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Initiating Access to Palliative Care Earlier in Pediatric Oncology Patients

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UNIVERSITY OF SAN DIEGO

Hahn School of Nursing and Health Science: Beyer Institute of Nursing

DOCTOR OF NURSING PRACTICE PORTFOLIO

by

Anita Sharma, MSN, PNP-BC

A portfolio presented to the

FACULTY OF THE HAHN SCHOOL OF NURSING AND HEALTH SCIENCE
UNIVERSITY OF SAN DIEGO

In partial fulfillment of the requirements of the degree

DOCTOR OF NURSING PRACTICE

May 2024

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Acknowledgments

I would like to thank Dr. Cunningham for being my faculty advisor for this project and providing me with guidance and support for the past 2 years. I also like to thank my husband for being supportive and patient, as I pursued this goal. My parents have always encouraged higher education. I am forever grateful to them for pushing me to always work harder and set the bar higher. Lastly, I would like to acknowledge my younger sister, who has always been a source of strength and support.

Initiating Access to Palliative Care Earlier in Pediatric Oncology Patients

Anita Sharma

Dr. Isis Cunningham

University of San Diego

Abstract

Background: Pediatric oncology patients should be referred to palliative care early but despite research indicating the clear benefits, there is still a delay in referring patients. One of the reasons include lack of understanding amongst providers on what palliative care is. Palliative care provides symptom management, emotional support and helps the patient and family with difficult decision making.

Objectives: This project aimed to increase the number of early referrals to palliative care. The Pediatric Palliative Care Screening Tool (PaPas) was utilized to help identify the triggers which should prompt the referral.

Methods: A chart review of patients diagnosed with a malignancy or with relapsed disease, was conducted over a four-month period. The number of referrals to palliative care over that time frame was recorded. Then, the PaPas checklist tool was implemented for another four months, and the number of referrals were recorded.

Results: The referral rate increased from 8.5% pre-intervention to 94.9% post-intervention. The implementation of the PaPas checklist tool was successful in increasing the number of referrals to palliative for pediatric oncology patients.

Conclusion: This project demonstrated that the implementation of a palliative care screening tool can increase the number of early referrals to this highly important support service.

Keywords: *palliative care, pediatric oncology, screening tool*

Introduction

Pediatric oncology is a specialty that interfaces with almost every other specialty due to the nature of cancer and the effects of treatment on the body. Pediatric malignancies are also a life-changing diagnosis that greatly impacts the physical, mental, and emotional health of the patients and their family (Snaman et al., 2018). The uncertainty of how the child's cancer will behave and if they will survive, changes these families forever. Once the patient has progressed and is nearing the end of his/her life, this is an unimaginably painful experience for the parents and the whole family (Snaman et al., 2018). While providers make a great effort to involve other specialists and gather input, we often forget about palliative care (PC). According to Levine et al. (2017), some healthcare providers still believe PC is the same as end-of-life care or hospice Many feel guilty about referring to PC as they feel they are giving up on their patients. This misconception leads to providers not initiating referrals in a timely manner. Ideally, every child with a confirmed malignancy should automatically be referred to PC, however over 90% of patients are referred only when cancer has widely metastasized, or when patients are at the end of their lives (Levine et al., 2017).

Oncology patients experience several side effects and complications including nausea, vomiting, loss of appetite, weight loss, fatigue, anxiety, and depression (Weaver, et al., 2015). These symptoms are very stressful to the patient and family, causing significant burden on everyone (Weaver et al., 2015). Families are often not aware of all the different ways in which PC can support symptom management, especially by alternative medicine therapies like hypnosis, acupressure, and talk therapy to manage anxiety and depression (Weaver et al..2015). These effective treatments and interventions can provide relief but are often overlooked by the

primary oncology team, leading to unnecessary suffering for patients and their family (Weaver, et al. 2015).

Several members of the oncology team can recognize when patients and families are struggling. Child life specialists, social workers, and nurses can regularly see the different issues that are piling up for these patients. Nurses are an integral part of the care team and patients often share their feelings with their nurses first. They are aware of certain dynamics which may not be known to the rest of the care team. According to Sousa et al. (2019), nurses felt that families should be connected to PC and hospice services earlier than just at time of imminent death. They advocate for more emphasis on symptom management and incorporating other means of therapy to help with coping such as music, art, child life, and pet therapy. Weaver et al. (2015) explains how PC services are unique and address all components of care including psychological and social issues. Their service focuses on the whole family unit and incorporates the family's wishes and cultural beliefs to help reach decisions which are comfortable for everyone. Continuing to provide education about the role of PC is important as this will help providers understand why it can be so helpful for patients and families to have this extra layer of support.

