Measure #5 (NQF 0081): Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD) – National Quality Strategy Domain: Effective Clinical Care

2016 PQRS OPTIONS FOR INDIVIDUAL MEASURES:
REGISTRY ONLY

DESCRIPTION:
Percentage of patients aged 18 years and older with a diagnosis of heart failure (HF) with a current or prior left ventricular ejection fraction (LVEF) < 40% who were prescribed ACE inhibitor or ARB therapy either within a 12 month period when seen in the outpatient setting OR at each hospital discharge.

INSTRUCTIONS:
This measure is to be reported for all heart failure patients a minimum of once per reporting period when seen in the outpatient setting AND reported at each hospital discharge (99238* and 99239*) during the reporting period.

*NOTE: When reporting CPT code 99238 and 99239, it is recommended the measure be reported each time the code is submitted for hospital discharge.

This measure is intended to reflect the quality of services provided for patients with HF and decreased left ventricular systolic function. This measure may be reported by clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding. Only patients who had at least two denominator eligible visits during the reporting period will be counted for Reporting Criteria 1.

Measure Reporting via Registry:
ICD-10-CM diagnosis codes, CPT codes, CPT category II codes, and patient demographics are used to identify patients who are included in the measure’s denominator. The listed numerator options are used to report the numerator of the measure.

The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data. It is expected that a single performance rate will be calculated for this measure.

THERE ARE TWO REPORTING CRITERIA FOR THIS MEASURE:
1) Patients who are 18 years and older with a diagnosis of HF with a current or prior LVEF < 40% seen in the outpatient setting with two denominator eligible visits
2) Patients who are 18 years and older with a diagnosis of HF with a current or prior LVEF < 40% and discharged from hospital

REPORTING CRITERIA 1: ALL PATIENTS WITH A DIAGNOSIS OF HF ASSESSED DURING AN OUTPATIENT ENCOUNTER

DENOMINATOR (REPORTING CRITERIA 1):
All patients aged 18 years and older with a diagnosis of heart failure with a current or prior LVEF < 40%

DENOMINATOR NOTE: LVEF < 40% corresponds to qualitative documentation of moderate dysfunction or severe dysfunction. The LVSD may be determined by quantitative or qualitative assessment, which may be current or historical. Examples of a quantitative or qualitative assessment may include an echocardiogram: 1) that provides a numerical value of LVSD or 2) that uses descriptive terms such as moderately or severely
depressed left ventricular systolic function. Any current or prior ejection fraction study documenting LVSD can be used to identify patients.

In order for the patient to be included in Reporting Criteria 1, the patient must have two denominator eligible visits.

**Denominator Criteria (Eligible Cases) 1:**
Patients aged ≥ 18 years on date of encounter

AND


AND

Patient encounter(s) during reporting period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350

AND

Two Denominator Eligible Visits

AND

Left ventricular ejection fraction (LVEF) less than 40% or documentation of moderately or severely depressed left ventricular systolic function: 3021F

**NUMERATOR (REPORTING CRITERIA 1):**
Patients who were prescribed ACE inhibitor or ARB therapy within a 12 month period when seen in the outpatient setting

**Definition:**
**Prescribed – Outpatient setting:** prescription given to the patient for ACE inhibitor or ARB therapy at one or more visits in the measurement period OR patient already taking ACE inhibitor or ARB therapy as documented in current medication list.

**Numerator Options**
**Performance Met:**
Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) therapy prescribed or currently being taken (4010F)

**OR**

**Medical Performance Exclusion:**
Documentation of medical reason(s) for not prescribing ACE inhibitor or ARB therapy (eg, hypotensive patients who are at immediate risk of cardiogenic shock, hospitalized patients who have experienced marked azotemia, allergy, intolerance, other medical reasons) (4010F with 1P)

**OR**

**Patient Performance Exclusion:**
Documentation of patient reason(s) for not prescribing ACE inhibitor or ARB therapy (eg, patient declined, other patient reasons) (4010F with 2P)

**OR**

**System Performance Exclusion:**
Documentation of system reason(s) for not prescribing ACE inhibitor or ARB therapy (eg, other system reasons) (4010F with 3P)
**Performance Not Met:** Angiotensin converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) therapy was not prescribed, reason not otherwise specified *(4010F with 8P)*

