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Palliative Care Referral Protocol: Best Practice Toolkit for Improving Early Referral Rate for Adult Cancer Patients

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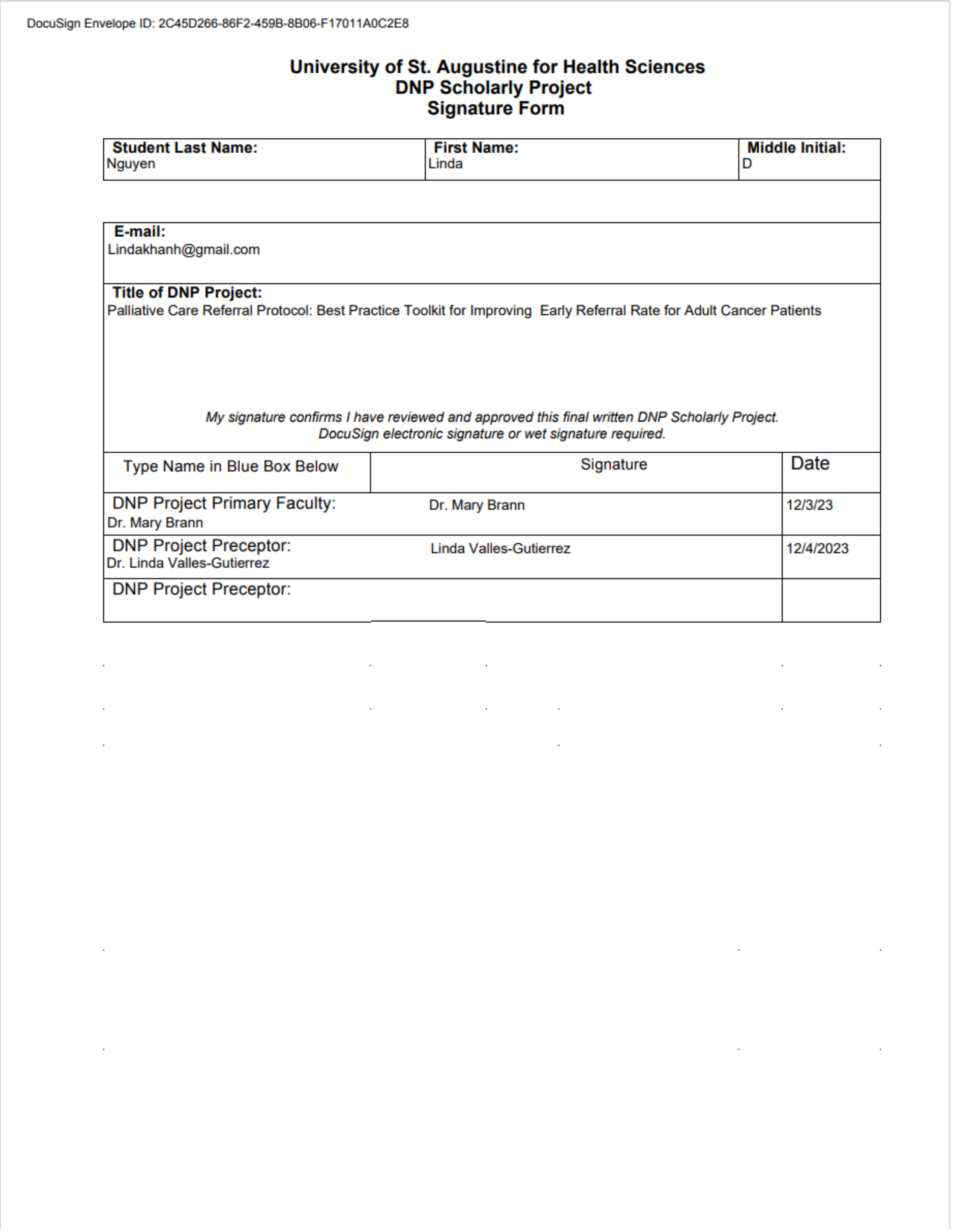

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Abstract

Despite the benefits of palliative care being well-documented in studies and early palliative care services being strongly recommended by reputable organizations, such as the American Society of Clinical Oncology, many patients did not receive or received late referrals (Pigni et al., 2022). This mainly occurs because oncologists commonly base their referrals on perceived needs and clinical judgment (Smith et al., 2017). Thus, this program development project aimed to create a toolkit to improve early identification and referral to palliative care for adult patients who would benefit from palliative care services. The PICO question that guides this program is: In ambulatory adult oncology patients in the Veteran Affairs healthcare system (P), how does a toolkit for implementation of a palliative care referral protocol (I) compared to standard referral methodology (provider judgment) (C) improve the utilization of standardized trigger-based referral to palliative care (O). Literature supports the development of an ambulatory-focused toolkit for the adult oncology population and supports early intervention to maximize living benefits, including quality of life measures. The evidence supports using a toolkit to guide the associated implementation of a dedicated referral process, including a criteria-based trigger tool. This scholarly project provides a step-by-step toolkit to guide the implementation of an early palliative care referral protocol in an ambulatory oncology setting.

Palliative Care Referral Protocol: Best Practice Toolkit for Improving Early Referral Rate for Adult Cancer Patients

There are an estimated 56.8 million people in the world who need palliative care (PC) each year, but only 14% of those people receive palliative care services (World Health Organization [WHO], 2020). The benefits of palliative care are well-documented to lessen suffering for those with an incurable chronic condition. Still, studies have shown that many did not receive or received late referrals (Pigni et al., 2022). This DNP project aims to implement a standardized palliative care referral protocol to assist clinicians in making early PC referrals for cancer patients and hopefully improve the early referral rate in the oncology unit.

Significance of the Practice Problem

Identification of Practice Problem

Palliative care is specialized interdisciplinary medical care for people with severe illnesses. It prevents and relieves suffering through early identification, correct assessment, and treatment of pain and problems, such as physical, psychosocial, and spiritual (WHO, 2020). PC focuses on patient-centered outcomes by relieving symptoms and stress related to illness while supporting the caregivers' needs (Center to Advance Palliative Care, 2020).

Early PC has been shown to improve cancer patients' quality of life, symptom control, disease knowledge, psychological and spiritual health, end-of-life care, and survival, as well as reduce inpatient hospital admissions and emergency visits (Gemmell et al., 2019; Hui et al., 2022;). Despite the documented benefits of early PC referral, it is still not often observed in clinical practice. In contrast to one's expectation, PC needs are usually offered after curative measures have been exhausted, and referral often occurs haphazardly (Fink, 2015; Pigni et al., 2022).

Though early PC is crucial to lessen suffering, the timing, and criteria for referring cancer patients to PC are still poorly defined (Pigni et al., 2022). Currently, PC referrals are initiated by oncologists who base their referrals on perceived needs and their clinical judgment (Smith et al., 2017). The norm is waiting to refer for most oncologists, who either did not refer or did refer late in the last month of life (Smith et al., 2017). Lack of knowledge about PC services, the stigma associated with PC, and logistical challenges to initiate PC referral are among the barriers to early PC referral. (Hui et al., 2022).

Cancer Patients

Patients with cancer face many supportive care needs for their disease, such as physical, psychological, social, spiritual, informational, and financial support, that may change with time and compromise their quality of life (Hui et al., 2022). Historically, patients with advanced cancer have been the first to benefit from PC, and it is the leading cause of specialized PC referrals worldwide (Frasca et al., 2021; Pigni et al., 2022). Late PC referrals are considered in advanced cancer patients as one of the factors that negatively impact the care pathway (Pigni et al., 2022). Thus, the American Society of Clinical Oncology recommends that all patients with advanced cancer should have an early referral to the palliative care team in conjunction with their oncological care (Smith et al., 2017).

Impact on the Healthcare System and Society

Late PC referrals often lead to increased suffering, suboptimal pain and symptom management, failure to discuss advanced care planning, and unexpected hospital deaths (Fink, 2015). Late referral can limit the PC team's time to effectively introduce symptom management, provide psychological support, and assist with care planning (Hui et al., 2022). Late referrals can lead to long-term hospital admissions, which can pressure the healthcare system (Abu-Odah et al., 2020).

A study on unplanned hospitalization among cancer patients shows that hospitalization increased with the stage of diagnosis (Whitney et al., 2019). The disease severity drives the use of inpatient care, and there is an overuse of inpatient care among patients with late-stage disease, leading to many patients' last weeks of life receiving aggressive hospital care (Whitney et al., 2019). The average cost of an ED visit was higher for oncology patients than nononcology patients per a study by Fred Hutchinson Cancer Research Center (Smith & Carlson, 2021).

On the other hand, early PC for cancer inpatients is associated with significant cost savings (Gemmell et al., 2019). PC reduces preventable spending and utilization in all settings with a decrease of 50% in admissions and 35% in ED visits when initiated in outpatient care (Center to Advance Palliative Care, 2020).

