

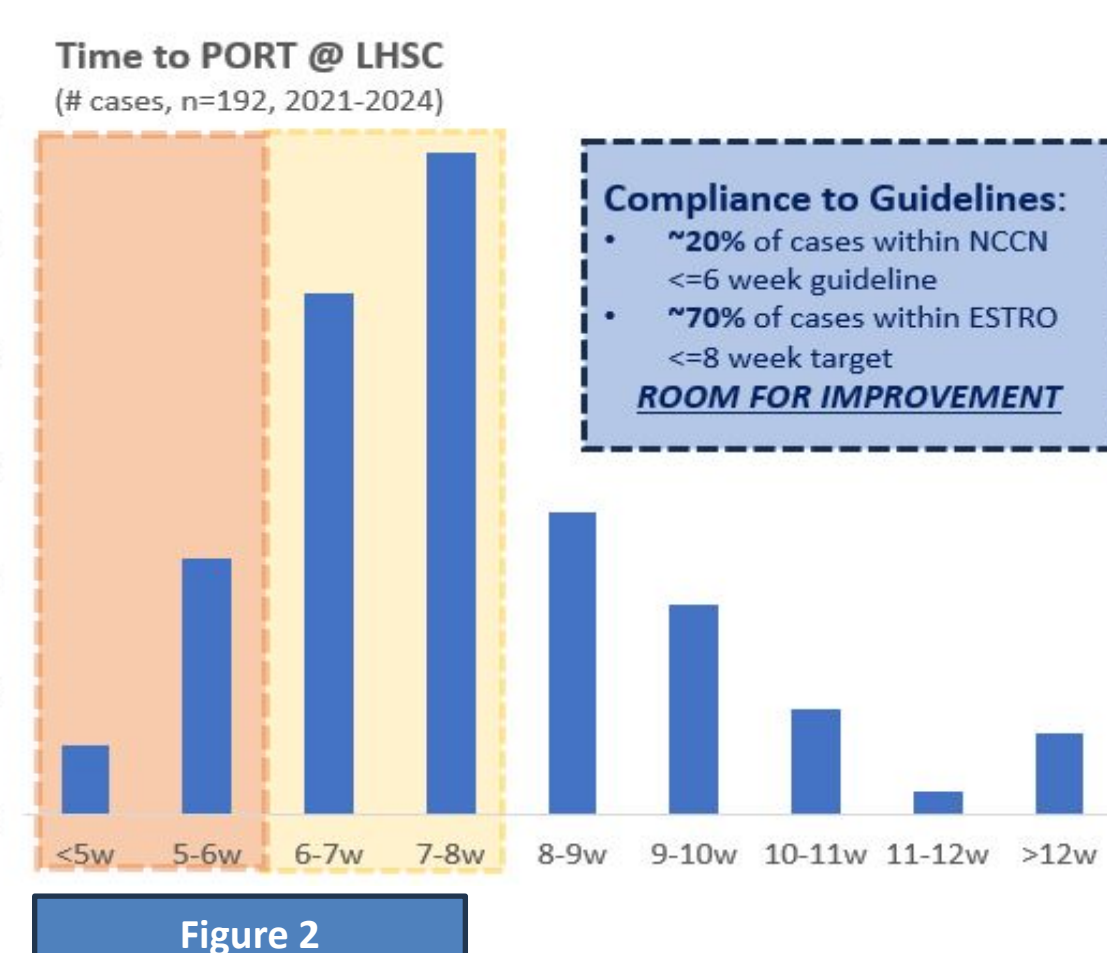
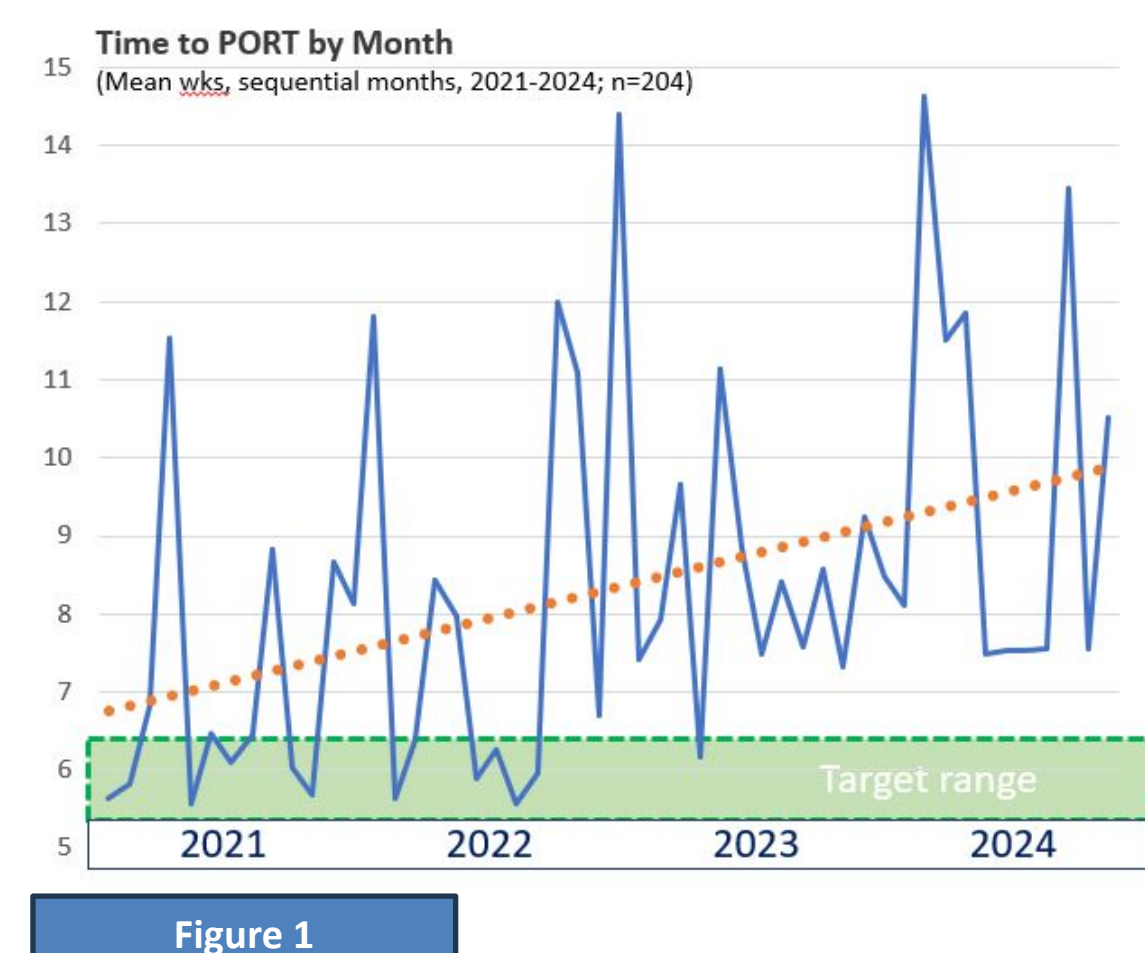
HEADSTART: Reducing Post-Operative Radiation Times (PORT) for Head and Neck Cancer Patients