Literature Review

Research has examined the patient and family's perception of symptom burden and as a result if patients and families are open to early PC referral. In one study, in which 258 patients were enrolled, surveys were given to both patients and parents which asked several questions around the different symptoms that oncology patients experience when starting therapy. These symptoms included nausea, loss of appetite, diarrhea, constipation, anxiety, and depression. All patients experienced these symptoms to varied degrees. Findings indicated only 1.6% of patients were opposed to the idea of early PC intervention, yet 6.2% of parents thought there might be

some detrimental effects of early referral to PC (Levine, 2017). Parents feared that this referral would make their child think they were dying and give up on treatment and life (Levine, 2017). Introducing PC earlier as a support service rather than end-of-life care could help discredit this notion and help the family accept such needed support.

Another study from a single academic institution looked at how many patients had documented triggers which should prompt a referral to PC and how many referrals were made. The study defined the variables into three categories including disease related triggers, symptom related triggers, and therapy related triggers. Some of these triggers included presence of metastatic disease, prognosis, advanced symptom control, patients proceeding with stem cell or bone marrow transplant, advancing to clinical trials, and presence of psychosocial factors that might affect family's coping abilities. A retrospective chart review of 931 patients revealed that all 931 patients had triggers for PC but only 5.6% of patients were referred (Cuviello, 2021). This study demonstrated that despite known triggers, for PC, these services continue to remain continues to be remain underutilized.

The Pediatric Palliative Care Screening Tool (PaPaS) developed by Bergstraesser et al. (2013), has been validated as a tool to help identify the triggers that should prompt a referral. It is an effective, and objective method of ensuring that all patients are appropriately identified and referred in a timely manner (Song et al, 2021). This checklist is easy to implement in the workplace and can be seen as a quick reference guide if a provider is unsure whether a particular patient should be referred or not. Ideally this tool/checklist would be utilized at diagnosis but can also be utilized later if the patient relapses or is acutely ill (Steineck, et al, 2022).

Based on the evidence that early referrals to PC lead to early intervention, better symptom management and outcomes for patients and families, the purpose of this project was to

utilize the PaPas scale to initiate prompt referrals at time of diagnosis or at time of relapse. Additionally, it aimed to educate the members of the healthcare team about the extensive support that palliative care can offer.

Methods

This project was implemented at Lucile Packard Children's Hospital Stanford (LPCH) in the pediatric oncology department. Approval to implement this project was received from the oncology department chief attending and director. The University of San Diego IRB board approved the project in April 2023.

The primary oncologist, advanced practice provider, nurse and social worker were educated about what PC was and the importance of early referral. The PaPas checklist was introduced as the tool necessary to help refer patients. The patients included in this project were diagnosed with a primary malignancy, and those whose cancer relapsed. Each provider has a patient panel which is available in the EMR. The patient lists were updated regularly by the provider to reflect all active patients who were receiving therapy, new diagnosis who were completing staging workups, and those with end-of-life needs. The charts of these patients also included the different referrals that were placed. Data was collected over a four-month time frame which examined how many patients were being referred to palliative care subjectively, at the providers discretion. For the next four months, the PaPas checklist tool was implemented and added to the EMR (Figure 1). The provider reviewed these patients charts and noted whether a referral to PC was initiated. Data was collected again to assess if the numbers of referrals had increased compared to previous months without the screening tool.

