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# A Multidisciplinary Approach to Managing Financial Toxicity in Oncology Patients

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College of Nursing

This is to certify that the doctoral study by

Katelin Muse

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
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Walden University
2023

Abstract

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Project Submitted in Partial Fulfillment

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February 2023

## Abstract

Patients with a cancer diagnosis are counseled at length about the standard of care treatment options, which may include surgery, radiation, anticancer medications, and chemo/immunotherapy through an informed consent process. Unfortunately, the potential economic burden and the accompanying psychological burden is seldom discussed up front. There is a significant need for routine screening and a multidisciplinary approach to the prevention of financial toxicity for the oncology patient. The purpose of this doctoral project was to lead an interprofessional team in the development of a clinical practice guideline for routine financial screening using the Comprehensive Score for Financial Toxicity (COST) tool and a formal triage process for additional support from the organization's financial counselor and social worker. Sources of evidence to support project initiatives are based on current, peer-reviewed, literature supporting best practices in improving financial toxicity for oncology patients. The clinical practice guideline development process uses RAND's modified Delphi model and is based on the AGREE II criteria. The overall AGREE II summative evaluation based on guideline development scoring and recommendation for use in practice was reviewed by an interdisciplinary team in the academic cancer center and totaled 6.75. Development of the clinical practice guideline is based on the Walden University social change theory for strategies to improve human conditions. The project uses the person-centered care model, which emphasizes empowerment of patients through education and resource utilization and improves the ability to be an autonomous decision maker in individual health plans.

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# Dedication

This is project is dedicated to the hundreds of thousands of cancer patients who have allowed me to be part of their journey, both in times of treatment and in everyday life. The impact each and every patient has had on my life is immeasurable and helped shape me into who I am today in many ways.

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# Section 1: Nature of the Project

## Introduction

Cancer remains a leading cause of death in the United States. It is estimated that nearly 40% of men and women will be diagnosed with cancer at some point in their lives (National Cancer Institute [NCI], 2020). The physical and psychological effects of a cancer diagnosis coupled with several sources of disease-related financial distress have led to an urgent need for improvement in the healthcare process. The term financial toxicity is used to describe the objective and subjective measures of financial strain caused by costly care or treatment for cancer. In this doctoral project, I developed an evidence-based plan to address financial toxicity in the oncology patient population.

## Problem Statement

The comprehensive cancer center where this project took place is a large, accredited, research-focused NCI-designated organization in the Southwest region of the United States. Although the care team has significant scientific and medical contributions in advancing the treatment of all types of cancer, there continues to be a lack of routine financial screening and appropriate referrals for mitigation. The appropriate resources, personnel, and electronic health record (EHR) needs are in place, but the systemic and interdisciplinary process for addressing financial issues and preventing toxicity is lacking. Advances in cancer care have led to a prolonged life expectancy after diagnosis (Chi, 2017). This, combined with the rising costs of medications and treatment-related expenses has added to significant distress for the oncology patient population. Additional expenses can be incurred through transportation needs, parking fees at healthcare

organizations, and reduced income from loss of employment or unplanned retirement. While the complete management of financial toxicity requires a multidisciplinary approach, the assessment, screening, and referral process is dependent on the active input of clinical nurses. The American Nurses Association (2020) holds a stance that patient advocacy within the workplace, community, and legislation is a pillar of the nursing profession. Proper screening and management for the reduction of financial toxicity during and after cancer care is a significant need for the local nursing practice and the oncology nursing profession in general.

## Purpose Statement

After a cancer diagnosis, standard of care treatment options, which often include surgery, radiation, anticancer medications, and chemo/immunotherapy are discussed at length with the patient through an informed consent process. Unfortunately, the potential economic burden and the accompanying psychological burden is seldom discussed up front. It is estimated that one half of patients with a cancer diagnosis, including those in survivorship, will experience financial toxicity at some point in their care trajectory (Smith et al., 2019). Therefore, routine screening and a multidisciplinary approach to management of financial issues for the oncology population is warranted. The clinical practice question was “Will a multidisciplinary team reach consensus on an expansion of the currently clinical practice guidelines to include a financial screening process and referral to on-site services?”

The purpose of this scholarly project was to create a clinical practice guideline for a multidisciplinary team within a comprehensive cancer center to appropriately screen

patients for financial toxicity and subsequently refer to on-site services such as social worker, case manager, and nurse navigator. Adherence to appropriate screening and referral processes will allow early recognition of financial stress and provide access to resources to enable patients and families to decide about treatment choices.

## Nature of the Doctoral Project

Financial toxicity is a relevantly new focus in healthcare over the past 5 years. However, evidence has frequently linked this concept with several critical subjective and objective patient outcomes (Chi, 2017). Evidence-based and peer-reviewed research publications served as the foundation for the design of the clinical practice guideline. I conducted a targeted search for recent literature that analyzes the most effective methods for screening and identifying patients for financial toxicity. The validated Comprehensive Score for Financial Toxicity (COST) screening tool is recommended to be implemented as a patient-reported outcome measure to assess economic needs outside of a clinical practice assessment (see de Souza et al., 2017). Additional evidence assisted with creating the most effective plan for referring patients to appropriate on-site and community-based resources for an all-encompassing financial and psychosocial support process. Identified sources of evidence were examined and documented in a literature review matrix for targeted concepts, strengths and weaknesses of the research, level of evidence, and outcomes. It is anticipated that with a validated screening tool and implementation of evidence-based strategies for mitigation of financial toxicity there will be an improvement in the patient's perception of provider engagement, a reduction in complications or missed treatment opportunities, and an improved quality of life.