Impact on an Oncology Department

Though PC is not the same as hospice care, PC is part of hospice and can lessen suffering, but it was not offered early. When there is a lack of a standardized initiation process for PC referral, clinicians depend on their clinical judgment and estimation of prognosis to initiate a referral to PC per one of the providers on the unit. Various clinical backgrounds and education can contribute to inconsistent referral timing. Studies suggest that PC consultations are associated with increased hospice uptake and utilization (Nitecki et al., 2021). In one reviewed facility, only 20 percent of the deceased cancer patients received palliative care services more than 3 months before death, as documented on the facilities' Consult Switchboard Report (June 2022 – January 2023).

Purpose of the Program Development Project

The purpose of the program development project was to create a toolkit to improve early identification and referral to palliative care for adult cancer patients who would benefit from services. The development of this toolkit structures opportunities for clinicians to have a clear understanding of when to trigger referrals to palliative care to support the patients and their families.

Project Objectives

The development of a targeted toolkit to support the implementation of a palliative care early intervention trigger is aimed to ensure the following objectives:

1. Compilation and synthesis of current literature related to early intervention for palliative in the ambulatory oncology environment, including facilitators and barriers.
2. Development of a palliative care referral toolkit to include a position statement, screening tools examples, current education material examples, and evaluation tools.

Program Problem Statement

In ambulatory adult oncology patients in the Veteran Affairs health system (P), how does a toolkit for implementation of a palliative care referral protocol (I) compared to standard referral methodology (provider judgment) (C) improve the utilization of standardized trigger-based referral to palliative care?

Population

The population in this project will include veteran patients who have cancer and receive care within the infusion clinic. The American Society of Clinical Oncology (ASCO) and World Health Organization (WHO) recommend that every patient with advanced cancer should be treated by a multidisciplinary palliative care team early in the course of the disease and in conjunction with anti-cancer treatment (Gemmell et al., 2020; Smith et al., 2017).

Intervention

The intervention for this project is the utilization of a toolkit to guide the implementation of a palliative care referral protocol that entails a checklist of referral criteria and instructions on placing a palliative care referral order in the electronic medical record. Studies have found that patients could be timely and more frequently referred to palliative care when standardized referral criteria were used (Hui et al., 2022).

Comparison

The comparison is standard referral methodology relying on the practitioner's clinical judgment, resulting in variable access to palliative care services (Hui et al., 2018).

Outcome

The expected outcome post-implementation of the toolkit is an increased early palliative care referral rate. Early palliative care referrals are initiated three months or more before death, within eight weeks after the initial cancer diagnosis, and alongside active cancer treatment. Early palliative care can improve symptom control, quality of life, prognostic understanding, end-of-life care, and survival and reduce acute care services and costs (Gemmell et al., 2020).

Utility of Program

Evidence-based toolkits provide clear guidance to interdisciplinary teams to improve current conditions and facilitate clinically significant change. Toolkits include guidance for the implementation of the program, training tools, and sustainability measures. Using stakeholder driven design, this program development provides value by filling a gap in the practice space.

Analytical Framework

The CDC's Program Evaluation Framework (PEF) is the guiding document for developing this program-based toolkit (2017). The PEF is a six-step process that guides the relevant team to establish a need, engage appropriate stakeholders, clearly define the program, and ensure accuracy within the evidence-based design, with established outcome measures and communication plans. This framework is synergistic with the Johns Hopkins Evidence-Based Nursing Practice model in that it validates the problem, evaluates the evidence, and translates it into practice (Dang & Dearholt, 2018).

Evidence Search Strategy, Results, and Evaluation

To ensure the program is valid and reliable, a review of relevant review was conducted.

Search Strategy

A comprehensive literature search using electronic databases was conducted to answer the PICOT question on the impact of a palliative care referral checklist on the early referral rate among cancer patients. The databases utilized are CINAHL Complete, PubMed, Gale Academic OneFile, Joanna Briggs Institute EBP database, and Google Scholar. The keywords include:

"palliative care" AND "palliative care referral" OR "palliative care consultation" AND "early" AND "cancer patients" OR "oncology patients" AND "referral rate" OR "referral rates."

Inclusion criteria include full-text articles, peer-reviewed articles, available abstracts, evidence-based practice studies, empirical research studies, systematic reviews, English language, and data from the United States, Canada, and Europe. Additional inclusion criteria include articles about tools and guidelines, clinical care, patients with terminal illnesses, and suggestions for improving the palliative care referral rate. Exclusion criteria include patients with no terminal illnesses, articles without suggestions on improving referral rates, and articles without data.

Results

A total of 565 articles were identified after applying inclusion and exclusion criteria. There were 419 records left to be screened after the duplicates were removed. The 419 records were screened based on their titles and abstracts; thus, 316 were eliminated, and the remaining 103 were deemed suitable for full-text review. The 103 articles were reviewed as full text to determine the relevance and usefulness of the PICO question. Ninety-one reports were excluded based on the following criteria: (1) future studies with no conclusion, (2) no relevant tools or interventions, and (3) no emphasis on earliness. This process left ten articles with studies that yielded primary research evidence and two articles with systemic literature reviews that met the inclusion criteria based on: (1) empirical data, (2) relevant tools/interventions, and (3) reference to earliness. The screening and removal of articles not meeting the inclusion criteria are depicted in the PRISMA Flowchart (see Figure 1). The PRISMA flowchart is used to show the systemic screening process and the selection of the articles based on the criteria (Moher et al., 2009).

Evaluation

The search for research evidence yielded 12 scholarly articles, ten of which yielded primary research evidence, and two were systemic literature reviews with meta-analyses of randomized clinical trials. The evidence strength and quality were evaluated using the Johns Hopkins Evidence Rating System and listed in the Evidence Tables (Appendix A & B). The type of research design determines the level of evidence, and the quality of evidence is determined by the appraisal of study methods for validity and reliability (Dang & Dearholt, 2018). Grade A is considered high quality, B is good quality, and C is low quality or major flaws with little evidence, inconsistent results, and insufficient sample size (Dang & Dearholt, 2018). See Figure 2 for more details.

Using the Johns Hopkins level of evidence, two studies were Level 1, Quality A (Rodin et al., 2022; El-Jawahri et al., 2021). One study was Level II, Quality B (Rocque et al., 2015), and three were Level III, Quality A (Borelli et al., 2021; Sullivan et al., 2019; Nieder et al., 2016). Three studies were appraised as Level III, Quality B (Gemmell et al., 2020; Wadhwa et al., 2018; Caraceni et al., 2020), and one study was Level V, Quality B (Flaherty et al., 2018) (see Appendix A and B). The two systemic review studies were rated Level I, Quality A (Nugraha et al., 2023), and B (Huo et al., 2022).

Critical Appraisal of the Evidence with Themes

Based on the scientific evidence from the twelve articles sought regarding palliative care and early palliative care referral, at least four themes were present, ultimately suggesting early palliative care referral is beneficial.

Cancer Patients

The population chosen for this project are adult oncology patients receiving care in the ambulatory oncology care space within the Veteran Affairs health system. Eleven of the twelve studies share the same type of patient population (Borelli et al., 2021; Caraceni et al., 2020; El-Jawahri et al., 2021; Gemmell et al., 2020; Huo et al., 2022; Nieder et al., 2016; Nugraha et al., 2023; Rocque et al., 2015; Rodin et al., 2022; Sullivan et al., 2029; Wadhwa et al., 2018) except for Flaherty and colleagues (2018), who conducted their study on adult cancer patients and those who were admitted to the medical-surgical orthopedic unit.

Timing

An essential and recurrent theme is the timing of early palliative care referral. Eleven studies suggest that early identification of palliative care needs and providing palliative care services early in the course of the disease or for a longer time result in improvement of patient outcomes such as symptoms management, better performance status, etc. (Borelli et al., 2021; Caraceni et al., 2020; Flahetry et al., 2018; Gemmell et al., 2020; Huo et al., 2022; Nieder et al., 2016; Nugraha et al., 2023; Rocque et al., 2015; Rodin et al., 2022; Sullivan et al., 2019; Wadhwa et al., 2018). On the other hand, a late referral is associated with a decrease in survival and a higher symptom burden (Huo et al., 2022; Sullivan et al., 2019; Wadhwa et al., 2018).

Symptom Management, Quality of Life, Satisfaction with Care, & Survival

When compared with standard oncological care or late palliative care, early palliative care referral and services are associated with improved quality of life, satisfaction with care, pain and symptoms management, mood with less depression and anxiety, empowerment, and better Edmonton Symptom Assessment System Distress Score, which is used on cancer patients to assess symptom burden (Borelli et al., 2021; El-Jawahri et al., 2021; Flahetry et al., 2018; Huo et al., 2022 Nugraha et al., 2023; Rodin et al., 2022; Wadhwa et al., 2018).

Studies suggest that early palliative care referral is associated with increased survival (Huo et al., Sullivan et al., 2019), but Triggered Palliative Care Consultation had little impact on survival (Rocque et al., 2015). Three studies report that early palliative care referral results in a better understanding of or awareness of the disease, which is part of empowerment that can facilitate acceptance (Nugraha et al., 2023; Borelli et al., 2021; Rocque et al., 2015). However, early palliative care did not detect mood improvement in the meta-analysis conducted by Nugraha and colleagues, yet triggered structured activities serve as safety and support affirmations (2023).