Figure 1

Pediatric Palliative Care Screening Tool

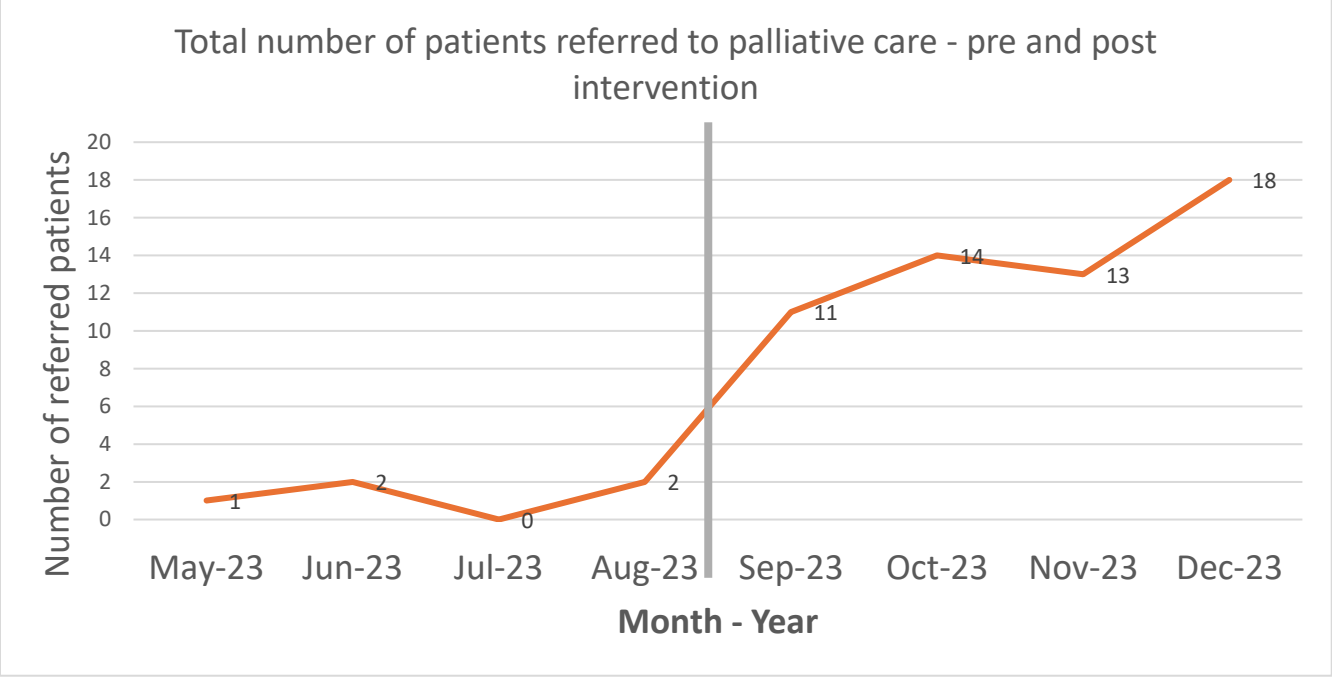
Domain and Item numbers	Item	Characteristic	Score
Domain 1	**Trajectory of disease and impact on daily activities of the child**		
1.1	Trajectory of disease and impact on daily activities of the child (in comparison with the child's own baseline) (with reference to the last 4 weeks)	Stable	0 ☐
		Slowly deteriorating without impact on daily activities.	1 ☐
		Unstable With impact on and restriction of daily activities.	2 ☐
		Significant deterioration with severe restriction of daily activities.	4 ☐
1.2	Increase of hospital admissions, (> 50% within 3 months, compared to previous periods)	No	0 ☐
		Yes	3 ☐
Domain 2	**Expected outcome of treatment directed at the disease and burden of treatment**		
2.1	Treatment directed at the disease, (does not mean treatment of disease related complications, such as pain, dyspnoea or fatigue)	...is curative.	0 ☐
		...controls disease and prolongs life with good quality of life.	1 ☐
		...does not cure or control but has a positive effect on quality of life.	2 ☐
		...does not control and has no effect on quality of life.	4 ☐
2.2	Burden of treatment, (**Burden** means side effects of treatment and additional burdens such as stay in hospital in the patient's or family's view)	No or minimal burden or no treatment is envisioned.	0 ☐
		Low level of burden	1 ☐
		Medium level of burden	2 ☐
		High level of burden	4 ☐
Domain 3	**Symptom and problem burden**		
3.1	Symptom intensity or difficulty of symptom control (over the last 4 weeks)	Patient is asymptomatic	0 ☐
		Symptom(s) are mild and easy to control	1 ☐
		Any symptom is moderate and controllable	2 ☐
		Any symptom is severe or difficult to control (unplanned hospitalisation or outpatient visits, symptom crises)	4 ☐
3.2	Psychological distress of patient related to symptoms	Absent	0 ☐
		Mild	1 ☐
		Moderate	2 ☐
		Significant	4 ☐
3.3	Psychological distress of parents or family related to symptoms and suffering of the child	Absent	0 ☐
		Mild	1 ☐
		Moderate	2 ☐
		Significant	4 ☐
Domain 4	**Preferences/needs of patient or parents**		
	Preferences of health professional		
4.1	Patient/parents wish to receive palliative care or formulate needs that are best met by palliative care.	No	0 ☐ please answer 4.2
		Yes	4 ☐ do not answer 4.2
4.2	You/your team feel that this patient would benefit from palliative care.	No	0 ☐
		Yes	4 ☐
Domain 5	**Estimated life expectancy**		
5.1	Estimated life expectancy	Several years	0 ☐ please answer 5.2
		Months to 1–2 years	1 ☐ please answer 5.2
		Weeks to months	3 ☐ do not answer 5.2
		Days to weeks	4 ☐ do not answer 5.2
5.2	"Would you be surprised if this child were to suddenly die in 6 months time?"	Yes	0 ☐
		No	2 ☐

Results

There were two phases to this project. On one phase, from May through August 2023, an extensive chart review of all the newly diagnosed and relapsed patients was completed to evaluate if a referral to PC had been placed. During this time, there were 47 patients who were eligible for PC, but only four patients were referred (Figure 2). On phase two, from September through December 2023, the PaPas screening tool was implemented and the number of referrals was recorded. There were 59 patients identified as appropriate referrals and 56 patients were referred (Figure 2). The referral rate increased from 8.5% pre-intervention to 94.9% post-intervention. These results confirm that patients are not being referred to PC in a timely manner and that the implementation of a screening tool was greatly effective in increasing the number of early referrals.

