

Receipt of Guideline-Concordant Treatment Among US Medicare Fee-for-Service Beneficiaries Newly Diagnosed with Stage III - IV Melanoma from SEER-Medicare Linked Data

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INTRODUCTION

- The National Comprehensive Cancer Network (NCCN) publishes comprehensive recommendations for cancer treatment based on the latest evidence.¹
- There is a lack of published literature on the receipt of guideline-concordant primary treatment (GCPT) and the factors that predict the failure to the receipt of GCPT.

OBJECTIVE

To identify disparities in receipt of guideline-concordant primary treatment among older Medicare fee-for-service beneficiaries diagnosed with stage III or stage IV cutaneous melanoma.

METHODS

Study Design, Data Source, and Study Population

- We conducted a retrospective observational cohort study using the Surveillance, Epidemiology, and End Results (SEER)-Medicare-Area Resource File linked dataset.
- We included 1,467 patients aged ≥66 years at the first primary diagnosis of stage III-IV incident cutaneous melanoma during 2011-2015.

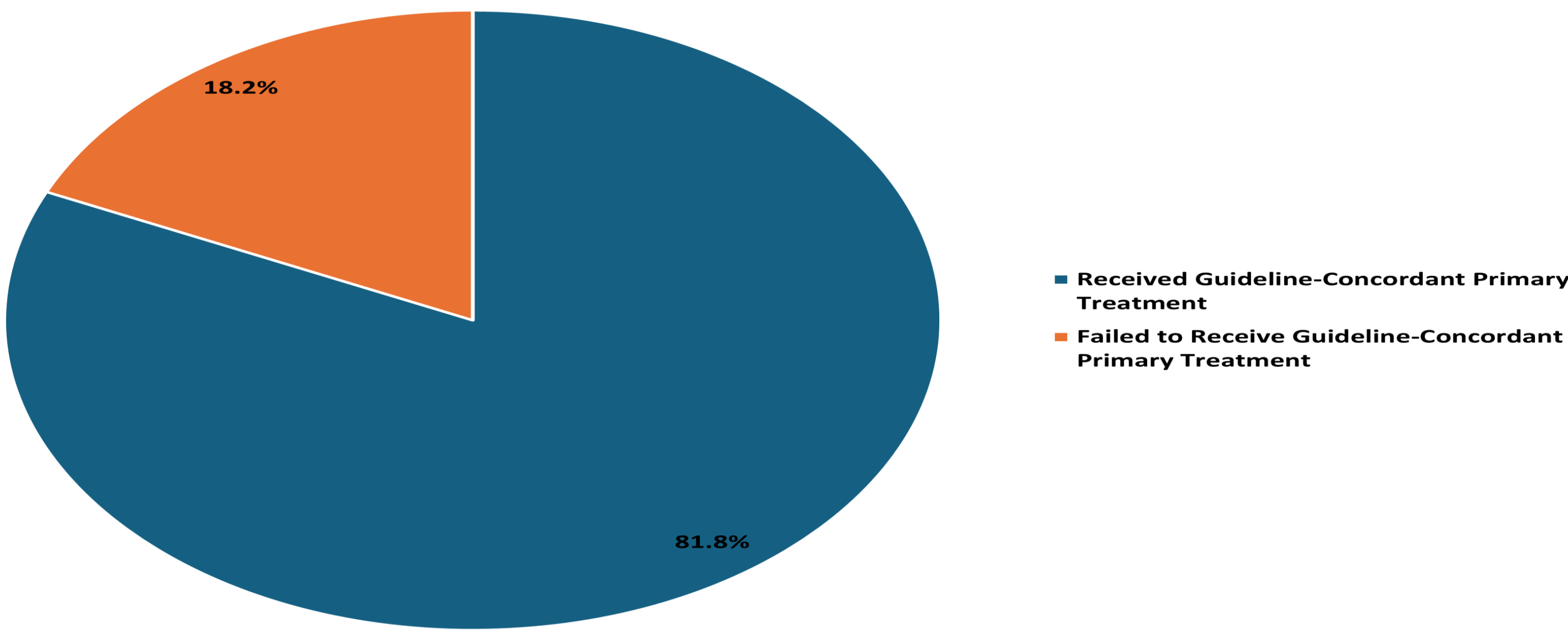
Measures

- Guideline-Concordant Primary Treatment:** defined by the initiation of a NCCN guideline designated treatment regimen for the primary treatment of cutaneous melanoma within six-months of diagnosis.
- Covariates:**
 - Clinical Characteristics: Year of diagnosis, Stage at Diagnosis, Anatomic Site of Cancer, Breslow Tumor Thickness, Regional Lymph Node Involvement, Histological Subtype, Ulceration Status, Charlson Comorbidity Index, Performance Status
 - Patient Demographic Characteristics: Age Group at Cancer Diagnosis, Sex, Race/Ethnicity, Marital Status
 - Socioeconomic Characteristics: Census Tract Median Household Income and Education
 - Healthcare Access: SEER Region, Number of Hospitals Providing Oncology Services in the Area of Patient’s Residence

