

Heart Failure Case Law

Updated 4-22-2024

Formed 6-14-2007; Revised 4-22-24

1. If there is no evidence of exacerbation or decompensation until a fatal cardiac arrest and there are no other evidence of heart failure, then there is not sufficient evidence for a diagnosis of HDX6=A (definite decompensated HF) or HDX6=B (possible decompensated HF). If patient survives the cardiac arrest with persistent low EF, then consider B or C based on available data.

Formed 6-14-2007

2. If there is no history of symptoms or evidence from echocardiography or other imaging to suggest LV systolic or diastolic dysfunction, then there is not sufficient evidence for a classification of chronic Heart Failure (HDX6=C).
3. Assign a classification of unclassifiable (HDX6=E) if you can't decide between chronic Heart Failure (HDX6=C) and HF unlikely (HDX6=D). Do not use "unclassifiable" if you are uncertain between "definite decompensated HF" and "possible decompensated HF"; in such a case, record "possible decompensated HF" (HDX6=B).
4. In the context of an acute exacerbation of COPD with symptoms of heart failure but with no direct or clear evidence of right or left ventricular dysfunction from imaging, then classify as unclassifiable (HDX6= E).
5. When deciding between Heart Failure unlikely (HDX6=D) and unclassifiable (HDX6=E) consider the completeness or sufficiency of the evidence. If there is sufficient or substantial amount of information provided in the reports to suggest that the patient did not have heart failure, choose HF unlikely (HDX6=D). Use unclassifiable (HDX6=E) in the cases where the level or amount of documentation is simply insufficient to make a clear diagnosis (whether heart failure is present versus absent).
6. Evidence of dilated ventricle alone is not sufficient to recoded abnormal LV/RV dysfunction (HDX4).

Formed 9-21-2007

7. Use all of the data available to you which is provided by the field center, even it is seems old because it is relevant to the case/admission that you are reviewing. However, for reviewing LVEF or LV/RV/Diastolic dysfunction, prefer the documentation related to the current hospitalization rather than records that pre-date the hospitalization.
8. Do not put too much weight on one piece of evidence. For example, when the discharge summary appears inconsistent with a HF diagnosis (i.e., does not list HF as a problem/diagnosis when there was an obvious problem of heart failure based on other documents like chest x-rays or description of treatment), make sure to weigh the totality of the evidence in the chart in order to classify the case.
9. If left ventricular compliance is normal, Record HDX4c=N (No diastolic dysfunction)

10. If the event summary form indicates an ejection fraction was recorded (Event summary form section IV), but there is no supporting information provided in the materials included in the case for you to review, record Unknown for HDX5.
11. If you have multiple echocardiography reports containing ejection fraction from old admissions and current admissions, make sure to use the lowest ejection fraction from the CURRENT admission.

Formed 12-7-07

12. For patients with specific types of cardiomyopathies that are not described as heart failure (e.g., hypertrophic cardiomyopathy/IHSS), use supporting evidence to determine if that condition exists (either as a chronic stable type of heart failure or a decompensated state). If the available evidence (e.g., treatment, past history) does not confirm that this condition exists as a “heart failure” condition, and you are trying to choose among “chronic stable HF (C)”, “HF unlikely (D)”, and “unclassifiable (E)”, then choose “unclassifiable (E)”.

Formed 12-20-07; Revised 10-17-08; Revised 3-1-19

13. When deciding between C, D, and E: If the record only mentions history of HF (and no history of HF hospitalization), and there is no other information to substantiate the diagnosis, choose E (not C). However, in order to choose C, there must be no contradictory evidence AND some kind of supporting information; for example, previous hospitalization for HF, low ejection fraction, medications specifically for heart failure, or X-ray finding like cardiomegaly. The ESF can be used to provide this supporting evidence (e.g, previous HF hospitalization noted on the ESF alone), but a previous diagnosis alone or previous treatment for HF may not be sufficient. Evidence of HF treatment should come from the medical record (sole mention of treatment in the ESF is not sufficient). (This case law is a similar but an expanded version of Case Law #2.) This specificity is particularly important for cohort members. Choose E instead of ‘D’ if there’s only one mention of HF on ESF or medical records with no other supporting evidence.

Formed 3-27-08; Deleted 10-17-08

- ~~14. When there is no contradictory data, documentation of a previous HF diagnosis, HF treatment, or hospitalization for HF, is sufficient for choosing C (chronic stable HF). If the data proves to be inconsistent, the reviewer should take the totality of the evidence into account.~~

