Peri-operative Pain Perceptions in Patients Undergoing Thoracic Surgery

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Master of Public Health Program

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THE OFFICIAL HEALTH CARE PARTNER OF THE CLEVELAND BROWNS

Background

Lung cancer is the leading cause of cancer deaths in the United States. Early intervention, including surgical resection, is a key component in managing this potentially lethal disease. Effective post-operative pain management is a fundamental aspect of surgical care that can have many influences including meaningful patient recovery, patient satisfaction and overall outcomes.The traditional approach to pain management relied on narcotic analgesia, which presents significant risks including dependency and adverse reactions. Often the peri-operative period is the patient's first exposure to opioid analgesia and indiscriminate prescribing of these medications can lead to addiction, overdose and death from prescribed opioids. While numerous studies have shown the clinical and economic benefits to a multi-modal pain regimen in post operative care, few have included the patient's perspective on the chosen post operative analgesia regimen.

Population

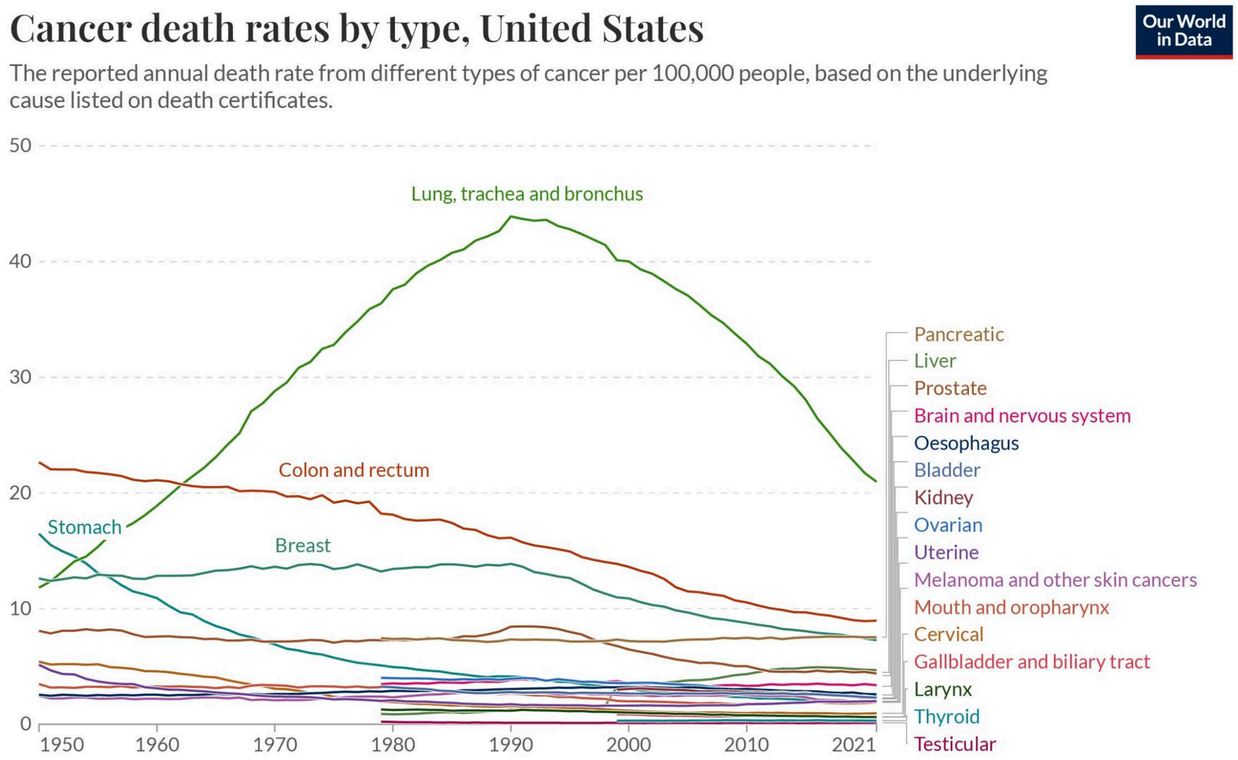
This project focuses on patients that are undergoing Thoracic Surgery at University Hospitals in Cleveland, Ohio. The inclusion criteria encompassed adult patients and/or their caregivers, aged 18 or older, scheduled for elective Thoracic surgery. Exclusion criteria included emergency surgeries, patients with cognitive impairments affecting surgery comprehension and those with chronic pain disorders or long-term narcotic use.

