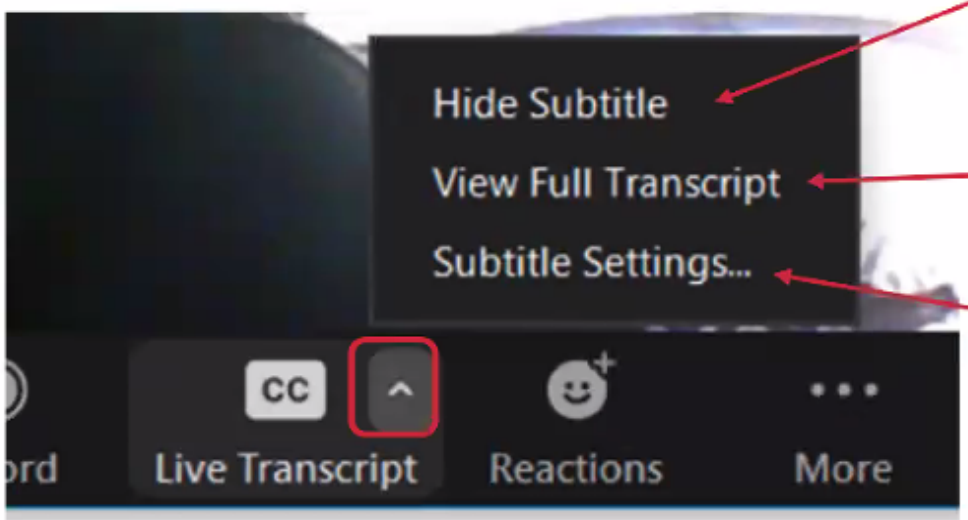
American Heart Association®
Get With The Guidelines®
Heart Failure

Get With The Guidelines® – HF: Impact of the New Heart Failure Guidelines

Presented by: Dr. Gregg C. Fonarow

Accessibility



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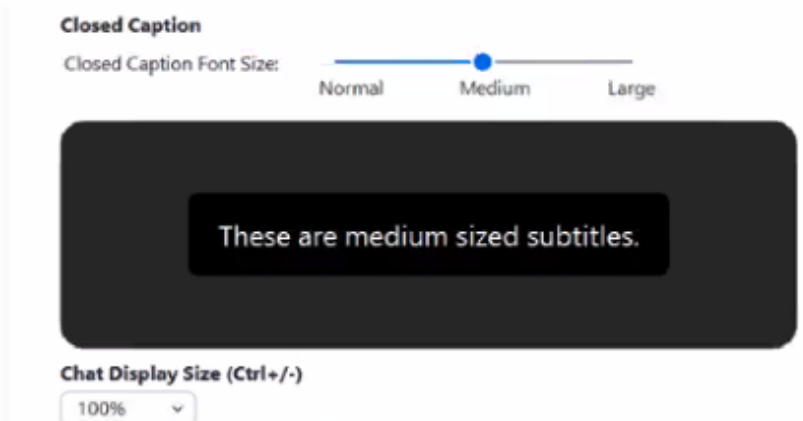

