The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

Determine whether racial disparities in treatment initiation and completion exist among white and black female Medicare beneficiaries in Alabama.

Methods

Linked Data Sources
- Alabama Statewide Cancer Registry
- Medicare claims for inpatient, outpatient, and physician encounters for individuals ≥65

Study Population
- White and black female Alabama residents, aged 66 years and older
- Diagnosed with stages I-III breast cancer (ICD-O-3 codes C50.0-C69.9) from January 1, 2000 to December 31, 2002
- Enrolled in Medicare Parts A and B

Treatment Definitions
- Mastectomy, lumpectomy, chemotherapy, and radiation performed up to 1 year after the diagnosis date.
- Standard adjuvant chemotherapy with chemotherapy agents/combinations listed in National Comprehensive Cancer Network Clinical (NCCN) Practice Guidelines included:
  1. Docetaxel (T), A and C
  2. C, Methotrexate (M) and Fluorouracil (F)
  3. Ac, Paclitaxel (P)
  4. Epirubicin (E) and C
  5. Docetaxel (T), A and C
  6. FAC, CAF, ECMF, ACMv, RT and FEC
- Radiation therapy Complete
- >35 days chemotherapy Complete
- ≥26 months, depending on the specific drug regimen
- Statistical Analysis
  - Chi-square statistics were used to compare the sociodemographic and clinical characteristics by race/ethnicity.
  - Generalized Estimating Equation (GEE) models were used to determine whether there were significant differences in having initiated or completed treatment between whites and blacks after adjusting for confounders.
  - Accounted for the clustering of patients within reporting hospitals

Results

Women diagnosed with breast cancer
- White and black women were equally likely to receive mastectomy (Figure 1, p = 0.27).
- Also, they were equally likely to receive breast conserving surgery (Figure 1, p = 0.12).

Among women who had a lumpectomy
- There were no racial differences in receipt of adjuvant radiation therapy (Figure 2, p = 0.33).
- There were no racial differences in completing adjuvant radiation therapy (Figure 2, p = 0.29).

Among women with tumors over 1 centimeter
- Whites and blacks were equally likely to start adjuvant chemotherapy (Figure 3, p = 0.14).
- They were also equally likely to complete adjuvant chemotherapy (Figure 3, p = 0.87).

No racial disparities in treatment were observed for any of these groups after adjusting for differences in sociodemographic and clinical characteristics (Table 2).

Conclusions

In Alabama, there were no disparities in breast cancer treatment initiation or completion among older black and white women enrolled in Medicare.

These findings are in contrast to studies of Medicare enrollees residing in Surveillance, Epidemiology and End Results (SEER) areas which found that black women are less likely than white women to receive breast cancer therapy.

Use of breast conserving therapy is similar to that of women in other SEER areas.

Conclusion: There were no racial disparities in breast cancer treatment initiation or completion among older black and white women enrolled in Medicare.

Table 1: Characteristics of Alabama Medicare beneficiaries diagnosed in 2000-2002 with stage I-III breast cancer (n=2,251)

Table 2: Adjusted odds of receiving treatment for black versus white Medicare beneficiaries diagnosed with breast cancer, 2000-2003

Adjuvant Chemotherapy Initiated

Adjuvant Chemotherapy Completed

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Figure 1. Receipt of lumpectomy and mastectomy among Medicare beneficiaries with breast cancer

Figure 2. Initiation and completion* of adjuvant radiation after lumpectomy among Medicare beneficiaries with breast cancer

Figure 3. Initiation and completion* of adjuvant chemotherapy among Medicare beneficiaries with breast cancer and tumors >1 centimeter

References: