

## Capstone for Impact Submission | GY2020

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**Project Title:** Comparing Different Preoperative Workflows in Surgical Oncology Clinics

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**Branch:** PBC

**Path of Excellence:** I&E

*If this project can be continued by another UMMS student, please include your contact information or any other details you would like to share here:*

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**Summary:** There is a lack of literature comparing how different preoperative workflows impact cost and time burden on patients. We compared two preoperative workflows in surgical oncology clinics to find that a more consolidated workflow reduces cost and time burden to patients.

**Methodology:** Retrospective chart review was performed on adult patients who underwent surgical treatment for cancer within the Thoracic and Hepatopancreaticobiliary (HPB) clinics. We estimated total miles traveled, total cost of gas, and total estimated hours spent by patients across all clinic visits before their procedure.

**Results:** The Thoracic clinic consolidates their initial surgical consult and imaging into a visit and attempts to schedule patients for their labs at the time of their preoperative workup clinic visit. Therefore, the Thoracic clinic had an average of 2.4 preop appointments, as opposed to 4.0 for the HPB clinic ( $p$  value  $<0.0001$ ). The Thoracic clinic patients also incurred significantly lower total miles traveled (499.2 vs 748.0), total estimated cost of gas (\$44.00 vs \$73.60), and total estimated hours spent travelling and in clinic (11.3 vs 18.5).

**Conclusion:** A streamlined preoperative workflow can reduce cost and time burden to patients. The true burden to patients is likely far greater, given potential lost wages due to missed work days and unnecessary stress. We encourage all surgical clinics to evaluate their own preoperative workflows to identify areas in which care can be streamlined in an effort to improve patient-centered care.

### Reflection/Impact Statement:

*You may use the following questions to guide your reflection:*

1. How did the process of conducting this research confront any limitations of your prior thinking?

As I completed this project, it was very surprising to see the variability among clinics in how their preoperative workflows are organized. Much of this was due to convenience for clinics, which is understandable- providers are extremely overworked and it can often be hard to take a step back and evaluate

processes for quality improvement. This project reinforced to me the importance of maintaining a focus on patient-centered care.

2. Who could potentially benefit from this CFI project over different timescales and how?

The biggest benefactor of this project would be underserved patients. If clinics change their preoperative workflows to be more patient-focused, our project shows a tangible benefit to patients. Underserved patients typically travel farther to get to UM, have more difficulty with access to transportation, and can't afford to miss days of work. Our findings suggest that these patients would benefit the most from improved patient-centered workflows.

3. What actions will you take afterwards to continue the momentum of this project, and maximise the likelihood of the identified benefits being achieved?

Much of the work I have done in medical school center around quality improvement, cost of care, and patient-centered care. As a future Ophthalmologist, I plan to bring these interests together to provide higher quality and more cost-effective care to patients. From this project in particular, I will apply my findings to my own future preoperative workflows. Furthermore, we presented our findings at a General Surgery Grand Rounds to disseminate our findings.

4. What advice would you give to another student completing their CFI?

The first important thing is to identify what your interests are outside of pure clinical medicine, such as medical education, quality improvement, or health disparities. Then, the most important thing you can do is finding a mentor who is invested in you and enjoys working with medical students.