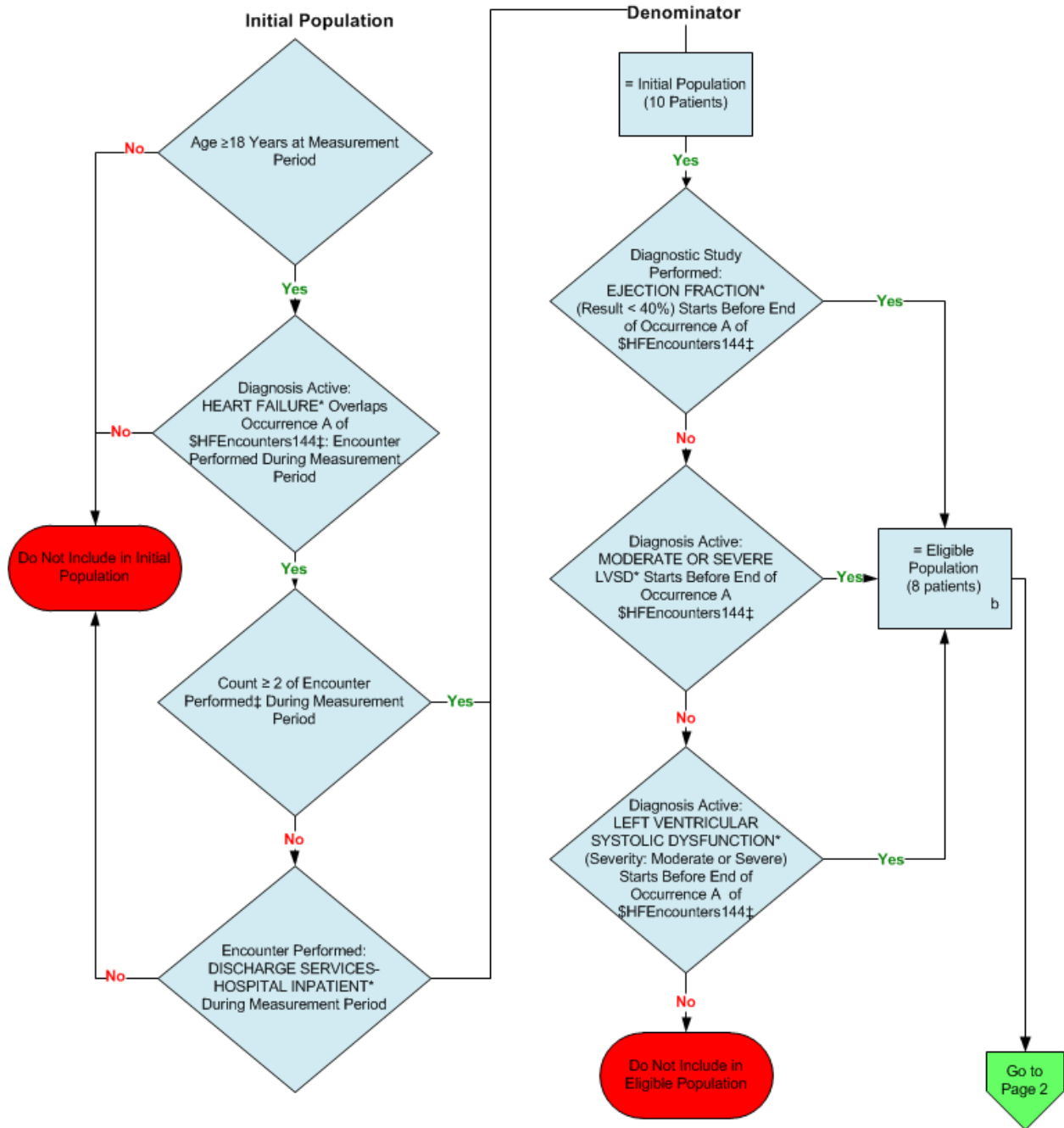


**2014 eCQM Flow
Measure Identifier: CMS144v4**

NQF 0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

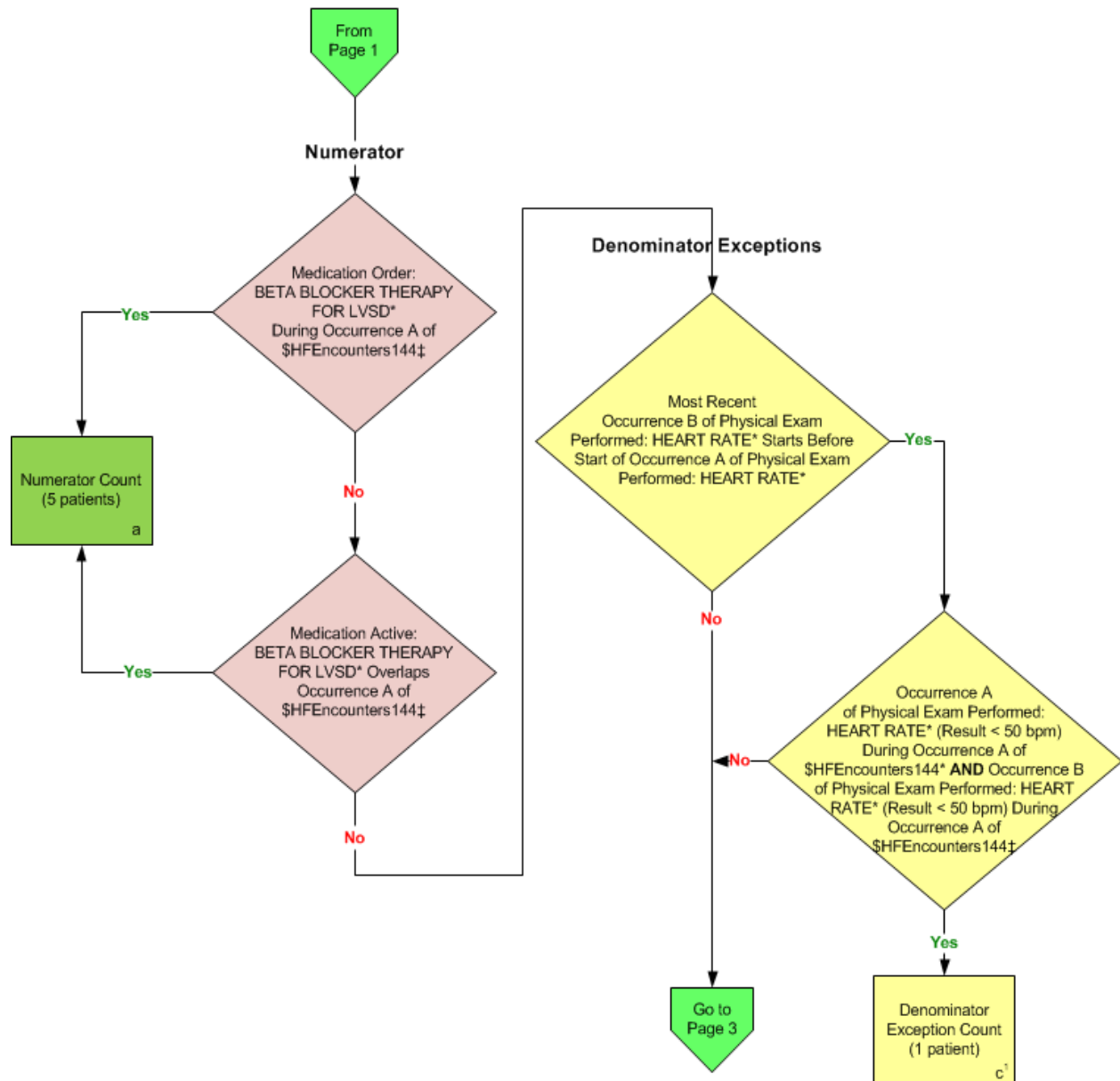


*Please refer to the specific section of the eCQM to identify the QDM data elements and associated value sets for use in reporting this eCQM.

‡ For a list of appropriate encounters, please refer to the Population Criteria and associated value sets as specific data elements have not been listed.

