

# Analysis of the Health Care Cost and Utilization Project (HCUP) shows that the total annual charges and costs for inpatient care of patients with radiation cystitis are rising

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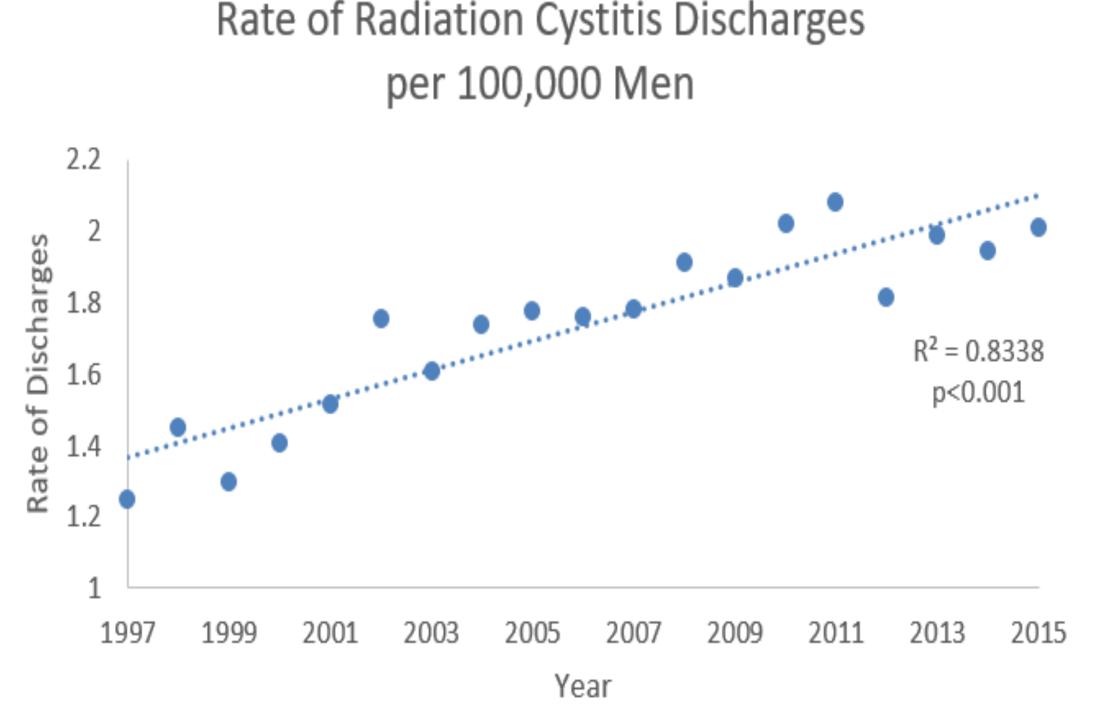
### Introduction

- Advances in care for patients with cancer is leading to a rapid growth in cancer survivors, with unique concerns for future healthcare
- Of the 16.9 million cancer survivors, up to 40% have received pelvic radiation for treatment of prostate, colorectal, and gynecologic malignancies putting this population at significant risk for long-term side effects from radiotherapy
- Radiation cystitis occurs in 23-80% of patients treated with pelvic radiation, with severe radiation cystitis in <5%
- We sought to characterize trends in admissions for radiation cystitis, and determine the associated charges and costs

### Materials & Methods

- We queried the Healthcare Cost and Utilization project (HCUP) National Inpatient Sample (NIS) using ICD-9 codes for radiation cystitis
- We assessed trends over time in diagnosis and management of radiation cystitis, using logistic regression
- NIS data on charges available from 2000 to 2015
- NIS data on costs reported beginning in 2006
- Data on demographics, admission, discharge, charges, and costs were analyzed from 1997 to 2015.
- Subgroup analysis of male patients was performed to focus on those who were more likely treated for prostate cancer.
- HCUP benefits:
  - All payer data
  - Encounter level data for multiple care settings
- HCUP limitations:
  - Limited ambulatory data
  - No patient-specific longitudinal or cross-sectional follow up
  - 20% stratified sample from representative US hospitals

### Results and Figures



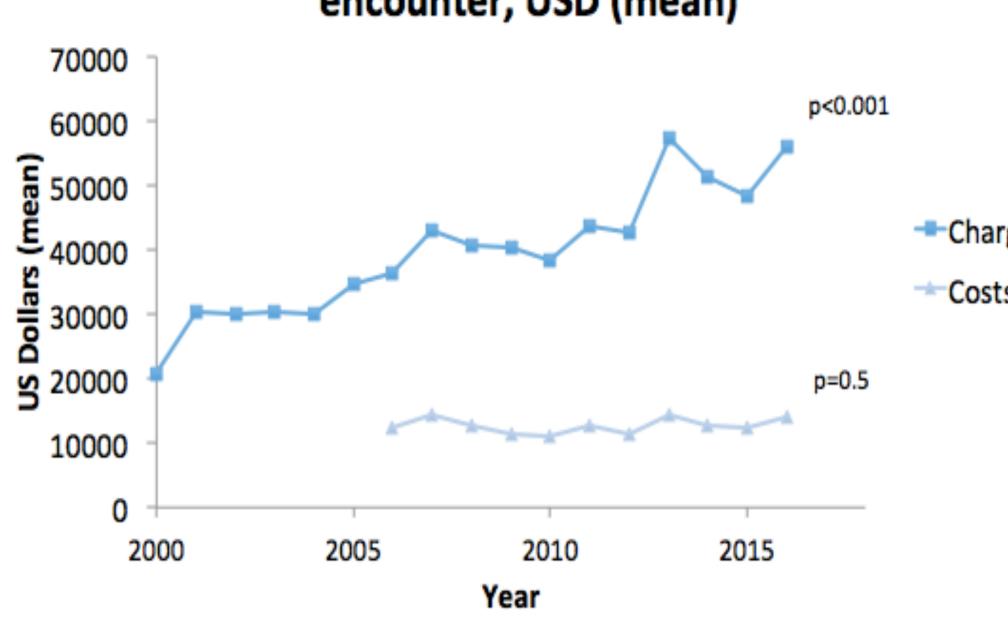
Inpatient discharges for radiation cystitis among men increased significantly from 1.25 to 2.00 per 100,000

# Inflation adjusted costs and charges, USD (Annual) 250 200 150 100 2000 2000 2005 2010 2015

Annual aggregate costs have risen to over \$50 million, driven by increased inpatient admissions

Year

## Inflation adjusted costs and charges per encounter, USD (mean)



Mean charge per encounter has gone up over time, with no change in cost per encounter

### Conclusions

- The incidence of hospital discharges for radiation cystitis is rising
- The charges per encounter have increased over time, while costs have been stable
- The annual aggregate costs for treating radiation cystitis have risen to over \$50 million, driven by the increased incidence of admissions