**OR**

**REPORTING CRITERIA 2: ALL PATIENTS WITH A DIAGNOSIS OF HF AND DISCHARGED FROM HOSPITAL**

**DENOMINATOR (REPORTING CRITERIA 2):**
All patients aged 18 years and older with a diagnosis of heart failure with a current or prior LVEF < 40%

**DENOMINATOR NOTE:** LVEF < 40% corresponds to qualitative documentation of moderate dysfunction or severe dysfunction. The LVSD may be determined by quantitative or qualitative assessment, which may be current or historical. Examples of a quantitative or qualitative assessment may include an echocardiogram: 1) that provides a numerical value of LVSD or 2) that uses descriptive terms such as moderately or severely depressed left ventricular systolic function. Any current or prior ejection fraction study documenting LVSD can be used to identify patients.

**Denominator Criteria (Eligible Cases) 2:**
Patients aged ≥ 18 years on date of encounter
**AND**
**AND**
Patient encounter during reporting period (CPT): 99238, 99239
**AND**
Left ventricular ejection fraction (LVEF) less than 40% or documentation of moderately or severely depressed left ventricular systolic function: 3021F

**NUMERATOR (REPORTING CRITERIA 2):**
Patients who were prescribed ACE inhibitor or ARB therapy at hospital discharge

**Definition:**
Prescribed – Inpatient setting: prescription given to the patient for ACE inhibitor or ARB therapy at discharge OR ACE inhibitor or ARB therapy to be continued after discharge as documented in the discharge medication list.

**Numerator Options:**

**Performance Met:** Angiotensin Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) therapy prescribed or currently being taken *(4010F)*

**OR**

**Medical Performance Exclusion:** Documentation of medical reason(s) for not prescribing ACE inhibitor or ARB therapy (eg, hypotensive patients who are at immediate risk of cardiogenic shock, hospitalized patients who have experienced marked azotemia, allergy, intolerance, other medical reasons) *(4010F with 1P)*

**OR**
**Patient Performance Exclusion:**
Documentation of patient reason(s) for not prescribing ACE inhibitor or ARB therapy (eg, patient declined, other patient reasons) *(4010F with 2P)*

**OR**

**System Performance Exclusion:**
Documentation of system reason(s) for not prescribing ACE inhibitor or ARB therapy (eg, other system reasons) *(4010F with 3P)*

**OR**

**Performance Not Met:**
Angiotensin converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) therapy was not prescribed, reason not otherwise specified *(4010F with 8P)*

**Rationale:**
In the absence of contraindications, ACE inhibitors or ARBs are recommended for all patients with symptoms of heart failure and reduced left ventricular systolic function. ACE inhibitors remain the first choice for inhibition of the renin-angiotensin system in chronic heart failure, but ARBs can now be considered a reasonable alternative. Both pharmacologic agents have been shown to decrease the risk of death and hospitalization. Additional benefits of ACE inhibitors include the alleviation of symptoms and the improvement of clinical status and overall sense of well-being of patients with heart failure.

**Clinical Recommendation Statements:**
ACE inhibitors are recommended in patients with HFrEF [heart failure with reduced ejection fraction] and current or prior symptoms, unless contraindicated, to reduce morbidity and mortality. (Class I, Level of Evidence: A) (ACCF/AHA, 2013)

Treatment with an ACE inhibitor should be initiated at low doses [see excerpt from guideline table below], followed by gradual dose increments if lower doses have been well tolerated... Clinicians should attempt to use doses that have been shown to reduce the risk of cardiovascular events in clinical trials. If these target doses of an ACE inhibitor cannot be used or are poorly tolerated, intermediate doses should be used with the expectation that there are likely to be only small differences in efficacy between low and high doses. Abrupt withdrawal of treatment with an ACE inhibitor can lead to clinical deterioration and should be avoided. (ACCF/AHA, 2013)

Drugs Commonly Used for Stage C HFrEF (abbreviated to align with focus of measure to include only ACE inhibitors and ARB therapy)

**Table 1 - Drugs Commonly Used for Stage C HFrEF. Rows 3 - 10 define Ace Inhibitors. Rows 11-13 define Angiotensin Receptor Blockers.**