Figure 2

Total number of patients referred to palliative care – pre and post intervention



Discussion

This evidence-based project has the potential to change the lives of our young patients who are going through an unimaginable journey. There is clear data on how early introduction to palliative care can better serve our patients throughout their journey, and not just at the end of their lives. Oncology patients suffer from anxiety, depression, fear, and require advanced symptom management. Despite extensive research indicating the benefits of palliative care, there continue to be barriers in referring patients in a timely manner. Some of these barriers include lack of understanding from the team about what palliative care is, equating palliative care to hospice or end of life care, providers feeling they already provide palliative care in their visits, and the general feeling of giving up on the patient.

Limitations

Even though the generalizability of this project is high due to the objectivity and feasibility of the checklist tool, one of the limitations encountered was not having enough PC providers to take care of all the patients being referred and having the ability to meet with them regularly. Nevertheless, thanks to this project, our institution was able to better quantify the need for more PC providers and started the process of expanding this department.

Conclusion

The PC team should be involved earlier in the patient's care and should be introduced at the time of diagnosis, relapse, or as treatment is being initiated. Their presence elicits positive feedback from our patients and their parents as it provides an extra layer of support during challenging times. It is imperative that patients are not only treated for their medical condition, but in all aspects of their well-being to increase their quality of life. It is vital that providers receive education on what PC is and how it differs from hospice as this can prevent barriers to

early referrals. The feasibility and sustainability of the PaPas screening tool has the potential to be generalized to other subspecialties including neuro-oncology, stem cell transplant and certain hematology patients.

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Appendix A IRB Approval

May 11, 2023

Anita Sharma
Hahn School of Nursing & Health Science

Re: Initial - IRB-2023-420 Initiating access to palliative care earlier for pediatric oncology patients.

Dear Anita Sharma:

The Hahn School of Nursing & Health Science faculty representative(s), as an official part of the University of San Diego Institutional Review Board (USD IRB), have reviewed your application and rendered the decision below for IRB-2023-420: Initiating access to palliative care earlier for pediatric oncology patients..

Decision: Non-research or Not-human subjects research. This study may start no earlier than May 11, 2023.

Findings: This application has been reviewed and certified by the corresponding unit's IRB Org Approver(s).

Research Notes: Though certified as either non-research or not-human subjects research, the project team should ensure that the activities associated with the project are conducted in compliance with applicable USD policies and ethical standards as well as local, state, and federal regulations.

Internal Notes:

This approval is based on the intended work and scope of activities outlined in the submitted proposal. If the research team makes changes to the project and/or its study protocols, the PI or their designated team member must submit a modification application for IRB's re-evaluation.

The USD IRB requires annual renewal of all active studies reviewed and approved by the IRB. Please submit an application for renewal prior to the annual anniversary date of initial study approval.
If an application for renewal is not received, the study will be administratively closed.

Note: We send IRB correspondence regarding student research to the faculty advisor, who bears the ultimate responsibility for the conduct of the research. We request that the faculty advisor share this correspondence with the student researcher.

Applications for full review must be submitted at least two weeks prior to the next scheduled monthly IRB meeting; see https://www.sandiego.edu/irb/updates/ for specific deadlines. You may submit an IRB application for expedited or exempt review at any time.

Sincerely,

Hahn School of Nursing and Health Science IRB Org Approver(s)

Institutional Review Board

Appendix B LPCH Support Letter

Stanford | MEDICINE

DEPARTMENT OF PEDIATRICS

April 25, 2023

To: Institutional Review Board, University of San Diego

Re: DNP scholarly project – Increasing access to palliative care early for oncology patients

Anita Sharma has our support to begin her scholarly practice project at the LPCH pediatric outpatient oncology clinic, as part of her coursework for the DNP program at the University of San Diego. Mrs. Sharma has agreed to cleanse all data of any patient or institutional identifiers, and we understand that she will request to use data from this experience for publications and future presentations.

If you have any questions, please do not hesitate to contact me at Jacquelyn.Crane@stanford.edu.

Sincerely,

XXXXXXXXXXXX

Jacquelyn Crane, MD
Clinical Assistant Professor
Division of Hematology, Oncology, Stem Cell Transplantation & Regenerative Medicine
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Appendix C Poster

Initiating Access to Palliative Care Earlier in Pediatric Oncology Patients

Anita Sharma, MSN, PNP
Dr. Isis Cunningham, DNP, APRN, NP-C, CPNP-PC

Stanford MEDICINE Children's Health
Hahn SCHOOL OF NURSING AND HEALTH SCIENCE
University of San Diego

Background

- Referral to PC at time of diagnosis
- Delay in referring pediatric oncology patients to PC
- Lack of understanding amongst providers on what PC is
- PC provides extra layer of support
  - Symptom management
  - Decision making

Evidence for Problem

- Oncology patients have wide array of symptoms including pain, anxiety, body dysmorphia, excessive fatigue, weight loss, nausea, vomiting, and depression
- PC is a team designed to offer support around symptom management, provide emotional support, alternative therapies (acupressure/acupuncture, hypnosis), and aid in decision making
- Around 90% of patients are referred late or at end of life