Improved End-of-Life Care

Another theme worth mentioning is the improvement in end-of-life care. Patients who received palliative care before death were more likely to have discussed their end-of-life care preference and less likely to receive chemotherapy near end-of-life (El-Jawahri et al., 2021). Cancer patients who received early palliative care were able to discuss with the palliative care team and thus increased their acceptance of end-of-life and expectation of a painless future (Borelli et al., 201).

Cancer patients who received early palliative care have a higher probability of dying at home, fewer hospital deaths or acute care setting deaths, and were substantially less likely to become hospitalized in the last 3 months of life compared to those who received late or no palliative care (Huo et al., 2022; Nieder et al., 2016; Sullivan et al., 2019). Early palliative care referral also contributed to increasing completion of advance directives, and those who received palliative care were significantly less likely to lack a documented resuscitation preference (Flahetry et al., 2018; Nieder et al., 2016).

Assessment and Referral Tools

To provide timely and effective palliative interventions, early identification of patients with a high likelihood of unmet palliative care needs is essential (Flaherty et al., 2018). Evidence from the studies discussed above cumulatively suggests that early palliative care referral is crucial and is associated with living benefits for patients with cancer. However, some guidelines or protocols should be in place to offer palliative care early in the disease course to maximize the benefits. The application of a criteria-based palliative care referral tool can proactively identify most patients prior to their terminal admission and would be able to facilitate early referral (Gemmell et al., 2019). Level III study with grade B evidence (Carceni et al., 2020) and level 1 study with grade A evidence (Rodin et al., 2022) suggest symptom burden, severity, and disease stage are suggested as screening criteria and can trigger early palliative care referral.

Additionally, applying the referral tool is probably the most effective when routinely used in outpatient clinics and the hospital's clinical assessment unit (Gemmell et al., 2019). Using a

Palliative Care Assessment Tool (PAST) in a medical-surgical oncology/orthopedic unit of St. Joseph Hospital improved patient access to timely and essential palliative care consultations, improved symptom management, and increased completion of advance directives (Flaherty et al., 2018). Thus, a palliative care assessment and referral tool based on criteria is recommended to improve timely access to palliative care services for cancer patients.

Evidence-based Recommendation Statement

Based on a thorough and rigorous analysis of the literature, the common themes, and trends associated with early palliative care referrals, the literature supports the development of an ambulatory-focused toolkit for the adult oncology population. The literature supports early intervention to maximize living benefits, including quality of life measures. The evidence supports the utilization of a toolkit to guide the associated implementation of a dedicated referral process, including a trigger tool.

Program Analysis and Evaluation Plan

A specific toolkit for implementing an early intervention for palliative care referrals in adult oncology patients in the Veteran Affairs health system was not located in the available literature. Upon review of the literature, best practices, and previously developed toolkits for translatable populations, a toolkit was developed to bridge the gap between current and future practice. The CDC program evaluation framework guided the toolkit development (2017).

Engage Stakeholders

The population of interest was determined and reviewed. This toolkit's major stakeholders include physicians specializing in oncology, ambulatory nursing staff, leadership, administrative leadership, and information technology support personnel. Additional stakeholders include medical and nursing, who will implement the steps within the toolkit to complete tasks such as filling out the checklist and placing the palliative care referral order in the electronic medical record (EMR) system.

Oncology patients and palliative care team members are crucial to the development of the toolkit both as engaged participants and receivers of actions. Their feedback provided helpful information to set as criteria for referral and gave input and estimation on how beneficial and realistic this project could become.

Describe the Program

The program will establish the parameters of the palliative care trigger for referral processing. This facilitates the planning and implementation of this program. The first objective pertains to training the provider and staff in the infusion clinic. The second objective aims to implement the protocol by the providers and nursing staff. The third objective concerns data collection for evaluation.

During the program's initial phase, the nursing staff providing care in the infusion clinic must be trained by the unit educator on the referral protocol using the checklist. This training is presented and documented on a training log. To be able to see the impact of the referral protocol on the referral rate, measurement of the providers' and nursing staff's use of the checklist and placement of a referral order (if applicable) is evidenced by the documentation in the electronic health records. This objective will help set the priority for this program, including the utilization of the checklist by all the providers and nursing staff. Incremental standard reports to collect and generate consultation numbers provide objective measures of implementation success. Additional long-term measures include wellness indicators.

Focusing the Evaluation Design

Data Collection

The data to be collected is the number of palliative care consultation orders placed by staff and providers in the electronic medical record. The number of palliative care consultation orders can be documented in an Excel spreadsheet for monitoring and analysis.

Data Analysis

The data will be analyzed weekly by the program lead. The cumulative data analysis determines the impact of the palliative care referral protocol on the early palliative care referral rate. Measures of the data to show sustainability over time include a one-sample t-test to determine if there is a significant difference between the pre-determined mean of the group without the referral protocol and the group with the referral protocol. A significant difference will indicate that the referral protocol does have an impact on the referral rate. It is considered statistically significant if the p-value is less than the alpha level, which should be ≤ 0.05. It is a clinically significant change if it shows that the referral protocol does have a positive impact on the referral protocol. The toolkit implementation focuses on clinical significance as it shows that the intervention is medically crucial and determines whether the results might affect clinical practice (Harris & Zoellner, 2022).

Gather Credible Evidence

Credible evidence for supporting the toolkit development for strategic implementation of a standardized approach to palliative care referrals using a trigger device for early intervention is supported by the literature, including high-quality studies and meta-analysis.

Justify Conclusions

Analysis and synthesis of results demonstrate the alignment of the intervention to the expected outcome. Continuous measurement and improvement ensure the program continues to meet the needs of the population while validating design and continued relevancy.

Ensure Use and Share Lessons Learned

Dissemination of processes, data, analysis, and outcome measures are included in the toolkit as an essential step. Ensuring that all stakeholders have current knowledge of outcomes ensures the program's sustainability.

Program Evaluation Discussion and Recommendations

Support and Approval

A new project or implementation of a protocol requires planning and the use of resources. There could be conflicting priorities, as more areas need improvement and attention. To contest that attitude, the project manager must show the need for a change with solid data. Presenting data to leaders and staff is essential because acknowledging a flawed system can push for change. It is helpful to show numerical data, systemic impact, and patient impact in a presentation in both written and visual form.

Besides showing strong data, the project manager can also push for a change based on the culture of evidence-based practice and the commitment to meet accreditation organizations' standards, such as the Commission on Cancer. This can buy into the support from hospital leaders focused on organizational goals. Staff's resistance to change frequently occurs because it could mean more work and disruption to the status quo. Selecting a fitting tool, protocol, and implementation style for the desired clinical setting is vital to cooperation and compliance. Finding project champions among staff is ideal for a change. Using auditing tools for training and protocol compliance and displaying results can engage stakeholders and support the program's transparency. The goal is to show that this project is a timely priority and change can be smooth and pleasant.

Technology

Collaborating with IT is central to this project. Establishing a good rapport with IT is helpful from the start, when the project manager needs data to identify the problem, until the end, when data is generated for analysis.

Limitations

Though this protocol entails a criteria-based checklist meant to be filled out by oncology providers and nursing staff, using the tool requires the users to understand the patient's condition well enough to yield a correct score. Thus, training and re-training are critical, but consider piloting a provider-driven project before including nursing staff. Additionally, using the tool is time-consuming compared to not using the tool. Therefore, if there is a time restraint or doubt that providers and nursing staff can screen all patients, it is most practical to focus on a group of cancer patients who tend to suffer from late palliative care referrals.

Another limitation noted is the ability of the palliative care team to process the referrals. Implementation of the protocol will ensure that cancer patients can receive the care they need, but that also means there could be an increase in the workload for palliative care providers. Thus, including the palliative care team in planning this project and helping them devise a plan to increase their capacity is critical. See Appendix D for the Early Palliative Care Referral Toolkit.

Dissemination

Dissemination of the toolkit to the ambulatory oncology clinical staff at a Veterans Affairs health system included a review of the toolkit, implementation steps, and evaluation model. The full-text scholarly manuscript of this project was published in the Scholarship and Open Access Repository (SOAR) at the University of St. Augustine for Health Sciences. SOAR@USA is an educational repository that collects and stores the research and scholarly output of faculty and students at the University of St. Augustine for Health Sciences.

Conclusion

Numerous studies suggest that early identification of palliative care needs and implementation of early palliative care services improve patient outcomes with better symptom management and survival (Huo et al., Sullivan et al., 2019). In cancer patients, late palliative care referrals are associated with increased suffering, decreased survival, failure to discuss advanced care planning and unexpected hospital deaths (Fink, 2015; Sullivan et al., 2019; Wadhwa et al., 2018;). It is also suggested that symptom burden, severity, and disease stage can be used as screening criteria to trigger early palliative care referral, and the use of criteria-based palliative care referral tools is appropriate to identify cancer patients with palliative care needs (Carceni et al., 2020; Gemmell et al., 2019; Rodin et al., 2022).