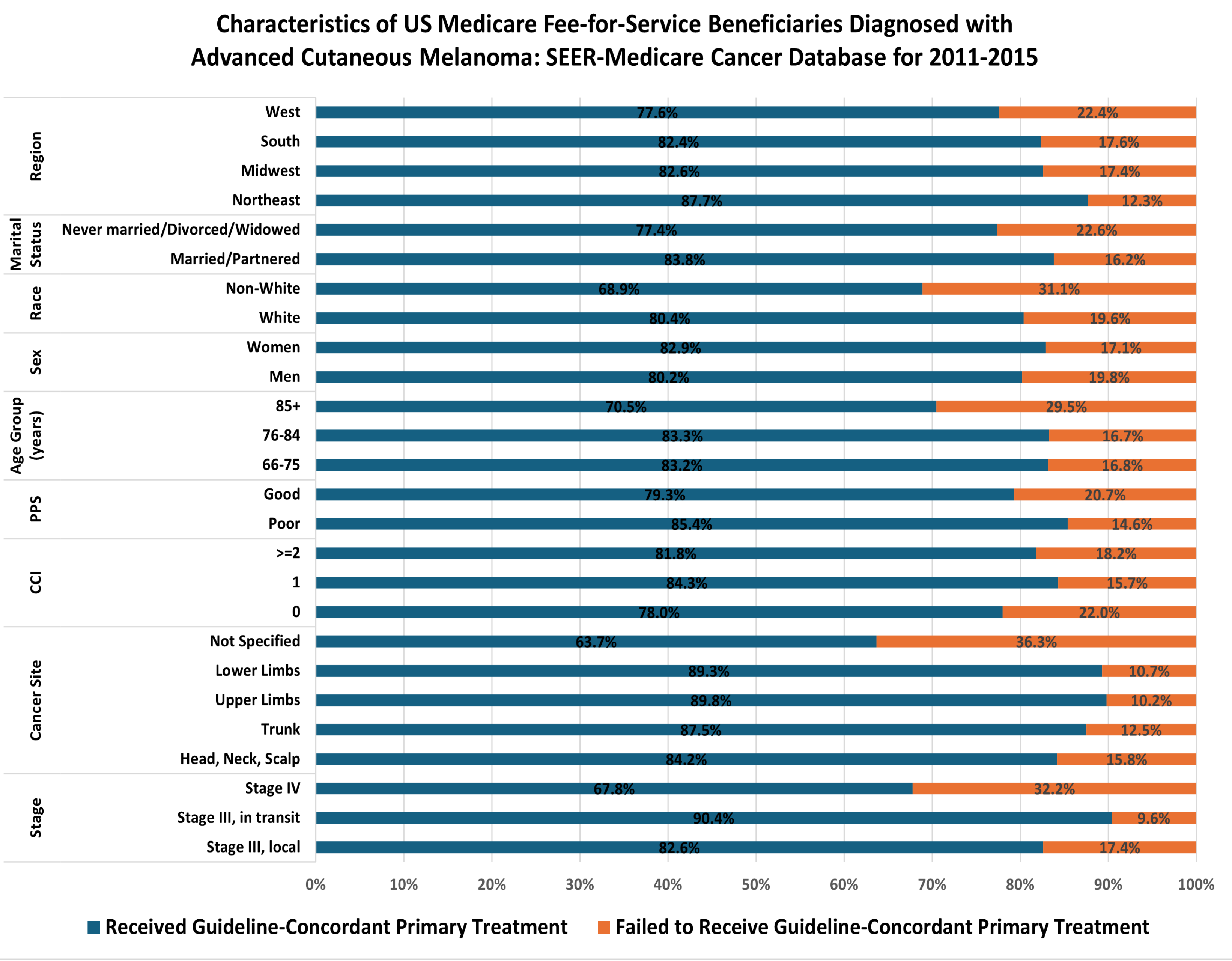
Statistical Analyses

- We conducted a descriptive analysis using a Chi square test to identify significant differences between those who received guideline-concordant treatment and those who failed to receive guideline-concordant treatment.