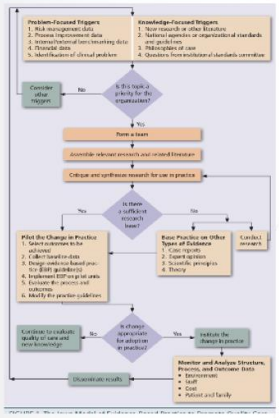
Evidence-Based Intervention/Benchmark

- Education to providers and nurses on importance of PC
- Referrals to PC at time of diagnosis/initiation of therapy using checklist which identifies triggers

Purpose

Aim of this project is to increase access to palliative care earlier in diagnosis rather than waiting until end of life or later in patients' oncology journey

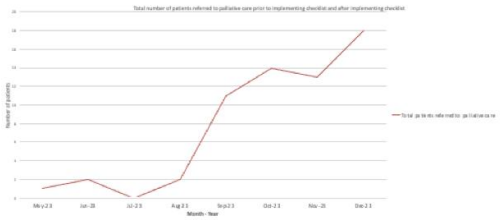
Framework/EBP Model



Cost-Benefit Analysis

- For every dollar spent, there is a $73 cost savings
- Potential $2960 cost avoidance for every patient not sent to ED for symptom management

Evaluation Results



Project Plan Process

- Provide education my team (4 attendings and 3 nurse coordinators) about the evidence for palliative care (PC)
- Identify and review charts in EMR for new patients who meet checklist criteria which should prompt referral to PC
- Talk to attending and family about initiating referral to PC
- Place referral to PC team in EMR
- Inform PC team about the new patient/family and provide summary about the top concerns
- Attend PC rounds weekly to monitor progress

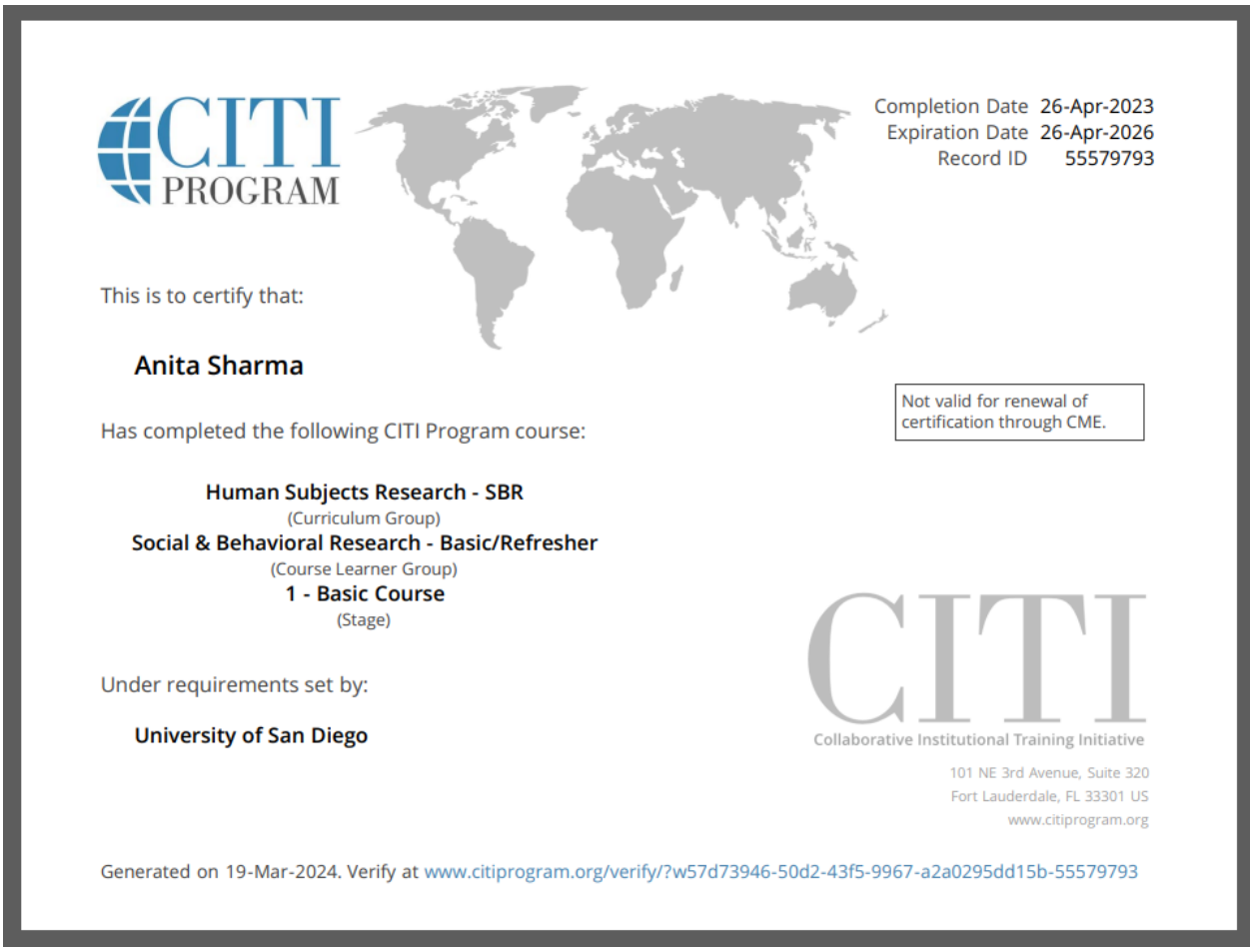
Conclusions

- Educated team on role of PC
- Utilization of checklist to identify triggers which prompted referral
- Increase in referral rate from 8.5% to 94.9%
- 4 out of 49 patients pre-intervention compared to 56 out of 59 post-intervention

