

Prevalence of Opioid and Adjunctive Medicine Prescriptions in Head and Neck Cancer

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INTRODUCTION

- Head and neck cancer (HNC) patients routinely receive a multitude of opioid and adjunctive pain medications
- The CDC has identified 232,000 deaths from prescription opioids between 1999-2018
- The specific agents prescribed, frequency, duration variations by cancer site, and relationship to radiation therapy have not been previously studied

OBJECTIVES

1. Assess the frequency and type of opioid and adjunctive prescriptions in HNC patient populations
2. Identify associations related to cancer stage, primary site (H&N, breast, lung), clinical setting and radiation therapy

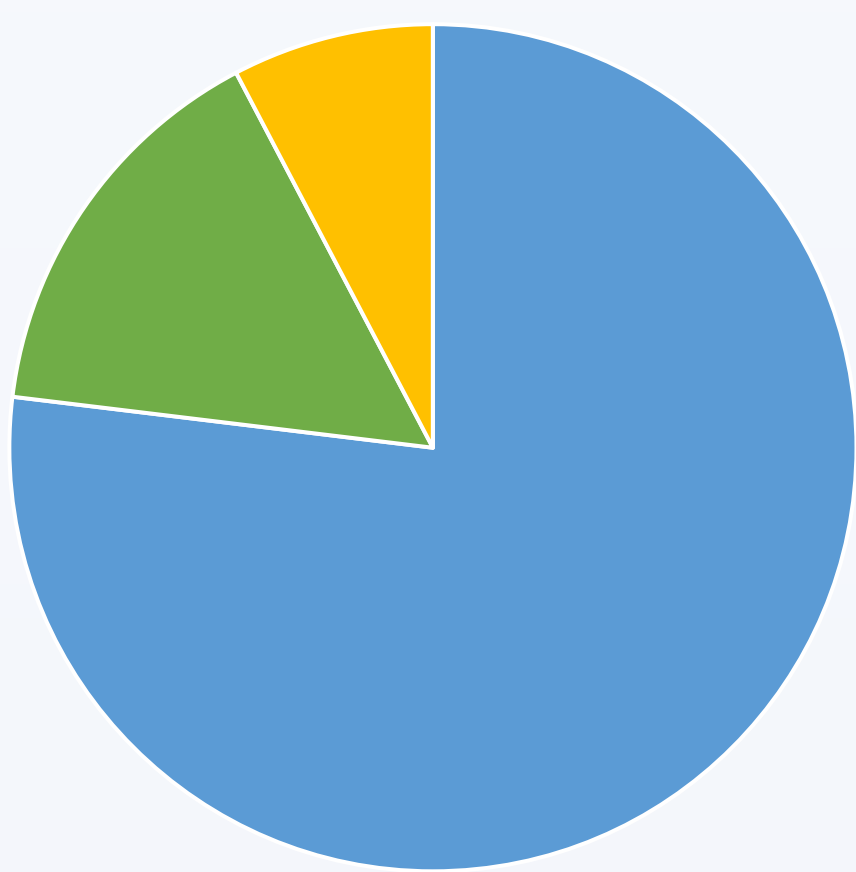
METHODS

- Identified all adult cancer patients at affiliated clinical sites (2009-2016) by EMR query
- Catalogued every opioid and adjunctive medication prescription
- Stratified patients by demographic criteria, cancer site, treatment setting, and receipt of radiation therapy
- Utilized chi-square testing to identify the association of opioid use with patient characteristics