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Nitecki, R., Diver, E. J., Kamdar, M. M., Boruta, I. D. M., del Carmen, M. C., Clark, R. M., Goodman, A., Schorge, J. O., & Growdon, W. B. (2018). Patterns of palliative care referral in ovarian cancer: A single institution 5 year retrospective analysis. *Gynecologic Oncology, 148*(3), 521–526. https://doi.org/10.1016/j.ygyno.2018.01.018

Nugraha Gautama, M. S., Damayanti, A., & Farda Khusnia, A. (2023). Impact of early palliative care to improve quality of life of advanced cancer patients: A meta-analysis of randomized controlled trials. *Indian Journal of Palliative Care, 29*(1), 28–35. https://doi.org/10.25259/IJPC_153_2022

Pigni, A., Alfieri, S., Caraceni, A. T., Zecca, E., Fusetti, V., Tallarita, A., & Brunelli, C. (2022). Development of the palliative care referral system: proposal of a tool for the referral of cancer patients to specialized palliative care. *BMC Palliative Care, 21*(1). https://doi.org/10.1186/s12904-022-01094-0

Rocque, G. B., Campbell, T. C., Johnson, S. K., King, J., Zander, M. R., Quale, R. M., Eickhoff, J. C., & Cleary, J. F. (2015). A quantitative study of triggered palliative care consultation for hospitalized patients with advanced cancer. *Journal of Pain and Symptom Management, 50*(4), 462–469. https://doi.org/10.1016/j.jpainsymman.2015.04.022

Rodin, R., Swami, N., Pope, A., Hui, D., Hannon, B., Le, L. W., & Zimmermann, C. (2022). Impact of early palliative care according to baseline symptom severity: Secondary analysis of a cluster-randomized controlled trial in patients with advanced cancer. *Cancer Medicine, 11(*8), 1869-1878. https://doi.org/10.1002/cam4.4565

Smith, M., & Carlson, J. (2021). Reducing ED disits and hospital admissions after chemotherapy with predictive modeling of risk factors. *Oncology Issues, 36*(4), 40–44. https://doi.org/10.1080/10463356.2021.1927638

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Sullivan, D. R., Chan, B., Lapidus, J. A., Ganzini, L., Hansen, L., Carney, P. A., Fromme, E. K., Marino, M., Golden, S. E., Vranas, K. C., & Slatore, C. G. (2019). Association of early palliative care use with survival and place of death among patients with advanced lung cancer receiving care in the Veterans Health Administration*. JAMA Oncology, 5*(12), 1702–1709. https://doi.org/10.1001/jamaoncol.2019.3105

Whitney, R. L., Bell, J. F., Tancredi, D. J., Romano, P. S., Bold, R. J., Wun, T., & Joseph, J. G. (2019). Unplanned hospitalization among individuals with cancer in the year after diagnosis. *Journal of Oncology Practice, 15*(1), e20–e29. https://doi.org/10.1200/JOP.18.00254

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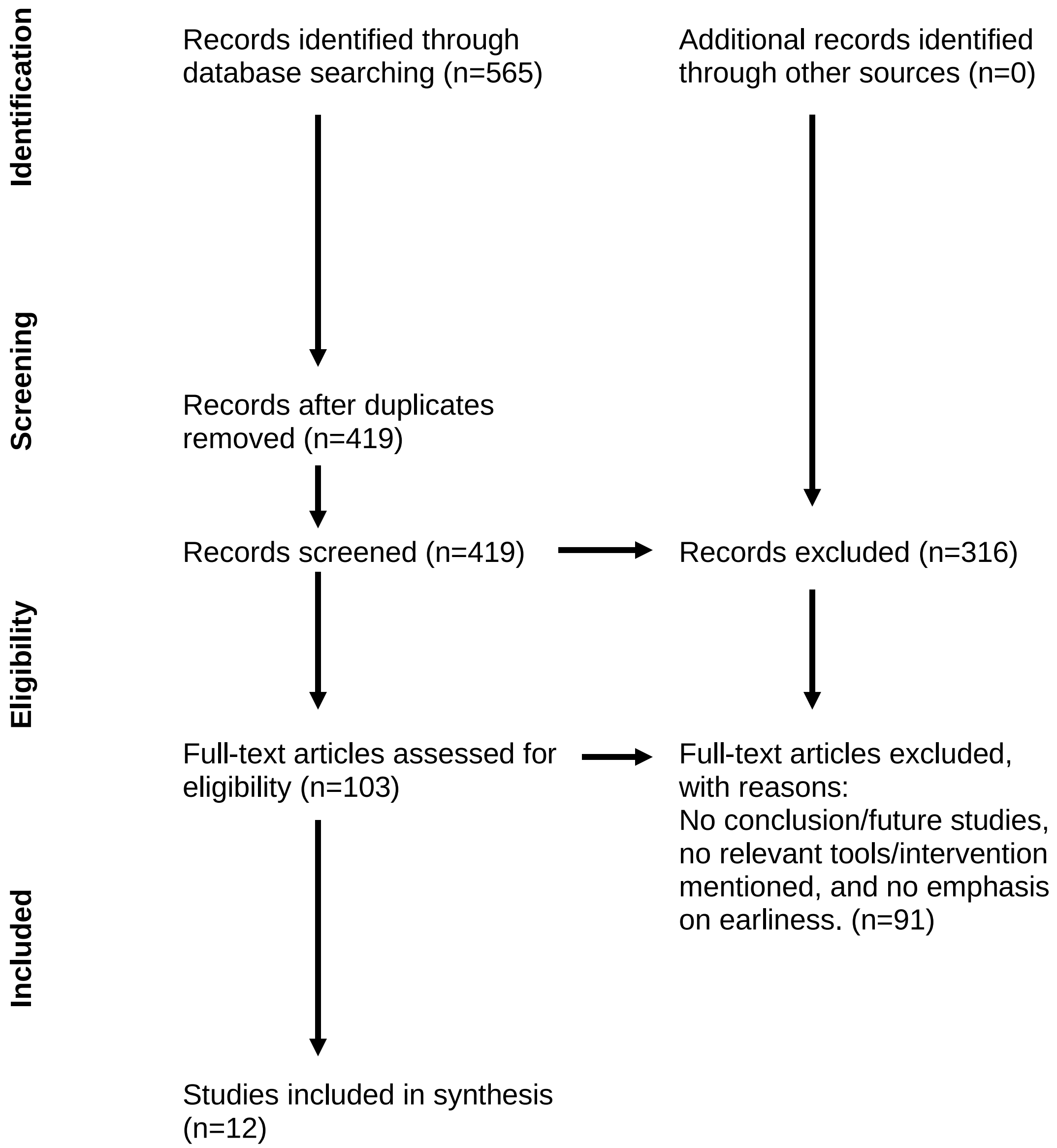
Figure 1

PRISMA Flowchart



Note. Prisma flow chart diagram from "Preferred Reporting Items for Systematic Reviews and Meta-analyses: The PRISMA Statement," by D. Moher, A. Liberati, J. Tetzlaff, & D.G. Altman, 2009, Annals of Internal Medicine, 151(4), p.267 (http://dx.doi.org/10.7326/0003-4819-151-4-200908180-00135). Copyright 2009 by The American College of Physicians.

Figure 2

Johns Hopkins Nursing Evidence-Based Practice - Evidence Level and Quality Guide

Level I:
Experimental study, randomized controlled trial (RCT) Explanatory mixed methods design that includes only a Level I quantitative study Systematic review of RCTs, with or without meta-analysis
Level II:
Quasi-experimental study.
Explanatory mixed methods design that includes only a Level II quantitative study.
Systematic review of a combination of RCTs and quasi-experimental studies, or quasi-experimental studies only, with or without meta-analysis.
Level III
Nonexperimental study, Systematic review of a combination of RCTs, quasi-experimental and nonexperimental studies, or nonexperimental studies only, with or without meta-analysis. Exploratory, convergent, or multiphasic mixed methods studies. Explanatory mixed methods design that includes only a Level III quantitative study. Qualitative study. Systematic review of qualitative studies with or without meta-synthesis
Level IV:
Opinion of respected authorities and/or nationally recognized expert committees or consensus panels based on scientific evidence. Includes: Clinical practice guidelines & Consensus panels/position statements
Level V:
Based on experiential and non-research evidence. Includes: Scoping reviews, Integrative reviews, Literature reviews, Quality improvement, program or financial evaluation , Case reports, Opinion of nationally recognized expert(s) based on experiential evidence.