- We conducted a multivariable logistic regression to identify significant predictors associated with failure to receive guideline-concordant treatment.

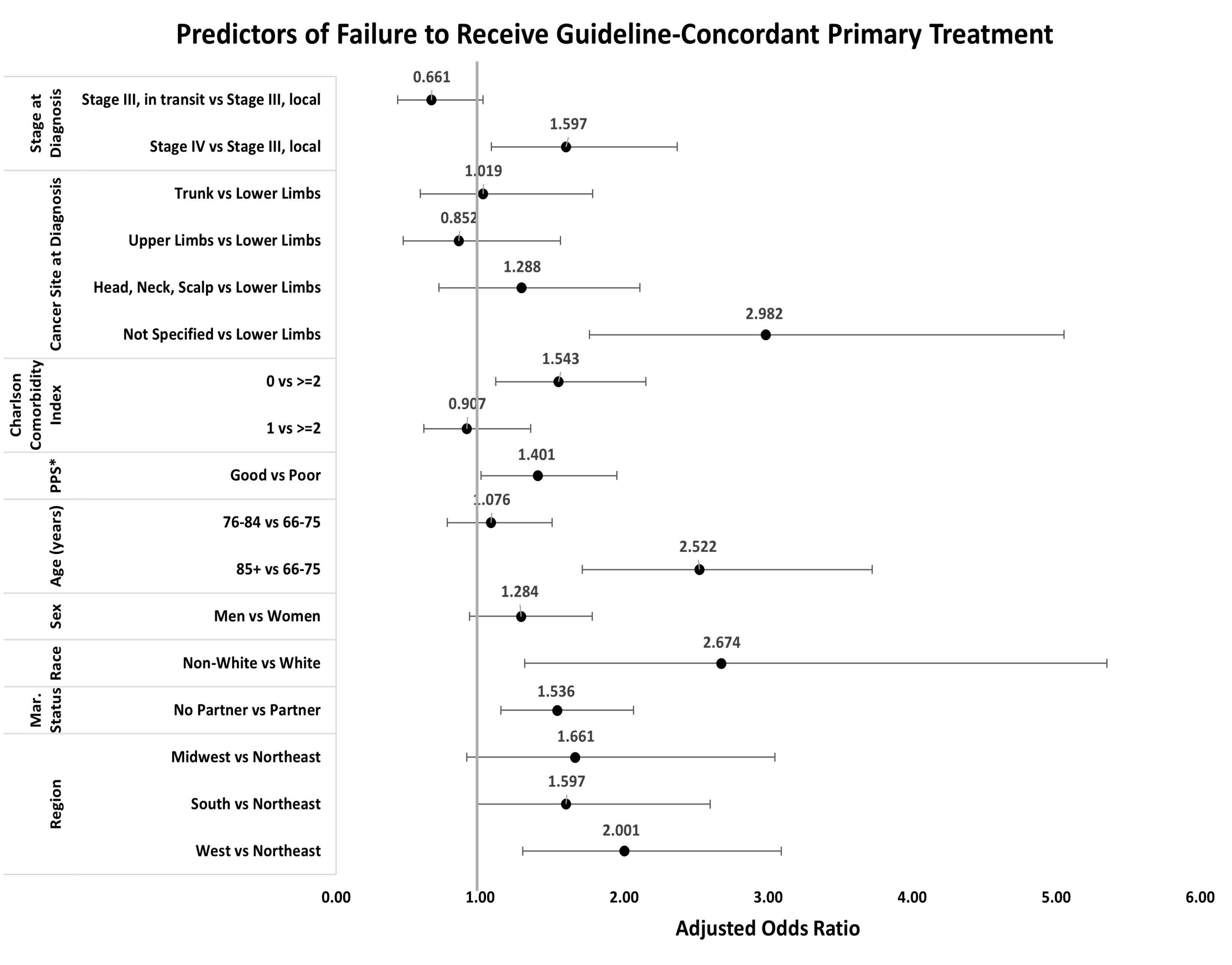
Final Cohort of US Medicare Fee-for-Service Beneficiaries, N = 1,467