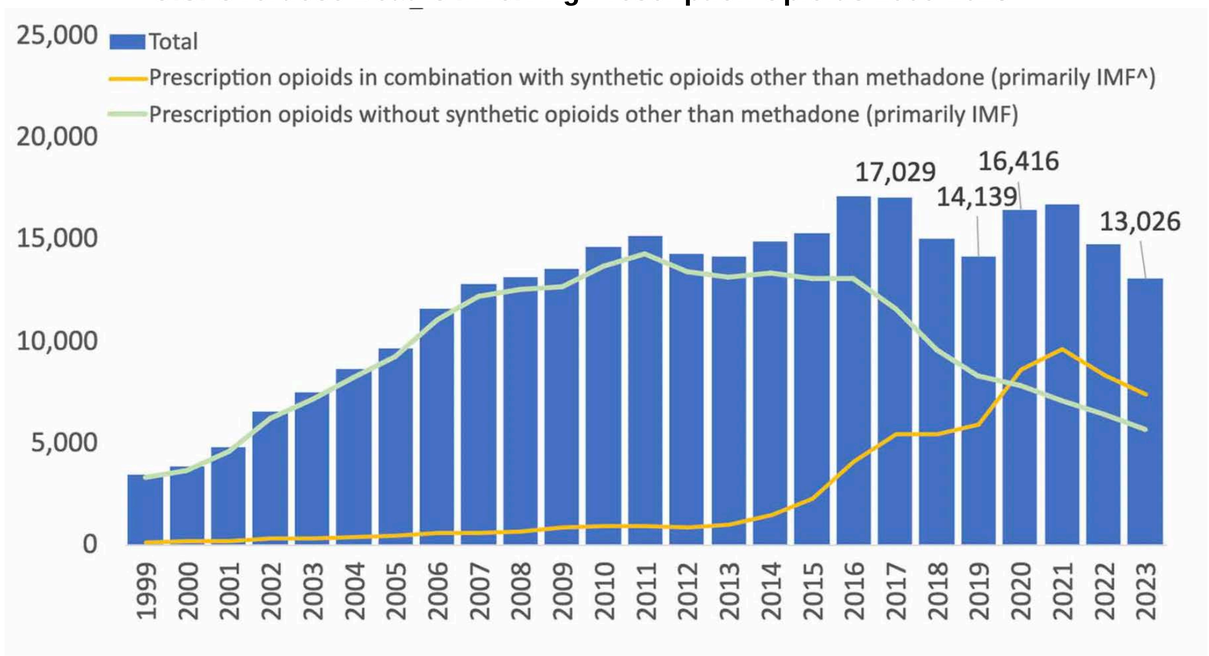
Learning Objectives

1. Create a survey to help understand the patient and caregiver perspective of current pain management practices in patients undergoing Thoracic Surgery procedures.
2. Develop an Institutional Review Board (IRB) application that satisfies the requirements for safe human subject research.
3. Appreciate the IRB process including protocol submission, informed consent procedures and risk management strategies.

Estimated New Cases in 2025	226,650
% of All New Cancer Cases	11.1%

Estimated Deaths in 2025	124,730
% of All Cancer Deaths	20.2%





Activities

My responsibilities included reviewing the literature, design of a survey to characterize lung-cancer patients' pain priorities and experiences after surgery, including attitudes toward opioids, and to explore whether perceived clinician understanding relates to satisfaction with pain treatment, IRB approval and recruiting subjects to complete the survey.

Deliverables

1. Pain Perceptions Patient and Caregiver Survey
2. CWRU/UH Institutional Review Board Application
3. Informed consent for survey recruitment.

Lessons Learned

- The essence of creating a flexible research project timeline to allow enough time for IRB application, correspondence and approval.
- Allowing an adequate timeframe for study participant recruitment.
- The rationale and importance of informed consent for vulnerable populations.
- The value of an individualized interdisciplinary approach to addressing peri-operative pain management in those undergoing Thoracic Surgery procedures.

Public Health Implications

Members of the surgery team play a unique role in the opioid crisis by oftentimes prescribing opioids to previously opioid-naive patients. In effort to minimize opioid-related side effects and the risks associated with potential dependency and abuse, opioid-sparing strategies have been successfully used clinically. Evidence has demonstrated that a multi-modal approach to pain management, along with individualized counseling and education regarding the risks/benefits to including opioids in the post operative regimen, can promote safe opioid prescribing and use, reduce opioid consumption, and increase patient satisfaction.

Acknowledgements

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