Background

- Adults ages 85 and older, sometimes referred to as the “oldest old,” are the fastest-growing population group in the US.
- The number of adults ages 85+ is expected to nearly triple from 6.4 million in 2016 to 19.0 million by 2060, primarily fueled by increasing life expectancy due to less smoking, improved screening, and treatment advances.
- Despite the increasing numbers and changing profile of this population, relatively little is known about the cancer burden in this age group.

Methods

- Data provided by NAACCR were used for the distribution of cases by stage at diagnosis and analyses of incidence trends in two older age groups (65-84 years and 85+) for selected sites during 1995 to 2015.
- Data for the most recent time period reflect 96% coverage of the US population, excluding data from 4 states (KS, MN, NV, and NM) and DC. An additional 18 were excluded from trend analyses because data were not available for all years during the study period.
- Data from the 18 SEER registries were used in analyses of 5-year relative survival rates and receipt of surgical treatment in the most recent time period (2011-2015).
- The 2015 National Health Interview Survey was used for estimates of cancer screening prevalence.

Results

- In 2019, there will be approximately 140,690 cancer cases diagnosed and about 103,250 cancer deaths among the oldest old in the US.
- Top cancers diagnosed in men and women, ages 85+
  - Men:
    1. Lung & bronchus (16%)
    2. Prostate (13%)
    3. Urinary bladder (13%)
    4. Colon & rectum (13%)
    5. Melanoma (6%)
  - Women:
    1. Breast (19%)
    2. Colon & rectum (14%)
    3. Lung & bronchus (14%)
    4. Pancreas (5%)
    5. Non-Hodgkin lymphoma (5%)
- The overall cancer incidence rate has decreased since about 1990 (Figure 1), reflecting sharp declines in incidence rates for cancers of the prostate, colorectum, and, more recently, lung (Figure 2a).
- Among women 85+, the overall cancer incidence rate peaked around 1980 before subsequently decreasing (Figure 1), largely reflecting declining rates for breast and colorectal cancers (Figure 2b).
- Although screening is generally not recommended for those ages 85+, data from the National Health Interview Survey indicate unexpectedly high rates of screening in adults ages 85+, many of whom have very limited life expectancies.
- Cancer patients ages 85+ are less likely to receive surgical treatment than patients ages 65-84, reflecting the complexities of treating older patients, including the presence of multiple comorbidities, functional declines, and cognitive impairment, as well as competing mortality risks and undertreatment.
- More research on cancer in the oldest Americans is needed to improve outcomes and anticipate the complex health care needs of this rapidly growing population.

Conclusions

- The oldest old cancer patients are two to four times more likely to lack staging information in medical records than cancer patients ages 65-84.
- Cancer patients ages 85+ have the lowest survival of any age group, with the largest disparities when cancer is diagnosed at advanced stages.
- Although cancer trends in the oldest old are generally similar to those in the younger (65-84) age group examined, we note some important differences (e.g. lung cancer and melanoma) reflecting strong birth cohort effects because of elevated risks in the oldest generations.
- Cancer patients ages 85 and older are less likely to be diagnosed at an early disease stage than those ages 65-84.
- The oldest old cancer patients are two to four times more likely to lack staging information in medical records than cancer patients ages 65-84.
- Cancer patients ages 85+ have the lowest survival of any age group, with the largest disparities when cancer is diagnosed at advanced stages.
- Although screening is generally not recommended for those ages 85+, data from the National Health Interview Survey indicate unexpectedly high rates of screening in adults ages 85+, many of whom have very limited life expectancies.
- Cancer patients ages 85+ are less likely to receive surgical treatment than patients ages 65-84, reflecting the complexities of treating older patients, including the presence of multiple comorbidities, functional declines, and cognitive impairment, as well as competing mortality risks and undertreatment.
- More research on cancer in the oldest Americans is needed to improve outcomes and anticipate the complex health care needs of this rapidly growing population.