This scholarly project followed the Walden Manual for Clinical Practice Guidelines. A multidisciplinary team consisted of volunteers from the Cancer Center, including a physician, surgeon, nurse practitioner, nurse navigator, social worker, and financial consultant. I assembled a summary of the best evidence-based practice and a first draft of the guideline. The team conferred via videoconferencing using a single shared document in Google Docs. Google Docs allows simultaneous editing and comments that could be limited to the team. The consensus process was guided by the RAND Corporation modified Delphi Model (Broder et al., 2022). Once consensus appeared to have been reached, both the core team and additional experts evaluated the guideline using the AGREE II tool (Brouwers et al., 2010). The guideline will then be submitted to the appropriate committees for adoption. Although beyond the scope of this project, the implementation and evaluation of the use of this guideline will be encouraged.

## Significance

Cancer care and the economic effects on those diagnosed with cancer are a critical opportunity for positive social change. Financial toxicity affects not only the ability to receive lifesaving disease treatment, but also aspects of daily living and both short- and long-term quality of life. Literature supports the need to properly identify patients at risk and provide appropriate support services across the continuum of care (Tran & Zafar, 2018). Financial toxicity can affect the patient from diagnosis to years into their survivorship and even indirectly affect family and/or dependents. The most considerably impacted stakeholder from the clinical practice guideline is the patient. Additional project

stakeholders include the clinical team (i.e., nurses, medical assistants, and physicians), unit social workers, and community representatives from patient support agencies. Each of these team members must communicate and work cooperatively to decrease the incidence of financial toxicity which may impact individual patient outcomes.

It is reported that an increased financial burden for cancer care costs is the strongest independent predictor of poor quality of life amongst cancer survivors (Fenn et al., 2020). Further, as cancer is considered the costliest disease in terms of out-of-pocket expenditure in the United States, financial toxicity has been associated with an increase in symptom burden, decreased treatment compliance, no treatment, and even higher risk for mortality (Hazell et al., 2020). Walden University's positive social change mission relates to the improvement of human and social conditions through the application of strategies to benefit humans from the individual level to societies as a whole (Walden University, 2022). Empowerment of patients through education and resource utilization improves their ability to be autonomous decision makers in their own healthcare plan. The lack of identification and support for financial toxicity puts individuals at risk of postponing or going without lifesaving care. Early screening and triage can help to mitigate both acute and long-term physical, psychological, and economic distress for patients. This is consistent with the Oncology Nursing Society's (2022) Standards for Oncology Clinical Practice. Although the project focuses solely on the oncology patient population, it is important to note that financial toxicity can impact the patient with any acute or chronic health condition and appropriate screening can be applied to a wide range of care specialties.

## Summary

Cancer care and the economic effects on those diagnosed with cancer are a critical opportunity for positive social change. Financial toxicity affects not only the ability to receive lifesaving disease treatment, but also aspects of daily living and both short- and long-term quality of life. Literature supports the dire need to properly identify patients at risk and provide appropriate support services across the continuum of care (Carrera et al., 2018; Chi, 2017; Coughlin et al., 2021). Financial toxicity can affect the patient from diagnosis to years into their survivorship and even indirectly affect family and/or dependents. Thus, this project focused on the creation of an evidence-based process for screening and identifying patients for financial hardship related to a cancer diagnosis. Screening scores will then guide clinical and support staff to provide available referrals and resources directly to those in need. Collectively, the aim of this Doctor of Nursing Practice (DNP) project was to improve awareness of financial toxicity in a large comprehensive cancer center, quickly identify at risk patients, and provide resources to lessen the economic threat on quality of life during disease management. In Section 2, I will discuss the conceptual model and a review of the literature.

Section 2: Background and Context

## Introduction

Evidence-based practice suggests that financial toxicity management in healthcare first be addressed through appropriate patient screening and provider engagement. Financial strain in the oncology patient can cause significant psychological stress, inability to afford basic necessities, and hinder the ability to obtain life-saving treatments (Coughlin et al., 2021). There is not a current clinical practice guideline that addresses a process for the interdisciplinary team to identify and refer oncology patients with financial toxicity. The aim of this project was to create an evidence-based clinical practice guideline for the implementation of a validated tool for screening the oncology patient population and subsequently referring to appropriate support services. In Section 2, I discuss related nursing concepts and theories, the relevance to nursing practice including the role of the project team members, and a description of the selected outpatient clinics' background.

## Concepts, Models, and Theories

Nursing theories create a groundwork to base healthcare decisions on. They provide a foundational understanding of care concepts that enable the nurse to justify the methodologies behind their practice decisions (Regis College, 2021). Person-centered care serves as a conceptual model that requires a true partnership between the practitioner and the individual. The Institute of Medicine described person-centered care as, "providing care that is respectful of, and responsive to, individual patient preferences, needs, and values, and ensuring that patient values guide all clinical decisions" (Agency

for Healthcare Research and Quality, 2018). An important aspect of person-centered care is the focus on providing collaborative care between the patient and the interdisciplinary team. Identifying and supporting patients with financial toxicity related to their disease treatment supports holistic care where not only the physical condition is addressed, but also the emotional well-being. Essential elements of effective person-centered care include an ongoing review of the patients' goals and care plan, care supported by an interprofessional team, active coordination between all providers and supportive teams, and an encouragement for family participation ("Person-centered care," 2015).