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Measure Identifier: CMS144v4

NQF 0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

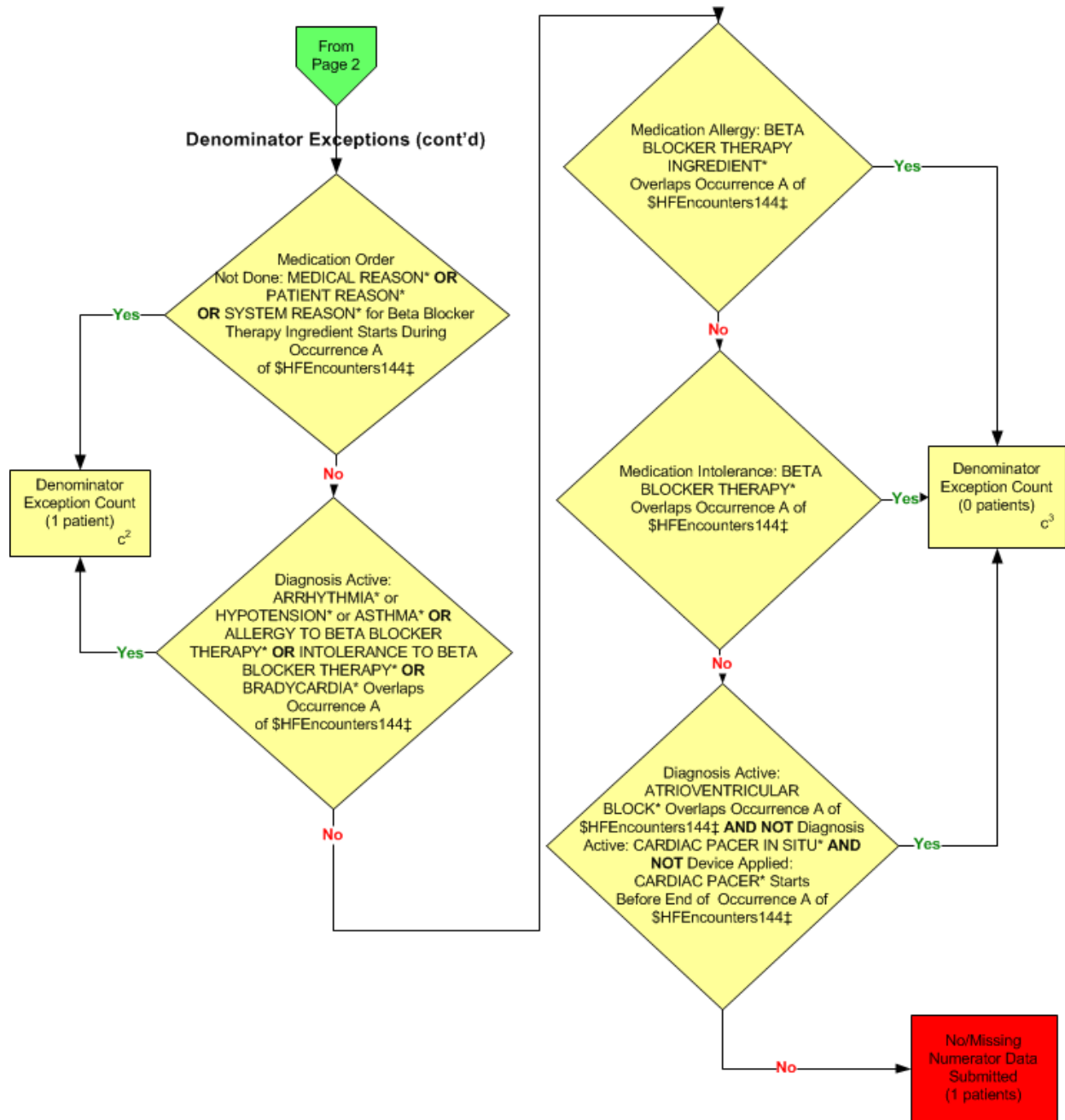


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‡ For a list of appropriate encounters, please refer to the Population Criteria and associated value sets as specific data elements have not been listed.

2014 eCQM Flow
Measure Identifier: CMS144v4

NQF 0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)



*Please refer to the specific section of the eCQM to identify the QDM data elements and associated value sets for use in reporting this eCQM.

‡ For a list of appropriate encounters, please refer to the Population Criteria and associated value sets as specific data elements have not been listed.

SAMPLE CALCULATION:

Performance Rate=

$$\frac{\text{Numerator (a= 5 patients)}}{\text{Denominator (b=8 patients) – Denominator Exclusions (N/A) – Denominator Exceptions (c¹ + c² + c³ = 2 patients)}} = 83.33\%$$

2014 eCQM Flows

Measure Identifier: CMS144v4

NQF 0083: Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)

Please refer to the specific section of the eCQM to identify Population Criteria and associated value sets for use in reporting this eCQM.