Implications for Clinical Practice

- Aimed to educate oncology providers on importance of initiating palliative care earlier than later
- Improved access to PC services for other sub-specialties including neuro-oncology, hematology and stem cell transplant
- Provided additional support for pediatric oncology patients

Appendix D Certification



CITI PROGRAM

Completion Date 26-Apr-2023
Expiration Date 26-Apr-2026
Record ID 55579793

This is to certify that:

Anita Sharma

Not valid for renewal of certification through CME.

Has completed the following CITI Program course:

Human Subjects Research - SBR
(Curriculum Group)
Social & Behavioral Research - Basic/Refresher
(Course Learner Group)
1 - Basic Course
(Stage)

Under requirements set by:

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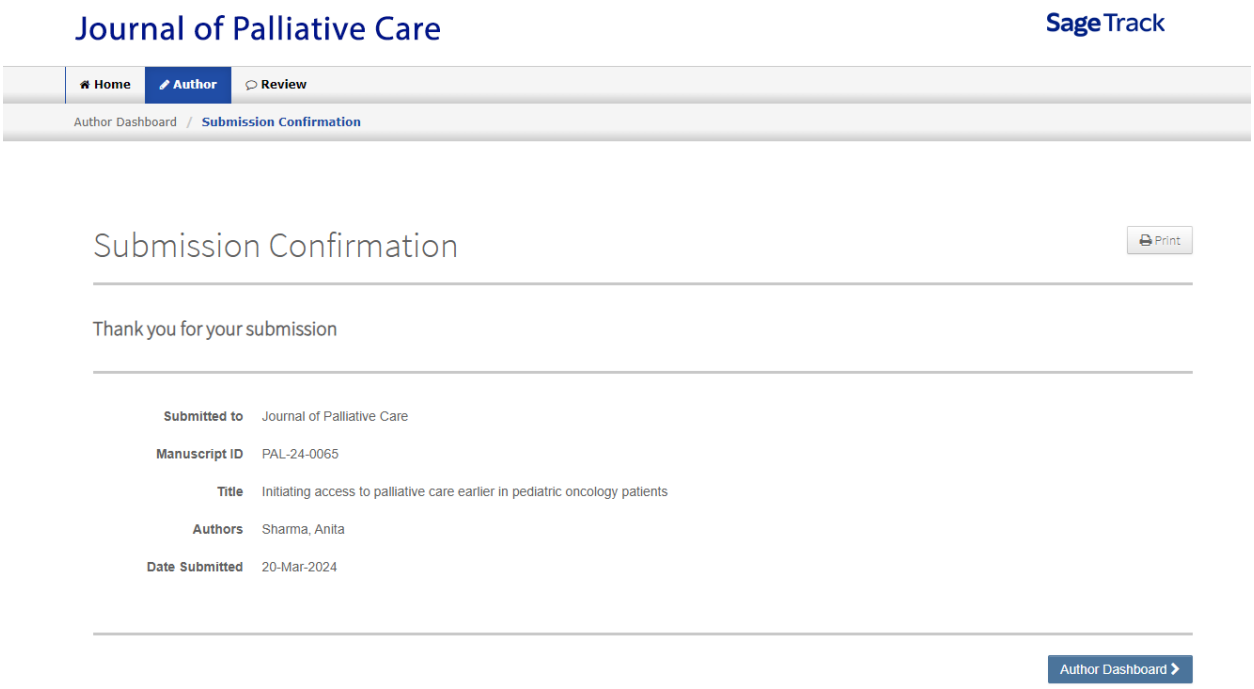
Appendix E Manuscript Submission



Journal of Palliative Care

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Submission Confirmation

Print

Thank you for your submission

Submitted to	Journal of Palliative Care
Manuscript ID	PAL-24-0065
Title	Initiating access to palliative care earlier in pediatric oncology patients
Authors	Sharma, Anita
Date Submitted	20-Mar-2024