The development of a clinical practice guideline requires a methodical process for obtaining consensus from a panel of content experts. The RAND modified Delphi panel method served as a process theory for the development of the practice guideline. The Delphi method systematically and quantitatively combines literature-based evidence and expert opinion through a process of panel discussion and a structured rating form (Broder et al., 2022). Two rounds of panel discussion and rating between requested revisions contribute to the effectiveness of the method. I applied this structured process to the clinical practice guideline produced on the management of financial toxicity in the oncology patient.

The term *financial toxicity* is based on the NCI (n.d.) definition which describes the problems a patient has related to the cost of medical care which can affect a patient's quality of life and access to medical care. The term *socioeconomic status* is defined based on the NCI's (n.d.) description which outlines low, medium, and high qualifications. These levels are based on a person's education, income, and type of job. A person

described as having lower socioeconomic status is said to have less access to financial, educational, social, and health resources in general and may be more likely to suffer from a poor health status. The term *interdisciplinary team* refers to the healthcare provider group including the physician, nurse, social worker, case manager, clinic leadership, and any applicable and available community resources.

## Relevance to Nursing Practice

Although the degree of contributing factors for financial toxicity in oncology patients is well understood, there is little research published regarding interventions for addressing it. The broader problem relating to nursing practice is the ability and resources available to provide holistic care at the bedside. Research has suggested that an increased awareness of low-value practices and financial toxicity in cancer care can be helpful (Coughlin et al., 2021). There is also significant support for the communication between patients and healthcare team members surrounding financial burdens, estimated costs of care, and consideration for whether the clinical intervention will provide meaningful improvement in quality of life. While some cancer centers report financial toxicity screening in their current practice, literature continues to support the need to move towards repeated financial toxicity assessments and an ongoing, dynamic process for an ad hoc referral program for expeditious and tailored management (Smith et al., 2022).

The limited amount of literature on current methods to address financial toxicity supports the regular use of the COST financial toxicity screening tool as a self-reported, 11-item questionnaire administered by a member of the healthcare team (de Souza et al., 2017). Effective screening through this tool has been linked to several clinically relevant

outcome measures, specifically related to quality of life. Financial interventions such as patient education about cost-saving financial methods and decision making, expanded referrals to community resources and assistance programs, and coaching for coping and adapting to financial strain have also been beneficial (Coughlin et al., 2021). This doctoral project further supports nursing practice by developing a guideline for organizations to support clinical staff in providing the holistic care needed for reducing the burden of financial toxicity.

## Local Background and Context

The project site is an NCI-designated cancer center that is internationally known for the depth and breadth of its research, innovative treatment modalities, community outreach, and reduction in health disparities. The center, through physician clinics, infusion, mammography, and radiation, serves nearly 250 patients each day. The current interdisciplinary care team includes 50 practicing physicians, nursing staff, medical assistants, social worker, nurse navigation, clinical dietician, geneticist, and leadership staff. The EHR is well established and has a strong informatics support team. There are several regulatory guided patient screenings that are done on admission such as depression screening, fall risk, and a review of current medications. However, there is no established process for screening for financial toxicity.

The clinic is set in one of the largest cities in the state with several competing healthcare organizations within close geographic range. There are an estimated 90 languages spoken in the widely diverse population due to its attractiveness for international immigration and refugees (World Population Review, 2022). The hospital

the clinic is affiliated with has a strong academic standing and a well-established international department which attracts patients seeking cancer care from all over the world. Patients of all paying types, including government-funded insurance, private insurance, self-pay, and uninsured, are cared for. The regulatory and accrediting bodies that provide guidance for protecting healthcare consumers include the Centers for Medicare and Medicaid and Det Norske Veritas, Inc.

Operational processes revolve around the coupled visit model. In this model, the patient can participate in all of their care in one visit to the building. For example, the chemotherapy patient is able to have their blood work drawn, see their physician, utilize support services (social worker and/or dietician) and obtain their treatment infusion in the same day. There is also a strong operational model of physician–nurse partnership and a family-oriented environment where the aim is to not make the patient feel like a number.

Financial toxicity is not only a local clinic concern but also a national problem in the context of healthcare reform. In 2020, 31.6 million Americans of all ages were uninsured (Cha & Cohen, 2022). Adequate health insurance is associated with ease of access to care and improved population health. Financial strain in general also can contribute to poverty rates and reliance on government support for basic necessities. The severity of financial toxicity and the awareness that a majority of oncology patients find this to be a significant concern reveals a need in healthcare.

## Role of the DNP Student

This doctoral project is based in the cancer center where I am currently employed as the infusion center nurse manager. I have spent 10 years of my nursing career at the

organization in a variety of nursing roles across the cancer center, including both inpatient and outpatient. The executive leadership team and nursing research council are both supportive departments in the progression of the doctoral project process. The organization has also been the site of the DNP on-site scholarly practicum experiences.

My career dedication to the care of the oncology patient influenced the decision to select a project topic that would improve the care provided to this patient population. The cancer center is in the process of transitioning to a newly constructed space that quadruples the physical size and greatly expands the ability to care for additional patients. The move involves the restructuring of the EHR and opportunity to evaluate the current processes for inefficiencies or missing pieces. This creates an opportune environment to introduce a clinical practice guideline for adding a financial toxicity screening to the care process. Furthermore, as the infusion center nurse leader, I have first-hand been a part of several efforts by the clinical staff to pool resources to support a financial struggling patient or family grocery gift cards, cash collection, or fundraising support. This adds to the need for an organizational support system to identify these patients early and link them to community resources. Personal bias can be introduced through relationships formed with specific patients; however, implementation of an interdisciplinary screening process will encompass every patient who seeks care at the center.