A High quality: Consistent, generalizable results; sufficient sample size for the study design; adequate control; definitive conclusions; consistent recommendations based on comprehensive literature review that includes thorough reference to scientific evidence
B Good quality: Reasonably consistent results; sufficient sample size for the study design; some control, fairly definitive conclusions; reasonably consistent recommendations based on fairly comprehensive literature review that includes some reference to scientific evidence
C Low quality or major flaws: Little evidence with inconsistent results; insufficient sample size for the study design; conclusions cannot be drawn

Note: Johns Hopkins Evidence Rating System by Dang, D., & Dearholt, S.L. (2018). *Johns Hopkins Nursing Evidence-Based Practice Third Edition: Model and Guidelines: Vol. Third edition.* Sigma Theta Tau International. https://prx-usa.lirn.net/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=1625431&site=eds-live

Appendix A

Summary of Primary Research Evidence

Citation	Design, Level, & Quality Grade	Sample & Sample size	Intervention & Comparison	Theoretical Foundation	Outcome Definition	Usefulness Results Key Findings
Rodin, R., Swami, N., Pope, A., Hui, D., Hannon, B., Le, L. W., & Zimmermann, C. (2022). Impact of early palliative care according to baseline symptom severity: Secondary analysis of a cluster-randomized controlled trial in patients with advanced cancer. *Cancer Medicine, 11*(8), 1869-1878. https://doi.org/10.1002/cam4.4565	RCT Level I Grade A	Men and women, 18 years old, had stage IV cancer, an estimated survival of 6–24 months, and an ECOG performance score of 0, 1, or 2 N = 461	EPC - A comprehensive, 60–90 min, multidisciplinary, in-person assessment focusing on symptoms, psychological distress, social support, and home services. - Routine telephone contact from a PC nurse as needed - Monthly outpatient PC follow-up. - A 24-h on-call service for the telephone management of urgent issues. VS. Standard oncology care (supportive care).	None Specified	Identify the Edmonton Symptom Assessment System Distress Score. High (>23) vs. Low (< or equal to 23)	EPC improved quality of life, satisfaction with care, and clinician-patient interactions in those with high baseline symptoms. Symptom severity may be an appropriate criterion to trigger early referrals to palliative care

El-Jawahri, A., LeBlanc, T. W., Kavanaugh, A., Webb, J. A., Jackson, V. A., Campbell, T. C., O'Connor, N., Luger, S. M., Gafford, E., Gustin, J., Bhatnagar, B., Walker, A. R., Fathi, A. T., Brunner, A. M., Hobbs, G. S., Nicholson, S., Davis, D., Addis, H., Vaughn, D., & Horick, N. (2021). Effectiveness of integrated palliative and oncology care for patients with acute myeloid leukemia: A randomized clinical trial. *JAMA Oncology, 7*(2), 238–245. https://doi.org/10.1001/jamaoncol.2020.6343	RCT Level I Grade A	Hospitalized patients 18 years and older with high-risk AML receiving intensive chemotherapy. N = 160	Integrated palliative and oncology care (IPC) VS. Usual Care: - Supportive care measures as per their oncology team. - They were permitted to receive palliative care at their request or the request of their oncologist. -	None Specified	Explore the effectiveness of QoL, mood, symptom burden, posttraumatic stress symptoms, and EoL outcomes.	Early IPC for hospitalized patients with AML receiving intensive chemotherapy can enhance their QOL and reduce their depression, anxiety, and posttraumatic stress symptoms during hospitalization for intensive chemotherapy and up to 6 months after diagnosis. Patients receiving the IPC model were also more likely to experience improvements in their EOL care.
Borelli, E., Bigi, S., Potenza, L., Eliardo, S., Artioli, F., Mucciarini, C., Cottafavi, L., Cagossi, K., Razzini, G., Cruciani, M., Pietramaggiori, A., Fantuzzi, V., Lombardo, F.L., Ferrari, U., Ganfi, V., Lui, F., Odejide, O., Cacciari, C., Porro, C.A., & Zimmerman, C. (2021). Changes in cancer patients' and caregivers' disease perceptions while receiving early palliative care: A qualitative and quantitative analysis. *Oncologist, 26*(12), e2274–e2287. https://doi.org/10.1002/onco.13974	Non-experimental mixed study Level III Grade A	Advanced cancer patients and caregivers from two cancer centers. N = 125 (77 patients and 48 caregivers.	Semistructured interviews were conducted on the cancer patients & caregivers receiving EPC. No comparison	None Specified	Explore the patients' clinical experience. Explored the perception and expectation of the future (including EoL).	Successful symptom management and empowerment were associated with the EPC holistic approach.

Rocque, G. B., Campbell, T. C., Johnson, S. K., King, J., Zander, M. R., Quale, R. M., Eickhoff, J. C., & Cleary, J. F. (2015). A quantitative study of triggered palliative care consultation for hospitalized patients with advanced cancer. *Journal of Pain and Symptom Management, 50*(4), 462–469. https://doi.org/10.1016/j.jpainsymman.2015.04.022	Prospective, pre-post, sequential cohort study. Level II Grade B	Hospitalized patients with advanced cancer and unplanned admission, regardless of performance status. N (Cohort 1) = 65 N (Cohort 2) = 70 N (Cohort 3) = 68	Intervention: Triggered Palliative Care Consultation (TPCC). Cohort 1 (pre-intervention. VS. Cohort 2 (after implementation) VS. Cohort 3 (after modification of intervention).	None Specified	Explore the impact on prognosis awareness, hospice utilization, cost of care, survival, patient-reported symptoms, and patient satisfaction. Explore the utilization of Resources.	TPCC significantly improved patients' prognostic awareness. TPCC had little impact on hospice utilization, cost of care, patient-reported symptoms, and survival.
Sullivan, D. R., Chan, B., Lapidus, J. A., Ganzini, L., Hansen, L., Carney, P. A., Fromme, E. K., Marino, M., Golden, S. E., Vranas, K. C., & Slatore, C. G. (2019). Association of early palliative care use with survival and place of death among patients with advanced lung cancer receiving care in the Veterans Health Administration. *JAMA Oncology, 5*(12), 1702–1709. https://doi.org/10.1001/jamaoncol.2019.3105	Retrospective cohort study Level III Grade A	All patients with advanced lung cancer (stage IIIB and stage IV) who received care in the Veterans Affairs health care system. Mean age: 68 N = 23154	Intervention: PC exposure (specialist-delivered PC encounter received in an inpatient or outpatient setting after a lung cancer diagnosis). No comparison.	None Specified	Explore the impact on survival. Explore the impact on the place of death.	PC was associated with a reduced risk of dying in an acute care setting. PC to be associated with a survival benefit among patients with advanced lung cancer. The timing of the receipt of PC relative to cancer diagnosis was a component of its association with a survival benefit. PC received within 30 days of diagnosis was associated with decreases in survival. PC received 31 to 365 days after diagnosis was associated with increases in survival.

Nieder, C., Tollåli, T., Haukland, E., Reigstad, A., Flatøy, L., Engljähringer, K., & Flatøy, L. R. (2016). Impact of early palliative interventions on the outcomes of care for patients with non-small cell lung cancer. *Supportive Care in Cancer, 24*(10), 4385–4391. https://doi.org/10.1007/s00520-016-3278-z	Retrospective Cohort Study Level III Grade A	All patients who died from NSCLC in the uptake area of the Nordland Hospital Trust (NHT) January 1, 2006, to December 31, 2014. N = 287	Using EPR, all patients treated for NSCLC were identified, and those who died from their disease were selected. Early PC (PCT involved 3 months before death or earlier) VS. Late PC (PCT involved only during the last phase of an incurable disease, <3 months). VS. No PC group	None Specified	Explore the impact on patterns of terminal care. Explore the impact on documented resuscitation preference. Explore the impact on patient Hospitalization within the last 3 months of life. Explored the impact on the place of death.	Patients who received early additional PC were significantly less likely to become hospitalized in the last 3 months of life. Patients who received early or late additional PC were significantly less likely to lack a documented resuscitation preference
Gemmell, R., Yousaf, N., & Droney, J. (2020). "Triggers" for early palliative care referral in patients with cancer: A review of urgent unplanned admissions and outcomes. *Supportive Care in Cancer, 28*(7), 3441–3449. https://doi.org/10.1007/s00520-019-05179-0	Retrospective Cohort Study Level III Grade B	Cancer patients who died during an unplanned admission between November 2014 and October 2015. N = 159	Using EHR, a PC referral tool was applied. The timing of palliative referral and whether patients met any triggers within 6 months before their terminal admission were assessed. No comparison.	None Specified	Identify the proportion of patients who were positive for each palliative care referral criteria or trigger within the 6 months prior to terminal admission	A palliative referral trigger tool may have proactively identified most patients before their terminal admission.
Flaherty, C., Fox, K., McDonah, D., & Murphy, J. (2018). Palliative Care Screening: Appraisal of a tool to identify patients' symptom management and advance care planning needs. *Clinical Journal of Oncology Nursing, 22*(4), 92–96. https://doi.org/10.1188/18.CJON.E92-E96	Retrospective Cohort Study Level V Grade B	Patients aged 18 years or older and admitted or transferred to the medical-surgical oncology/ orthopedic unit. N = 44	Chart review using EHR from January 19 to April 12, 2016. Palliative Care Assessment Tool (PAST). No comparison.	None Specified	Explore the impact on symptoms management and completion of Advance Directives.	The nurse-driven PAST supports improved patient access to timely and essential PC consultations, better symptom management, and increased completion of advance directives.