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AIM Statement: By October 2025, ensure that 75% of head and neck cancer patients initiate timely and effective radiation therapy within **6 weeks** of surgery

PROBLEM DEFINITION

- While surgery is the primary treatment modality for many head and neck cancers, PORT is often a crucial component in reducing the risk of recurrence.
- Clinical evidence shows that delays of >6 weeks compromise tumor control and overall survival.^{1,2}
- Multiple international guidelines, including those from NCCN and ESTRO, recommend starting PORT within this 6-week window to optimize patient outcomes.^{3,4}
- At London Health Sciences Centre (LHSC), PORT wait times are increasing. (Figure 1)
- The incidence of patients starting radiation beyond the 6-week threshold is unacceptably high (Figure 2) —raising concerns about quality of care and patient outcomes.

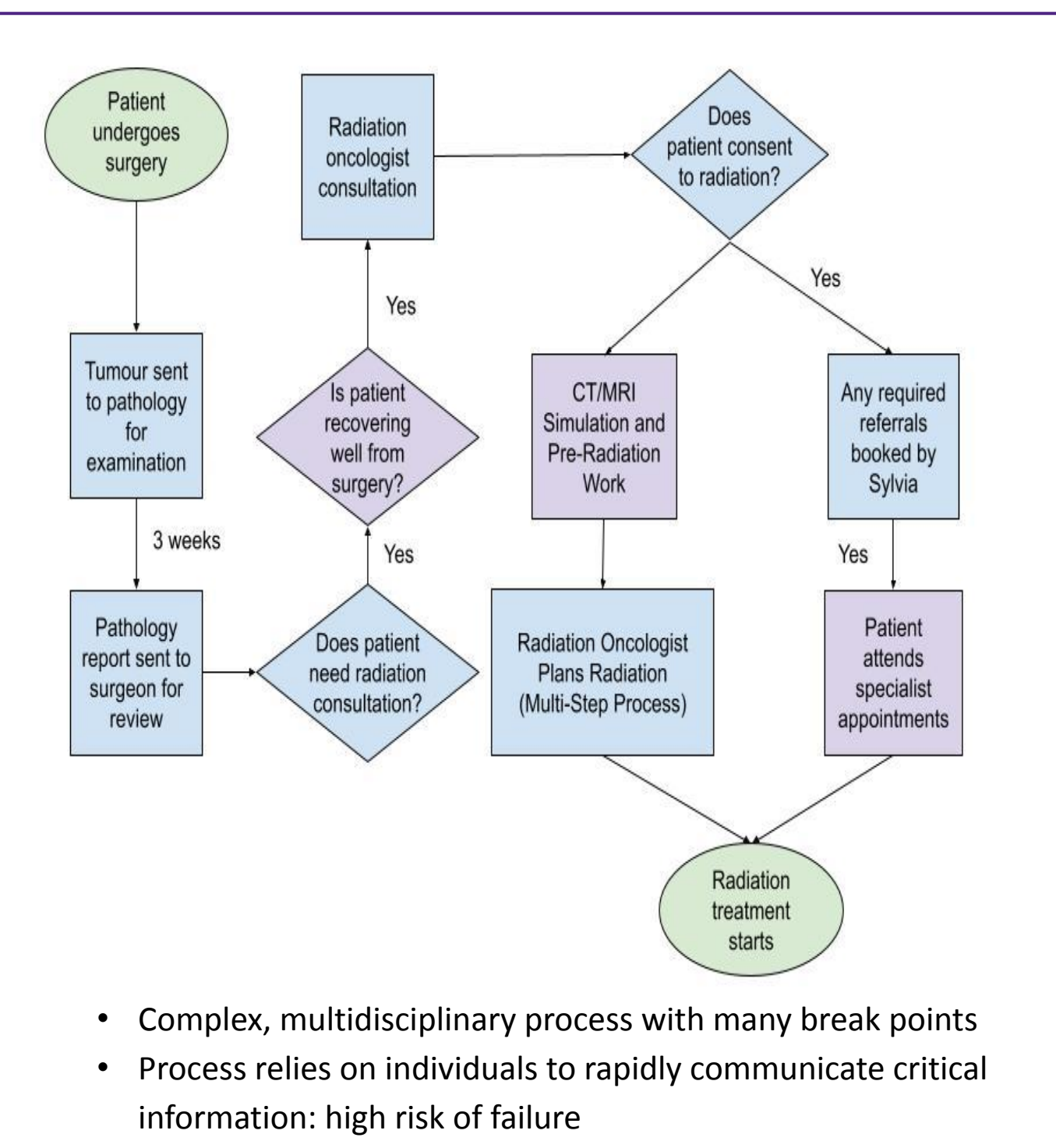


ROOT CAUSE ANALYSIS

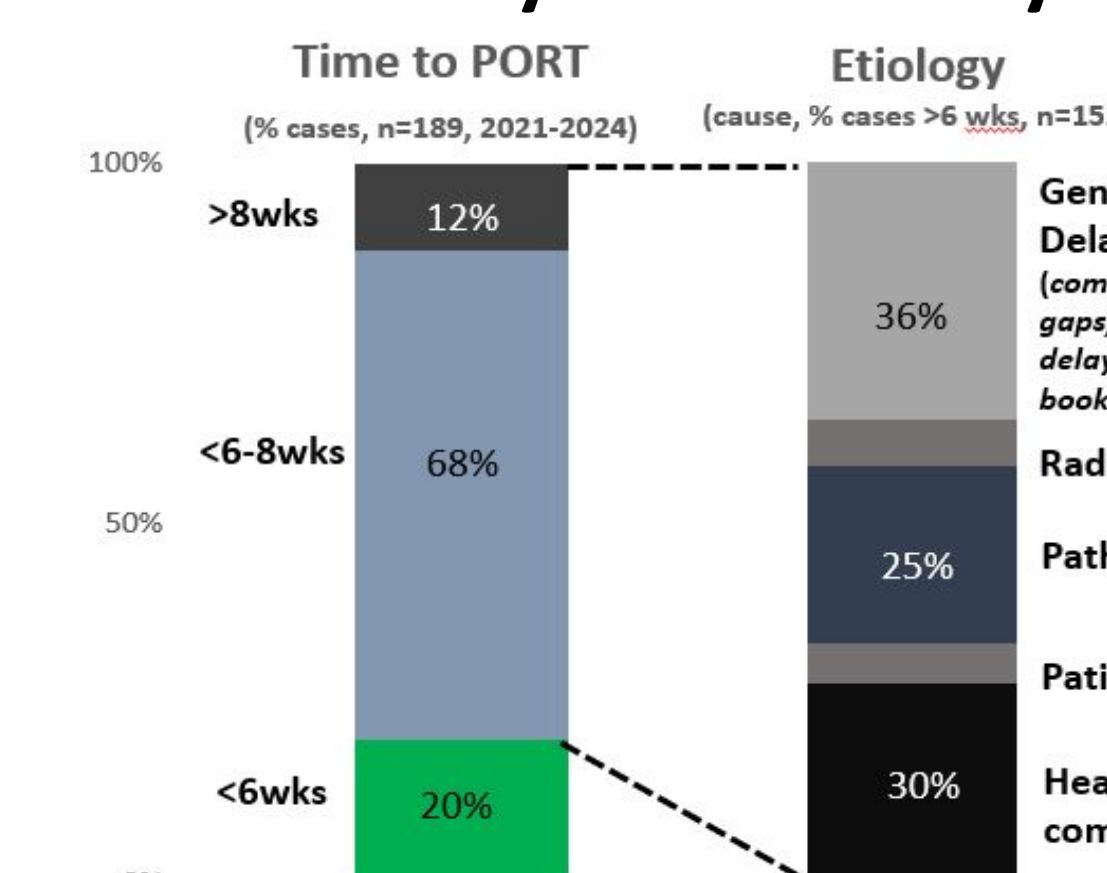
A. Stakeholder Interviews

- Surgical Oncologists**
 - Post operative patient evaluation, multidisciplinary communication, and treatment coordination falls to individual surgeons
- Pathology**
 - Capacity and resource issues led to reporting stretching to 4-5 weeks; this delays Radiation decision making
- Radiation Oncologists**
 - Radiation safety, dose and volumes depend on input from pathology, surgery and patient
 - High case complexity can lead to iterative planning process
- Radiation Therapy**
 - Complex planning process demanding 10-14 days due to resource issues
 - Typically starts after tumour pathology has been processed