1. Start Initial Population
2. Check Age:
 - a. If the AGE greater than or equal to 18 years at measurement period equals No, do not include in Initial Population. Stop Processing.
 - b. If the AGE greater than or equal to 18 years at measurement period equals Yes, proceed to check Diagnosis Active.
3. Check Diagnosis Active:
 - a. If the Diagnosis Active QDM data element, HEART FAILURE, overlaps Occurrence A of \$HFEncounters144 (Encounter Performed QDM data element, CARE SERVICES IN LONG-TERM RESIDENTIAL FACILITY, or HOME HEALTHCARE SERVICES, or NURSING FACILITY VISIT, or OFFICE VISIT, or OUTPATIENT CONSULTATION, or FACE-TO-FACE INTERACTION, or DISCHARGE SERVICES – HOSPITAL INPATIENT during measurement) equals No, do not include in Initial Population. Stop Processing.
 - b. If the Diagnosis Active QDM data element, HEART FAILURE, overlaps Occurrence A of \$HFEncounters144 (Encounter Performed QDM data element, CARE SERVICES IN LONG-TERM RESIDENTIAL FACILITY, or HOME HEALTHCARE SERVICES, or NURSING FACILITY VISIT, or OFFICE VISIT, or OUTPATIENT CONSULTATION, or FACE-TO-FACE INTERACTION, or DISCHARGE SERVICES – HOSPITAL INPATIENT during measurement) equal Yes, proceed to check Encounter Performed.
4. Check Encounter Performed: Total number of encounters must be greater than or equal to 2:
 - a. If the Encounter Performed QDM data element, CARE SERVICES IN LONG-TERM RESIDENTIAL FACILITY, or HOME HEALTHCARE SERVICES, or NURSING FACILITY VISIT or OFFICE VISIT or OUTPATIENT CONSULTATION, or PATIENT PROVIDER INTERACTION during measurement period equals No, proceed to check next Encounter Performed.
 - b. If the Encounter Performed QDM data element, CARE SERVICES IN LONG-TERM RESIDENTIAL FACILITY, or HOME HEALTHCARE SERVICES, or NURSING FACILITY VISIT or OFFICE VISIT or OUTPATIENT CONSULTATION, or PATIENT PROVIDER INTERACTION during measurement period equals Yes, check for another Encounter Performed until total number of encounters are greater than or equal to 2. If the count is greater than or equal to 2, include in Initial Population.
5. Check Encounter Performed:

- a. If the Encounter Performed QDM data element, DISCHARGE SERVICES – HOSPITAL INPATIENT, during measurement period equals No, do not include in the Initial Population. Stop Processing.
 - b. If the Encounter Performed QDM data element, DISCHARGE SERVICES – HOSPITAL INPATIENT, during measurement period equals Yes, include in the Initial Population and continue to the Denominator.
6. Start Denominator
 - a. Denominator equals the Initial Population.
7. Check Diagnostic Study Performed:
 - a. If the Diagnostic Study Performed QDM data element, EJECTION FRACTION (result less than 40 percent), starts before end of Occurrence A of \$HFEncounters144 (Encounter Performed QDM data element, CARE SERVICES IN LONG-TERM RESIDENTIAL FACILITY, or HOME HEALTHCARE SERVICES, or NURSING FACILITY VISIT, or OFFICE VISIT, or OUTPATIENT CONSULTATION, or FACE-TO-FACE INTERACTION, or DISCHARGE SERVICES – HOSPITAL INPATIENT during measurement) equals No, proceed to check next Diagnosis Active.
 - b. If the Diagnostic Study Performed QDM data element, EJECTION FRACTION (result less than 40 percent), starts before end of Occurrence A of \$HFEncounters144 (Encounter Performed QDM data element, CARE SERVICES IN LONG-TERM RESIDENTIAL FACILITY, or HOME HEALTHCARE SERVICES, or NURSING FACILITY VISIT, or OFFICE VISIT, or OUTPATIENT CONSULTATION, or FACE-TO-FACE INTERACTION, or DISCHARGE SERVICES – HOSPITAL INPATIENT during measurement) equals Yes, include in Eligible Population Count, which is represented by Letter b in the sample calculation listed at the end of this document. Letter b equals 8 patients. Proceed to the Numerator.
8. Check Diagnosis Active:
 - a. If the Diagnosis Active QDM data element, MODERATE OR SEVERE LVSD, starts before end of Occurrence A of \$HFEncounters144 (Encounter Performed QDM data element, CARE SERVICES IN LONG-TERM RESIDENTIAL FACILITY, or HOME HEALTHCARE SERVICES, or NURSING FACILITY VISIT, or OFFICE VISIT, or OUTPATIENT CONSULTATION, or FACE-TO-FACE INTERACTION, or DISCHARGE SERVICES – HOSPITAL INPATIENT during measurement) equals No, proceed to check next Diagnosis Active.
 - b. If the Diagnosis Active QDM data element, MODERATE OR SEVERE LVSD, starts before end of Occurrence A of \$HFEncounters144 (Encounter Performed QDM data element, CARE SERVICES IN LONG-TERM RESIDENTIAL FACILITY, or HOME HEALTHCARE SERVICES, or NURSING FACILITY VISIT, or OFFICE VISIT, or OUTPATIENT CONSULTATION, or FACE-TO-FACE INTERACTION, or DISCHARGE SERVICES – HOSPITAL INPATIENT during measurement) equals Yes, include in Eligible Population Count, which is represented by Letter b in the sample calculation listed at the end of this document. Letter b equals 8 patients. Proceed to the Numerator.
9. Check Diagnosis Active:

- a. If the Diagnosis Active QDM data element, LEFT VENTRICULAR SYSTOLIC DYSFUNCTION (severity: moderate or severe), starts before end of Occurrence A of \$HFEncounters144 (Encounter Performed QDM data element, CARE SERVICES IN LONG-TERM RESIDENTIAL FACILITY, or HOME HEALTHCARE SERVICES, or NURSING FACILITY VISIT, or OFFICE VISIT, or OUTPATIENT CONSULTATION, or FACE-TO-FACE INTERACTION, or DISCHARGE SERVICES – HOSPITAL INPATIENT during measurement) equals No, do not include in Eligible Population. Stop Processing.
- b. If the Diagnosis Active QDM data element, LEFT VENTRICULAR SYSTOLIC DYSFUNCTION (severity: moderate or severe), starts before end of Occurrence A of \$HFEncounters144 (Encounter Performed QDM data element, CARE SERVICES IN LONG-TERM RESIDENTIAL FACILITY, or HOME HEALTHCARE SERVICES, or NURSING FACILITY VISIT, or OFFICE VISIT, or OUTPATIENT CONSULTATION, or FACE-TO-FACE INTERACTION, or DISCHARGE SERVICES – HOSPITAL INPATIENT during measurement) equals Yes, include in Eligible Population Count, which is represented by Letter b in the sample calculation listed at the end of this document. Letter b equals 8 patients. Proceed to the Numerator.

10. Start Numerator

11. Check Medication Order:

- a. If the Medication Order QDM data element, BETA BLOCKER THERAPY FOR LVSD, during Occurrence A of \$HFEncounters144 (Encounter Performed QDM data element, CARE SERVICES IN LONG-TERM RESIDENTIAL FACILITY, or HOME HEALTHCARE SERVICES, or NURSING FACILITY VISIT, or OFFICE VISIT, or OUTPATIENT CONSULTATION, or FACE-TO-FACE INTERACTION, or DISCHARGE SERVICES – HOSPITAL INPATIENT during measurement) equals No, proceed to check next Medication Active.
- b. If the Medication Order QDM data element, BETA BLOCKER THERAPY FOR LVSD, during Occurrence A of \$HFEncounters144 (Encounter Performed QDM data element, CARE SERVICES IN LONG-TERM RESIDENTIAL FACILITY, or HOME HEALTHCARE SERVICES, or NURSING FACILITY VISIT, or OFFICE VISIT, or OUTPATIENT CONSULTATION, or FACE-TO-FACE INTERACTION, or DISCHARGE SERVICES – HOSPITAL INPATIENT during measurement) equals Yes, include in Numerator Count, which is represented by letter a in the sample calculation listed at the end of this document. Letter a equals 5 patients. Stop Processing.