Wadhwa, D., Popovic, G., Pope, A., Swami, N., Le, L. W., & Zimmermann, C. (2018). Factors associated with early referral to palliative care in outpatients with advanced cancer. *Journal of Palliative Medicine, 21*(9), 1322–1328. https://doi.org/10.1089/jpm.2017.0593	Retrospective Cohort Study Level III Grade B	Advanced cancer patients who were referred to the outpatient PC at a comprehensive cancer center between Jun1 and November 30, 2006. Mean age = 64.9 N = 337	Data from the EPR and the Palliative Care Clinical database were used to assess factors associated with EPC referral. No comparison.	None Specified	Identify the timing of the referral and the reason for the referral.	Symptoms burden was higher for late referrals as they had worse overall Edmonton Symptom Assessment System distress scores, worse tiredness, nausea, drowsiness, appetite, and well-being.
Caraceni, A., Lo Dico, S., Zecca, E., Brunelli, C., Bracchi, P., Mariani, L., Garassino, M. C., & Vitali, M. (2020). Outpatient palliative care and thoracic medical oncology: Referral criteria and clinical care pathways. *Lung Cancer, 139*, 13–17. https://doi.org/10.1016/j.lungcan.2019.10.003	Retrospective Cohort Study Level III Grade B	Men and women with thoracic cancer. First-time patients were seen at the Thoracic Medical Oncology outpatient Clinic between Jan.01, 2014, and Dec.31, 2014. Mean age = 65 N = 229	Using EPR Cox regression models were used to evaluate the association between time to POC referral and performance status, disease stage, and symptoms.	None Specified	Identify the patients' characteristic Identify the use of the palliative care outpatient clinic. Identify the clinical factors associated with the time to POC referral. Identify the reason for the referral and Clinical care pathways Explore EoL data	Patients with the highest symptom burden were likely to be referred earlier. 75% of them died within one year from referral.

Legend: RCT = Randomized Controlled Trial; EPC = Electronic Patient Record; ECOG = Eastern Cooperative Oncology Group; PC = Palliative Care; AML = Acute Myeloid Leukemia; IPC = Integrated Palliative and Oncology Care; QoL = Quality of Life; EoL = End of Life; NSCLC = Non-small Cell Lung Cancer; EPR = Electronic Patient Record; PCT = Palliative Care Treatment; EHR = Electronic Health Record; POC = Palliative Care Outpatient Clinic.

Appendix B

Summary of Systematic Reviews (SR)

Citation	Quality Grade	Question	Search Strategy	Inclusion/ Exclusion Criteria	Data Extraction and Analysis	Key Findings	Usefulness/ Recommendation/ Implications
Nugraha Gautama, M. S., Damayanti, A., & Farda Khusnia, A. (2023). Impact of early palliative care to improve quality of life of advanced cancer patients: A meta-analysis of randomized controlled trials. *Indian Journal of Palliative Care, 29*(1), 28–35. https://doi.org/10.25259/IJPC_153_2022	Meta-analysis Level 1 Quality A	Is EPC an effective intervention that improves the QoL of patients with cancer?	Keywords, MeSH, and Boolean operators: Advanced cancer OR metastatic cancer OR metastatic neoplasms AND early palliative care AND standard oncology care AND quality of life OR symptoms OR mood. Electronic database of PubMed, ProQuest, MEDLINE through EBSCOhost, Cochrane Library, and clinicaltrials.gov.	Inclusions: Adult patients (≥18 years) with advanced/metastatic cancer, RTC, the effect of EPC in patients with cancer, English language, outcomes that focus on QoL, symptoms control, and psychological issues. Exclusion: Studies assessed EPC for non-cancer patients, systemic reviews, protocol studies, observational studies, inappropriate interventions, or outcomes.	1206 studies, 1167 screened, 36 retrieved and eligible, 12 included in quantitative analysis.	QoL in the EPC group was significantly higher than in standard cancer care. Initiating EPC after diagnosis of advanced cancer is related to improving QoL, satisfaction with care, and understanding of disease prognosis. EPC is beneficial in symptoms. EPC provides a sense of safety, support, and affirmations and triggers structured activities such as involving social. It can lead to more consistent treatment with patient preference. EPC did not improve patients' moods.	EPC has been proven effective as an intervention that improves the QoL of patients with cancer, especially those diagnosed with advanced cancer.

Citation	Quality Grade	Question	Search Strategy	Inclusion/ Exclusion Criteria	Data Extraction and Analysis	Key Findings	Usefulness/ Recommendation/ Implications
Huo, B., Song, Y., Chang, L., & Tan, B. (2022). Effects of early palliative care on patients with incurable cancer: A meta-analysis and systematic review. *European Journal of Cancer Care, 31*(6), e13620. https://doi.org/10.1111/ecc.13620	Meta-analysis Level 1 Quality B	What are the effects of EPC on patients with incurable cancer with those of standard oncologic care or on-demand PC?	Keywords: - early palliative care and cancer, - incurable OR metastatic OR advanced - AND neoplasm OR cancer OR carcinoma OR oncology OR malignancy - AND early OR integrate OR systematic, - AND palliative care OR palliative medicine OR terminal care OR hospice care. Filtered by RTCs Databases: Pubmed, Embase, Cochrane Library, and Web of Science, ClinicalTrials.gov, and World Health Organization International Clinical Trials Registry Platform.	Inclusions: RCTs and EPC treatment with four parts (communication, symptoms management, support, and regular follow-ups). Exclusion: No randomizations. Patients who have already received palliative care or want to receive PC immediately were excluded. Caregivers.	1377 studies, 1037 screened, 16 eligible studies were included in the quantitative and quantitative analysis.	QoL improved Symptoms improved Higher survival rate Depression improved Same resource use Home Death	EPC improves the lives of patients with incurable cancer. Higher survival rates among participants who received EPC Patients who received EPC had fewer symptoms and better moods. There were no significant differences in resource use between groups. Patients who received EPC have a higher probability of dying at home.

Legend:

RCT = Randomized Controlled Trial; EPC = Electronic Patient Record; PC = Palliative Care; QoL = Quality of Life; EoL = End of Life

Appendix C

Palliative Care Referral Criteria Checklist

Please screen the patient on every visit (except for those who already have established care with the Palliative Care Team).

Check all that apply:

- ☐ Presence of metastatic or locally advanced cancer [2 points]
- ☐ Functional status score, according to ECOG performance status score [0–4 points]
- ☐ Presence of one or more serious complications of advanced cancer usually associated with a prognosis of <12 months (e.g., brain metastases, hypercalcemia, delirium, spinal cord compression, cachexia) [1 point]
- ☐ Presence of one or more serious comorbid diseases also associated with poor prognosis (e.g., moderate-severe COPD or CHF, dementia, AIDS, end stage renal failure, end stage liver cirrhosis)
  [1 point]
- ☐ Presence of palliative care problems:
  - Symptoms uncontrolled by standard approaches [1 point]
  - Moderate to severe distress in patient or family, related to cancer diagnosis or therapy
    [1 point]
  - Patient/family concerns about course of disease and decision making [1 point]
  - Patient/family requests palliative care consult [1 point]
  - Team needs assistance with complex decision-making or determining goals of care [1 point]

TOTAL SCORE: _______

A total score of ≥5 indicates a patient is appropriate for a specialist palliative care referral.

Does the patient accept a palliative care referral?

- ☐ Yes – Please sign the note and proceed to place a Palliative Care E-Consult for this patient.
- ☐ No – please sign the note.

Note: Adapted from Glare et al. (2011). Palliative care in the outpatient oncology setting: Evaluation of a practical set of referral criteria. *Journal of Oncology Practice, 7*(6), 366-370. https://doi.org/10.1200/JOP.2011.000367

Doctor Paul Glare, the tool's developer, granted permission to use the tool for this DNP project.

Appendix D

Early Palliative Care Referral Toolkit

Purpose Statement

The program development project aimed to create a toolkit to improve early identification and referral to palliative care for adult cancer patients who would benefit from services. The development of this toolkit provides clinicians with a clear understanding of when to trigger referrals to palliative care to support the patients and their families.

Audience

The audience for this toolkit includes oncologists, oncology nurse practitioners, oncology registered nurses, the nurse manager, medical support assistants, patients, and family/support members.

I. Definitions/Glossary

A. **Palliative Care:** A specialized medical care for people with severe illnesses like cancer or heart failure. Patients in palliative care may receive medical care for their symptoms or palliative care, along with treatment to cure their serious illness.

B. **Early Palliative Care Referral:** Early palliative care referrals are initiated three months or more before death, within eight weeks after the initial cancer diagnosis, and alongside active cancer treatment.

C. **Late Palliative Care Referral:** Late palliative care referrals are initiated less than three months before death, more than eight weeks after the initial cancer diagnosis, and not alongside active cancer treatment.

