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Identifying Baseline Characteristics for Consideration of Prophylactic Feeding Tube Placement in Persons Undergoing Chemoradiotherapy for Head and Neck Cancer: A Retrospective Chart Review

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Introduction

- LVHN does not have an established list of criteria to determine which Head and Neck Cancer (HNC) Patients undergoing Chemoradiotherapy (CRT) receive a Prophylactic Feeding Tube (PFT)
- NCCN guidelines recommend against placement of PFT in patients who have low Performance Status score (ECOG) unless they have severe pretreatment weight loss or severe dysphagia

Objectives

- Identify common characteristics found in patients who had PFT placed

Age	ECOG Score	Nodal (N) status
Pretreatment weight loss	Tumor location	Chemotherapy regime
Baseline BMI	Tumor (T) status	Dysphagia

- Evaluate weight loss, hospital admissions, and Feeding Tube (FT) use to determine if PFT improved patient outcomes
- Ultimately create guideline for physicians to help decide which patients will benefit most from PFT

Methods

Identify patients diagnosed with HNC between 2016 and 2019

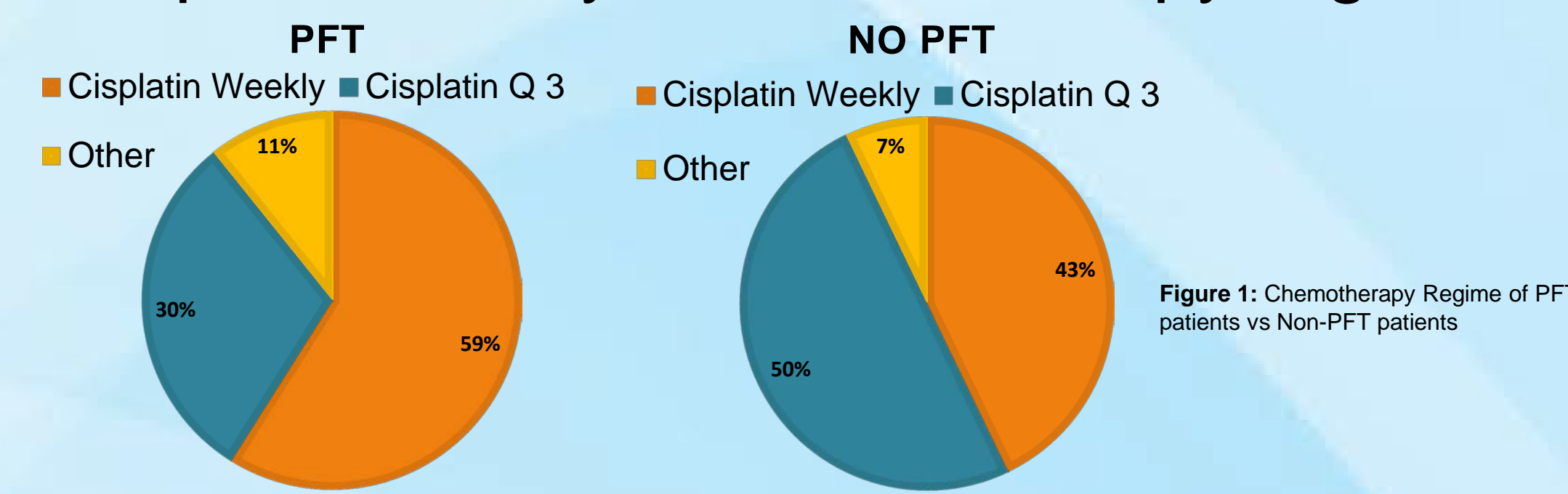
Screen patient charts by inclusion criteria: stage III or IV HNC, chemotherapy and radiation treatment (CRT), treated at LVHN Cedar Crest or Muhlenberg sites, over 18 years of age