Formed 5-15-08; Revised 9-1-09 and 9-10-09 and 9-27-13

15. When patients with severe or late stage kidney disease that are not currently on dialysis and no history of clinical HF have symptoms/signs of pulmonary edema which respond to specific heart failure treatment then choose B (Possible decompensated heart failure) rather than A (Definite) because of the confounding comorbidity of renal failure. However, D (HF unlikely) should generally be chosen if the patient is on chronic dialysis and symptoms are due to inadequate dialysis with no evidence of cardiac systolic or diastolic dysfunction or history of clinical heart failure. Patients with ESRD on dialysis may be classified as B (or

possibly A) when there is appropriate supporting evidence for heart failure and the primary cause of the exacerbation is unlikely due to inadequate or missed dialysis. Patients with ESRD and low LVEF who had inadequate dialysis as the cause of volume overload may be classified as C; use the weight of the evidence to determine. Patients with CKD not on dialysis who get iatrogenic fluid overload from IV fluids with no evidence of cardiac systolic or diastolic dysfunction or history of clinical heart failure should be classified as D. The following hierarchy of supporting evidence can be used to determine the “diagnosis”:

- a. Heart Function including past or present systolic and diastolic measurements
- b. Therapy for chronic or acute heart failure
- c. Chest x-ray that shows pulmonary edema or cardiomegaly (pulmonary vascular congestion is not sufficient)
- d. Totality of evidence.

Formed 12-8-08

16. RV strain noted in the case materials is insufficient to consider it RV dysfunction unless there are further details suggesting RV dysfunction. Question 4b “Abnormal RV systolic function?” should be answered “Unknown” if only RV strain is present.

Formed 7-31-09

17. If a patient has an acute pulmonary embolus resulting in right ventricular dysfunction, but is without signs or symptoms, the patient does not have heart failure; the reviewer should choose D (heart failure unlikely).

Formed 9-1-09; Revised 4-22-24

18. Patients with obvious HF signs and symptoms secondary to arrhythmia (e.g., atrial fibrillation), severe valvular disease, cor pulmonale, or hypertensive urgency, and with no documented evidence of diastolic or systolic dysfunction, may still be classified as ‘A’ definite HF if there is clear evidence for right- or left-sided heart failure, or ‘B’ possible HF.

Formed 8-11-10; Revised 9-27-13; Revised 5-7-15; Revised 10-16-17; Revised 9-23-20; Revised 2-23-22

19. In the setting of fluid overload from too much fluid administration and absence of pathologic heart failure, choose D for question 6 rather than A or B. In case of iatrogenic fluid overload due to a procedure (e.g., post cardiac surgery, after transfusion, IV fluids, post-op fluid administration), avoid A or B if no history of HF, or if no new diagnosis of HF and no evidence of cardiac dysfunction. Don’t call it HF just because of iatrogenic fluid overload alone. If there is chronic clinical heart failure, iatrogenic fluid overload should be C when it is *expected* transient iatrogenic fluid overload (e.g., post-cardiac surgery, post-transfusion, post-IV fluid hydration, CKD) that is adequately treated by discharge.

Formed 6-7-12; Revised 10-16-17

20. A case with new LV dysfunction in the context of a new MI should be classified as at least “B-Possible decompensated HF.”

If there is pre-existing HFrEF (low LVEF) in setting of acute MI, and no signs of acute decompensated HF, and LVEF drops by only 10% or less, then choose C.

Formed 9-13-12; Revised 4-22-24

21. “B-Possible decompensated HF” should be selected for a case with new LV systolic dysfunction in the setting of symptoms related to another active cardiovascular problem that could be related to the LV dysfunction (e.g., tachyarrhythmia, **bradyarrhythmia**, MI [Case Law 20]).

Formed 9-13-12

22. LVEDP (left ventricular end-diastolic pressure) > 20 mmHg, from a cardiac catheterization report, indicates that left ventricular filling pressures are abnormally high, and can provide enough evidence to classify a case as “B-Possible decompensated HF” if there are also symptoms suggestive of HF or if HF therapy (e.g., diuretics) is augmented.

Formed 1-31-13; Revised 9-27-13

23. For those with historical HF whose EF in HFrEF or HF etiology has completely recovered, classify the case as “C-chronic stable HF” because they have had history of HF and remain at risk for recurrent HF. This includes patients with recovered EF (e.g., stress cardiomyopathy, peripartum cardiomyopathy, acute myocarditis), repaired valvular disease, etc. If no longer on medications for HF or are s/p cardiac transplant on no HF therapy, “C” is still the best classification because the goal is to capture them epidemiologically.

Formed 1-31-13; Revised 4-22-24

24. For cor pulmonale cases:

- a. There must be no evidence of LV systolic dysfunction to consider a case to be cor pulmonale
- b. If patient is described as having cor pulmonale and has clinical right-sided heart failure symptoms presently or in the past, choose RV Dysfunction (HDX # 4b) = yes.
- c. RV dysfunction must be **present** to call a case as “C”, or “A” or “B” for right-sided heart failure (see below):
 - i. Choose “C-chronic HF” if there are past HF symptoms but not current HF symptoms.
 - ii. Choose “A-definite acute HF” or “B-possible acute HF” if patient has current HF symptoms.

Formed 5-29-2014; Revised 3-1-2019

25. In cases of valvular heart disease, e.g., moderate to severe aortic stenosis, if there are symptoms and treatment of HF and no alternative explanation for these symptoms, choose at least a “B”. But if there is no evidence of HF (by history or symptoms, past or present), choose D.