly.

Please follow the link below and complete one final survey. It should only take a couple of minutes. I left room at the end for comments, but that is optional. All of your responses are anonymous and I will never know who wrote which response.

https://unc.az1.qualtrics.com/jfe/form/SV_espJLsBNMnnZtNr

Thank you and best of luck with everything!

Melissa Holt, RN, DNP Student
The University of North Carolina at Chapel Hill
mbholt@email.unc.edu

APPENDIX 7: POST-INTERVENTION SURVEY

1. Distress screening is helpful to patients.	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
2. I understand how distress impacts patients.	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
3. I am comfortable administering the Distress Screening Thermometer to patients.	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
4. How important is distress screening in the care of clinic patients?	Extremely important	Very important	Moderately important	Slightly important	Not at all important
5. I am comfortable referring p patients to the Patient & Family Resource Center or paging the Comprehensive Cancer Support Program when patients score 4 or above.	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
6. The new handout is helpful when engaging patients in distress screening.	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
7. The distress screening training helped improve my ability to talk with patients about distress.	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
8. Feel free to provide additional comments about distress screening or the recent training.					

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