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Context: Primary care practices are often the sole source of care for chronic obstructive pulmonary disease (COPD). To achieve improvements on the standard of care for patients with COPD, a family practice in Red Lodge, Montana, set out to conduct a quality improvement project (QIP) based on the chronic care model (CCM) in order to meet the GOLD guidelines.

Purpose: This QIP was aimed at improving provider use of GOLD guidelines for patients with COPD. The aims were to improve rates of Pulmonary Function Testing, smoking cessation counseling, patients who receive influenza and pneumococcal vaccines, and to decrease the number of COPD exacerbations.

Methods: Interventions directed towards providers at Beartooth Billings Clinic were conducted. Components of the CCM were used as the foundation for the interventions. Data was collected regarding the four aims and entered in a Microsoft Excel spreadsheet from January 2011 until February 29, 2012. Statistical analysis was performed using SPSS 20.0 by performing McNemar and Chi-Square tests.

Findings: The QIP demonstrated significant improvements in rates (from 26.8% to 5.6%) of hospitalizations due to COPD exacerbations. Enhancements in other clinical outcomes included increases in rates of influenza and pneumococcal vaccination as well as increases in rates of counseling for smoking cessation.

Conclusions and Implications: QIP interventions were an effective approach to improving evidence-based practices in the management of COPD. The CCM framework was useful for guiding interventions aimed at improving care of patients with COPD.

Key Words: COPD, GOLD guidelines, Chronic Care Model, rural.