

Palliative Pathways Project: An Initiative to Increase Timely Referrals to Palliative Care

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Background

Pancreatic cancer is associated with a 5-year survival rate of 13%, with only 20% of patients considered potentially curable at diagnosis (American Cancer Society, 2025; Efstain et al., 2020). Pancreatic cancer is frequently diagnosed at an advanced stage due to its typically asymptomatic nature in early progression (American Cancer Society, 2024). This delayed detection often leads to significant physical and psychological distress, greatly impacting patients' quality of life (Efstain et al., 2020). Despite well-documented benefits supporting early integration of palliative care (PC) for improving symptom management and quality of life, PC remains significantly underutilized amongst patients with pancreatic adenocarcinoma. Many patients are accessing these services too late in their disease process to optimize these resources, underscoring a critical need for improved integration of these services (Bevins et al., 2021; Gonzalez et al., 2022).

At the intervention site, there is currently no formal screening and referral process in place to mitigate the underutilization of palliative services. The *Palliative Pathways Project* aims to address this issue by implementing a standardized screening and referral process to facilitate early access to PC for adults with pancreatic adenocarcinoma. Specific goals include achieving 90% utilization of a PC referral screening tool and increasing timely PC referrals within this patient population.

PCOT question: In adult patients with pancreatic adenocarcinoma, does implementing a PC referral screening tool within one month of diagnosis, compared to no screening tool, increase the utilization of PC services?

Available Knowledge

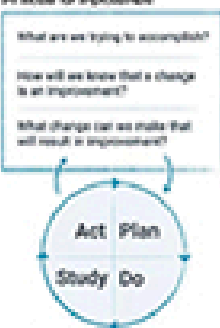
When used in collaboration with an interdisciplinary team, early PC has been associated with improved quality of life, symptom management, patient-centered outcomes, and even better survival rates (Huo et al., 2022; Quinn et al., 2020). The cost-benefit of early PC interventions is demonstrated by fewer emergency department visits and intensive care unit admissions, particularly toward the end of life (Bevins et al., 2021; Gonzalez et al., 2022). Utilizing a validated screening tool has consistently been found to increase timely PC referrals (Churchill et al., 2020; Paiva et al., 2020; Whyman et al., 2024). Additionally, screening tools aid in standardization to appropriately identify patients who would benefit from consultation and have the potential to significantly increase the number of referrals (Paiva et al., 2020; Yon et al., 2022).

Table 1:
Level and Grading of Evidence

Outcome	Level of Evidence	Grade of Evidence
Bevins et al. (2021)	III	B
Churchill et al. (2020)	V	C
Glass et al. (2023)	III	A
Gonzalez et al. (2022)	III	A
Huo et al. (2022)	B	A
Paiva et al. (2020)	B	A
Phillips et al. (2024)	III	A
Quinn et al. (2020)	B	A
Refsum et al. (2022)	IV	B
Yon et al. (2022)	B	B
Whyman et al. (2024)	III	A

(Gonzalez et al., 2022)

Figure 1:
The Model for Improvement



(Institute for Healthcare Improvement, n.d.)

Model

This quality improvement project was guided by the Institute for Healthcare Improvement's (IHI) Model for Improvement and selected for its ease of use and replicability (Institute for Healthcare Improvement, n.d.). This framework includes the "Plan-Do-Study-Act" (PDSA) phase which allows for testing and adjusting the identified change to achieve the project goal (Institute for Healthcare Improvement, n.d.).

The *Palliative Pathways Project* primarily employed the PDSA cycle during the selection and refinement of the PC screening tool. After selecting the tool, the project team applied the IHI framework to explore and evaluate multiple integration strategies within the electronic health record (EHR), ensuring the tool could be efficiently implemented and sustained in clinical practice.

Methods

Inclusion criteria: Adult patients with a diagnosis of pancreatic adenocarcinoma presenting for their first oncology consultation within the intervention hospital

Exclusion criteria: Patients seeking second opinions without transferring care

- All adult pancreatic adenocarcinoma consultations screened with Glass et al.'s (2014) 11-item Palliative Care Screening Tool (11-PCST) (Figure 2) on their new patient intake assessment over a three-month period
- All patients with total scores ≥ 5 referred to palliative care (PC)
- Electronic analytics data report generated to obtain the specified data gathered from the EHR
- Manual chart review employed to obtain the score of the 11-PCST and cancer staging

Ethical consideration: This project was reviewed by Institutional Review Boards review at the University of Cincinnati and received non-human subjects research determination. Site administration approval was obtained before implementation. No conflicts of interest to disclose.

