

## Quality Measures Fact Sheet

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

Quality Measures Set: Alternate

Data Source: Registry

### BPCI Advanced and Quality

The Center for Medicare & Medicaid Innovation's (the CMS Innovation Center's) BPCI Advanced Model rewards health care providers for delivering services more efficiently, supports enhanced care coordination, and recognizes high quality care. Hospitals and clinicians should work collaboratively to achieve these goals, which have the potential to improve the BPCI Advanced Beneficiary experience and align to the CMS Quality Strategy goals of promoting effective communication and care coordination, highlighting best practices, and making care safer and more affordable. A goal of the BPCI Advanced Model is to promote seamless, patient-centered care throughout each Clinical Episode, regardless of who is responsible for a specific element of that care.

### Background on Therapy for Left Ventricular Systolic Dysfunction

Heart failure is a condition where the left ventricle is unable to pump well. Left ventricular systolic dysfunction (LVSD) is one form of the syndrome where the heart muscle is weakened. To diagnose and follow the condition, clinicians typically conduct an echocardiogram to assess left ventricular ejection fraction (LVEF), a number which reflects the proportion of blood ejected with each heartbeat. Extensive evidence supports the use of Angiotensin-Converting Enzyme (ACE) inhibitors or Angiotensin Receptor

Blocker (ARB) therapy for patients with an LVEF of less than 40 percent, which correlates to moderate to severe dysfunction.<sup>19,20,21</sup>

## **CMS Innovation Center Rationale for Including the HF: ACE Inhibitor or ARB or ARNI Therapy for LVSD Measure in BPCI Advanced**

ACE inhibitors or ARB or ARNI therapy improve function and survival and carry a Class IA (Strong recommendation, High quality evidence) recommendation in the current guideline for the management of heart failure. However, a recent analysis found that nearly 20 percent of eligible patients failed to receive ACE inhibitors or ARB therapy at hospital discharge.<sup>21</sup> The CMS Innovation Center is promoting the HF: ACE Inhibitor or ARB or ARNI Therapy for LVSD measure because it represents an important opportunity for improved quality of services provided for patients with HF with reduced ejection fraction. CMS has used, or is currently using, this measure in the Quality Payment Program, Merit-Based Incentive Payment System (QPP MIPS) and other reporting programs.

### **Applicable Clinical Episodes**

The HF: ACE Inhibitor or ARB or ARNI Therapy for LVSD measure is included in the Alternate Quality Measures Set and applies to the following inpatient Clinical Episode<sup>22</sup>:

- Congestive Heart Failure: Medicare Severity–Diagnosis-Related Groups (MS-DRG) 291, 292, and 293

### **Measure Specifications**

The HF: ACE Inhibitor or ARB or ARNI Therapy for LVSD measure selected for BPCI Advanced follows National Quality Forum (NQF) #0081 measure specifications. The measure reflects the percent of HF patients with LVSD and without both ACE inhibitor and ARB contraindications whose physicians prescribed an ACE Inhibitor or an ARB or ARNI at hospital discharge. The registry will calculate Acute Care Hospital (ACH) level performance for all patients included in the denominator. The term “patients” refers to people 18 years and older who undergo a procedure at the hospital associated with the Clinical Episodes from the “Applicable Clinical Episodes” section, not limited to Medicare beneficiaries or BPCI Advanced Beneficiaries. For Physician Group Practices (PGPs), the registry will calculate the measure as

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<sup>19</sup> Baine, K., Armstrong, P., Fonarow, G., Cannon, C., Hernandez, A., Peterson, E., Peacock, W. F., Laskey, W., Zhao, X., Schwamm, L., & Bhatt, D. (2014). Use of renin-angiotensin system blockers in acute coronary syndromes. *Cardiovascular Quality and Outcomes*, 7, 227-235. Retrieved from <https://www.ahajournals.org/doi/10.1161/CIRCOUTCOMES.113.000422>.

<sup>20</sup> National Quality Forum (2019). Measure information: #0081 heart failure (HF): angiotensin-converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) or angiotensin receptor-neprilysin inhibitor (ARNI) therapy for left ventricular systolic dysfunction (LVSD). See link in Other Resources table below.