D. **Referral:** Directing a patient to another specialist for consultation, review, or further action.

II. Implementation Strategy

A. Identify the Problem:

- **i.** Review existing referral protocol, current referral practice, and referral rates.
- **ii.** Assess clinical setting and population.
    1. All cancer patients in the institution?
    2. Departments/units?
    3. Certain types of cancer?
    4. Certain types of cancer patients?
- **iii.** Gather Institutional Data.
    1. Total number of palliative care referrals/consultations.
    2. Early referral rate
    3. Late referral rate
    4. General referral rate

B. Formulate the Problem.

C. Set Goal: To increase early palliative care referral rate.

D. Research and Select Evidence-Based Strategies

- **i.** Literature search and analysis.
- **ii.** Review internal and external organizational recommendations.
- **iii.** Select the best practice for the chosen clinical setting and institution.
    1. The change manager may research and survey the attitude of the staff about the referral protocol before deciding on the innovation.

E. Identify and Meet the Stakeholders to Obtain Tentative Approval

- **i.** The oncology team includes providers, nursing staff, the unit manager, and the cancer program manager.
- **ii.** Palliative care team

iii. Administrative team

F. Plan for Implementation

i. Budget Planning: Budgeting is a process of preparing and managing revenue and expenses; it is vital because it ensures resource availability (Cote, 2022).

1. Estimated total expenses: direct and indirect expenses.
2. Estimated total revenues: billing, grants, institutional support.
3. Net balance.

ii. Resource Planning.

1. Education department.
2. IT support.
3. Staffing.
4. Administrative.

G. SWOT (Strengths, Weaknesses, Opportunities, and Threats) Analysis (see Table 1).

i. Develop plans on how to mitigate risks and threats.

Table 1 SWOT Analysis

SWOT Analysis	
Strengths	**Weaknesses**
▪	▪
Opportunities	**Threats**
▪	▪

H. Develop SMART (Specific, Measurable, Attainable, Relevant, Time-Based) goals.

i. Long-term.

  ii. Short-term.

I. Develop Communication Planning Tools.

  i. In-person meetings.

  ii. Virtual meetings (Zoom, TEAMS, Ring Central).

  iii. E-mails, phone calls, or announcements.

  iv. Scheduled and as needed.

J. Meet with IT

  i. Create the referral checklist within the electronic medical record system.

  ii. Develop a data collection process.

  iii. Develop a data reporting process.

  iv. Develop a data analysis process.

  v. Develop an audit tool.

K. Identify Project Champions.

A champion can undertake more than one task.

  i. Who can help with training?

  ii. Who can help with auditing?

  iii. Who can help with gathering and monitoring data?

  iv. Who can help with communication?

L. Develop a Staff Training Tool.

  i. PowerPoint presentation in person or virtual.

  ii. Live demonstration in person or virtual.

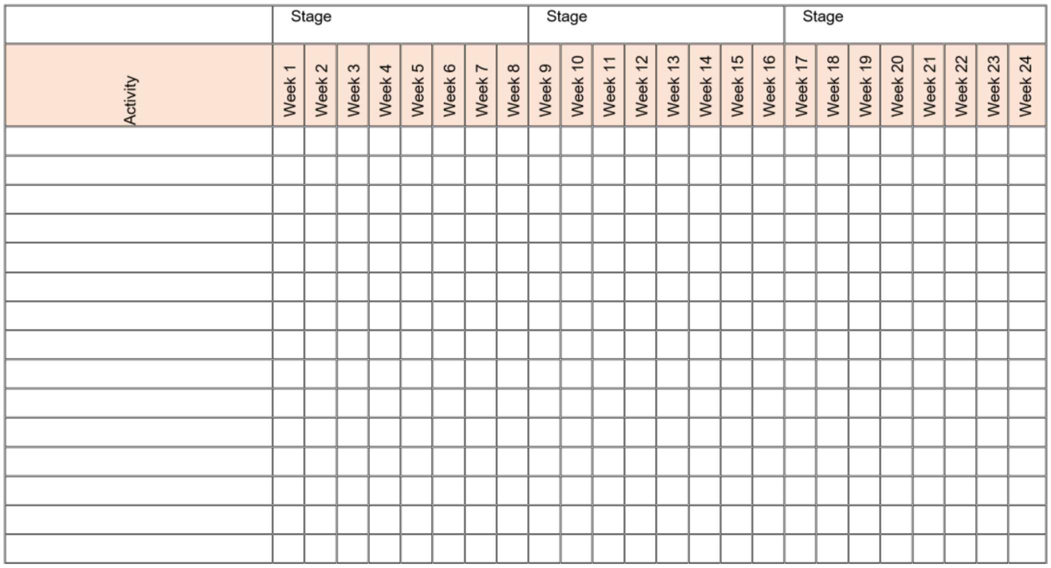
  iii. Send the training material via e-mail.

  iv. Allow staff to access the training tool and educational materials on the unit/hospital intranet or the unit binder.

M. Develop a Timeline.

The GANTT chart is commonly used in project management to display the activities of a project against time (Duke, n.d.).

Table 2 Project Schedule



	Stage								Stage								Stage							
Activity	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15	Week 16	Week 17	Week 18	Week 19	Week 20	Week 21	Week 22	Week 23	Week 24

i. Set a start date.

ii. Staff education/training and re-training.

iii. Unit meeting dates

  1. Discuss questions or concerns and provide clarification before initiating project implementation.
  2. Discuss any needed modifications to the protocol or additional support moving forward.

iv. Stakeholder meeting dates.

  1. Report on updates.
  2. Discuss any needed modifications to the protocol or additional support moving forward.

v. Mid-project evaluation.

vi. End-of-project evaluation.

vii. Data gathering.

viii. Data analysis.

N. Meet with Stakeholders.

i. Review the implementation strategies.

ii. Obtain the final approval.

III. **<u>Implement the Palliative Care Referral Protocol</u>**

A. Go LIVE.

B. Monitor

i. Checklist utilization and protocol compliance.

ii. Need for re-enforcement of protocol.

iii. Data for analysis.

C. Report Data to Stakeholders, Including Users.

IV. **<u>Evaluate the Palliative Care Referral Protocol Implementation.</u>**

Reflect on the success of the project.

A. Have the SMART goals been met?

B. Barriers?

C. Compliance Rate

i. Use the audit tool to check for compliance.

D. Revise and Improve

i. Meet with stakeholders and staff to discuss the need for protocol modification or additional need for support.

V. Evaluation Strategy and Tools

Audit tools can be used to determine if the protocol is functional and to assess compliance rate. Below are two audit tools applicable to this project.

Table 3 Training Audit Tool

Protocol Training	Providers	Nurses
Number of potential users.		
Number of completed protocol training		
Percentage of completed protocol training		

Table 4 Protocol Audit Tool

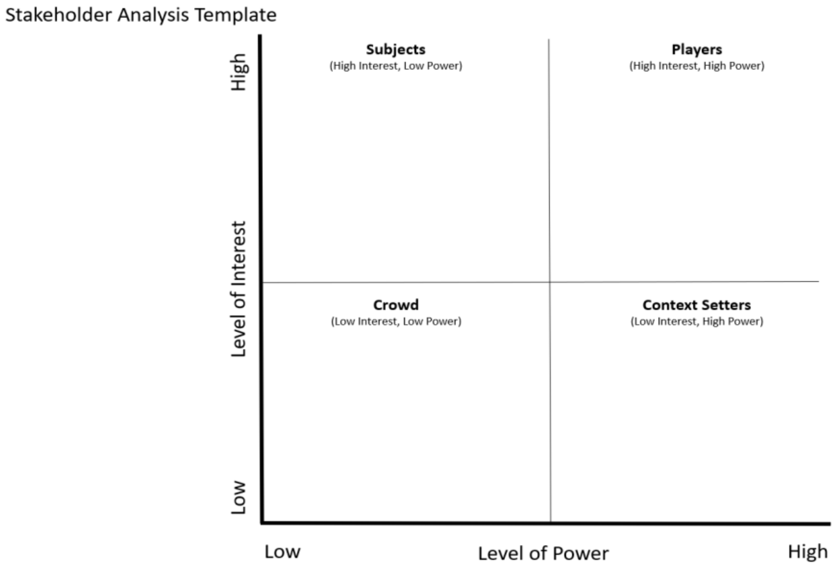
PC Referral Checklist	Number	Percentage
Patients eligible for screening		N/A
Patients screened (eligible)		
Patients not screened (eligible)		
Completed screening		
Patients Scored ≥5		
Patients Accepted Referral		
Patients Declined Referral		
Number of PC referral/consultation ordered		

VI. Stakeholder Engagement and Analysis Tools

The major stakeholders for this project include the Chief of Oncology, the clinic nurse manager, the cancer program manager, and Informatics. They can decide whether the project can be conducted and ensure that the providers and staff follow its plan. The other stakeholders include medical and nursing, the primary users of the palliative care referral checklist. Informatics will help place the checklist in the EMR and can generate reports on data. Other major stakeholders are oncology patients who will provide pertinent information so the staff can identify the palliative care need and place the referral order.

Though the palliative care team will not be directly involved, they are at the receiving end of the referral and can provide expert input. Below is a stakeholder analysis template that can be used for this project. This Stakeholder Analysis Tool can help identify the major stakeholders, their level of power, and interest in this protocol so the project manager can better engage them and respond to their needs.

Table 5 Stakeholder Analysis



VII. <u>Position Statement</u>

A palliative care referral protocol is vital to cancer care and should be standardized to ensure optimal health outcomes.

