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Background: To determine the factors associated with the utilization of palliative care (PC) in patients with metastatic gynecologic cancer who died while hospitalized.

Methods: Data were extracted from the National Inpatient Sample (NIS) database for patients with cervical, uterine, and ovarian cancers from 2005 to 2011. Chi-squared and logistic regression models were employed for statistical analyses. Results: Of 4264 women with gynecologic cancer, 983 (23.0%) utilized PC (median age: 66 years). 2633 (61.8%), 1034 (24.3%), and 597 (14.0%) patients had ovarian, uterine, and cervical cancer, respectively. The majority were white (57.9%), and the remainder were black (12.6%), Hispanic (7.8%), and Asian (3.1%). 24.9, 23.9, 23.6, and 25.2% were low, low-middle, middle-high, and high with respect to median income. Medicare, Medicaid, and private insurance was found in 46.7, 10.8, and 37.6% of patients. 36.9, 21.0, 18.0, and 24.1% of patients were treated in hospitals in the South, West, Midwest, and Northeast. 11.3, 23.9, and 64.2% of patients were treated in small, medium, and large hospitals, designated as teaching (53.1%) and nonteaching (46.3%) institutions. The utilization of PC increased from 5.2% in 2005 to 30.4% in 2011. Older age (OR: 1.34; 95% CI: 1.10-1.64; P = 0.01), high SES (OR: 1.37; 95% CI: 1.09-1.72; P = 0.01), privately insured (OR: 1.81; 95% CI: 1.46-2.24; P < 0.001), treatment at Western (OR: 1.94; 95% CI: 1.56-2.41; P < 0.001) and Midwestern hospitals (OR: 1.43; 95% CI: 1.15-1.77; P = 0.001), and depression (OR: 1.34; 95% CI: 1.00-1.80; P = 0.05) were associated with higher PC use. However, race, cancer type, hospital teaching status, and hospital location were not associated with PC use. Conclusions: The use of inpatient palliative care has increased significantly over the study period. The lower utilization of palliative care for terminal illness associated with younger, lower socioeconomic status, Southern and smaller volume hospitals warrants further attention.