B. Current State Process Mapping

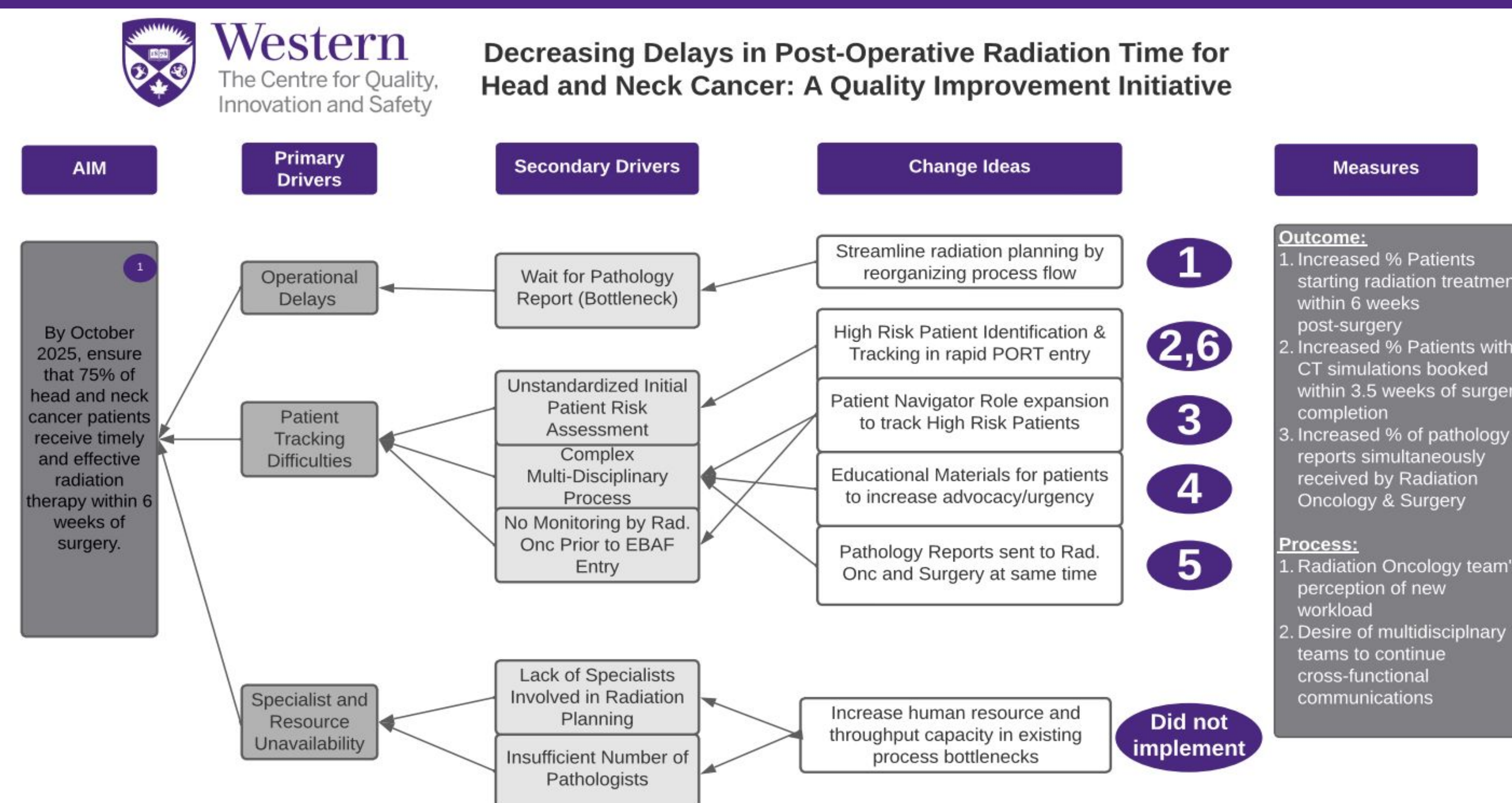


C. Data Analysis to Identify Modifiable Drivers

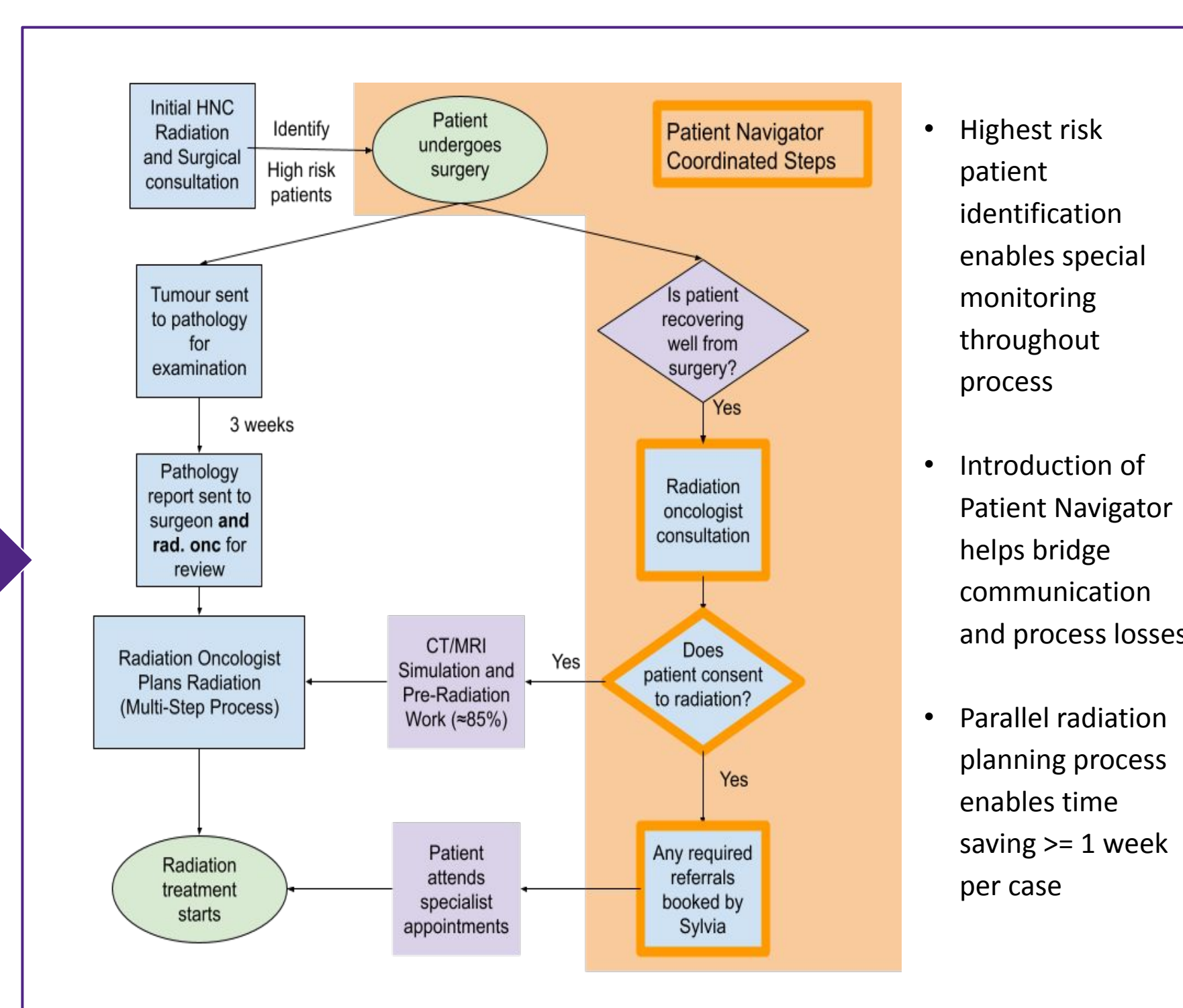


- ~30% of cases found to be non-modifiable: surgical or medical complications following surgery necessitate delay for safety
- General process delays was most common primary cause of cases starting >= 6 weeks -> significant improvements possible with communication and coordination
- ~5% of time, patient chose to delay for convenience -> education needed
- Literature review conducted to identify best practices utilized at global centres

