Improving Four Quality Measures in a Primary Care Setting Using an Electronic Health Record and Performance Improvement Principles
Christine Allen, RN, CPHQ
TMF Health Quality Institute
Kelly Westfall, Sonia Cavazos, Diana Lozano

1. Flu vaccine administration in patients 65+ years of age.
2. Pneumonia vaccine administration in patients 65+ years of age.

Problem: Providers using an electronic health record (EHR) can make significant strides in improving their patients’ overall health by identifying their preventive health needs.

Evidence: The Centers for Disease Control and Prevention (CDC) recommends seasonal flu vaccine and estimates that the flu vaccine can reduce deaths from influenza by 50% in patients 65 years and older. The CDC recommends the pneumococcal polysaccharide vaccine for patients 65 years and older. Pneumococcal pneumonia kills 1 in 20 who contract it.

Mammography is recommended for patients 40 years of age and older. Breast cancer increases with age. According to the American Cancer Society, early detection has lowered breast cancer deaths by 30%. For this study, a population of female patients, 52–69 years of age, was selected for measurement. The American Cancer Society recommends colon cancer screening for patients 50 years and older.

Strategy: This abstract focuses on one primary care practice using its EHR to improve four preventive health measures.

Practice Change: Documentation, work flow redesign, patient reminders and order tracking.

Evaluation (18 months): Both baseline and evaluation data were extracted using the EHR, which used the active patient, age and sex criteria.

Results:
1. Flu vaccine administration improved 34%.
2. Pneumonia vaccine administration improved 37%.
3. Breast cancer screening improved 76%.
4. Colon cancer screening improved 75%.

Recommendations: The EHR assists the practice in its quest to improve health maintenance in patients only if combined with consistent teamwork, education, protocols and practice management accountability.

Lessons Learned:
1. EHRs cannot report unless the data is correctly formatted.
2. EHRs are tools offering timely information, but the practice is largely dependent on the team for education, correct documentation and order tracking.