Annual Monitoring of Digoxin

MEASURE DESCRIPTION:

Annual Monitoring of Digoxin indicates whether a patient, aged 18 years and older, who received at least 180 days of digoxin medication therapy during the measurement year, had at least one therapeutic monitoring event (lab tests) during that same period. This excludes patients who had an inpatient stay during the measurement year.

This measure is based on the HEDIS measure *Annual Monitoring for Patients on Persistent Medications* (MPM).

PROPRIETARY STATUS:
This measure is owned by NCQA [NQF-Endorsed ™].

CRITERIA REVISION:
- This measure is based on the HEDIS® 2013 Technical Specifications for Physician Measurement criteria.
- The NDC drug codes are from the NCQA files released November 2012.

CRITERIA REVIEW DATE: 03/26/2013

MEASURE TYPE: Quality - process of care

MEASURE PACKAGE: Advantage Nationally Endorsed

MINIMUM DATA REQUIREMENTS (months): 12

MEASURE DETAILS:

DENOMINATOR:

Identifies the unique count of patients, aged 18 years and older at the end of the measurement year, who received at least 180 treatment days of ambulatory medication therapy for a digoxin therapeutic agent during the measurement year. It excludes patients who had an inpatient stay during the measurement year.

At least 180 days supply of digoxin (during the measurement year)	NDC Codes as defined by NCQA (www.ncqa.org) And Days Supply >= 180 when summed across all digoxin drug prescriptions. Only prescriptions filled during the measurement year are counted. Only the number of calendar days covered by prescriptions filled within the measurement year are counted. For example, a prescription for 90 days dispensed 30 days prior to the end of the reporting period has only 30 days counted.
AND	
Age in years (as of the end of the measurement year)	Age in Years >= 18

EXCLUSIONS:

Excludes from the eligible population all patients who had an inpatient stay anytime during the measurement year. This includes admissions to hospitals, hospices, skilled nursing facilities, intermediate care facilities, rehabilitation facilities, and residential psychiatric or substance abuse facilities.

Inpatient admission (acute, non-acute, or long- term care) (during the measurement year)	(Place of Service Code Medstat = 21, 25, 31, 32, 34, 51, 54, 55, 56, 61 Or Bill Type Code UB = 11*, 12*, 18*, 21*, 22*, 41*, 81*, 82*, 84* Or Revenue Code UB = 0115, 0118, 0125, 0128, 0135, 0138, 0145, 0148, 0155, 0158, 019*, 0650, 0655, 0656, 0658, 0659, 1001, 1002 Or HCPCS Procedure Code = H0017-H0019, T2048)

NUMERATOR:

Identifies patients, aged 18 years and older, who had at least one serum potassium test *and either* a serum creatinine or a blood urea nitrogen (BUN) test during the measurement year.

At least one lab panel that includes all 3 tests (during the measurement year)	CPT Procedure Code = 80047, 80048, 80050, 80053, 80069
OR	
At least one serum potassium test performed along with either a creatinine test or a BUN test (during the measurement year) Note: The 2 tests do not need to occur on the same date of service, but may occur on the same date.	Potassium: CPT Procedure Code = 80051, 84132 And Creatinine: (CPT Procedure Code = 82565, 82575 Or BUN: CPT Procedure Code = 84520, 84525)

CONTINUOUS ENROLLMENT:

Continuously enrolled with medical and drug coverage during the measurement year, which equates to 12 months out of 12 months.

MEASURE BACKGROUND:

Adverse drug events can lead to hospital admission. A meta-analysis estimated that in 1994 more than 1 million Americans were hospitalized because of adverse drug events, accounting for 4.7 percent of all admissions. In one survey, 25 percent of primary care outpatients reported an adverse drug event. The incidence of adverse events appears to increase with patients taking multiple drugs. Some adverse events are related to suboptimal laboratory monitoring. In one study, nearly half of all patients taking at least one chronic medication did not receive all of the laboratory tests recommended for monitoring, including drug levels for seizure medications, or renal function and electrolytes for patients taking ACE inhibitors, diuretics, or digoxin.

Digoxin has a narrow therapeutic window, with significant overlap between therapeutic and toxic levels. Toxic effects can be seen in up to 5 percent of patients taking the drug, and may include arrhythmias, conduction disturbances, and symptoms such as nausea, vomiting, and visual disturbances. Decrease in renal function can lead to higher drug levels and predispose to digoxin toxicity. Patients with electrolyte disturbances, particularly hypokalemia and hypomagnesemia, are also at increased risk of arrhythmias even with a “therapeutic" digoxin level. A variety of other drugs can also alter digoxin levels. Digoxin level, serum electrolytes, and tests of renal function are recommended for patients being treated with this drug.