## Role of the Project Team

The development of a clinical practice guideline through the AGREE II criteria required the formation of an interdisciplinary project team. The project team consisted of a determined expert panel and key stakeholders recruited from the cancer center (i.e.,

physician team members, executive leaders, and direct patient care staff) to ensure usability and accuracy. Background information, evidence, and process information were shared through regular comprehensive team meetings conducted through electronic meeting capabilities and succinct meeting minute follow-ups. A developed project timeline remained at the center of workflow to ensure a timely clinical practice guideline production.

## Summary

Through a focus on providing patient-centered care and the use of an evidence-based guideline for identifying and addressing financial toxicity in the oncology population, patient care can be advanced with the proposed doctoral project. Cancer remains a leading cause of death in the United States and has the potential for imposing a significant impact on quality of life physically, psychologically, and economically. The cancer center identified as a focus for the project is situated to affect a large quantity of patients over years to come. There is a need to properly identify patients at risk and provide appropriate support services across the continuum of care from diagnosis through survivorship. With this project, I sought to improve awareness of financially toxicity, quickly identify at risk patients, and provide resources to lessen the economic threat on quality of life during disease management. Section 3 will provide additional detail on the implementation process.

Section 3: Collection and Analysis of Evidence

## Introduction

A large number of patients affected by financial strain caused by oncology care, coupled with a lack of standardized identification and management process, creates the need for the development of a clinical practice guideline. Management of financial toxicity encompasses a focus on patient-centered care and an analysis of research to understand best practices for the desired outcome. The clinical practice guideline is designed to support the translation of evidence into clinical practice, outline a plan of expected care, and identify anticipated outcomes. The guideline provides a standard in which quality of care is measured against and serves as a source for decision-making in the clinical domain and the healthcare system as a whole (Bhaumik, 2017). In Section 3, I discuss the elements and processes used to fully develop the clinical practice guideline with a comprehensive explanation of supporting sources and published results. A detailed review of the literature I collected and subsequently analyzed will be presented with a focus on the project purpose.

## A Multi-Disciplinary Approach to Addressing Financial Toxicity: Development of a Clinical Practice Guideline

The identified outpatient cancer center lacks an evidence-based process for identifying and referring patients with financial toxicity. Financial toxicity is linked to patients' dissatisfaction with cancer care provided, possible delays or foregoing treatment, bankruptcy, and poor quality of life or deceased survival (Desai & Gyawali, 2020). Through the review of current literature and stakeholder engagement, solutions

can be implemented with a developed clinical practice guideline as navigation. The interdisciplinary team that is currently in place at the organization will be leveraged and guided by protocols and decision trees to appropriately identify patients in need and subsequently educate and refer them to services or community support available. The intended comprehensive outcome provides an opportunity to have necessary conversations with patients who may be experiencing financial toxicity related to the cost and value of prescribed cancer treatments, the availability and access to resources, and the ability to provide supportive care for the patient and family across the care continuum.

The operational definition of *clinical practice guideline* is derived from the Institute of Medicine. The clinical practice guideline is developed as a systematic aid in making complex medical decisions, such as an interdisciplinary effort to manage financial toxicity (Graham, 2011). The guideline uses a standardized process, in this case the AGREE II criteria, combined with a thorough review of the literature, clinical expertise, and patient values to improve healthcare outcomes and quality of care. Further discussion on the development process of the clinical practice guideline will be addressed in subsequent parts of this section in this DNP project paper.

## Sources of Evidence

The concept of financial toxicity in cancer care has only recently been investigated and acknowledged for its widespread effects. There have been few large studies reported on the combination of subjective and objective effects combined for financial toxicity in the oncology patient population, especially in relation to the high cost

of newer drugs in treatment regimens. Many of the available studies in the literature are either cross-sectional or retrospective/prospective cohort studies. Additionally, there are no current publicly available clinical practice guidelines relevant to this topic from any healthcare organizations. However, several recent peer-reviewed articles highlight the severity of the problem by expressing the high percentage of cancer patients that currently report either subjective or objective symptoms; some even relating it to the common expectation of alopecia or nausea that can be part of cancer treatment (Carrera et al., 2018). More recent literature supports a comprehensive process for self-reported screening, a reduction in low-value interventions, facilitation of appropriate referrals, and ensuring full disclosure of projected costs for the treatment interventions proposed for patients (Chan & Gordon, 2021).

The intended clinical practice guideline aims to measure the degree of financial toxicity in the oncology population and engage stakeholders for meaningful discussions with patients and allow for appropriate referrals for those in need. The basis for measuring the problem is the COST screening tool, which is the only validated, self-reported assessment that correlates financial toxicity with health-related quality of life (Desai & Gyawali, 2020). The 11-item screening tool is specific to the cancer patient and uses a Likert scale to score the severity of current or future financial toxicity (de Souza et al., 2016). The intended population for use is adults (i.e., over 18 years of age) with either a current or past cancer diagnosis. Validation studies have reported statistically significant relationships between COST score and health related quality of life, symptom burden, treatment compliance, and even survival.