Author Dashboard

Outcomes Exemplar

AACN DNP Essentials & NONPF Competencies	USD DNP Program Objectives	Exemplars Provide bulleted exemplars that demonstrates achievement of each objective
DNP Essential I: Scientific Underpinnings for Practice **NONPF: Scientific Foundation Competencies** *The scientific foundation of nursing practice has expanded and includes a focus on both the natural and social sciences including human biology, genomics, science of therapeutics, psychosocial sciences, as well as the science of complex organizational structures. In addition, philosophical, ethical, and historical issues inherent in the development of science create a context for the application of the natural and social sciences.*	**2.** Synthesize nursing and other scientific and ethical theories and concepts to create a foundation for advanced nursing practice.	***Fall 2022*** • Collaborative Institutional Training Initiative (CITI program) completion ***Spring 2023*** • Completed CITI human subjects training certificate April 2023
DNP Essential II: Organizational & System Leadership for Quality Improvement & Systems Thinking **NONPF: Leadership Competencies/Health Delivery System Competencies** *Advanced nursing practice includes an organizational and systems leadership component that emphasizes practice, ongoing improvement of health outcomes, and ensuring patient safety. Nurses should be prepared with sophisticated expertise in assessing organizations, identifying system's issues, and facilitating organization-wide changes in practice delivery. This also requires political skills, systems thinking, and the business and financial acumen needed for the analysis of practice quality and costs.*	**5.** Design, implement, and evaluate ethical health care delivery systems and information systems that meet societal needs and ensure accountability for quality outcomes.	***Fall 2022*** • Learned to develop PICOT question • Created evidence-based proposal on how to refer pediatric oncology patients, with a known malignancy and /or starting chemotherapy, to palliative care at time of diagnosis and when they are starting therapy ***Spring 2023*** • Fully developed PICOT question • Completed timeline for project and specifics on how to implement and measuring outcomes – increasing number of referrals to palliative care utilizing evidence-based checklist which identifies triggers in patients • Completed IRB proposal ***Summer 2023*** • Received IRB approval to start collecting data and implementing project

		Fall 2023 • Implemented PaPas screening tool for 4 months (September through December 2023) ***Spring 2024*** • Reviewed all data which concluded that implementing the checklist tool increased the number of early referrals.

DNP Essential III: Clinical Scholarship & Analytical Methods for Evidence-Based Practice **NONPF: Quality Competencies/Practice Inquiry Competencies** *Scholarship and research are the hallmarks of doctoral education. Although basic research is viewed as the first and most essential form of scholarly activity, an enlarged perspective of scholarship has emerged through alternative paradigms that involve more than discovery of new knowledge. These paradigms recognize: (1) the scholarship of discovery and integration "reflects the investigative and synthesizing traditions of academic life"; (2) scholars give meaning to isolated facts and make connections across disciplines through the scholarship of integration; and (3) the scholar applies knowledge to solve a problem via the scholarship of application that involves the translation of research into practice and dissemination and integration of new knowledge.*	**4.** Incorporate research into practice through critical appraisal of existing evidence, evaluating practice outcomes, and developing evidence-based practice guidelines.	***Fall 2022*** • Researched evidence which supported the need for early access to palliative care for pediatric patients with cancer. • Used MESH terms as part of Lit review to ensure evidence was specific and appropriate for this population • Incorporated checklist tool as a way to identify which patients should be referred to palliative care early based on tool that was already created in the literature ***Spring 2023*** • Continued to gather evidence to support DNP project • Used the "Melynk level of evidence" to rate articles and quality of evidence ***Summer 2023*** • Finalized checklist tool using all evidence and research to identify triggers which should prompt automatic referral to PC ***Fall 2024*** • PaPas checklist tool implemented for 4 months (September through December 2023)

DNP Essential IV: Information Systems/Technology & Patient Care Technology for Improvement & Transformation of Health Care **NONPF: Technology & Information Literacy Competencies** *DNP graduates are distinguished by their abilities to use information systems/technology to support and improve patient care and health care systems, and provide leadership within health care systems and/or academic settings. Knowledge and skills related to information systems/technology and patient care technology prepare the DNP graduates apply new knowledge, manage individual and aggregate level information, and assess the efficacy of patient care technology appropriate to a specialized area of practice along with the design, selection, and use of information systems/technology to evaluate programs of care, outcomes of care, and care systems. Information systems/technology provide a mechanism to apply budget and productivity tools, practice information systems and decision supports, and web-based learning or intervention tools to support and improve patient care.*	**7.** Incorporate ethical, regulatory, and legal guidelines in the delivery of health care and the selection, use, and evaluation of information systems and patient care technology.	***Fall 2022*** • Used Epic (EMR) to review list of new patients and referral process ***Spring 2023*** • Worked with nursing informatics about potential for adding 'best practice advisory' in Epic to prompt referral • Continuing to look through patient charts in EMR to review potential triggers ***Summer 2023*** • Using Epic, reviewed patient charts and collected data on timing of referral to palliative care from May 2023 through August 2023 ***Fall 2023*** • Identified new patients with confirmed malignancy and patients with relapsed disease. ***Spring 2024*** • Created graph indicating the increase in number of referrals in September through December compared to prior months