Figure 2:
11-PCST

Criterion	Points*
Locally advanced or metastatic cancer	2
Functional status of patient (ie, ECOG score)	0-4
Any serious complication of cancer associated with survival < 12 months	1
Any serious comorbidity	1
Any other condition complicating care	1
Additional points	
Uncontrolled symptoms	1
Moderate/severe distress	1
Patient/family concerns regarding decision making	1
Team needs assistance with decision making	1
Patient/family requests PC consult	1
Prolonged length of stay	1
Total	0-14

Notes: Order referral to Palliative Care for scores ≥ 5 . (Glass et al., 2014)

Results

Number of patients identified by EHR analytics report: 144

Number of patients who met inclusion criteria: 50
Patients screened with 11-PCST: 41 (82%)

- All patients who scored ≥ 5 were referred to PC
- Several patients scored < 5 and were still referred ($n = 12$); reasons for referral included metastatic disease, pain management needs, and patient request
- Average time from first visit with oncologist to referral: 8.6 days before oncology visit
- Average time from referral to first visit with PC: 16.3 days
- Of patients referred, 91% were referred before their initial oncology visit, and 82% had scheduled PC appointments
- During implementation period, 7 patients (14%) died

Comparison to 2023 and 2024 data:

- 54 patients (in 2023) and 49 patients (in 2024) were seen by oncologists on the pancreatic cancer team*
- 10 patients (in 2023) and 16 patients (in 2024) were referred to PC
- Average time from first visit with oncologist to referral: 7.4 days (in 2023) and 7.7 days (in 2024)
- Average time from referral to first visit with PC: 24.5 days (in 2023) and 21.2 days (in 2024)

* Inclusion criteria were not retrospectively applied to these cohorts

Figure 3:
11-PCST Score Categories and Palliative Care Referral Distribution

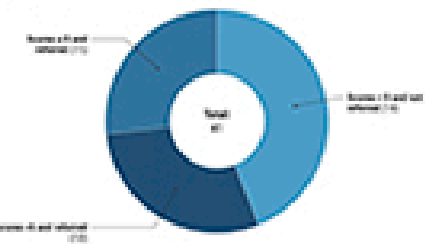


Figure 4:
Cancer Staging Distributions for 2023 Data



Discussion

Key Findings:

- High screening compliance:** 82% of eligible patients were screened
- Appropriateness and accepted referrals:** All patients who scored ≥ 5 were referred and accepted referral; additionally, 12 patients who scored < 5 were appropriately referred based on clinical judgement or patient preference
- Earlier access to PC:** Shifted referral timing to an average of 8.6 days before the initial oncology visit, compared to ~ 7 days after the visit in prior years. Average time from referral to first PC visit decreased from 21-24.5 days in previous years to 16.3 days. Both outcomes result in more time to facilitate supportive interventions.
- Significant patient needs:** 14% of patients ($n = 7$) died during the intervention, emphasizing the need for earlier PC involvement

Strengths:

- Feasibility of implementation
- Positive impact on timeliness
- Appropriateness of referrals
- Potential for broader adoption

Limitations:

- Incomplete screening:** 9 eligible patients were not screened due to logistical barriers (did not meet goal of 90% adherence to screening)
- Screening threshold may be too high:** The current 11-PCST threshold (≥ 5) missed several patients with metastatic disease
- Operational gaps:** Inconsistent identification at the point of entry contributed to missed opportunities

Next steps:

- Lower screening threshold:** Recommend reducing the 11-PCST referral threshold from ≥ 5 to ≥ 4 to capture more patients in need of PC
- Automatic referral for metastatic disease:** Refer all patients regardless of screening score
- Embed screening tool in the EHR:** Automate the 11-PCST and referral triggers to improve consistency and efficiency
- Evaluate long-term outcomes:** Future studies should continue to assess how early PC impacts patient outcomes
- Ensure sustainability:** Support ongoing training, monitoring, and leadership engagement to embed the process into standardized clinical workflows

Conclusion

This quality improvement initiative demonstrated the feasibility and effectiveness of implementing a structured PC screening tool for patients with pancreatic adenocarcinoma. The intervention significantly improved both the timing and frequency of PC referrals compared to previous years, laying the groundwork for broader systemwide adoption. Considerations for sustained clinical integration include embedding the 11-PCST within the EHR to ensure consistent use and minimize reliance on manual processes. Additionally, creating an automated trigger for referral within the EHR for patients who meet specified criteria would assist in reducing variation in the referral process. Future work should explore the impact of early palliative care on patient-centered outcomes, such as quality of life, hospital utilization, and alignment of care with patient preferences.

References

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