PROPOSED INTERVENTIONS & DRIVER DIAGRAM



Change Idea 1 + 2 + 3: Streamlined Process + Patient Navigator + High Risk Patient Identification (Rapid PORT)



- Highest risk patient identification enables special monitoring throughout process
- Introduction of Patient Navigator helps bridge communication and process losses
- Parallel radiation planning process enables time saving >= 1 week per case

Change Idea 4: Patient Education Materials

Understanding the Need for Post-Operative Radiation Therapy (PORT) for Head and Neck Cancer

WHY DO I NEED RADIATION?

- In some cases, even after surgery, small areas of cancer may remain or the cancer may have been difficult to remove completely
- Radiation therapy helps target these leftover cells, ensuring the cancer is fully treated.

WHAT IS RADIATION?

- Radiation is energy that moves from one place to another - much like the heat we get from the sun
- We use radiation therapy in cancer treatment to zap or burn off cancer cells to shrink or destroy them.

WHY NOW?

- Although radiation seems like a far-away step in your treatment journey, it is important you are aware of it.

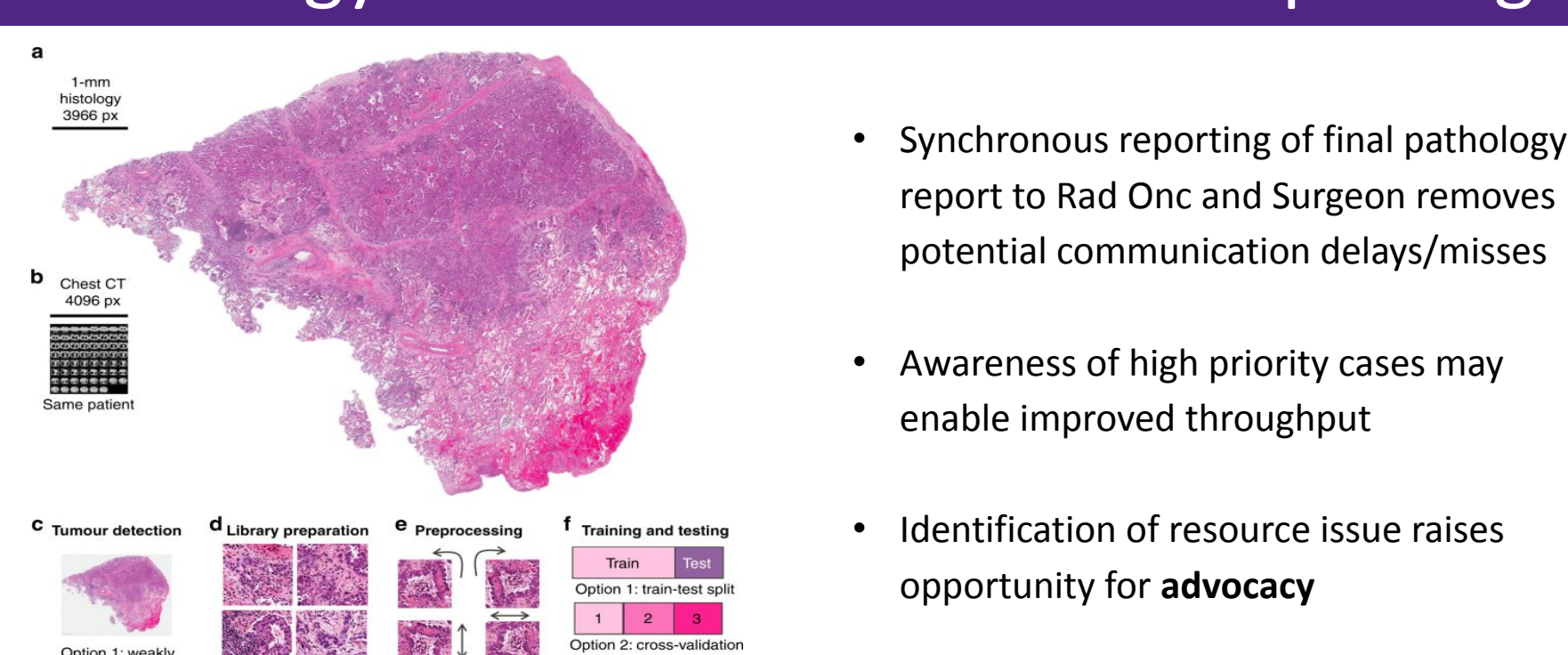
WHAT COULD DELAY MY START TIME?

