
CBE ID

0551

Title

Ace Inhibitor / Angiotensin Receptor Blocker Use and Persistence Among Members with Coronary Artery Disease at High Risk for Coronary Events

Endorsement Status

Endorsement Removed

Is Under Review

No

Previous Endorsement Cycle

Full Year 2008

Removal Date

Tue, 07/31/2012 - 20:00

Initial Endorsement

Tue, 08/04/2009 - 20:00

Steward

Health Benchmarks-IMS Health

1.0 New or Maintenance

Maintenance

1.1 Measure Structure

Single Measure

1.3 Electronic Clinical Quality Measure (eCQM)

No

1.6 Measure Description

To assess the use of and persistence to ACE inhibitors or Angiotensin receptor blockers (ARB) among members with CAD or other atherosclerotic vascular disease (i.e., peripheral arterial disease, atherosclerotic aortic disease and carotid artery disease) who are at high risk for coronary events during a one year period. High-risk comorbidities are defined as heart failure, hypertension, diabetes, or chronic kidney disease (excluding stage V and patients on dialysis).

1.7 Measure Type

Process

1.8 Level of Analysis

Clinician: Group/Practice, Health Plan

1.9 Care Setting

Ambulatory Care: Clinic, Other

1.14 Numerator

The member's persistence or medication possession ratio (MPR) for ACE inhibitor or ARB prescriptions during the measurement year. Individuals with 0% MPR will be defined as those who did not fill any prescriptions for ACE or ARB. Note: Members may switch between ACE inhibitors and ARB drugs. Time Window: 6 month period prior to measurement year to the measurement year. Of note, the 6 month period prior to the measurement year is needed to identify new ACE/ARB users and the measurement year is used to calculate MPR.

Step 1: Check if the member received at least one prescription of ACE/ARB in the measurement year. If no prescription had been received set $MPR = 0$ and TERMINATE PROGRAM. Otherwise proceed to Step 2. Of note, this step would identify members who did not receive any ACE/ARB at all during the measurement year as members with $MPR = 0$.

Step 2: Check if the members received a least one prescription of ACE/ARB during the 6 month period prior to the beginning of the measurement year. If YES, then this patient is Not a new user of ACE/ARB and set the New_User flag = 0. If NO, then this patient is a new user of ACE/ARB medication and set the New_User flag = 1. Of note, this step would differentiate new versus continuous ACE/ARB user.

Step 3: If patient is a new user (New_User flag = 1) then set START_DATE as the date of service (DOS) in which the first ACE/ARB prescription is filled and set PRIOR_SUPPLY = 0. If $START_DATE > 3/31$ then drop the member from the analysis. Of note, this step would allow the denominator time frame for the new user to be the difference in days between the first prescription of ACE/ARB and the end of the measurement year. In addition, this would also drop new users who filled the first prescription after 3/31.

Step 4: If patient is NOT a new user (New_User flag = 0) then set START_DATE the first day of the measurement year (i.e., January 1st). Of note, this step would set the measurement period of a continuous user as the first date of the measurement period.

Step 5: If patient is NOT a new user (New_User flag = 0) then set LAST_DATE_i = the date of the last ACE/ARB prescription in the 6 month period prior to the start of the measurement year and DAY_SUPPLY_i = day supply of this prescription. Check if $LAST_DATE_i + DAY_SUPPLY_i > \text{first date of the measurement year}$. If YES then $PRIOR_SUPPLY = DAY_SUPPLY_i - (\text{First date of the measurement year} - LAST_DATE_i + 1)$; else $PRIOR_SUPPLY = 0$. Of note, this step would take care of the case in which a prescription for ACE/ARB filled prior to the first date of the measurement year spilled over into the current measurement year.

Step 6: Identify the last prescription of ACE/ARB given during the measurement year and set the date of this prescription as LAST_DATE_e and DAY_SUPPLY_e = day supply of this prescription; Check if $LAST_DATE_e + DAY_SUPPLY_e > \text{last date of the measurement year}$. If Yes then $LAST_SUPPLY = (\text{last date of the measurement year} - LAST_DATE_e + 1)$. If No then $LAST_SUPPLY = DAY_SUPPLY_e$. Of note, this step would take care of the case in which the prescription for ACE/ARB filled spilled over the current measurement year.

Step 7: Identify all the prescriptions of ACE/ARB given during the measurement year, except for the last prescription (i.e., P₁, P₂, ..., P_{n-1}).

$$MPR = \frac{PRIOR_SUPPLY + \sum_{i=1}^{n-1} \text{total day supply of } P_i + LAST_SUPPLY}{(\text{Last date of measurement year} - START_DATE + 1)}$$

Of note, the maximum MPR is 100%. If the calculated MPR is > 100% it will be capped at 100%.

1.15 Denominator

Continuously enrolled members 18-75 years of age with established coronary and other atherosclerotic vascular disease at high risk for coronary events. The high risk subgroup is defined as members with concurrent comorbidity of heart failure, hypertension, diabetes, or chronic kidney disease (excluding stage V and patients on dialysis). Time Window: Year prior to the measurement year

6.1.2 Current or Planned Use(s)

Public Reporting, Quality Improvement (Internal to the specific organization)

6.1.3 Current Use(s)

Public Reporting, Quality Improvement (Internal to the specific organization)

Exclusions

Members with a diagnosis of angiodema, hyperkalemia, hypotension, arterial stenosis, or renal failure (stage V or dialysis) at any time prior to the end of the measurement year, members who were pregnant during the measurement year, or members who were in hospice during the measurement year. Also, members who were discharged as expired from the denominator qualifying AMI, CABG or PTCA (i.e. denominator criterion [A], [B], or [C]).

Note: Index date is defined as the first instance of denominator steps A or B or C or (D and E) or (D and G) or (F and G) or (F and E) during the year prior to the measurement year (i.e, diagnosis of CAD or other atherosclerotic disease).

Risk Adjustment

No risk adjustment or risk stratification

Steward Organization

Health Benchmarks-IMS Health

Steward POC email

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