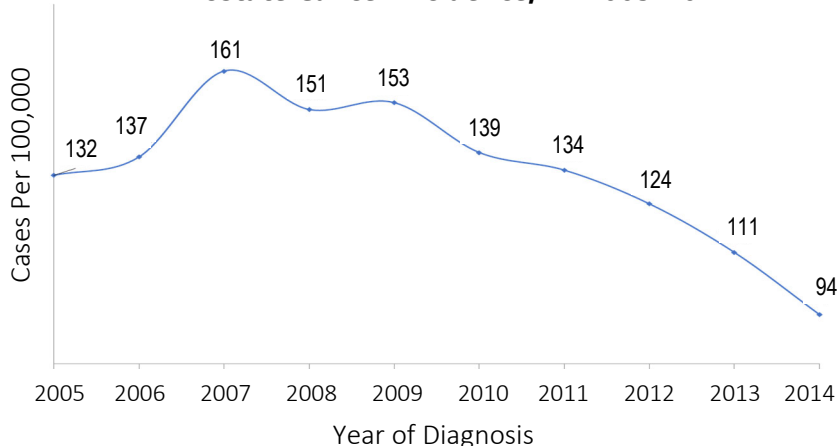# Prostate Cancer

May 2019

Fact Sheet: Data on Veterans Using VA Health Care

CSPEAR provides timely epidemiologic information on VA health care users. This fact sheet presents summary data to inform a broad community of VA leaders, investigators, and clinicians as they consider how best to address the needs of Veterans.

Introduction: Prostate Cancer (PCa) is the most common cancer and the second leading cause of cancer death in men in the US. In the US, an estimated 174,650 new cases and 31,620 deaths are expected to occur in 2019.[1]

Prostate Cancer Incidence, FY 2005-2014

Cases Per 100,000 / Year of Diagnosis — 2005: 132, 2006: 137, 2007: 161, 2008: 151, 2009: 153, 2010: 139, 2011: 134, 2012: 124, 2013: 111, 2014: 94

Distribution of Race/Ethnicity by Age

Legend: Age <65, Age ≥65. Categories: Non-Hispanic White, Non-Hispanic Black, American Indian / Alaska Native, Asian/ Pacific Islander, Hispanic, Other/ Unknown

5-Year Overall Survival by Clinical Stage

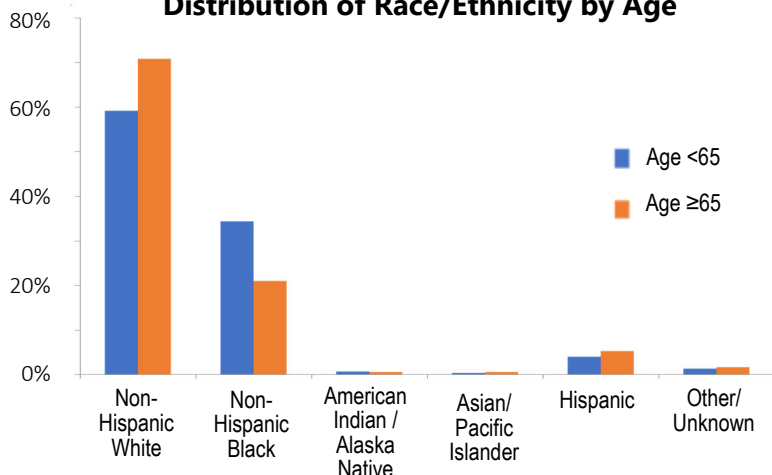Stages: IV, III, I/II (scale 0–90)

Fast Facts

Among patients receiving care in the VHA:

- There are ~12,400 new cases of PCa per year, comprising 31% of all new cancer cases.[3]

- Age-adjusted PCa incidence decreased from 132 in 2005 to 94 per 100,000 in 2014. A similar pattern is observed in the US population, with incidence rates of 157/100,000 in 2005 and 100/100,000 in 2014.[2]

- Overall age-adjusted incidence FY2005-FY2014 is 133 per 100,000 person-years.

- 5-year overall survival is 80% and median survival is 12 years.