RESULTS



CCI – Charlson Comorbidity Index; PPS – Proxy Performance Status



Adjusted for: Stage at Diagnosis, Site of Cancer, Charlson Comorbidity Index, Proxy Performance Status, Age group, Sex, Race, Marital Status, and Region. CCI – Charlson Comorbidity Index; PPS – Proxy Performance Status

Guideline-Concordant Primary Treatment among US Older Medicare Fee-for-Service Beneficiaries Diagnosed with Advanced Cutaneous Melanoma: SEER-Medicare Cancer Database for 2011-2015 Cases.

| Stage at Diagnosis | Primary Treatment | n (%) |
|-----------------------|---|------------|
| Stage III, local | Lymph Node Dissection | 35 (15.1) |
| n = 232 | Lymph Node Dissection and Wide Excision | 197 (84.9) |
| Stage III, in Transit | Surgical Excision, alone | 323 (52.5) |
| n = 615 | Surgical Excision AND | |
| | - Systemic Therapy | 32 (5.2) |
| | - Radiation Therapy | 57 (9.3) |
| | - Intralesional Injection | 76 (12.4) |
| | - Other treatment combination | 13 (2.1) |
| | Systemic Therapy AND | |
| | - Local ablation Therapy | 45 (7.3) |
| | - Other treatment combinations | 58 (9.4) |
| Stage IV | Surgical Excision AND | |
| n = 343 | - Systemic Therapy and | 22 (6.4) |
| | o Radiation Therapy | 17 (39.4) |
| | o Other treatment combinations | 41 (12.0) |
| | - Radiation | 52 (15.2) |
| | o Other | 31 (9.0) |
| | - Palliative Care | 30 (8.7) |
| | - Observation | 63 (18.4) |
| | Radiation only | 25 (7.3) |
| | Other Treatment Combinations | 62 (18.1) |

DISCUSSION

- Increased adjusted odds of failure to receive guideline-concordant primary treatment was seen among the following patients diagnosed with advanced cutaneous melanoma:
 - Those over 85 years old, compared to those 66-76 years old
 - Those diagnosed at stage IV compared to stage III, local
 - Those with good performance status and lower Charlson comorbidity index
 - Those without a partner or not married
 - Those who were non-White
- Non-clinical factors are associated with failure to receive guideline-concordant primary treatment
- Identifying patients failing to receive guideline-concordant primary treatment is central to delivering patient centered care

REFERENCE

- Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Melanoma V.3.2016. © National Comprehensive Cancer Network, Inc. 2016. All rights reserved. Accessed February 19, 2019. To view the most recent and complete version of the guideline, go online to NCCN.org.