<sup>21</sup> Yancy, C. W., Jessup, M., Bozkurt, B., Butler, J., Casey, D. E., Colvin, M. M., Drazner, M. H., Fillappatos, G. S., Fonarow, G. C., Givertz, M. M., Hollenberg, S. M., Lindenfeld, J., Masoudi, F. A., McBride, P. E., Peterson, P. N., Stevenson, L. W., & Westlake, C., (2017). 2017 ACC/AHA/HFSA focused update of the 2013 ACCF/AHA guideline for the management of heart failure: a report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines and the Heart Failure Society of America. *Circulation*, 136(60), 137-161. Retrieved from <https://www.ahajournals.org/doi/10.1161/cir.0000000000000509>.

<sup>22</sup> MS-DRGs are up to date as of Model Year 3 (2020) and will be updated for Model Year 4 as needed.

specified at individual hospitals, then the CMS Innovation Center will weight measure performance based on PGP Clinical Episode volume for each ACH where a PGP triggers an episode.

### **Denominator**

The denominator for the HF: ACE Inhibitor or ARB or ARNI Therapy for LVSD measure includes all patients 18 or older with a principle diagnosis of HF and a documented LVEF lower than 40% or a narrative description of LVEF consistent with moderate or severe systolic dysfunction. This measure is not limited to Medicare beneficiaries or BPCI Advanced Beneficiaries.

All MS-DRG triggers apply, but this measure only applies to patients with LVSD.

The exclusions for this measure include patients:

- less than 18 years of age
- transferred to another ACH
- who left against medical advice;
- who expired
- discharged to hospice
- with chart documentation of participation in a clinical trial, testing alternatives to ACE Inhibitors as first-line HF therapy
- with contraindications to both ACE Inhibitor and ARB or both ACE Inhibitor and ARNI.
- who are on comfort measures only

### **Numerator**

The numerator includes individuals in the previously defined denominator for whom qualified health professionals prescribed an ACE Inhibitor or ARB or ARNI at hospital discharge.

### **Measure Submission**

BPCI Advanced Participants may submit this measure through the American Heart Association® (AHA) Get With The Guidelines (GWTG)®- Heart Failure Registry.

### **Revisions to the Published Specifications**

There are no revisions from the current, published specifications.

### **Composite Quality Score**

The HF: ACE Inhibitor or ARB or ARNI Therapy for LVSD measure is one component of the BPCI Advanced Composite Quality Score (CQS) calculation. The CMS Innovation Center uses the CQS to adjust a portion of any Positive Total Reconciliation Amount and any Negative Total Reconciliation Amount. The CQS adjustment will not adjust the Positive Total Reconciliation Amount down by more than 10 percent, nor will it adjust the Negative Total Reconciliation Amount up by more than 10 percent. More information is available at the BPCI Advanced website provided below.

## Other Resources

Organization/Resource	Website Address
NQF #0081 specifications	<a href="https://qualityforum.org/QPS/0081">https://qualityforum.org/QPS/0081</a>
BPCI Advanced	<a href="https://innovation.cms.gov/initiatives/bpci-advanced">https://innovation.cms.gov/initiatives/bpci-advanced</a>
CMS Quality Payment Program measure specifications	<a href="https://qpp.cms.gov/docs/QPP_quality_measure_specifications/CQM-Measures/2020_Measure_005_MIPSCQM.pdf">https://qpp.cms.gov/docs/QPP_quality_measure_specifications/CQM-Measures/2020_Measure_005_MIPSCQM.pdf</a>
AHA® GTWG®	<a href="https://www.heart.org/en/professional/quality-improvement">https://www.heart.org/en/professional/quality-improvement</a>
AHA® GTWG®-Heart Failure	<a href="https://www.heart.org/en/professional/quality-improvement/get-with-the-guidelines/get-with-the-guidelines-heart-failure">https://www.heart.org/en/professional/quality-improvement/get-with-the-guidelines/get-with-the-guidelines-heart-failure</a>