12. Check Medication Active:

- a. If the Medication Active QDM data element, BETA BLOCKER THERAPY FOR LVSD, overlaps Occurrence A of \$HFEncounters144 (Encounter Performed QDM data element, CARE SERVICES IN LONG-TERM RESIDENTIAL FACILITY, or HOME HEALTHCARE SERVICES, or NURSING FACILITY VISIT, or OFFICE VISIT, or OUTPATIENT CONSULTATION, or FACE-TO-FACE INTERACTION, or DISCHARGE SERVICES – HOSPITAL INPATIENT during measurement), equals No, proceed to Denominator Exceptions.
- b. If the Medication Active QDM data element, BETA BLOCKER THERAPY FOR LVSD, overlaps Occurrence A of \$HFEncounters144 (Encounter Performed QDM data element, CARE SERVICES IN LONG-TERM RESIDENTIAL FACILITY, or

HOME HEALTHCARE SERVICES, or NURSING FACILITY VISIT, or OFFICE VISIT, or OUTPATIENT CONSULTATION, or FACE-TO-FACE INTERACTION, or DISCHARGE SERVICES – HOSPITAL INPATIENT during measurement) equals Yes, include in Numerator Count, which is represented by Letter a in the sample calculation listed at the end of this document. Letter a equals 5 patients. Stop Processing.

13. Check Denominator Exceptions

14. Check Most Recent Occurrence B of Physical Exam Performed:

- a. If the Most Recent Occurrence B of Physical Exam Performed QDM data element, HEART RATE, starts before start of Occurrence A of Physical Exam Performed QDM data element, HEART RATE equals No, proceed to check Medication Order Not Done.
- b. If the Most Recent Occurrence B of Physical Exam Performed QDM data element, HEART RATE, starts before start of Occurrence A of Physical Exam Performed QDM data element, HEART RATE equals Yes, proceed to check Occurrence A of Physical Exam Performed.

15. Check Occurrence A Physical Exam Performed:

- a. If the Occurrence A of Physical Exam Performed QDM data element, HEART RATE (result less than 50 bpm), during Occurrence A of \$HFEncounters144 (Encounter Performed QDM data element, CARE SERVICES IN LONG-TERM RESIDENTIAL FACILITY, or HOME HEALTHCARE SERVICES, or NURSING FACILITY VISIT, or OFFICE VISIT, or OUTPATIENT CONSULTATION, or FACE-TO-FACE INTERACTION, or DISCHARGE SERVICES – HOSPITAL INPATIENT during measurement) AND Occurrence B of Physical Exam Performed QDM data element, HEART RATE (result less than 50 bpm) during Occurrence A of \$HFEncounters144 (Encounter Performed QDM data element, CARE SERVICES IN LONG-TERM RESIDENTIAL FACILITY, or HOME HEALTHCARE SERVICES, or NURSING FACILITY VISIT, or OFFICE VISIT, or OUTPATIENT CONSULTATION, or FACE-TO-FACE INTERACTION, or DISCHARGE SERVICES – HOSPITAL INPATIENT during measurement), equals No, proceed to check Medication Order Not Done.
- b. If the Occurrence A of Physical Exam Performed QDM data element, HEART RATE (result less than 50 bpm), during Occurrence A of \$HFEncounters144 (Encounter Performed QDM data element, CARE SERVICES IN LONG-TERM RESIDENTIAL FACILITY, or HOME HEALTHCARE SERVICES, or NURSING FACILITY VISIT, or OFFICE VISIT, or OUTPATIENT CONSULTATION, or FACE-TO-FACE INTERACTION, or DISCHARGE SERVICES – HOSPITAL INPATIENT during measurement) AND Occurrence B of Physical Exam Performed QDM data element, HEART RATE (result less than 50 bpm) during Occurrence A of \$HFEncounters144 (Encounter Performed QDM data element, CARE SERVICES IN LONG-TERM RESIDENTIAL FACILITY, or HOME HEALTHCARE SERVICES, or NURSING FACILITY VISIT, or OFFICE VISIT, or OUTPATIENT CONSULTATION, or FACE-TO-FACE INTERACTION, or DISCHARGE SERVICES – HOSPITAL INPATIENT during measurement), equals Yes, include in Denominator Exception Count, which is represented by Letter c¹ in the sample

calculation listed at the end of this document. Letter c¹ equals 1 patient. Stop Processing.