Based on the literature currently available, I developed the clinical practice guideline following a comprehensive analysis of peer-reviewed articles that support the need for screening for financial toxicity. Studies that describe the cost of cancer drugs or policies related to limiting the costs were not included, as their focus is not to assist in addressing identification of individuals in need from a clinical assessment standpoint. Analysis of the selected studies provided evidence for the key domains of the clinical practice guideline and support for identification of the multidisciplinary team.

**Published Outcomes and Research**

The database search was based on the Walden University Library resource for peer-reviewed articles, e-books, and dissertations. Additional searches included the use of the Google platform for obtaining the AGREE II criteria tool, RAND modified Delphi method, and the COST screening tool. Key search terms included *financial toxicity*, *cancer*, *oncology*, *COST*, *screening tool*, *multi-disciplinary team*, *financial burden*, and *cancer survivor*. Studies that were more than 5 years old, not in the English language, or not peer-reviewed were excluded. Exceptions included validated tools (COST, AGREE II) that were published more than 5 years ago. For the literature review, I sought to find all Level I studies and any available and applicable clinical practice guidelines already developed. Additionally, in order to avoid outcome bias, I evaluated all studies based on applicability to the topic, any gaps in the research, and an overall evaluation of the contributions towards the desired project outcome.

## Analysis and Synthesis

The development of the clinical practice guideline followed a systematic process to translate evidence into practice. Initially, an organized method for recording and tracking evidence collected in the literature review was achieved through a matrix developed in Microsoft Excel. The matrix outlined key findings in each source and the level of evidence to understand the strength of the findings. Based on the literature review, I began a draft of the guideline. An interprofessional team of experts reviewed and provided feedback with a goal of a final document designed to meet organizational and patient needs. The committee met via teleconferencing to share expertise and suggestions on making the guideline actionable and measurable. Consensus was reached over two rounds using the modified Delphi method (see Broder et al., 2022).

Once consensus was reached, I asked the team of experts to review the document using the AGREE II criteria. The AGREE II tool is used to validate the content and assess the quality of the guideline developed for appropriate methodologies and rigorous strategies to ensure successful implementation (Brouwers et al., 2010). The grading criteria is organized into domains: Scope and Purpose, Stakeholder involvement, Rigor of Development, Clarity of Presentation, Applicability, and Editorial Independence. Each domain further critiques the guideline through a total of 23 key items to aggregate a final score. A higher final score indicates a link between proper collection and use of research by qualified professionals. Through the feedback obtained from AGREE II evaluation, the guideline was revised for a final presentation and subsequently forwarded to the appropriate hospital-based committee for approval and implementation.

## Summary

Creation of the clinical practice guideline for comprehensive screening and referral for financial toxicity in the cancer patient population was achieved through a rigorous literature review process to ensure evidence-based guidelines are followed. Additionally, a validated and systematic tool with the AGREE II criteria for expert panel review, modifications, and critiquing was utilized. Once consensus was achieved, implementation and dissemination plans commenced. Further details on finalized recommendations and a local dissemination plan will be discussed in subsequent sections of this doctoral project.

# Section 4: Findings and Recommendations

## Introduction

Financial toxicity in oncology care is a relatively new topic of interest but, nonetheless, has widespread and drastic implications for patients. The organization in focus has the necessary interdisciplinary team members in place to assist patients, but there is a lack of standardized screening to identify those patients in need. The clinical practice guideline provides a framework for implementation of a validated, patient-reported screening questionnaire to score and appropriately refer patients who indicated potential for financial toxicity. The project site is based on a large, academic-affiliated, comprehensive cancer center that manages care for all types of oncology diagnoses. Based on a comprehensive literature review and subsequent structured evidence analysis, I developed recommendations for practice. Findings, implications, and recommendations are outlined in Section 4.

## Role of Team Members

The AGREE II criteria comprise a series of communications and scoring guidelines to allow an expert panel to review and provide input on the clinical practice guideline. It is currently the most commonly applied tool to appraise a clinical practice guideline with six domains for assessing document validity and applicability (Hoffman-Eber et al., 2018). Each domain consists of assessment questions with a 7-point rating scale ranging from *strongly disagree* to *strongly agree*. The project team members subsequently rate the clinical practice guideline with each domain being expressed as a percentage of the total possible score. The domain explanations are displayed in Table 1.

The project team members consisted of nursing leadership members, an oncology clinical practice physician, clinical educators, and oncology center support service staff. The group collectively agreed that an organized, clinical approach to managing financial toxicity was of high importance. Each team member provided their independent review and feedback for application to the clinical practice guideline. After review and consideration of provided feedback, consensus was met with the AGREE II scoring shown in Table 1. Initial scoring allowed the identification of areas of correction for clarity and improvement of guidance for actionable items. Follow-up scoring revealed a panel consensus had been met.

**Table 1**

*AGREE II Tool Domains Alignment With Project*

| Domain | Description | Expert panel summative score |
|---|---|---|
| 1. Scope and purpose | Practice-focused question aligns with the proposed CPG to enhance patient care. | 7 |
| 2. Stakeholder involvement | Four expert panelists to review the proposed CPG based on evidence-based practice. | 7 |
| 3. Rigor of development | Best practices, current guidelines, and evidence used in development. | 6.5 |
| 4. Clarity of presentation | CPG and resource were clear and supported with evidence-based practice. | 7 |
| 5. Applicability | CPG and resources are universal for the target population. | 6.75 |
| 6. Editorial independence | Each expert panelist completed their review and added their own thoughts and individual comments. | 6.75 |

*Note*. Total summative agreement score based on overall guideline quality and recommendation for use = 6.75. CPG = clinical practice guideline.