- Median age at diagnosis of PCa is 65.

- 5-year overall survival is 86% for localized disease (stage I/II), but only 28% for stage IV. Among all patients, 5-year overall survival is 80% and 5-year PCa-specific survival is 95%.

Clinical Stage Distribution
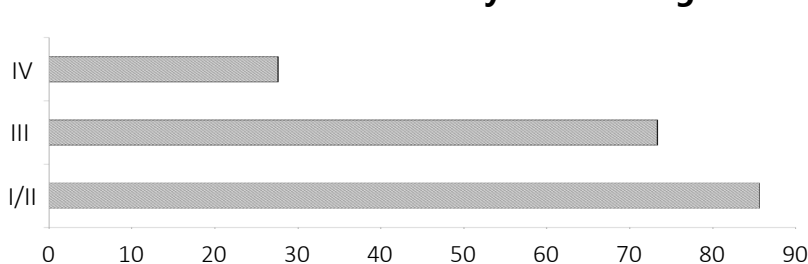

6.0%, 6.2%, 1.4%, 86.4%

Legend: Stage I/II, Stage III, Stage IV, Unknown
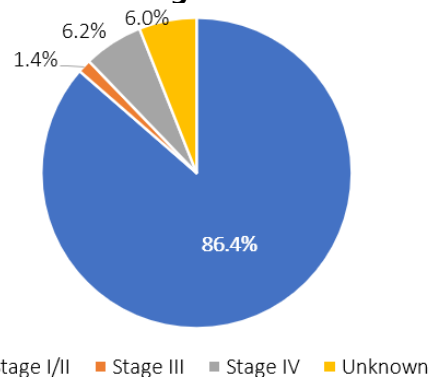
The majority of patients are diagnosed with clinical stage I/II PCa. This clinical stage was based on TNM classification only, not PSA and Gleason score.

Visit [CSPEAR's website](#) or contact CSPEAR@va.gov for more information.

VA

U.S. Department of Veterans Affairs

Veterans Health Administration
Cooperative Studies Program

Gleason Score Categories

| Gleason score category	All years %	2005-2009 %	2010-2014 %
2-6	39	43	34
7	41	39	43
8-10	20	18	22

Gleason score is the grading system used to evaluate the aggressiveness of PCa based on biopsy, with lower scores representing less aggressive PCa. Among biopsied patients, 39% of had Gleason scores 2-6 and 20% in the highest Gleason score category.