Collect patient information through EPIC and enter into REDcap

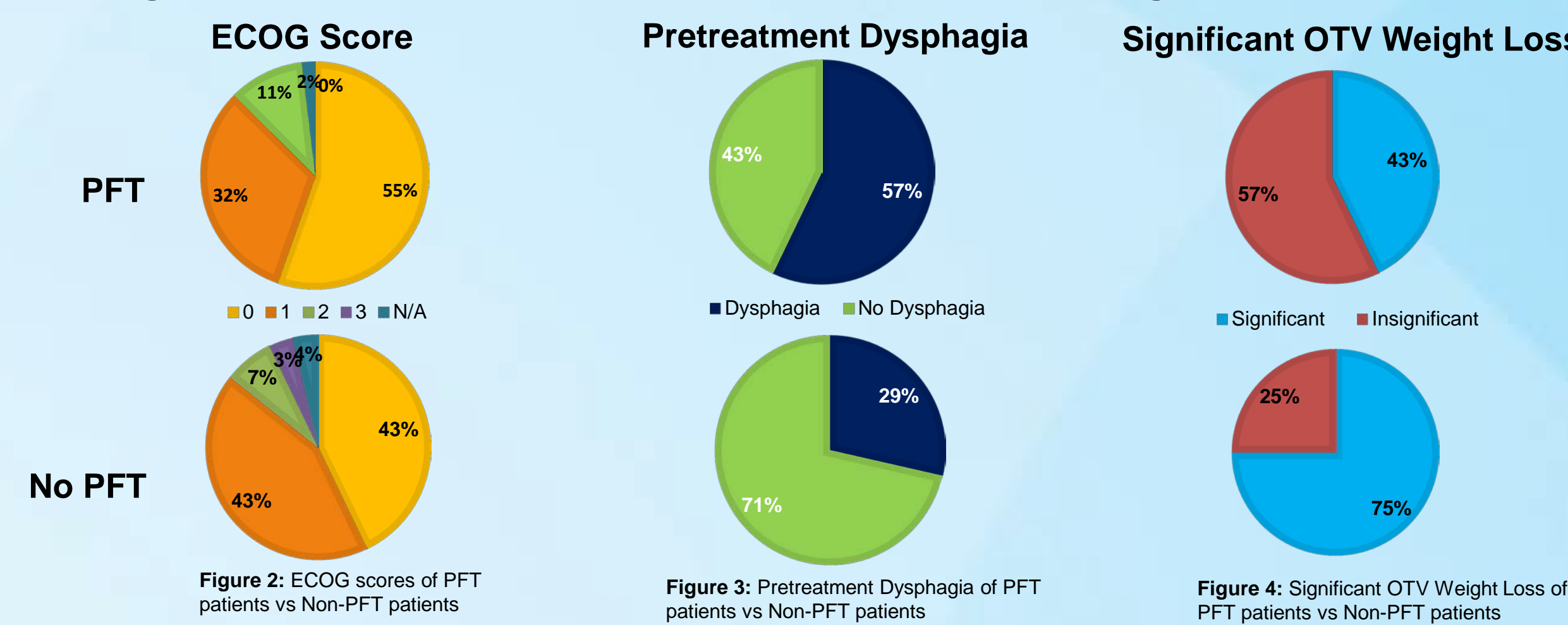
Perform statistical analysis to compare PFT with reactive feeding tube (RFT) and no FT

