# Improving Oncology Telephonic Triage Nursing

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## Purpose

The purpose of this project was to evaluate the impact that an evidence-based practice telephone triage template would have on decreasing emergency room (ER) visits and hospitalizations for oncology patients undergoing immunotherapy.

# Background

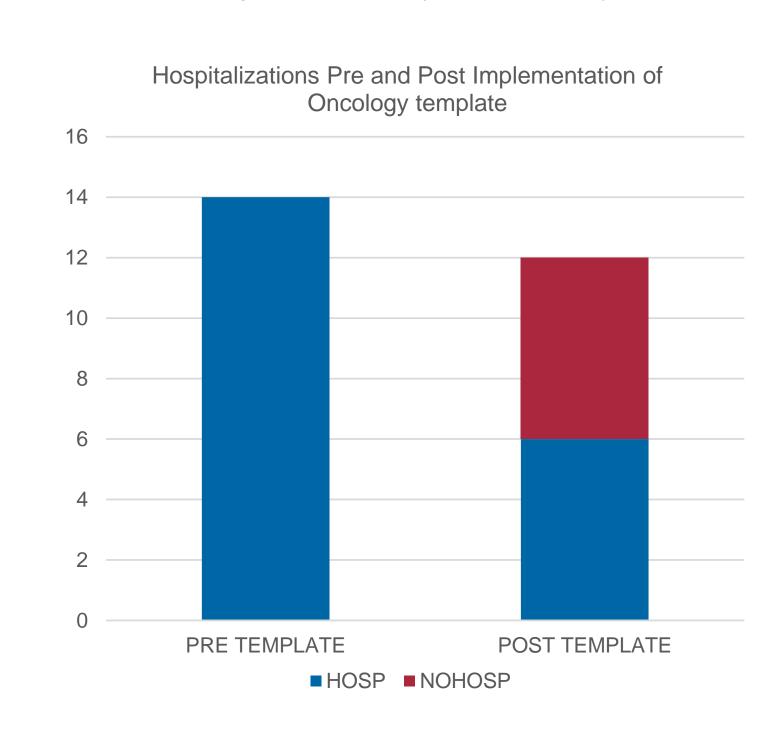
- Telephone triage has become an essential tool for indirect patient care. Oncology patients use the phone as a means to communicate symptoms to their providers more frequently than any other group of patients.
- Last year more than one million patients were treated with immunotherapy.
- There are currently 17 cancers approved to be treated with immunotherapies and approximately 900 clinical trials that involve immunotherapy treatment (NCI, 2019).
- Oncology patients receiving immunotherapy are not being appropriately and efficiently triaged over the phone by a nurse. This is leading to increased severity of toxicities and increased unnecessary ER visits and/or hospitalization.
- Toxicities secondary to cancer immunotherapy are unique and need special consideration prior to treatment.