Trends in Prostate Cancer Treatment for Clinical Stage I/II

Age < 65
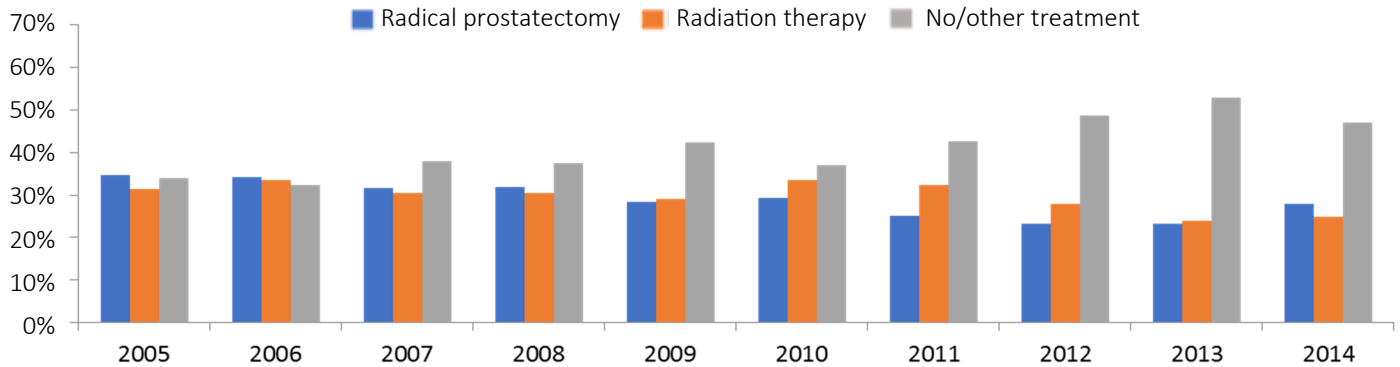
Age ≥ 65
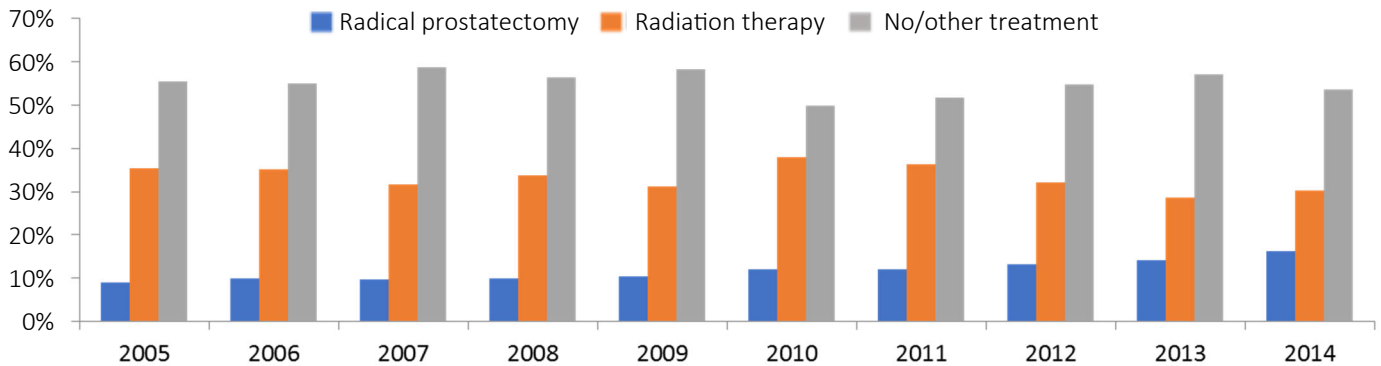
Among biopsied patients with clinical stage I/II PCa, treatment rates for those <65 ranged from 35% to 28% for radical prostatectomy, 31% to 25% for radiation therapy, and 34% to 47% for no/other treatment between 2005-2014. Corresponding treatment rates among patients ≥65 are 9% to 16% for radical prostatectomy, 35% to 30% for radiation therapy, and 56% to 54% for no/other treatment. This represents treatment received within 1 year of diagnosis, and does not consider non-VA care particularly for patients ≥65.

Summary of Data Sources and Analysis

Data were obtained from the VA Central Cancer Registry (VACCR), which contains demographic, tumor and treatment characteristics for VA patients.[3] Prostate cancer defined as ICD-O-3 C619, SEER site recode 28010. Vital status was obtained from the VA Corporate Data Warehouse. Overall survival was estimated using the Kaplan-Meier method. The age-adjusted incidence rate was calculated based on U.S. 2010 adult population estimates and VA user population. The number of VA users in FY05-15 was obtained from the VA National Center for Veterans Analysis and Statistics.[4]

Notes: This work was conducted under the Epidemiology of Cancer among Veterans (EpiCAN) protocol (IRB: #2009). This material is the result of work supported with resources and the use of facilities at the VA Cooperative Studies Program Epidemiology Center in Durham, NC. The contents do not represent the views of VA or the US Government.

References

1. American Cancer Society. Cancer Facts & Figures 2019. American Cancer Society. Atlanta, GA. 2019.

2. Siegel R.L., Miller K. D., Jemal A. Cancer statistics, 2018. CA Cancer J Clin. 2018 Jan; 68(1):7-30.

3. Zulling, L.L., et. Al. Cancer Incidence Among Patients of the U.S. Veterans Affairs Health Care System: 2010 Update. Military Medicine. 2017; 182(7), e1883-e1891.

4. Office of Enterprise Integration (OEI). Data Governance and Analytics. U.S. Department of Veterans Affairs. Accessed January 2019 at https://www.va.gov/oei/about/data-governance-analytics.asp.