The total summative agreement score is based on an average of the four guideline appraisers. The financial toxicity management clinical practice guideline resulted in a score of 6.75 on a scale of 0 to 7. This score reflects the appraiser's recommendations for implementation of the guideline actions and their confidence in the overall quality. This score was obtained after two rounds of review from the group of appraisers and revisions based on feedback obtained with the first appraisal review.

## Findings and Implications

The objectives of the clinical practice guideline development focused on three desired outcomes: (a) to equip ambulatory oncology staff with basic knowledge of initial screening and needs identification for financial toxicity in oncology patients; (b) to provide prompt, consistent, and evidence-based care to oncology patients in the ambulatory setting to reduce disease related suffering; and (c) to appropriately utilize an evidence-based standardized tool for financial toxicity screening and manage interpretation of scoring results for necessary internal support service referrals.

To meet these objectives, a thorough literature review revealed the importance of utilizing an interdisciplinary team to identify and assist patients. The patient-reported and validated COST questionnaire proved to be the only screening tool available to identify and refer patients for financial toxicity in the oncology care setting. An unanticipated finding during the literature review centered on a lack of evidence supporting which financial toxicity interventions had the greatest positive outcomes for patients. While there are several interdisciplinary referrals and support services suggested for implementation, there is little support to determine which provided the most significant impact on reducing suffering.

Financial toxicity in oncology care is a widespread and significant problem across the nation. Screening and supporting individual patients in a single ambulatory oncology clinic can make a meaningful impact on communities and populations as a whole. Providing opportunity for care that may not have been available due to financial constraints improves the health of the individual. Avoiding financial toxicity in the

individual impacts the economic stability for their family and drives positive social change. Healthcare expenditure across the nation related to cancer care is largely shouldered by the patient out-of-pocket costs (NCI, 2021). In 2019, the economic burden for patients to receive cancer care totaled an estimated $16.22 billion in medical costs and an additional $4.87 billion in travel costs. With the rising cost of cancer care year over year, a clinical practice guideline supporting screening and referrals is warranted.

## Recommendations

The clinical practice guideline was developed based on the body of current literature related to financial toxicity in oncology patients and expert feedback through the AGREE II criteria. Implementation recommendations are based on the inclusion of regular screening for all patients entering the healthcare system seeking oncology care. Screening should ideally occur at new patient appointments, with any change in treatment plan, or with patient indications of financial toxicity. The COST screening tool can be administered on paper and subsequently recorded in the EHR for future reference or be embedded directly in the EHR and administered by a healthcare provider inputting information. An interdisciplinary team should be involved in the screening activity with appropriate referral processes in place for resources such as social worker, community support, financial counseling, palliative care referral, nurse navigation, or further treatment option discussions with their medical provider.

It is recommended that organizational leadership approve the clinical practice guideline actions and begin implementation. Follow-up actions include monitoring of the formative and summative evaluation of this tool and reporting of findings to colleagues.

Evaluation of the tool should be considered annually for identification of any necessary updates to meet applicability and usability standards. If updates are needed, a multi-disciplinary team should be convened to evaluate the guideline for changes, which subsequently would be approved by organizational leadership. Future research should consider evaluation of the strength and efficacy of financial toxicity interventions that can be adopted by healthcare organizations based on patient input. The developed clinical practice guideline for financial toxicity screening for adult oncology patients is outlined in Appendix A. The referenced validated COST screening tool and scoring system is provided in Appendix B.

## Strengths and Limitations of the Project

Several project strengths are evident, with an important aspect arising from the focus on integration of a comprehensive literature review and peer-reviewed evidence analysis. Incorporation of recent literature and the use of a validated screening tool that has been proven to provide the desired results increase the strength of the clinical practice guideline. A high level of stakeholder engagement at the potential implementation site provided a unique strength with valuable input and an opportunity to refine and solidify the clinical practice guideline. It was assumed that the panel assembled to review the clinical practice guideline had sufficient knowledge and experience to provide a critical evaluation of the guideline. However, there can be challenges with implementation of evidence-based practice, especially with an area that has little support from current clinical practice guidelines.

Project limitations result from the understanding that financial toxicity is only recently being acknowledged in clinical care. Therefore, while there is a comprehensive tool for screening, there is little research promoting evidence-based interventions after screening occurs. There are several interventions and referrals suggested in the literature; however, there is little analysis for which interventions are the most effective. Future research should consider evaluating, based on patient input, the strength and efficacy of financial toxicity interventions that can be adopted by healthcare organizations.

## Section 5: Dissemination Plan

The clinical practice guideline was developed to assist the outpatient oncology clinic in successfully screening and providing interdisciplinary support to the patients seeking care. Upon project approval by the Chief Academic Officer at Walden University, formal dissemination will take place locally. I will present the fully approved clinical practice guideline to the cancer center leadership practice/operations work group. This group holds key stakeholders who provide support for successful implementation. Upon approval for implementation from this leadership group, it is essential to gather clinical staff leaders to discuss the importance of addressing financial toxicity in the patient population and clearly outline the required actions to set the screening process in motion. Additionally, a team from the information technology (IT) team must be involved for integration of the screening tool, and possible subsequent support referral, to be embedded into the EHR.