<table>
<thead>
<tr>
<th>Drug</th>
<th>Initial Daily Dose(s)</th>
<th>Maximum Doses(s)</th>
<th>Mean Doses Achieved in Clinical Trials</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACE Inhibitors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Captopril</td>
<td>6.25 mg 3 times</td>
<td>50 mg 3 times</td>
<td>122.7 mg/d</td>
</tr>
<tr>
<td>Enalapril</td>
<td>2.5 mg twice</td>
<td>10 to 20 mg twice</td>
<td>16.6 mg/d</td>
</tr>
<tr>
<td>Fosinopril</td>
<td>5 to 10 mg once</td>
<td>40 mg once</td>
<td>N/A</td>
</tr>
<tr>
<td>Lisinopril</td>
<td>2.5 to 5 mg once</td>
<td>20 to 40 mg once</td>
<td>32.5 to 35.0 mg/d</td>
</tr>
<tr>
<td>Drug</td>
<td>Initial Daily Dose(s)</td>
<td>Maximum Doses(s)</td>
<td>Mean Doses Achieved in Clinical Trials</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-----------------------</td>
<td>------------------</td>
<td>---------------------------------------</td>
</tr>
<tr>
<td>Perindopril</td>
<td>2 mg once</td>
<td>8 to 16 mg once</td>
<td>N/A</td>
</tr>
<tr>
<td>Quinapril</td>
<td>5 mg twice</td>
<td>20 mg twice</td>
<td>N/A</td>
</tr>
<tr>
<td>Ramipril</td>
<td>1.25 to 2.5 mg once</td>
<td>10 mg once</td>
<td>N/A</td>
</tr>
<tr>
<td>Trandolapril</td>
<td>1 mg once</td>
<td>4 mg once</td>
<td>N/A</td>
</tr>
<tr>
<td>Angiotensin Receptor Blockers</td>
<td></td>
<td></td>
<td>Intentionally blank</td>
</tr>
<tr>
<td>Candesartan</td>
<td>4 to 8 mg once</td>
<td>32 mg once</td>
<td>24 mg/d</td>
</tr>
<tr>
<td>Losartan</td>
<td>25 to 50 mg once</td>
<td>50 to 150 mg once</td>
<td>129 mg/d</td>
</tr>
<tr>
<td>Valsartan</td>
<td>20 to 40 mg twice</td>
<td>160 mg twice</td>
<td>254 mg/d</td>
</tr>
</tbody>
</table>

ARBs are recommended in patients with HFrEF with current or prior symptoms who are ACE inhibitor intolerant, unless contraindicated, to reduce morbidity and mortality. (Class I, Level of Evidence: A) (ACCF/AHA, 2013)

ARBs are reasonable to reduce morbidity and mortality as alternatives to ACE inhibitors as first-line therapy for patients with HFrEF, especially for patients already taking ARBs for other indications, unless contraindicated. (Class IIa, Level of Evidence: A) (ACCF/AHA, 2013)

Addition of an ARB may be considered in persistently symptomatic patients with HFrEF who are already being treated with an ACE inhibitor and a beta blocker in whom an aldosterone antagonist is not indicated or tolerated. (Class IIb, Level of Evidence: A) (ACCF/AHA, 2013)

For the hospitalized patient:

In patients with HFrEF experiencing a symptomatic exacerbation of HF requiring hospitalization during chronic maintenance treatment with GDMT [guideline-directed medical therapy; GDMT represents optimal medical therapy as defined by ACCF/AHA guideline-recommended therapies (primarily Class I)], it is recommended that GDMT be continued in the absence of hemodynamic instability or contraindications. (Class I, Level of Evidence: B) (ACCF/AHA, 2013)

**COPYRIGHT:**

Physician Performance Measures (Measures) and related data specifications were developed by the American Medical Association (AMA)-convened Physician Consortium for Performance Improvement® (PCPI™) including the American College of Cardiology (ACC), the American Heart Association (AHA) and the American Medical Association (AMA) to facilitate quality improvement activities by physicians. These performance Measures are not clinical guidelines and do not establish a standard of medical care, and have not been tested for all potential applications. While copyrighted, they can be reproduced and distributed, without modification, for noncommercial purposes, eg, use by health care providers in connection with their practices. Commercial use is defined as the sale, license, or distribution of the performance measures for commercial gain, or incorporation of the Measures into a product or service that is sold, licensed or distributed for commercial gain.
Commercial uses of the Measures require a license agreement between the user and the AMA, (on behalf of the PCPI) or the ACC or the AHA. Neither the AMA, ACC, AHA, PCPI nor its members shall be responsible for any use of these Measures.