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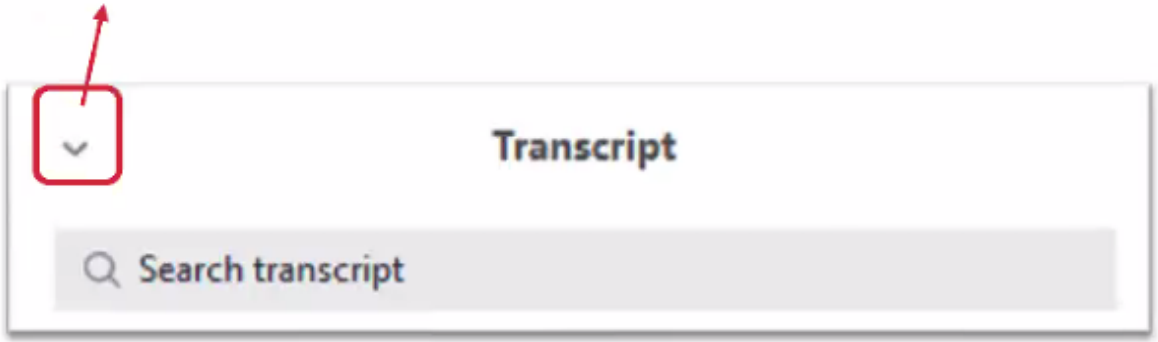
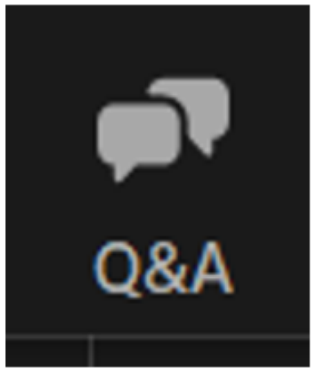
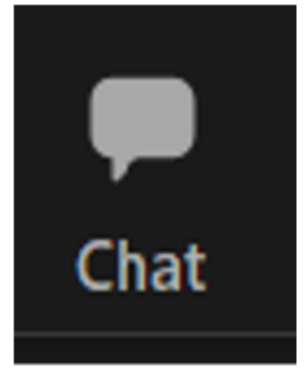




Use the Q&A button to submit questions

Questions will be answered during the Q&A session at the end of today's presentation

We will try to answer as many questions as possible in the time available



Watch for resource links

Share your
- comments
- thoughts
- reactions

A copy of today's recording will be sent to all attendees within 24 hours of this event.

There are no CE's associated with this webinar.

The Eliot Corday Professor of Cardiovascular Medicine and Science
Chief of Cardiology, UCLA Division of Cardiology (Interim)
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Gregg C. Fonarow, MD, FACC, FAHA, FHFSA

Gregg C. Fonarow, MD, FACC, FAHA, FHFSA is the Eliot Corday Professor of Cardiovascular Medicine and Science at UCLA. He serves as Chief of the UCLA Division of Cardiology (Interim), Director of the Ahmanson-UCLA Cardiomyopathy Center, and Co-Director of UCLA's Preventative Cardiology Program. He attained the rank of Professor of Medicine, Geffen School of Medicine at UCLA in 2003. His research interests center on acute and chronic heart failure, preventative cardiology, quality of care, outcomes, and implementing treatment systems to improve clinical outcomes. Dr. Fonarow has published over 1400 research studies and clinical trials in heart failure, disease management, preventative cardiology, and outcomes research. Each year 2014 to 2020, Dr. Fonarow has been selected by Clarivate for the list of Highly Cited Researchers, which identifies the world's most influential contemporary researchers across 21 scientific fields with the greatest number of published articles that received marks for exceptional impact. In 2015, Dr. Fonarow received a Clinical Research Forum Distinguished Clinical Achievement Award. In 2017, Dr. Fonarow received the AHA National Chairman's Award. In 2019, he received the Outstanding Lifetime Achievement Award from the AHA Quality of Care and Outcomes Research Council. In 2020, Dr. Fonarow became a Member of the Association of University Cardiologists. This organization was founded in 1961 and is only limited to an active membership of 135 academic cardiologists (who shape the course of research and training in cardiovascular disease) from the United States, elected by their peers. In 2022, Dr. Fonarow was the recipient of the American Heart Association's Gold Heart Award.

Disclosures

Dr. Gregg Fonarow

Abbott – Consultant
Novartis – Consultant/Speaker Bureau
Janssen – Consultant
Egnite – Consultant
Merck – Consultant
Cytokinetics – Consultant
AstraZeneca – Consultant
Urovant – Consultant

2022 AHA/ACC/HFSA Guideline for the Management of Heart Failure

Developed in partnership with the Heart Failure Society of America

Citation

This slide set is adapted from the 2022 AHA/ACC/HFSA Guideline for the Management of Heart Failure. Published online ahead of print April 1, 2022, available at: *Circulation.* https://www.ahajournals.org/doi/10.1161/CIR.0000000000001063 And Journal of the American College of Cardiology published online ahead of print April 1, 2022. *J Am Coll Cardiol.* https://www.jacc.org/doi/10.1016/j.jacc.2021.12.012