16. Check Medication Order Not Done:

- a. If the Medication Order Not Done QDM data element, MEDICAL REASON, or QDM data element, PATIENT REASON, or QDM data element, SYSTEM REASON, for Beta-Blocker Therapy Ingredient starts during Occurrence A of \$HFEncounters144 (Encounter Performed QDM data element, CARE SERVICES IN LONG-TERM RESIDENTIAL FACILITY, or HOME HEALTHCARE SERVICES, or NURSING FACILITY VISIT, or OFFICE VISIT, or OUTPATIENT CONSULTATION, or FACE-TO-FACE INTERACTION, or DISCHARGE SERVICES – HOSPITAL INPATIENT during measurement) equals No, proceed to Diagnosis Active.
- b. If the Medication Order Not Done QDM data element, MEDICAL REASON, or QDM data element, PATIENT REASON, or QDM data element, SYSTEM REASON, for Beta-Blocker Therapy Ingredient starts during Occurrence A of \$HFEncounters144 (Encounter Performed QDM data element, CARE SERVICES IN LONG-TERM RESIDENTIAL FACILITY, or HOME HEALTHCARE SERVICES, or NURSING FACILITY VISIT, or OFFICE VISIT, or OUTPATIENT CONSULTATION, or FACE-TO-FACE INTERACTION, or DISCHARGE SERVICES – HOSPITAL INPATIENT during measurement) equals Yes, include in Denominator Exception Count, which is represented by Letter c² in the sample calculation listed at the end of this document. Letter c² equals 1 patient. Stop Processing.

17. Check Diagnosis Active:

- a. If the Diagnosis Active QDM data element, ARRYTHMIA, or QDM data element, HYPOTENSION, or QDM data element, ASTHMA, or QDM data element, ALLERGY TO BETA BLOCKER THERAPY, or QDM data element, INTOLERANCE TO BETA BLOCKER THERAPY, or QDM data element, BRADYCARDIA, overlaps Occurrence A of \$HFEncounters144 (Encounter Performed QDM data element, CARE SERVICES IN LONG-TERM RESIDENTIAL FACILITY, or HOME HEALTHCARE SERVICES, or NURSING FACILITY VISIT, or OFFICE VISIT, or OUTPATIENT CONSULTATION, or FACE-TO-FACE INTERACTION, or DISCHARGE SERVICES – HOSPITAL INPATIENT during measurement) equals No, proceed to Medication Allergy.
- b. If the Diagnosis Active QDM data element, ARRYTHMIA, or QDM data element, HYPOTENSION, or QDM data element, ASTHMA, or QDM data element, ALLERGY TO BETA BLOCKER THERAPY, or QDM data element, INTOLERANCE TO BETA BLOCKER THERAPY, or QDM data element, BRADYCARDIA, overlaps Occurrence A of \$HFEncounters144 (Encounter Performed QDM data element, CARE SERVICES IN LONG-TERM RESIDENTIAL FACILITY, or HOME HEALTHCARE SERVICES, or NURSING FACILITY VISIT, or OFFICE VISIT, or OUTPATIENT CONSULTATION, or FACE-TO-FACE INTERACTION, or DISCHARGE SERVICES – HOSPITAL INPATIENT during measurement) equals Yes, include in Denominator Exclusion Count, which is represented by Letter c² in the sample calculation listed at the end of this document. Letter c² equals 1 patient. Stop Processing.

18. Check Medication Allergy

- a. If the Medication Allergy QDM data element, BETA BLOCKER THERAPY INGREDIENT, overlaps Occurrence A of \$HFEncounters144 (Encounter Performed QDM data element, CARE SERVICES IN LONG-TERM RESIDENTIAL FACILITY, or HOME HEALTHCARE SERVICES, or NURSING FACILITY VISIT, or OFFICE VISIT, or OUTPATIENT CONSULTATION, or FACE-TO-FACE INTERACTION, or DISCHARGE SERVICES – HOSPITAL INPATIENT during measurement) equals No, proceed to check Medication Intolerance.
- b. If the Medication Allergy QDM data element, BETA BLOCKER THERAPY INGREDIENT, overlaps Occurrence A of \$HFEncounters144 (Encounter Performed QDM data element, CARE SERVICES IN LONG-TERM RESIDENTIAL FACILITY, or HOME HEALTHCARE SERVICES, or NURSING FACILITY VISIT, or OFFICE VISIT, or OUTPATIENT CONSULTATION, or FACE-TO-FACE INTERACTION, or DISCHARGE SERVICES – HOSPITAL INPATIENT during measurement), equals Yes, include in Denominator Exception Count, which is represented by Letter c³ in the sample calculation listed at the end of this document. Letter c³ equals 0 patients. Stop Processing.