THE MEASURES AND SPECIFICATIONS ARE PROVIDED “AS IS” WITHOUT WARRANTY OF ANY KIND.

© 2010 American College of Cardiology, American Heart Association and American Medical Association. All Rights Reserved.

Limited proprietary coding is contained in the measure specifications for convenience. Users of the proprietary code sets should obtain all necessary licenses from the owners of these code sets. The AMA, ACC, AHA, PCPI and its members disclaim all liability for use or accuracy of any Current Procedural Terminology (CPT®) or other coding contained in the specifications.

THE SPECIFICATIONS ARE PROVIDED “AS IS” WITHOUT WARRANTY OF ANY KIND.


LOINC® copyright 2004-2015 Regenstrief Institute, Inc. SNOMED CLINICAL TERMS (SNOMED CT®) copyright 2004-2015 International Health Terminology Standards Development Organization. All Rights Reserved. Use of SNOMED CT® is only authorized within the United States.
2016 Registry Individual Measure Flow
PQRS #5 NQF# 0081: Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD) Reporting Criteria One

Start

Denominator

Yes

Patient Age at Date of Service ≥ 18 Years

No

Not Included in Eligible Population/Denominator

Yes

Diagnosis of Heart Failure as Listed in Denominator**

No

Current or Prior Diagnosis of LVSD (LVEF ≤ 40%) 3021F or equivalent

No

Outpatient Encounter as Listed in Denominator)** (1/1/2016 thru 12/31/2016)

Yes

Two Denominator Eligible Encounters During the Reporting Period

No

ACE/ARB Therapy Prescribed or Currently Being Taken

Yes

Reporting Met + Performance Met 4010F or equivalent (4 patients) d1

No

Documentation of Medical Reason(s) for Not Prescribing ACE/ARB Therapy

Yes

Reporting Met + Performance Exclusion 4010F-1P or equivalent (1 patient) b1

No

Documentation of Reason(s) for Not Prescribing ACE/ARB Therapy

Yes

Reporting Met + Performance Exclusion 4010F-3P or equivalent (0 patients) b3

No

ACE/ARB Therapy Not Prescribed; Reason Not Otherwise Specified

Yes

Reporting Not Met Quality-Data Code or equivalent not reported (1 patient)

No

Include in Eligible Population/Denominator (8 patients)* d1

*This measure is to be reported at two different frequencies, depending upon the clinical setting. This measure is to be reported for a minimum of once per reporting period when seen in the outpatient setting AND reported at each hospital discharge (995238 and 99239*) during the reporting period. Please reference the Reporting Criteria 2 for Hospital Discharge Setting Flow.

**See the posted Measure Specification for specific coding and instructions to report this measure.

NOTE: Reporting Frequency: Patient/process

CPT only copyright 2015 American Medical Association. All rights reserved. The measure diagrams were developed by CMS as a supplemental resource to be used in conjunction with the measure specifications. They should not be used alone or as a substitution for the measure specification.
2016 Registry Individual Measure Flow
PQRS #5 NQF# 0081: Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD) Reporting Criteria Two

Denominator

Start

Patient Age at Date of Service ≤ 16 Years

Yes

Diagnosis of Heart Failure as Listed in Denominator**

No

Not Included in Eligible Population/Denominator

No

Current or Prior Diagnosis of LVSD (LVEF <40%) 3021F or equivalent

Yes

Hospital Discharge as Listed in Denominator** (1/1/2016 thru 12/31/2015)