- Many healthcare professionals are involved in making sure you receive the best treatment possible
- Occasionally, coordination between teams can take time, but our goal is to make sure every step of your treatment is carefully planned and tailored to your needs.

If you haven't heard about radiation planning a month after your surgery, please let us know.

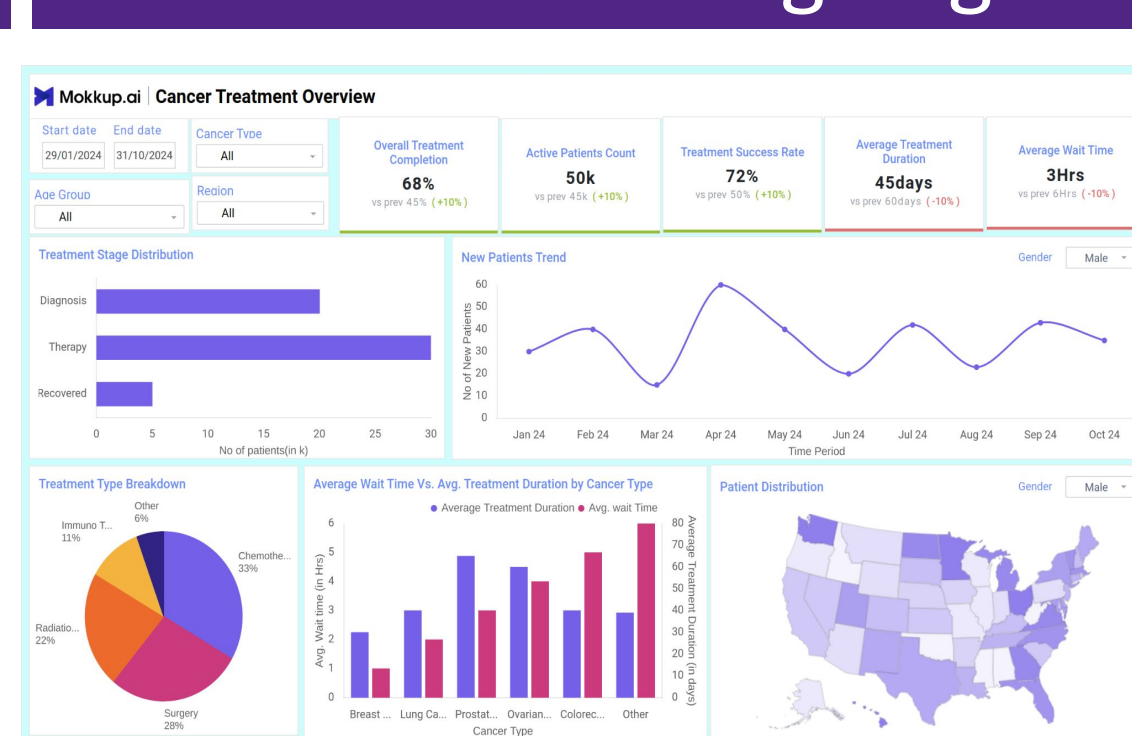
CONTACT HEAD AND NECK NAVIGATOR: 519-685-8600

Change Idea 5: Pathology Prioritization and Dual Reporting



- Synchronous reporting of final pathology report to Rad Onc and Surgeon removes potential communication delays/misses
- Awareness of high priority cases may enable improved throughput
- Identification of resource issue raises opportunity for advocacy

Change Idea 6: Dashboard for Ongoing PORT Monitoring



- Continued awareness by stakeholders helps to course correct early
- Ongoing root cause analysis enables continuous improvement, and advocacy in highest leverage areas

IMPLEMENTATION

PDSA Cycle 1:

- Patient Educational Materials presented by surgeon/radiation oncologist for each high-risk patient to start radiation planning 2 weeks after surgery, regardless of final pathology result