VIII. <u>Policy Statement</u>

Oncology providers and nursing staff should per protocol, ensure that cancer patients are screened for palliative care needs by using the Palliative Care Referral Checklist and place a referral/consultation order as indicated. The oncology providers should follow up accordingly to ensure the needs have been met.

IX. <u>Palliative Care Referral Tool</u>

There are numerous referral tools available to identify cancer patients with palliative care needs. Based on project research, a referral protocol that entails a criteria-based checklist is essential and beneficial to improving the palliative care referral rate. The Five-Item Palliative

Care Screening tool, criteria-based screening tool by Doctor Paul Glare and colleagues, can be used to screen cancer patients for palliative care needs (see Appendix C). The items and referral criteria in the screening tool were developed by the national panel of experts assembled by the National Comprehensive Cancer Network (Glare & Chow, 2015). The tool has been validated by local PC experts using data from a prior study of guideline-based screening and referral (Glare & Chow, 2015). The Five-Item Palliative Care Screening tool has been validated for its content, construct, and criterion. It is deemed a valid tool for identifying cancer patients with complex palliative care needs who would benefit from a palliative care consult (Glare & Chow, 2015).

X. Clinician & Staff Educational Material

A. National Comprehensive Cancer Network – Guideline for Palliative Care.

  i. https://www.nccn.org/guidelines/guidelines-detail?category=3&id=1454

B. Why Palliative Care is Essential in the Face of Serious Illness – YouTube.

  i. https://www.youtube.com/watch?v=rfeqVGf_PB0

C. American Society of Clinical Oncology – Team Approach

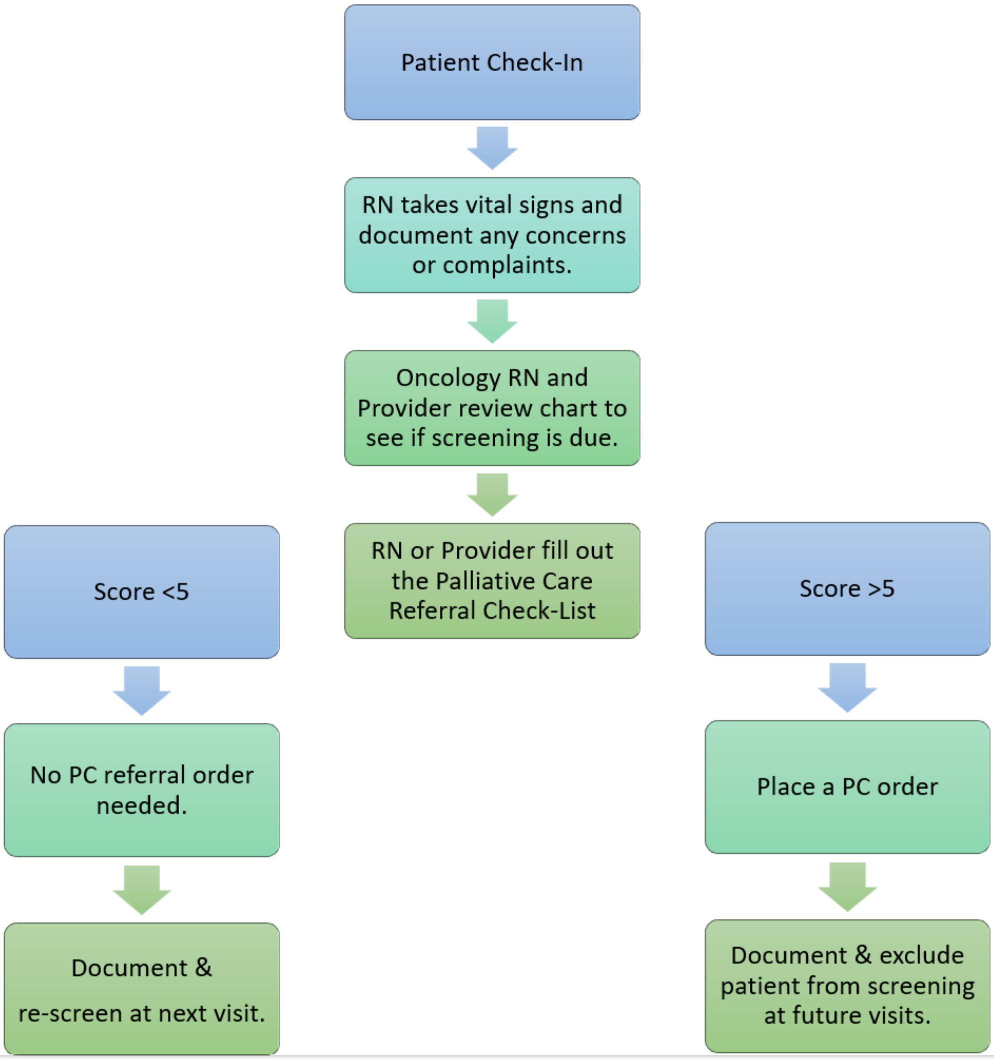
  i. https://ascopubs.org/doi/full/10.1200/EDBK_175474?role=tab

D. Patient Identification and Assessment

  i. https://www.capc.org/toolkits/patient-identification-and-assessment/

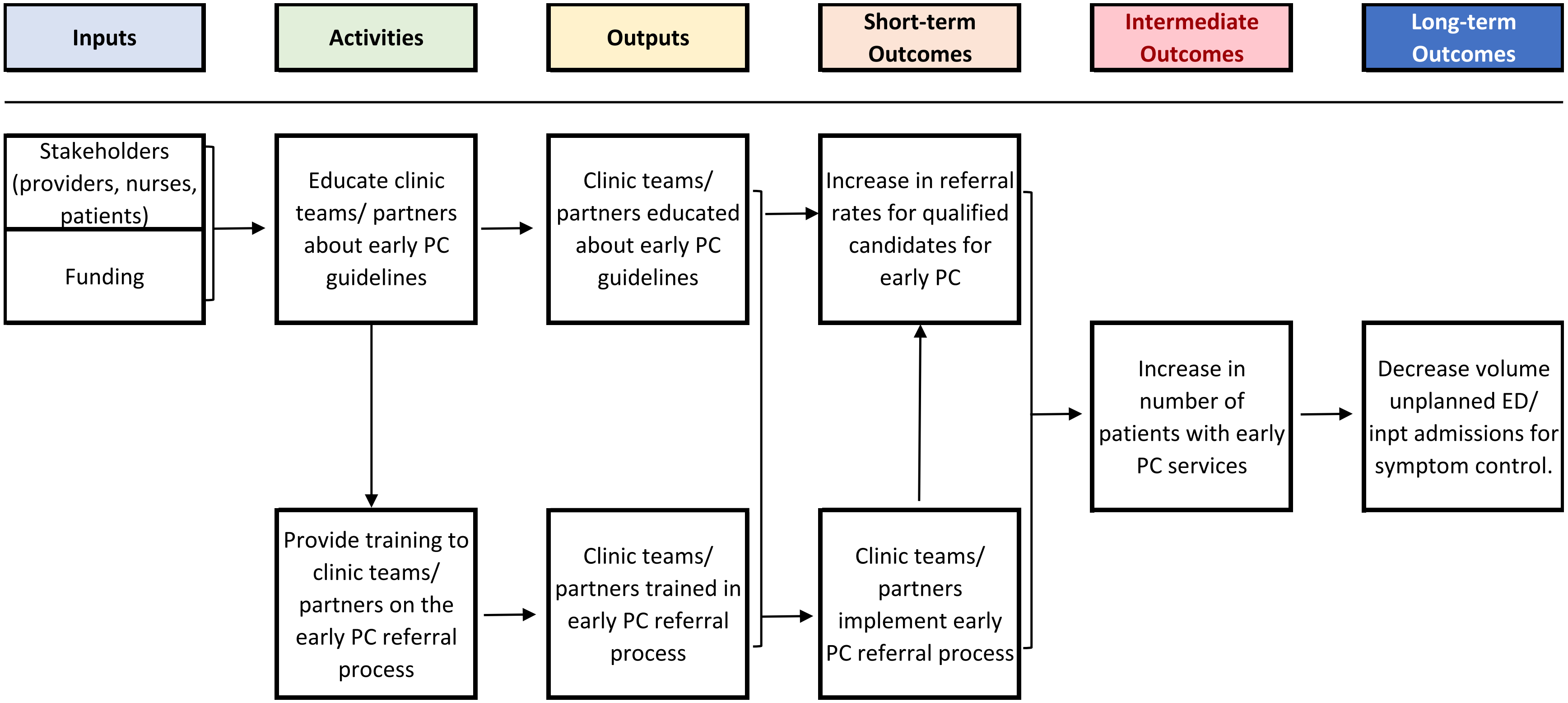
XI. Simple Example of the Protocol

Table 6 Palliative Care Referral Protocol



Appendix E

Logic Model



Assumptions: early PC referrals are maintained by clinic teams/ partners. Patients have the right to accept or decline the referral.

Contextual factors: Symptom progression, patient/caregiver perception, PC resource availability.