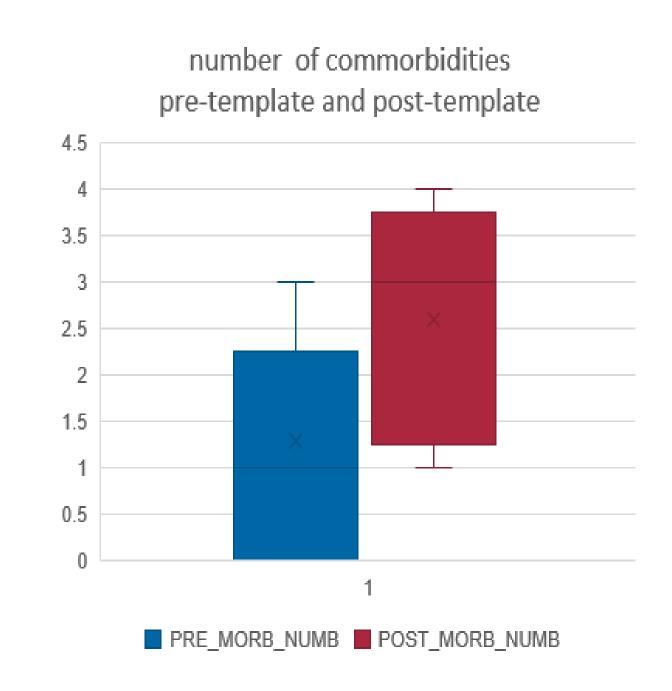
### Methods

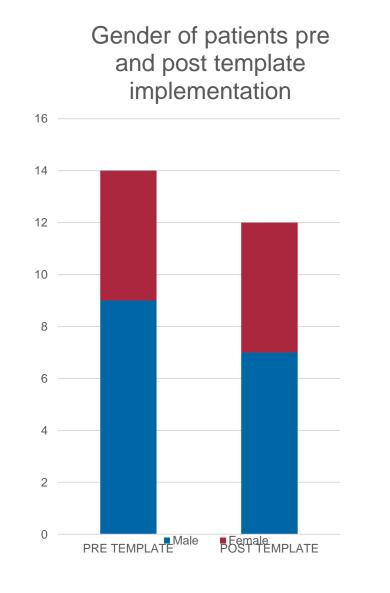
- **Design:** This project was conducted to implement oncology triage protocols for patients receiving immunotherapy, and evaluate the effect on patient outcomes. Nurses were educated on the use of the template and had biweekly reinforcement performed by the authors
- **Sample:** 14 patients were randomly selected from a 6 week retrospective chart review and 12 patients were selected after 6 weeks of triage protocol implementation.
- **Setting:** Cutaneous Oncology Clinic at in Tampa, Florida.
- **Measurement:** Number of ER visits or hospitalizations. Results were further broken down into the following categories:
  - Pre-existing co-morbidities
  - Gender and Age
  - Current immunotherapy treatment
  - Grade of the immune mediated adverse event
  - ECOG performance status

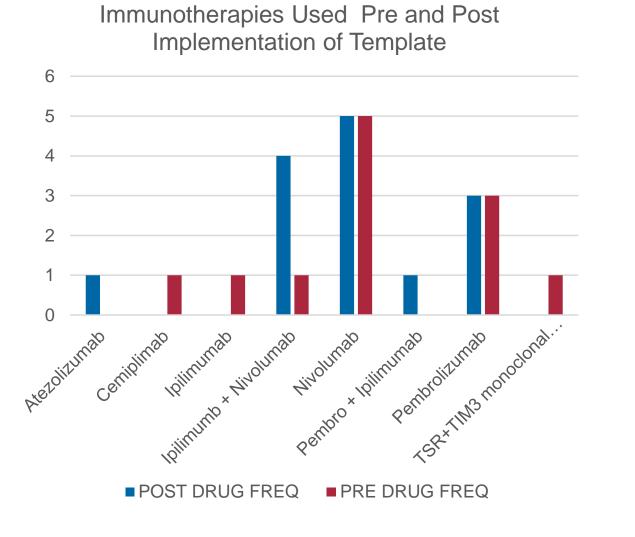
#### Results

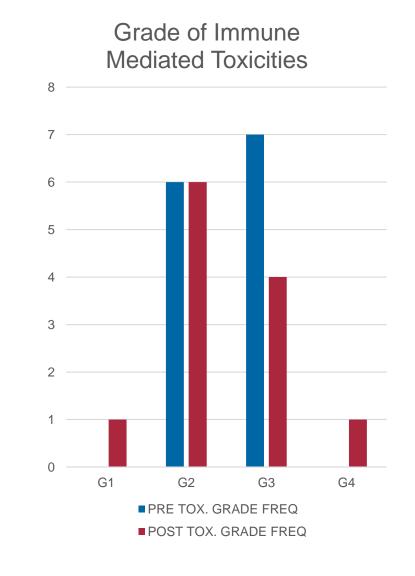
- The reduction of ER visits or hospitalizations after the use of the oncology triage template was statistically significant. Prior to implementation, 14 of the 14 patients selected were hospitalized compared to 6 of the 12 patients post template implementation. Using the Chi Square Test this gives us a P value of 0.002556.
- The number of pre-existing co-morbidities had a statistically significant impact on patient outcomes (P 0.00849). Of note, patients that had more pre-existing co-morbidities had less hospitalizations after the implementation of the Oncology triage template.
- Neither gender or age appeared to have a statistically significant impact on the rate of ER visits or hospitalizations. Using the Chi Square Test the P value for gender was P 0.755794 and for age was P 0.804803.
- The type of immunotherapy received did not have a statistically significant impact on the rate of ER visits or hospitalizations (P -0.62414).
- The grade of immune-mediated toxicity did not have a statistically significant impact on the rate of ER visits or hospitalizations (P- 0.651219).











#### Discussion

#### **Implications for Practice**

- The use of an evidence-based oncology telephone triage template can significantly reduce the number of ER visits and hospitalizations for patients on immunotherapy.
- If the Oncology telephone template is followed correctly patient's time to resolution of their symptoms could be reduced significantly allowing them to remain on cancer treatment
- Prompt evaluation of patient's symptoms could lead to patient staying in treatment longer

#### Recommendations

- The authors recommend standardization of the oncology telephonic triage template across all oncology clinics to improve patient's outcomes
- Increase accountability in the education of nurses to improve their level of knowledge in triaging patients currently on immunotherapy
- Audit calls on a quarterly basis to improve the quality of care of patients using telephonic oncology triage and provide adequate and timely education to improve patient care
- Implement mandatory classes for nurses to improve their oncology telephonic triage skills and charting

#### Limitations

- Use of a central triage unit in addition to the cutaneous nurses who were trained on the triage template allow for unaccounted patients.
- Due to the small sample size, these results would not be generalizable to the entire oncology population.

## References

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