**Heart Failure Chart Review Protocol**

The purpose of this chart review is to validate the technical validity (is the logic correct) of the OHDSI cohort definition, as automatically translated from CQL. This means the chart review need only look at structured data, and confirm that the structured data present for a patient represents their inclusion or exclusion as a case. We are purposely ignoring clinical validity (do we believe the patient does/does not have heart failure) at this time. While it is important, that work will be conducted at a future date and will include a review of clinical notes.

**Sample size selection**

Prevalence in both sexes – 2.2%[[1]](#footnote-1)

|  |  |
| --- | --- |
|  |  |
| Number of patients in OHDSI database |  |
| Number of patients identified by OHDSI heart failure cohort |  |
| Number of cohort-defined potential cases selected for chart review | 25 |
| Number of patients not identified by OHDSI heart failure cohort |  |
| Number of patients with >= 1 HF diagnosis and >=1 echocardiogram (“high risk for error”) |  |
| Number of “high risk for error” potential controls selected for chart review | 25 |
| Number of patients without >=1 HF diagnosis and >=1 echocardiogram (“low risk for error”) |  |
| Number of “low risk for error” potential controls selected for chart review | 0 |

**Chart Review**

1. Is the patient currently >= 18 years of age?
   1. YES – Continue to 2
   2. NO – Flag patient as “Exclude – age”
2. Does the patient have at least one echocardiogram?
   1. YES – Continue to 3
   2. NO – Flag patient as “Exclude – no echocardiogram”
3. Find each relevant heart failure diagnosis.
   1. If there are no diagnoses, flag the patient as “Exclude – no diagnoses”. Continue to the next patient.
   2. Otherwise, for each heart failure diagnosis:
      1. Confirm there is an associated visit, using the visit ID. If not, do not count the diagnosis and move on to the next diagnosis (3b)
      2. Determine if the visit is inpatient or outpatient.
         1. If inpatient, flag patient as “Confirmed case” and continue to the next patient.
         2. If outpatient, is this the first or second outpatient diagnosis you have found:
            1. FIRST - track that the patient has one outpatient diagnosis so far, record the visit ID and date, and continue to the next heart failure diagnosis (3b).
            2. SECOND – confirm that the diagnosis is associated with a different visit than the one found in 3.b.2.a. If it is the same visit, do not count this as a second diagnosis and continue with the next diagnosis (3b). Otherwise, flag patient as “Confirmed case” and continue to the next patient.
      3. If you have finished reviewing the last diagnosis, and the patient has not qualified, please flag the patient as “Exclude – insufficient diagnoses”.

1. Table 20.1 - <https://www.ahajournals.org/doi/full/10.1161/CIR.0000000000000350?url_ver=Z39.88-2003&rfr_id=ori%3Arid%3Acrossref.org&rfr_dat=cr_pub%3Dpubmed> [↑](#footnote-ref-1)