No

Include in Eligible Population/Denominator (8 visits)** α≤

Numerator

ACE/ARB Therapy Prescribed or Currently Being Taken

No

Documentation of Medical Reason(s) for Not Prescribing ACE/ARB Therapy

Yes

Reporting Met + Performance Exclusion 4010F-IP or equivalent (1 visit) β≤

No

Reporting Met = Performance Exclusion 4010F-3P or equivalent (0 visits) β≤

Yes

Documentation of Patient Reason(s) for Not Prescribing ACE/ARB Therapy

No

Reporting Met = Performance Exclusion 4010F-IP or equivalent (1 visit) β≤

Yes

Documentation of System Reason(s) for Not Prescribing ACE/ARB Therapy

No

ACE/ARB Therapy Not Prescribed, Reason Not Otherwise Specified

Yes

Reporting Met = Performance Not Met 4010F-3P or equivalent (2 visits) γ≤

No

Reporting Not Met: Quality-Data Code or equivalent not reported (1 visit)

*This measure is to be reported at two different frequencies, depending upon the clinical setting. This measure is to be reported for a minimum of once per reporting period when seen in the outpatient setting AND reported at each hospital discharge (99238* and 99239*) during the reporting period. Please reference the Reporting Criteria for Outpatient Setting Flow.

**See the posted Measure Specification for specific coding and instructions to report this measure.

NOTE: Reporting Frequency: Visit
2016 Registry Individual Measure Flow
PQRS #5 NQF# 0081: Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD)

SAMPLE CALCULATIONS:

Reporting Rate=
Performance Met (a^2 + a^2 = 8 visits) + Performance Exclusion (b^2 + b^2 + b^2 + b^2 = 2 visits) + Performance Not Met (c^2 + c^2 = 4 visits) = 14 visits
Eligible Population / Denominator (d^2 + d^2 = 16 visits) = 16 visits

Performance Rate=
Performance Met (a^2 + a^2 = 8 visits) = 8 visits = 66.67%

Reporting Numerator (14 visits) – Performance Exclusion (b^2 + b^2 + b^2 + b^2 = 2 visits) = 12 visits

NOTE: Reporting Frequency: Patient-process
2015 Registry Individual Measure Flow
PQRS #5 NQF #0081: Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD)

Please refer to the specific section of the Measure Specification to identify the denominator and numerator information for use in reporting this Individual Measure.

Reporting Criteria 1: Outpatient Setting

1. Start with Denominator

2. Check Patient Age:
   a. If the Age is greater than or equal to 18 years of age on Date of Service and equals No during the measurement period, do not include in Eligible Patient Population. Stop Processing.
   b. If the Age is greater than or equal to 18 years of age on Date of Service and equals Yes during the measurement period, proceed to check Patient Diagnosis.

3. Check Patient Diagnosis:
   a. If Diagnosis of Heart Failure as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
   b. If Diagnosis of Heart Failure as Listed in the Denominator equals Yes, proceed to check Current or Prior Diagnosis of LVSD (LVEF <40%).

4. Check Current or Prior Diagnosis of LVSD (LVEF <40%):
   a. If Diagnosis of LVSD (LVEF <40%) 3021F or equivalent as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
   b. If Diagnosis of LVSD (LVEF <40%) 3021F or equivalent as Listed in the Denominator equals Yes, proceed to check Outpatient Encounter as Listed in the Denominator.

5. Check Outpatient Encounter Performed:
   a. If Outpatient Encounter as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
   b. If Outpatient Encounter as Listed in the Denominator equals Yes, proceed to check Two Denominator Eligible Encounters Performed.

6. Check Two Denominator Eligible Encounters Performed:
   a. If Two Denominator Eligible Encounters Performed as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
   b. If Two Denominator Eligible Encounters Performed as Listed in the Denominator equals Yes, include in the Eligible population.
7. Denominator Population:
   a. Denominator population is all Eligible Patients in the denominator. Denominator is represented as
      Denominator in the Sample Calculation listed at the end of this document. Letter d1 equals 8 patients in
      the sample calculation.

8. Start Numerator

9. Check ACE/ARB Therapy Prescribed or Currently Taken:
   a. If ACE/ARB Therapy Prescribed or Currently Taken equals Yes, include in Reporting Met and
      Performance Met.
   b. Reporting Met and Performance Met letter is represented in the Reporting Rate and Performance Rate in
      the Sample Calculation listed at the end of this document. Letter a1 equals 4 patients in Sample
      Calculation.
   c. If ACE/ARB Therapy Prescribed or Currently Taken equals No, proceed to Documentation of Medical
      Reason(s) for Not Prescribing ACE/ARB Therapy.