Results

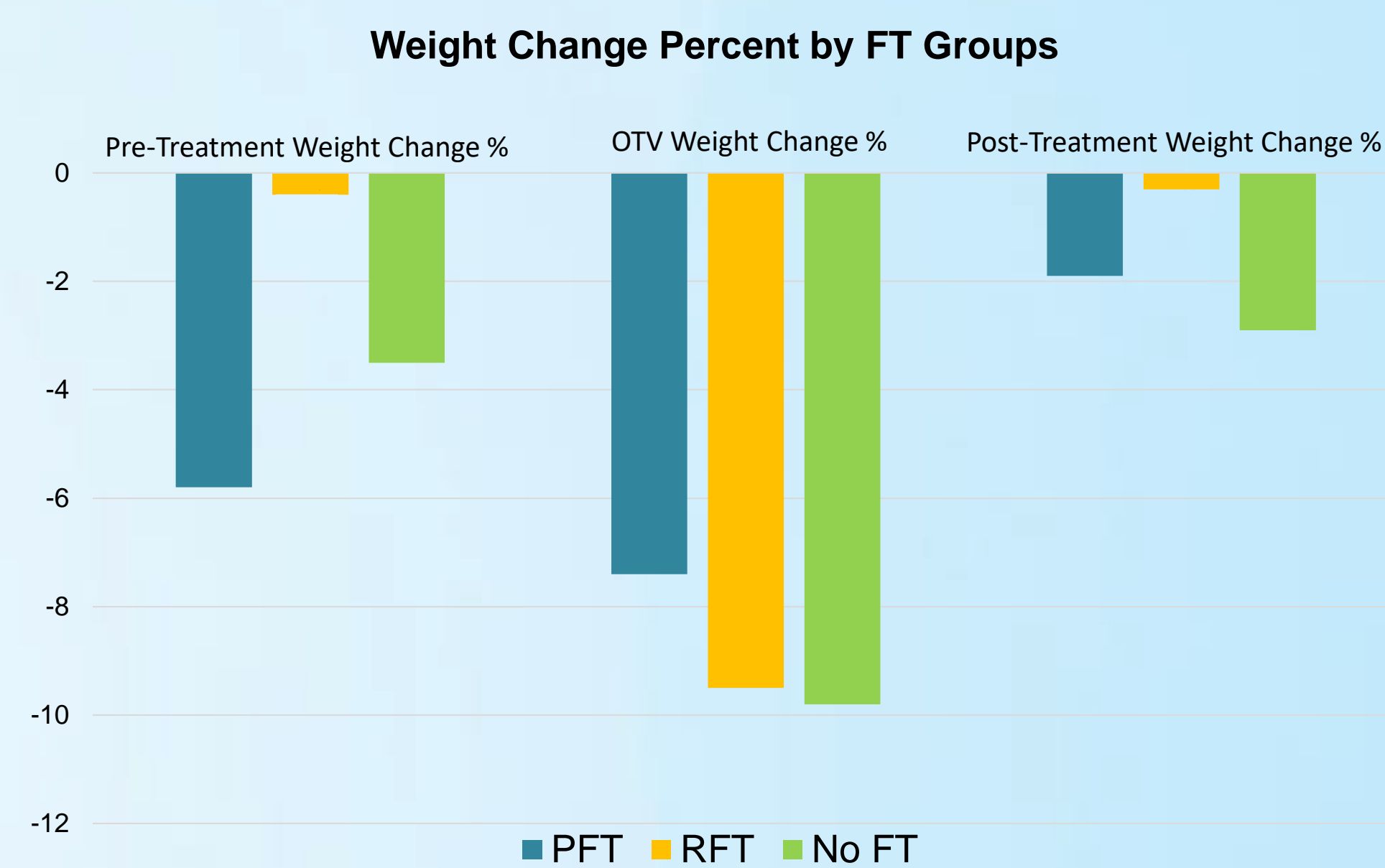
- Sample size n= 84
- Of the 84 patients, 56 (66.7%) received a PFT and 28 (33.3%) did not
- The majority of patients who received a PFT underwent cisplatin weekly as chemotherapy regimen



- Most patients who received PFT had an initial ECOG score of 0 or 1, pretreatment dysphagia, and insignificant On-Treat Visit (OTV) weight loss



- Patients who received PFT had lower weight loss percentage during and after treatment compared to patients with a RFT and no FT



Conclusions

- 91% of patients with PFTs used them
- Regardless of disease location, ECOG, BMI, nodal involvement, and tumor status, placement of PFT appears preferred in order to reduce need for subsequent RFT placement
- ECOG score does *not* determine need for PFT
- Even patients with initially low ECOG scores of 0-1 benefited from PFT and reduced overall weight loss
- Weekly cisplatin may have a lower anticipated degree of toxicity, however does not seem to increase likelihood of not benefiting from PFT
- Patients with PFT had less weight loss likely indicating better overall nutrition status

Future Directions

- Perform complete statistical analysis to find statistically significant results
- Evaluate if patients with both PFTs and RFTs were relying upon them fully or using them as supplementation
- Compare the treatment “failure” of a RFT with the treatment “failure” of receiving a PFT and not using it
- Track outpatient hydration appointments of patients with no FT
- Use data to develop concrete guide to help physicians determine which patients will benefit most from PFT

References

Karsten RT, Stuver MM, van der Molen L, Navran A, de Boer JP, Hilgers FJM, Klop WMC, Smeele LE. Reactive to proactive tube feeding during chemoradiotherapy for head and neck cancer: A clinical prediction model-based approach. *Oral Oncology*. 2018;11:172-179.
Greaves J. Head and neck cancer seeding at the percutaneous endoscopic gastrostomy site. *Nutr Clin Pract* 2018;33(4)
NCCN Guidelines Version 2.2018 Head and Neck Cancers
Van der Linden NC et al. Indicators for enteral nutrition use and prophylactic percutaneous endoscopic gastrostomy placement in patients with head and neck cancer undergoing chemoradiotherapy. *Nutr Clin Pract*. 2017; 32(2):225-232
Wopken K, Bijl HP, Langendijk JA. Prognostic factors for tube feeding dependence after curative (chemo-) radiation in head and neck cancer: A systematic review of literature. *J Eur Soc Ther Radiol Onc*. 2018;126(1):56-67
Leser M, Ledesma N, Bergerson S, Trujillo E. *Oncology Nutrition For Clinical Practice*. 2013. Oncology Nutrition Dietetic Practice Group of the Academy of Nutrition and Dietetics, Chicago IL.