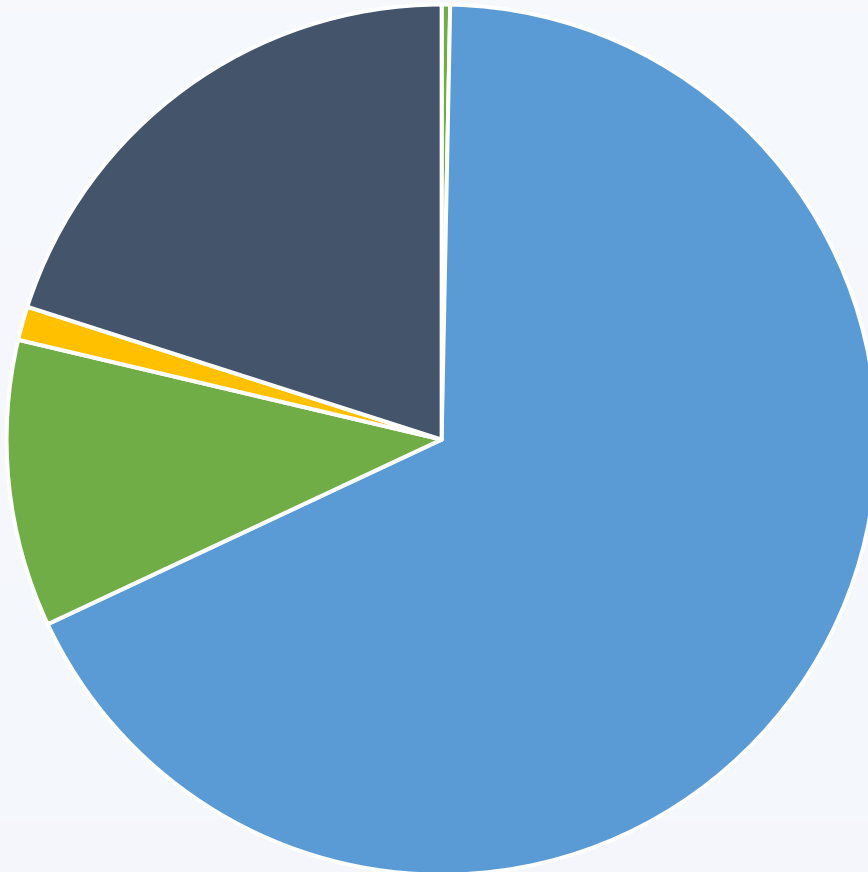
RESULTS

Prescriptions by Cancer Stage

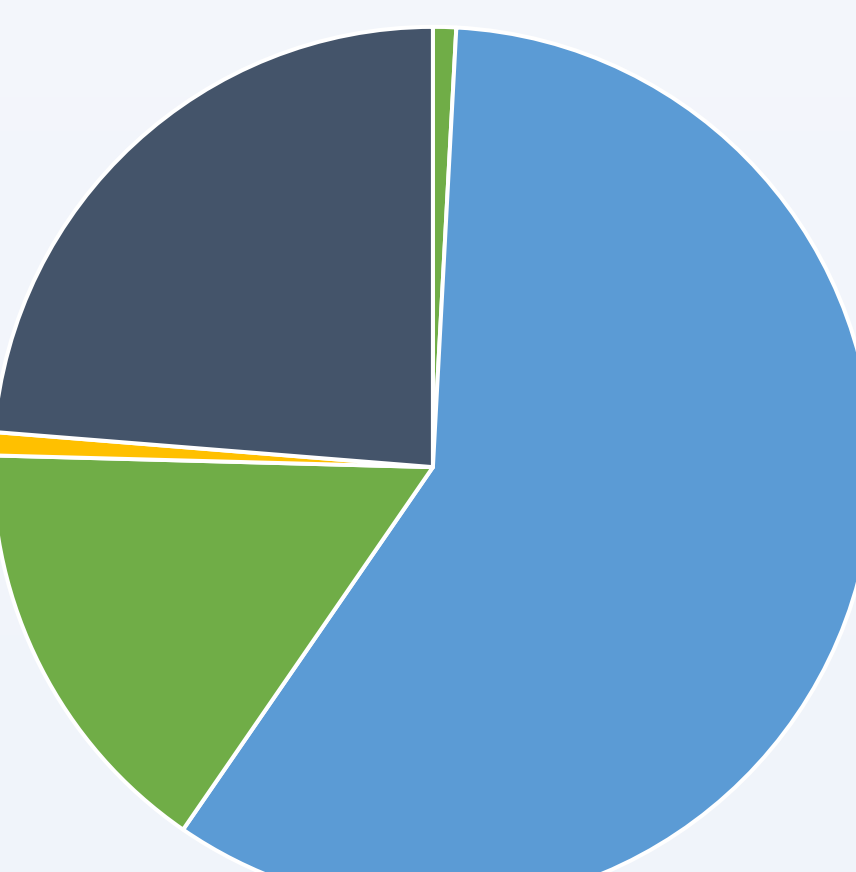
Stage 0



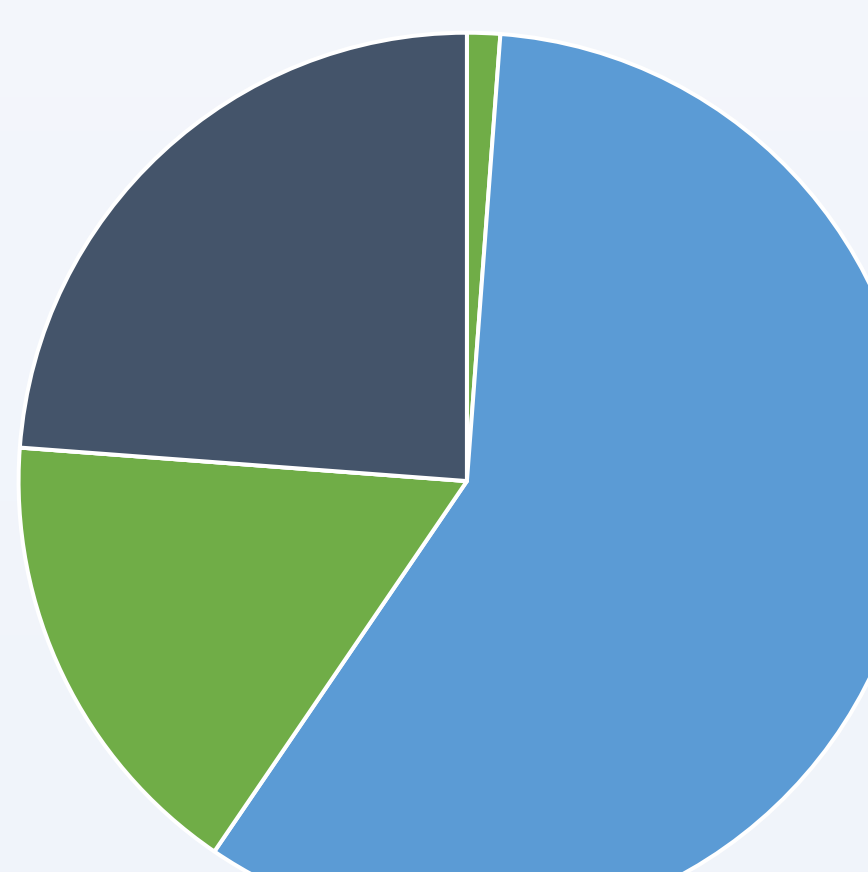
Stage 1



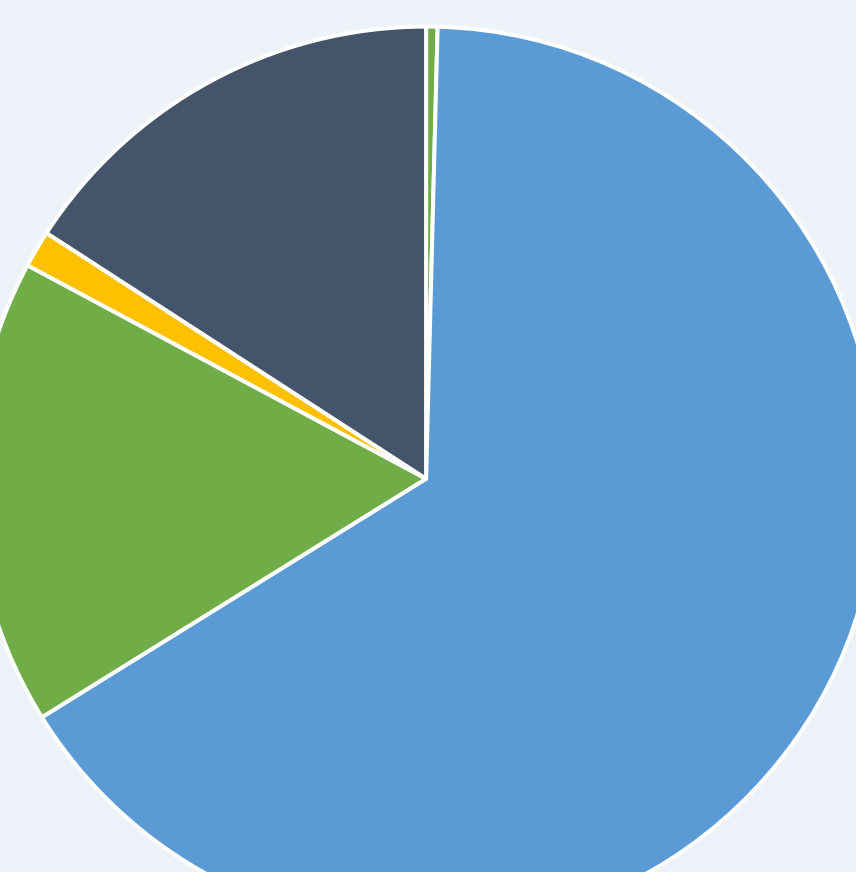
Stage 3



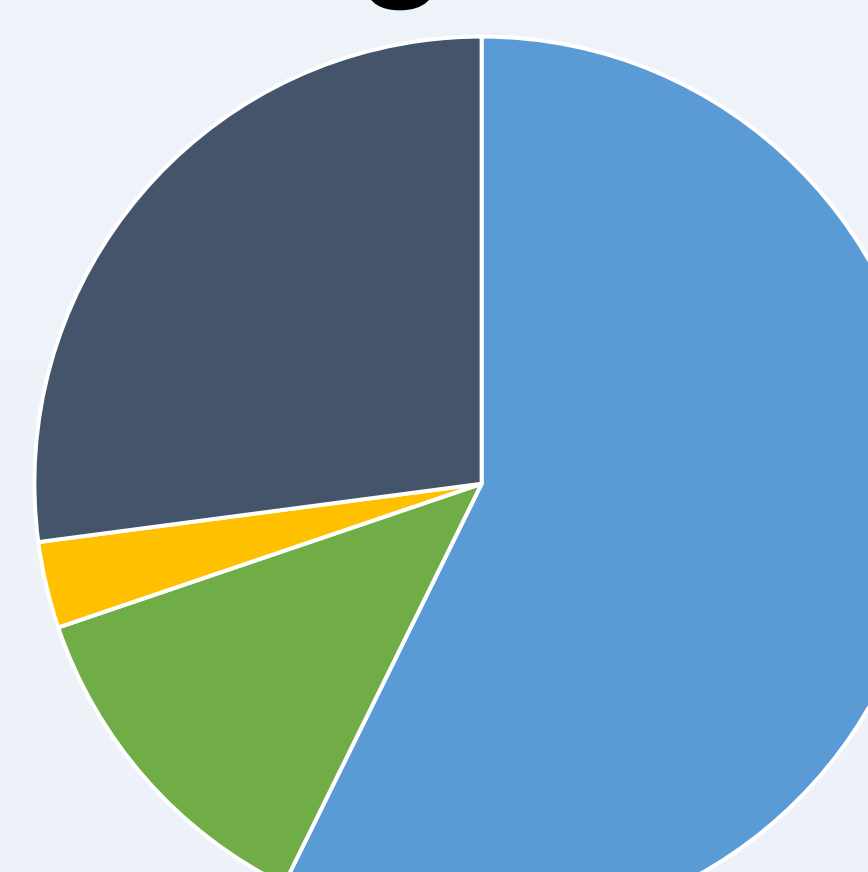
Stage 2



Stage 4



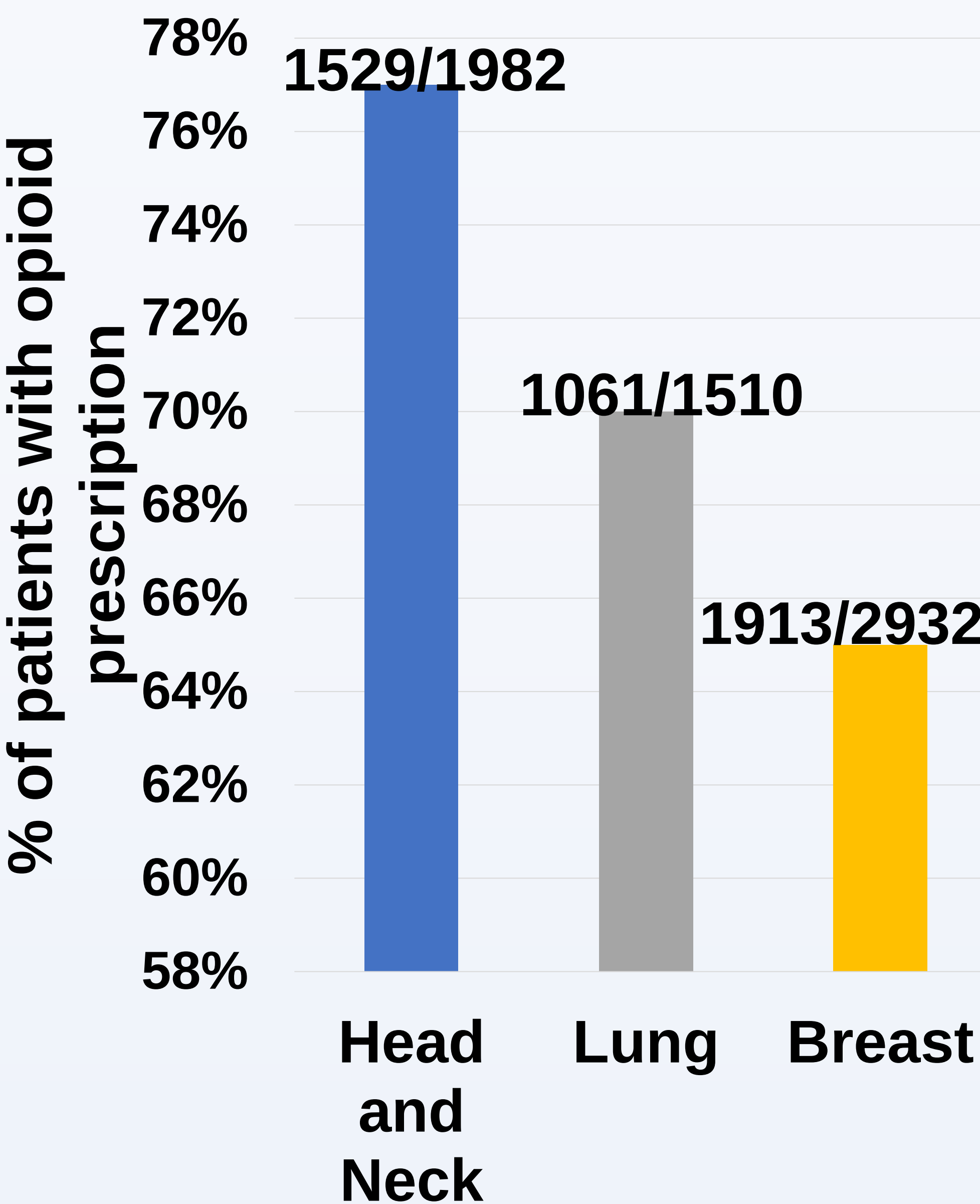
Stage N/A



Opioids Only
Opioids and Adjunctive