10. Check Documentation of Medical Reason(s) for Not Prescribing ACE/ARB Therapy:
    a. If Documentation of Medical Reason(s) for Not Prescribing ACE/ARB Therapy equals Yes, include in
       Reporting Met and Performance Exclusion.
    b. Reporting Met and Performance Exclusion letter is represented in the Reporting Rate and Performance Rate in
       the Sample Calculation listed at the end of this document. Letter b1 equals 1 patient in the
       Sample Calculation.
    c. If Documentation of Medical Reason(s) for Not Prescribing ACE/ARB Therapy equals No, proceed to
       Documentation of Patient Reason(s) for Not Prescribing ACE/ARB Therapy.

11. Check Documentation of Patient Reason(s) for Not Prescribing ACE/ARB Therapy
    a. If Documentation of Patient Reason(s) for Not Prescribing ACE/ARB Therapy equals Yes, include in
       Reporting Met and Performance Exclusion.
    b. Reporting Met and Performance Exclusion letter is represented in the Reporting Rate and Performance Rate in
       the Sample Calculation listed at the end of this document. Letter b2 equals 0 patients in the
       Sample Calculation.
    c. If Documentation of Patient Reason(s) for Not Prescribing ACE/ARB Therapy equals No, proceed to
       Documentation of System Reason(s) for Not Prescribing ACE/ARB Therapy.

12. Check Documentation of System Reason(s) for Not Prescribing ACE/ARB Therapy:
    a. If Documentation of System Reason(s) for Not Prescribing ACE/ARB Therapy equals Yes, include in
       Reporting Met and Performance Exclusion.
    b. Reporting Met and Performance Exclusion letter is represented in the Reporting Rate and Performance Rate in
       the Sample Calculation listed at the end of this document. Letter b3 equals 0 patients in the
       Sample Calculation.
    c. If Documentation of System Reason(s) for Not Prescribing ACE/ARB Therapy equals No, proceed to
       ACE/ARB Therapy Not Prescribed, Reason Not Specified.
13. Check ACE/ARB Therapy Not Prescribed, Reason Not Specified:
   a. If ACE/ARB Therapy was Not Prescribed, Reason Not Specified equals Yes, include in Reporting Met and Performance Not Met.
   b. Reporting Met and Performance Not Met letter is represented in the Reporting Rate in the Sample Calculation listed at the end of this document. Letter c1 equals 2 patients in the Sample Calculation.
   c. If ACE/ARB Therapy was Not Prescribed, Reason Not Specified equals No, proceed to Reporting Not Met.

14. Check Reporting Not Met
   a. If Reporting Not Met equals No, Quality Data Code or equivalent not reported. 1 patient has been subtracted from the reporting numerator in sample calculation.
2015 Registry Individual Measure Flow
PQRS #5 NQF #0081: Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD)

Please refer to the specific section of the Measure Specification to identify the denominator and numerator information for use in reporting this Individual Measure.

Reporting Criteria 2: Hospital Discharge Setting

1. Start with Denominator
2. Check Patient Age:
   a. If the Age is greater than or equal to 18 years of age on Date of Service and equals No during the measurement period, do not include in Eligible Patient Population. Stop Processing.
   b. If the Age is greater than or equal to 18 years of age on Date of Service and equals Yes during the measurement period, proceed to check Patient Diagnosis.
3. Check Patient Diagnosis:
   a. If Diagnosis of Heart Failure as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
   b. If Diagnosis of Heart Failure as Listed in the Denominator equals Yes, proceed to check Current or Prior Diagnosis of LVSD (LVEF <40%).
4. Check Current or Prior Diagnosis of LVSD (LVEF <40%):
   a. If Diagnosis of LVSD (LVEF <40%) 3021F or equivalent as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing
   b. If Diagnosis of LVSD (LVEF <40%) 3021F or equivalent as Listed in the Denominator equals Yes, proceed to check Hospital Discharge Encounter Performed.
5. Check Hospital Discharge Encounter Performed:
   a. If Hospital Discharge Encounter as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
   b. If Hospital Discharge Encounter as Listed in the Denominator equals Yes, include in the Eligible population.
6. Denominator Population:
   a. Denominator population is all Eligible Patients in the denominator. Denominator is represented as Denominator in the Sample Calculation listed at the end of this document. Letter d2 equals 8 visits in the sample calculation.
7. Start Numerator
8. Check ACE/ARB Therapy Prescribed or Currently Taken:
   a. If ACE/ARB Therapy Prescribed or Currently Taken equals Yes, include in Reporting Met and Performance Met.
   b. Reporting Met and Performance Met letter is represented in the Reporting Rate and Performance Rate in the Sample Calculation listed at the end of this document. Letter a2 equals 4 visits in Sample Calculation.
   c. If ACE/ARB Therapy Prescribed or Currently Taken equals No, proceed to Documentation of Medical Reason(s) for Not Prescribing ACE/ARB Therapy.