19. Check Medication Intolerance:

- a. If the Medication Intolerance QDM data element, BETA BLOCKER THERAPY, overlaps Occurrence A of \$HFEncounters144 (Encounter Performed QDM data element, CARE SERVICES IN LONG-TERM RESIDENTIAL FACILITY, or HOME HEALTHCARE SERVICES, or NURSING FACILITY VISIT, or OFFICE VISIT, or OUTPATIENT CONSULTATION, or FACE-TO-FACE INTERACTION, or DISCHARGE SERVICES – HOSPITAL INPATIENT during measurement), equals No, proceed to Diagnosis Active.
- b. If the Medication Intolerance QDM data element, BETA BLOCKER THERAPY, overlaps Occurrence A of \$HFEncounters144 ((Encounter Performed QDM data element, CARE SERVICES IN LONG-TERM RESIDENTIAL FACILITY, or HOME HEALTHCARE SERVICES, or NURSING FACILITY VISIT, or OFFICE VISIT, or OUTPATIENT CONSULTATION, or FACE-TO-FACE INTERACTION, or DISCHARGE SERVICES – HOSPITAL INPATIENT during measurement), equals Yes, include in Denominator Exception Count, which is represented by Letter c³ in the sample calculation listed at the end of this document. Letter c³ equals 0 patients. Stop Processing.

20. Check Diagnosis Active:

- a. If the Diagnosis Active QDM data element, ATRIOVENTRICULAR BLOCK, overlaps Occurrence A \$HFEncounters144 (Encounter Performed QDM data element, CARE SERVICES IN LONG-TERM RESIDENTIAL FACILITY, or HOME HEALTHCARE SERVICES, or NURSING FACILITY VISIT, or OFFICE VISIT, or OUTPATIENT CONSULTATION, or FACE-TO-FACE INTERACTION, or DISCHARGE SERVICES – HOSPITAL INPATIENT during measurement), AND NOT Diagnosis Active, QDM data element, CARDIAC PACER IN SITU, AND NOT Device Applied, QDM data element, CARDIAC PACER, starts before end of Occurrence A of \$HFEncounters144 (Encounter Performed QDM data element, CARE SERVICES IN LONG-TERM RESIDENTIAL FACILITY, or HOME HEALTHCARE SERVICES, or NURSING FACILITY VISIT, or OFFICE VISIT, or

- OUTPATIENT CONSULTATION, or FACE-TO-FACE INTERACTION, or DISCHARGE SERVICES – HOSPITAL INPATIENT during measurement) equals No, include in the No/Missing Data Submitted Count. Stop Processing.
- b. If the Diagnosis Active QDM data element, ATRIOVENTRICULAR BLOCK, overlaps Occurrence A \$HFEncounters144 (Encounter Performed QDM data element, CARE SERVICES IN LONG-TERM RESIDENTIAL FACILITY, or HOME HEALTHCARE SERVICES, or NURSING FACILITY VISIT, or OFFICE VISIT, or OUTPATIENT CONSULTATION, or FACE-TO-FACE INTERACTION, or DISCHARGE SERVICES – HOSPITAL INPATIENT during measurement), AND NOT Diagnosis Active, QDM data element, CARDIAC PACER IN SITU, AND NOT Device Applied, QDM data element, CARDIAC PACER, starts before end of Occurrence A of \$HFEncounters144 (Encounter Performed QDM data element, CARE SERVICES IN LONG-TERM RESIDENTIAL FACILITY, or HOME HEALTHCARE SERVICES, or NURSING FACILITY VISIT, or OFFICE VISIT, or OUTPATIENT CONSULTATION, or FACE-TO-FACE INTERACTION, or DISCHARGE SERVICES – HOSPITAL INPATIENT during measurement), equals Yes, include in Denominator Exception Count, which is represented by Letter c³ in the sample calculation listed at the end of this document. Letter c³ equals 0 patients. Stop Processing.

SAMPLE CALCULATION:

Performance Rate=

$$\frac{\text{Numerator (a= 5 patients/ visits)}}{\text{Denominator (b=8 patients/visits) – Denominator Exclusions (N/A) – Denominator Exceptions (c¹ + c² + c³ = 2 patients/visits)}} = 83.33\%$$