Adjunctive Only
None

RESULTS

Opioid Prescriptions by Site

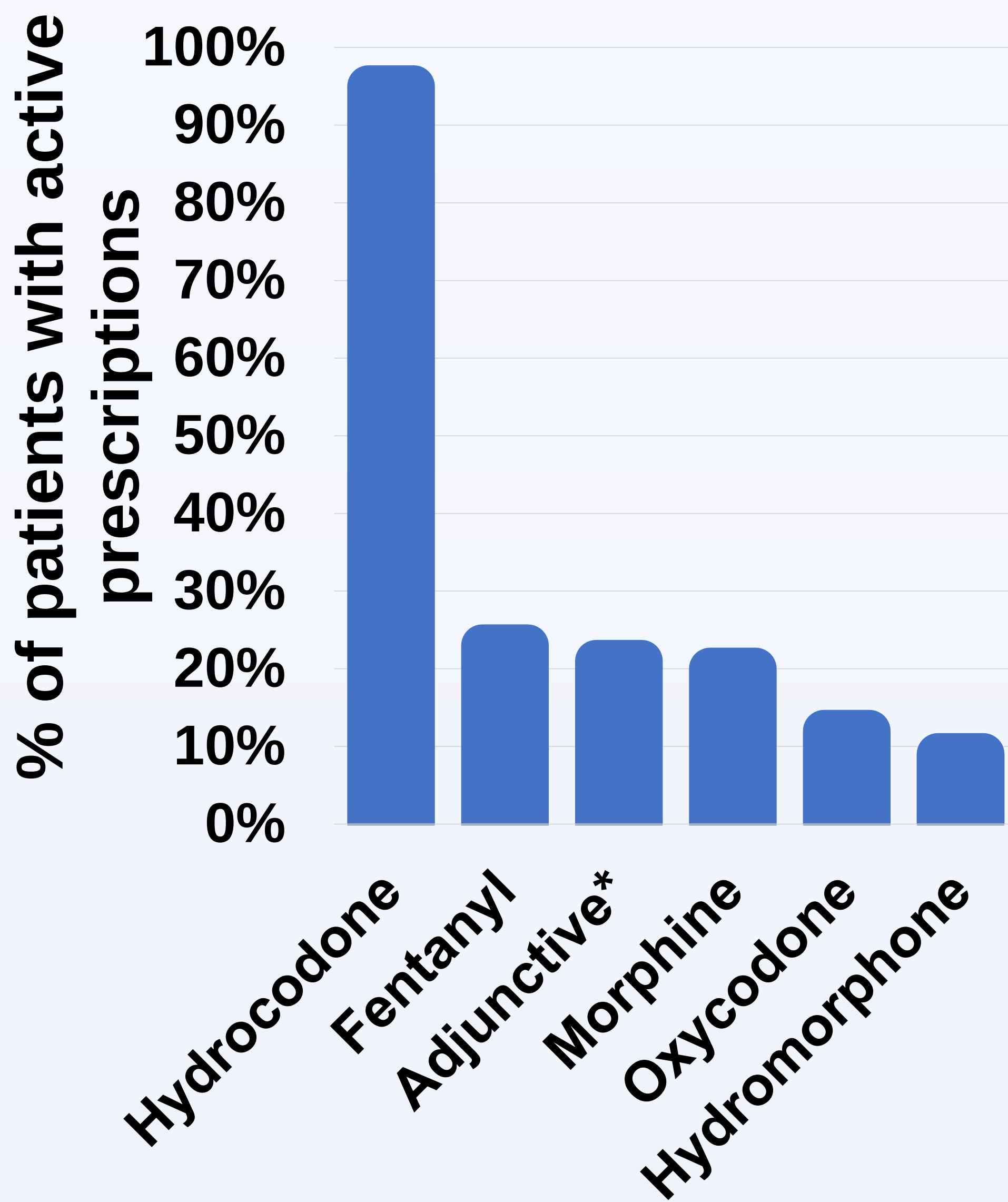


ADDITIONAL FINDINGS

- **Adjunctive medications** were given to 317/1982 (16%) of HNC patients and 92% had a concurrent opioid prescription
- 12% of HNC patients (and 33% with adjunctive medications) had **3+ opioid prescriptions**
- 72% of prescriptions were received by patients in the **University Hospital setting** (55% of the study population)
- Of HNC patients with opioid prescriptions + radiation, 90% had an active prescription **>3 months after the last date of radiation**

RESULTS

Pain Medication Prescriptions by Drug



*Adjunctive=gabapentin (90%), pregabalin (15%), Carbamazepine (4%)

CONCLUSIONS

- Opioids are widely prescribed regardless of cancer stage
- Hydrocodone is the most prescribed agent
- Relatively few prescriptions came from community hospitals vs university hospital settings
- In the period under study adjunctive medications were rarely prescribed either alone or without opioids
- Opioid prescriptions increased with increasing fractions of radiation therapy and continued long after radiation completion
- Many HNC patients received >3 distinct opioids during treatment

AREAS OF FUTURE STUDY

- Rigorously compare prescribing behaviors between public and private healthcare settings
- Trend how prescribing patterns have changed under period under study/after data collection and dissemination
- Assess variations in morbidity and mortality depending on opioid prescriptions and agents used