9. Check Documentation of Medical Reason(s) for Not Prescribing ACE/ARB Therapy:
   a. If Documentation of Medical Reason(s) for Not Prescribing ACE/ARB Therapy equals Yes, include in Reporting Met and Performance Exclusion.
   b. Reporting Met and Performance Exclusion letter is represented in the Reporting Rate and Performance Rate in the Sample Calculation listed at the end of this document. Letter b4 equals 1 visit in the Sample Calculation.
   c. If Documentation of Medical Reason(s) for Not Prescribing ACE/ARB Therapy equals No, proceed to Documentation of Patient Reason(s) for Not Prescribing ACE/ARB Therapy.

10. Check Documentation of Patient Reason(s) for Not Prescribing ACE/ARB Therapy:
    a. If Documentation of Patient Reason(s) for Not Prescribing ACE/ARB Therapy equals Yes, include in Reporting Met and Performance Exclusion.
    b. Reporting Met and Performance Exclusion letter is represented in the Reporting Rate and Performance Rate in the Sample Calculation listed at the end of this document. Letter b5 equals 0 visits in the Sample Calculation.
    c. If Documentation of Patient Reason(s) for Not Prescribing ACE/ARB Therapy equals No, proceed to Documentation of System Reason(s) for Not Prescribing ACE/ARB Therapy.

11. Check Documentation of System Reason(s) for Not Prescribing ACE/ARB Therapy:
    a. If Documentation of System Reason(s) for Not Prescribing ACE/ARB Therapy equals Yes, include in Reporting Met and Performance Exclusion.
    b. Reporting Met and Performance Exclusion letter is represented in the Reporting Rate and Performance Rate in the Sample Calculation listed at the end of this document. Letter b6 equals 0 visits in the Sample Calculation.
    c. If Documentation of System Reason(s) for Not Prescribing ACE/ARB Therapy equals No, proceed to ACE/ARB Therapy Not Prescribed and Reason Not Specified.

12. Check ACE/ARB Therapy Not Prescribed and Reason Not Specified:
    a. If ACE/ARB Therapy was Not Prescribed and Reason Not Specified equals Yes, include in Reporting Met and Performance Not Met.
    b. Reporting Met and Performance Not Met letter is represented in the Reporting Rate in the Sample Calculation listed at the end of this document. Letter c2 equals 2 visits in the Sample Calculation.
c. If ACE/ARB Therapy was not prescribed for Patient Reason equals No, proceed to Reporting Not Met.

13. Check Reporting Not Met

a. If Reporting Not Met equals No, Quality Data Code or equivalent not reported. 1 visit has been subtracted from the reporting numerator in sample calculation.
## 2015 Registry Individual Measure Flow

**PQRS #5 NQF #0081: Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD)**

| Reporting Rate | Performance Met (a+ax=8 visits) + Performance Exclusion (b+bx+y+z+2 visits) + Performance Not Met (c+cz=4 visits) = 14 visits = 87.50% | Eligible Population / Denominator (d+d=16 visits) = 16 visits |
| Performance Rate | Performance Met (a+ax=8 visits) = 8 visits = 66.67% | Reporting Numerator (14 visits) – Performance Exclusion (b+bx+y+z+2 visits) = 12 visits |

This measure contains 2 Reporting Criteria, although as the Sample Calculation indicates, there is **ONLY** one reporting rate and one performance rate for this measure.