Intensity of Integrated Primary and Specialist Home-Based Palliative Care for Chronic Diseases in Northeast Italy and Its Impact on End-of-Life Hospital Access

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BACKGROUND. Hospital admissions at the end of life (EOL) represent an established indicator of poor quality of care.
OBJECTIVE. To examine the impact of intensity of integrated primary and specialist home-based palliative care for chronic diseases (HPCCD) plans of care on EOL hospital access.
METHODS. Retrospective population-based study using linked mortality, hospitalization, and home care data. Intensity of HPCCD was measured 90-31 days before death; outcomes were hospital death and prolonged hospital stay for medical reasons in the last month of life. Outcomes were modeled through Poisson and quartile regressions. Adults aged 65-84 years with at least an ordinary hospitalization and a drug treatment in the year before death, who died from nononcological chronic diseases in the Veneto Region, January 2012-December 2013, were included.
RESULTS. Among 2087 patients, 1016 (48.7%) did not receive any HPCCD homecare visit; 860 (41.2%), 152 (7.3%), and 59 (2.8%) had <2, 2-4, and 4-7 homecare visits/week, respectively. Hospital death occurred for 1310 patients (62.8%) and the median hospital stay in the last month of life was five days (interquartile range 0-14). In multivariate analysis, a higher intensity of HPCCD was associated with lower rates of prolonged (≥14 days) EOL hospitalization and hospital death with a dose-response relationship. When no access to HPCCD was compared with 2-4 visits/week, adjusted percentage of hospital death decreased by -18.4% (95% confidence interval [CI] -5.4% to -29.7%) and the length of hospital stay decreased by 37.9% (95% CI 16.7%-56.0%).
CONCLUSIONS. The intensity of integrated HPCCD plans of care was associated with a reduction in EOL hospital stay and in hospital death.