DNP Essential V: Health Care Policy for Advocacy in Health Care **NONPF: Policy Competencies** *Health care policy, whether created though governmental actions, institutional decision-making, or organizational standards, creates a framework that can facilitate or impede the delivery of health care services or the ability of the provider to engage in practice to address health care needs. Engagement in the process of policy development is central to creating a health care system that meets the needs of its constituents. Political activism and a commitment to policy development are central elements of DNP practice.*	**3.** Demonstrate leadership in collaborative efforts to develop and implement policies to improve health care delivery and outcomes at all levels of professional practice (institutional, local, state, regional, national, and/or international).	***Fall 2022*** • BAPHON (Bay Area Pediatric Hematology/Oncology Nurses) board member – assist with planning educational events for local nurses and APP's about various healthcare topics • Member of NAPNAP (Pediatric Nurse Practitioner Association) ***Spring 2023*** • Continue to be on BAPHON board assisting with educational planning • Joined 3 committees at LPCH Stanford to help improve efficiency and work flow for patients ***Summer 2023*** • Planned summer educational talk for cardiac toxicities related chemotherapy and radiation for oncology nurses ***Fall 2023*** • Attended CTOS sarcoma conference • Joined work taskforce to finalize standing orders that nurses can use to help providers with routine orders ***Spring 2024*** • Continue to be on BAPHON board – planned winter education event for February 2024 • Planned annual symposium April 2024

DNP Essential VI: Interprofessional Collaboration for Improving Patient & Population Health Outcomes **NONPF: Leadership Competencies** *Today's complex, multi-tiered health care environment depends on the contributions of highly skilled and knowledgeable individuals from multiple professions. In order to accomplish the IOM mandate for safe, timely, effective, efficient, equitable, and patient-centered care in this environment, health care professionals must function as highly collaborative teams. DNPs have advanced preparation in the interprofessional dimension of health care that enable them to facilitate collaborative team functioning and overcome impediments to interprofessional practice. DNP graduates have preparation in methods of effective team leadership and are prepared to play a central role in establishing interprofessional teams, participating in the work of the team, and assuming leadership of the team when appropriate.*	**1.** Demonstrate advanced levels of clinical practice within defined ethical, legal, and regulatory parameters in designing, implementing, and evaluating evidenced-based, culturally competent therapeutic interventions for individuals or aggregates. **3.** Demonstrate leadership in collaborative efforts to develop and implement policies to improve health care delivery and outcomes at all levels of professional practice (institutional, local, state, regional, national, and/or international).	***Fall 2022*** • Worked with palliative care physician and APP, social work team, child psychologists, solid tumor attendings, and nursing about my plan to initiate earlier referrals to palliative care ***Spring 2023*** • Join palliative care weekly rounds to review patient lists • Continue to collaborate with psychosocial team regarding patient issues and needs ***Summer 2023*** • Attending weekly palliative care rounds • Finalized palliative care checklist as the tool to be utilized to prompt referrals ***Fall 2023*** • Attending palliative care rounds weekly • Implemented PaPas
DNP Essential VII: Clinical Prevention & Population Health for Improving Nation's Health **NONPF: Leadership Competencies** *Consistent with national calls for action and with the longstanding focus on health promotion and disease prevention in nursing, the DNP graduate has a foundation in clinical prevention and population health. This foundation enables DNP graduates to analyze epidemiological, biostatistical, occupational, and environmental data in the development, implementation, and evaluation of clinical prevention and population.*	**6.** Employ a population health focus in the design, implementation, and evaluation of health care delivery systems that address primary, secondary, and tertiary levels of prevention.	***Fall 2022*** • Designed evidence based project goals to help improve the mental health of our young oncology patients suffering from anxiety, depression and fear of death ***Spring 2023*** • Designed goal to join DEI workshop to address social disparaties in healthcare ***Summer 2023*** • Attended workshop to learn more about hate crimes towards Asian communities and how to be an ally for all communities ***Fall 2023*** • DEI training at Stanford

DNP Essential VIII: Advanced Nursing Practice **NONPF: Independent Practice/Ethics Competencies** *The increased knowledge and sophistication of health care has resulted in the growth of specialization in nursing in order to ensure competence in these highly complex areas of practice. The reality of the growth of specialization in nursing practice is that no individual can master all advanced roles and the requisite knowledge for enacting these roles. DNP programs provide preparation within distinct specialties that require expertise, advanced knowledge, and mastery in one area of nursing practice. A DNP graduate is prepared to practice in an area of specialization within the larger domain of nursing.*	**1**. Demonstrate advanced levels of clinical practice within defined ethical, legal, and regulatory parameters in designing, implementing, and evaluating evidence-based, culturally competent therapeutic interventions for individuals or aggregates.	***Fall 2022*** • Completed 500 clinical hours from MSN program • Working full time in pediatric oncology 40 hours/week ***Spring 2023*** • Continue to work full time 40 hours/week in pediatric oncology ***Fall 2023*** • Continue to work full time 40 hours/week in pediatric oncology ***Spring 2024*** • Continue to work full time 40 hours/week in pediatric oncology

The End