Physicians' Knowledge and Management Practices of Pancreatic Cancer in Nova Scotia: A Mixed Methods Study

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INTRODUCTION

- Pancreatic cancer (PC) has the 12th highest incidence rate for cancers in Canada, but it is the 4th leading cause of cancer death.[1]
- Nova Scotia reported the lowest provincial 5-year survival rate for PC with 4.7% compared to the overall national average of 9.1%.[2]
- Curative treatment of PC is only possible with early diagnosis and surgical resection.
- Ongoing research focuses on biology and developing better screening, diagnostic, and therapeutic tools[3], yet there is a lack of insight on health care delivery for PC and its impact on patient outcomes.

OBJECTIVES

1. To explore the knowledge and practices of specialist physicians regarding PC care in Nova Scotia
2. To identify knowledge gaps and barriers to delivering PC care

METHODS

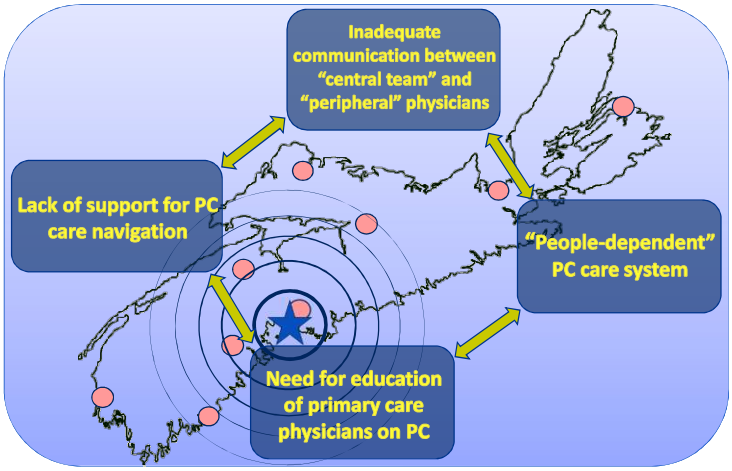
- Participants: physician specialists involved with PC in Nova Scotia
  Medical and Radiation Oncologists; General Surgeons; Gastroenterologists; Internists

SURVEY — Quantitative survey on PC knowledge and practices, including clinical vignettes to assess management practices

INTERVIEW — Qualitative, semi-structured interviews to elaborate on survey findings

ANALYSIS — Thematic analysis of interviews based on the principles of grounded theory[4]

RESULTS



Eight physicians participated in an interview
- All recognized the poor biology of PC and the lack of effective therapeutics at present
- All identified system issues they believe impede PC care and outcomes in Nova Scotia

1. Communication challenges exist between the central team and peripheral physicians
   - Internal communication within the central team physicians (subspecialist high volume surgeons/oncologists practicing at the academic centre) is high functioning due to familiarity and good relations among multidisciplinary team members
   - Peripheral specialists (community-based physicians who refer to the central team) are less familiar with the central team members, and are less able to quickly access team members and patient-specific information
   - Multidisciplinary tumour boards are intended to be province-wide, however peripheral specialists face greater barriers to access
2. The PC care system in NS is heavily "people-dependent"
   - There are no formal PC pathways to help peripheral physicians refer patients to central team members for timely access to appropriate PC care
   - As a small province, informal relations between physicians are highly prevalent; while often advantageous, this system is fragile and potentially harmful in the context of difficult illnesses that requires highly specialized training such as PC
3. Patients and physicians need support navigating the system
   - Perception that no one is "responsible" for PC work-up and referral, and for helping ensure patients receive access to timely care
   - Increasing cancer navigator services in the community was identified as the most effective intervention to improving PC care in NS
4. Primary care provider education is necessary but logistically challenging
   - Though education of primary care providers was recognized as important, formal CME sessions on PC were perceived to have a limited role in both reaching these physicians and impacting clinical management

In total, **36** specialists responded to the survey

Specialty Groups	Years in Practice	PC Patient Volume/Year
"IM" – Int. Med; GI; – **13** "Onc" – Med/Rad Onc – **12** "Surg" – Gen. Surg. – **11**	**0-5** years – **7** **6-15** years – **11** **>15** years – **18**	**0-2** patients – **14** **3-9** patients – **12** **>9** patients – **10**

Figure 1. Survey Participant Demographics

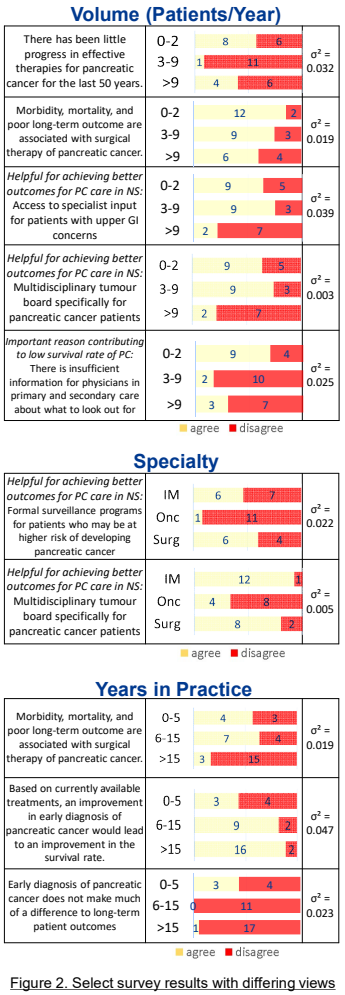


Figure 2. Select survey results with differing views

CONCLUSIONS

- PC care system is Nova Scotia is rooted in informal relations, which can strengthen communication within the central team but can also hinder communication with peripheral physicians
- The "people-dependent" nature of physician practices in Nova Scotia helps to draw insight into not just PC care, but the nature of the Nova Scotia healthcare system as a whole
- This study provides a basis for developing future interventions to optimizing PC care in Nova Scotia

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