The developed guideline is not only applicable to the specific project site organization and can be disseminated to the broader nursing profession. Financial toxicity in oncology care is a widespread problem and the COST screening tool can be used in both inpatient and outpatient settings. There are opportunities to share the clinical practice guideline at national professional nursing conferences such as the ANCC Magnet conference and the Oncology Nursing Society annual Congress. Dissemination locally can also occur through networking at regional professional nursing society meetings.

## Analysis of Self

Several DNP essentials provided by the American Association of Colleges of Nursing address the ability of the DNP nurse to successfully integrate evidence into clinical practice. A scholarly nurse has a duty to incorporate enhanced knowledge into nursing practice to improve nursing practice and patient outcomes (American Association of Colleges of Nursing, 2006). DNP Essential III highlights the importance of the ability to investigate and synthesize literature and subsequently apply this knowledge to clinical problems with integration and dissemination (American Association of Colleges of Nursing, 2006). The clinical practice guideline project drew on these skills through a critical appraisal of the literature review and direct application to practice at the local (and potentially broader) level. Further, DNP Essential V relates to the core responsibility of the scholarly nurse to advocate for and influence health policy and the improvement of health delivery practices. Through the creation of an evidence-based guideline for a wide-spread patient need, I am able to influence the delivery of healthcare by improving access to care and holistic care for the community.

As the project leader of the clinical practice guideline development, I am also able to bring to the table over 10 years of oncology nursing experience, from the bedside clinician role to a leadership role. I have had the professional opportunity to complete the Agency for Healthcare Research and Quality Black Belt courses based on healthcare quality, program management, and Six Sigma principles. I was able to draw on each of these experiences to guide me in project leadership for this DNP scholarly work. The ability to guide interdisciplinary teams towards a common objective is key for the DNP

practicing nurse and the need to improve patient outcomes through evidence-based practice. The project manager role also came with the challenge of ensuring timely feedback and communication from all stakeholders who also had several competing interests. Through consistency and timely follow-up, this challenge was able to be mostly abated. Future work as a project manager and DNP nurse will certainly draw from experiences obtained through completion of this project.

## Summary

The development of this clinical practice guideline provides an opportunity for scholarly nursing growth and also the ability to impact patient care at both a clinical and psychological level. The larger imprint on improving the access to care for communities and reducing overall suffering during cancer treatment could profoundly impact the patient experience during a critical and potentially life-long health concern. The gap in practice identified at the local level with a lack of screening for financial toxicity with support referrals in place is suggested to be a national concern based on current literature. Nurses play a critical role in the success of the screening program through their ability to communicate with patients and identify signs of distress. It is important to consider implementation of the clinical practice guideline on a widespread level.

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Appendix A: Clinical Practice Guideline

# Nursing Clinical Practice Guideline Development for the Screening and Inter-Disciplinary Management of Financial Toxicity in Oncology Patients

## Introduction:

It is estimated that nearly 40% of the population will be diagnosed with cancer at some point in their lives (NCI, 2020). The physical and psychological effects of a cancer diagnosis coupled with several sources of disease-related financial distress have led to an urgent need for improvement in the healthcare process. The term financial toxicity is used to describe the objective and subjective measures of financial strain caused by costly care or treatment for cancer. Advances in cancer have led to a prolonged life expectancy after diagnosis; this combined with rising costs of medications and treatment-related expenses has added significant distress for the oncology patient population (Chi, 2017). The complete management of financial toxicity starts with a systematic and interdisciplinary process for the assessment, screening, and referral of impacted and at-risk patients.

## Guideline Purpose:

The purpose of this clinical practice guideline is to develop a standard practice to guide a multi-disciplinary team within a comprehensive cancer center to appropriately screen patients for financial toxicity and subsequently refer to on-site services such as social worker, case manager, and nurse navigator as appropriate.

Objectives include:

1. Equip ambulatory oncology staff with basic knowledge of initial screening and needs identification for financial toxicity in oncology patients.

2. Provide prompt, consistent, and evidence-based care to oncology patients in the ambulatory setting to reduce disease related suffering.

3. Appropriately utilize an evidence-based standardized tool for financial toxicity screening and manage interpretation of scoring results for necessary internal support service referrals.

## Healthcare Burden:

After a cancer diagnosis, standard of care treatment options (surgery, radiation, anticancer medications, chemo/immunotherapy) are discussed at length with the patient through an informed consent process. The potential economic burden and the accompanying psychological burden is seldom discussed up front. It is estimated that one-half of patients with a cancer diagnosis, including those in survivorship, will

experience financial toxicity at some point in their care trajectory (Smith et al., 2019). Financial toxicity affects not only the ability to receive lifesaving disease treatment, but also aspects of daily living and quality of life. It is reported that an increased financial burden for cancer care costs is the single most important predictor of poor quality of life among cancer survivors (Fenn et al., 2020). Further, cancer is considered the costliest disease in terms of out-of-pocket expenditure in the United States which can lead to decreased treatment compliance, no treatment, and even higher risk for mortality (Hazell et al., 2020).

## Methods:

The clinical practice guideline originated from a comprehensive analysis of peer-reviewed articles that support the need for screening for financial toxicity. The database search is based on the Walden University Library resource for peer-reviewed articles, e-books, and dissertations. Additional evidence analysis included the use of the Agree II criteria tool, RAND modified Delphi method, and the COST screening tool. Studies were selected based on being less than five years old with a preference for Level I randomized controlled trials or systematic reviews. Additionally, to avoid any bias, all studies were evaluated based on applicability to the topic, any gaps in the research, and an overall evaluation of contributions towards the desired outcome.