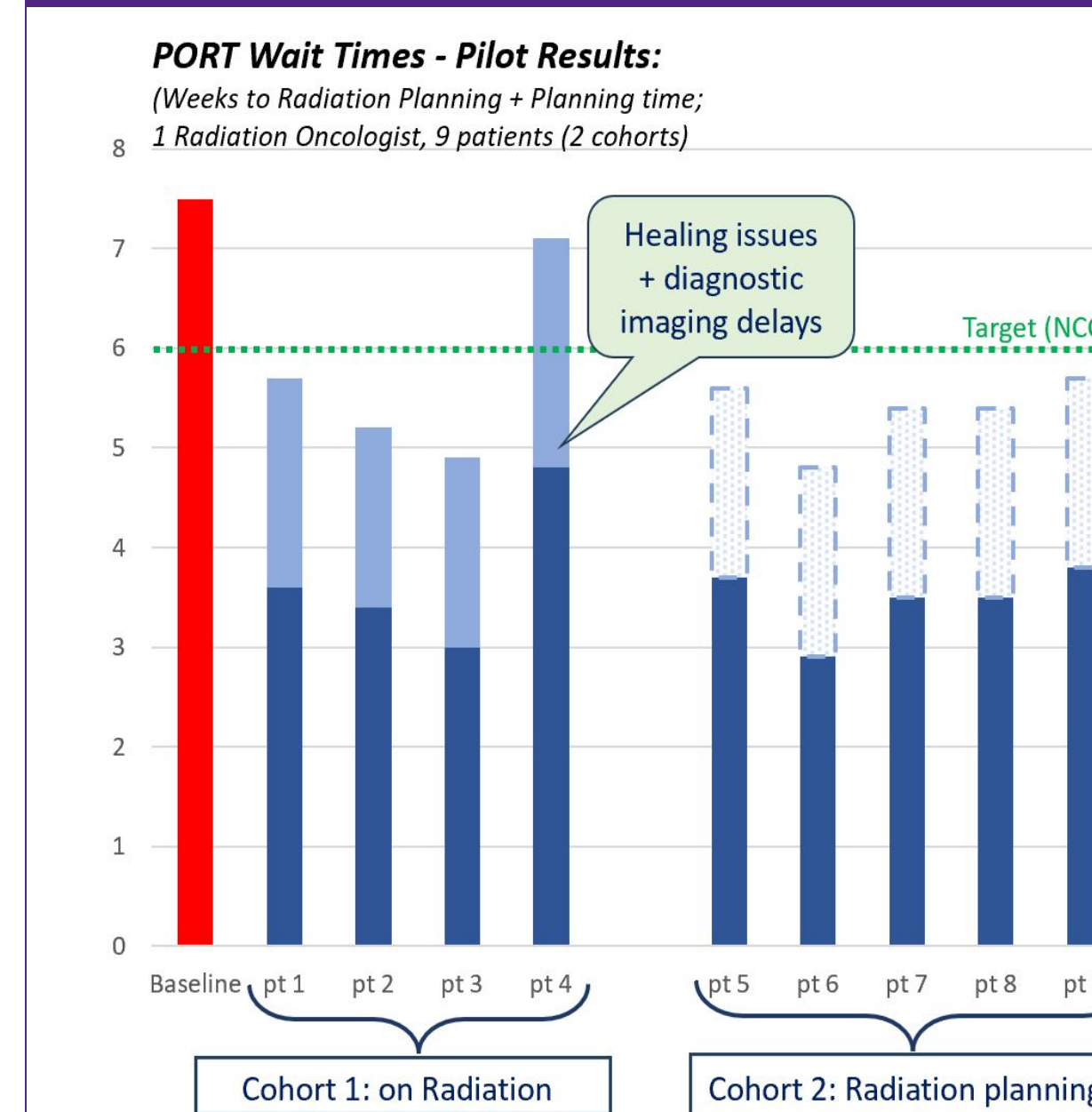
PDSA Cycle 2:

- Patient Navigator Role introduced to track high risk patients and streamline processes between surgery, pathology, & radiation

Reflection on Implementation Challenges

- Difficulty obtaining accurate PORT data to identify drivers
- Long total process time (10-14 weeks) requires intermediate measures
- Limited human resources in fiscally constrained environment
- Onboarding new roles: Pilot of Patient Navigator to capture all high-risk patients

MEASURES AND RESULTS



Process Measure:

- Small sample; 75% of on-treatment patients <6 weeks as expected, ~90% projected; patient >6 weeks: not modifiable
- Next steps: roll out process to all (n=4) Radiation oncologists

Balancing Measure:

- Increased workload on rad. onc. staff may lead to burnout
- Dual pathology reporting may reduce accuracy of reports as efficiency increases

SUSTAINABILITY

- Head and Neck Radiation Oncologist owns the process
- Patient navigator role embedded to oversee post-surgery tracking and radiation planning
- Standardization of clinical protocols and MDT checklists to reflect new patient flow process
- Regular Monitoring: Monthly dashboard to track surgery-to-CT timelines and flag delays

CITATIONS

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