## Guideline Key Action Statements:

- Consistent with the Oncology Nursing Society's Standards for Oncology Practice, early financial toxicity screening and triage should be implemented to help mitigate both acute and long-term physical, psychological, and economic distress for patients (ONS, 2022).

- It is recommended that the ambulatory oncology level of care utilize an interdisciplinary approach to screening for and managing financial toxicity.

- The validated Comprehensive Score for Financial Toxicity (COST) assessment tool should be implemented as a patient-reported outcome measure to assess economic needs. The 11-item questionnaire tool can be administered on paper or through the electronic health record by any member of the healthcare team. See attached for COST screening assessment tool.

- A referral system should be implemented and monitored based on scoring outcomes obtained during screening for appropriate services including but not limited to: physician discussions related to treatment plan options, palliative care interventions, financial counselor, nurse navigation, social worker, dietician, patient education about cost saving methods during treatment decision making, expanded referrals to community resources and assistance programs, psychological coaching for coping and adapting to financial strain.

**Implementation Considerations:**

Successful guideline implementation requires the formation of an interdisciplinary team. The clinical practice guideline should be disseminated to key stakeholders who are anticipated to play a significant role in successful implementation. Information technology (IT) support should be considered during stakeholder identification to improve migration of the COST screening tool into the electronic health patient screening admission process. The COST screening tool and its accompanying scoring guideline are attached as a supporting materials. Considerations based on potential health risks associated with screening include embarrassment of sharing personal financial information and the potential for eliciting an emotional situation such as sadness or frustration. Additionally, it recommended that the organization review and update the clinical practice guideline as appropriate for clinical applicability on an annual basis.

**Research Needs:**

Financial toxicity is a relevantly new focus in healthcare over the past five years. Additional research is recommended to understand most effective interventions after a patient is scored as appropriate for referrals and assistance.

**External Reviews:**

This guideline will be assessed by multiple appraisers with expertise in oncology clinical practice. Among these appraisers include clinical nursing leadership, practicing oncology physicians, financial counselors, and clinical educators. There are no identified competing interests from guideline development group members/Agree II evaluators.

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Appendix B: Supporting Material

## COST – FACIT (Version 2)

Below is a list of statements that other people with your illness have said are important. **Please circle or mark one number per line to indicate your response as it applies to the past 7 days.**

| | | Not at all | A little bit | Some-what | Quite a bit | Very much |
|---|---|---|---|---|---|---|
| FT1 | I know that I have enough money in savings, retirement, or assets to cover the costs of my treatment | 0 | 1 | 2 | 3 | 4 |
| FT2 | My out-of-pocket medical expenses are more than I thought they would be | 0 | 1 | 2 | 3 | 4 |
| FT3 | I worry about the financial problems I will have in the future as a result of my illness or treatment | 0 | 1 | 2 | 3 | 4 |
| FT4 | I feel I have no choice about the amount of money I spend on care | 0 | 1 | 2 | 3 | 4 |
| FT5 | I am frustrated that I cannot work or contribute as much as I usually do | 0 | 1 | 2 | 3 | 4 |
| FT6 | I am satisfied with my current financial situation | 0 | 1 | 2 | 3 | 4 |
| FT7 | I am able to meet my monthly expenses | 0 | 1 | 2 | 3 | 4 |
| FT8 | I feel financially stressed | 0 | 1 | 2 | 3 | 4 |
| FT9 | I am concerned about keeping my job and income, including work at home | 0 | 1 | 2 | 3 | 4 |
| FT10 | My cancer or treatment has reduced my satisfaction with my present financial situation | 0 | 1 | 2 | 3 | 4 |
| FT11 | I feel in control of my financial situation | 0 | 1 | 2 | 3 | 4 |
| FT12 | My illness has been a financial hardship to my family and me | 0 | 1 | 2 | 3 | 4 |

**Comprehensive Score for Financial Toxicity (COST) Scoring Guidelines** (Version 2)

Instructions:* 1.Record answers in "item response" column. If missing, mark with an X
2. Perform reversals as indicated, and sum individual items to obtain a score.
3. Multiply the sum of the item scores by the number of items in the scale, then divide by the number of items answered. This produces the scale score.
4. **The higher the score, the better the Financial Well-Being.**

| **Subscale** | **Item Code** | **Reverse item?** | | **Item response** | **Item Score** |
|---|---|---|---|---|---|
| **FINANCIAL TOXICITY SCALE** | FT1 | 0 | + | _____ | =_____ |
| | FT2 | 4 | - | _____ | =_____ |
| | FT3 | 4 | - | _____ | =_____ |
| | FT4 | 4 | - | _____ | =_____ |
| *Score range:* 0-44 | FT5 | 4 | - | _____ | =_____ |
| | FT6 | 0 | + | _____ | =_____ |
| | FT7 | 0 | + | _____ | =_____ |
| | FT8 | 4 | - | _____ | =_____ |
| | FT9 | 4 | - | _____ | =_____ |
| | FT10 | 4 | - | _____ | =_____ |
| | FT11 | 0 | + | _____ | =_____ |
| | FT12 | **Not scored (summary item)** | | | |

***Sum individual item scores:*** _____
***Multiply by 11:*** _____
***Divide by number of items answered:*** _____**= Financial Toxicity Score**