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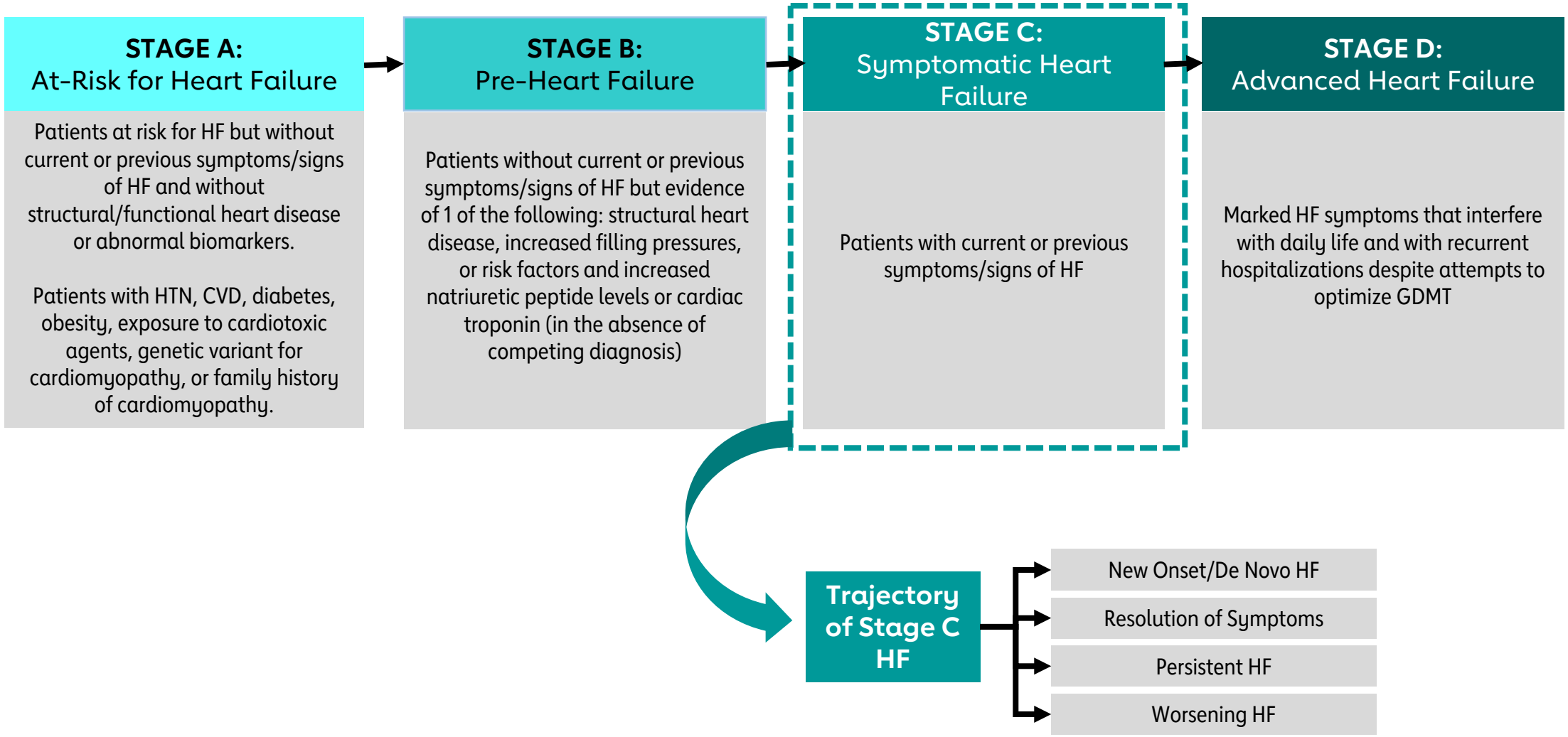
*Writing committee members are required to recuse themselves from voting on sections to which their specific relationships with industry may apply; see Appendix 1 for detailed information. † ACC/AHA Representative. ‡ ACC/AHA Joint Committee on Clinical Practice Guidelines Liaison. §Task Force Performance Measures. ‖HFSA Representative. #Former Joint Committee member; current member during the writing effort.

Nuts & Bolts of Heart Failure Care

Stages of Heart Failure

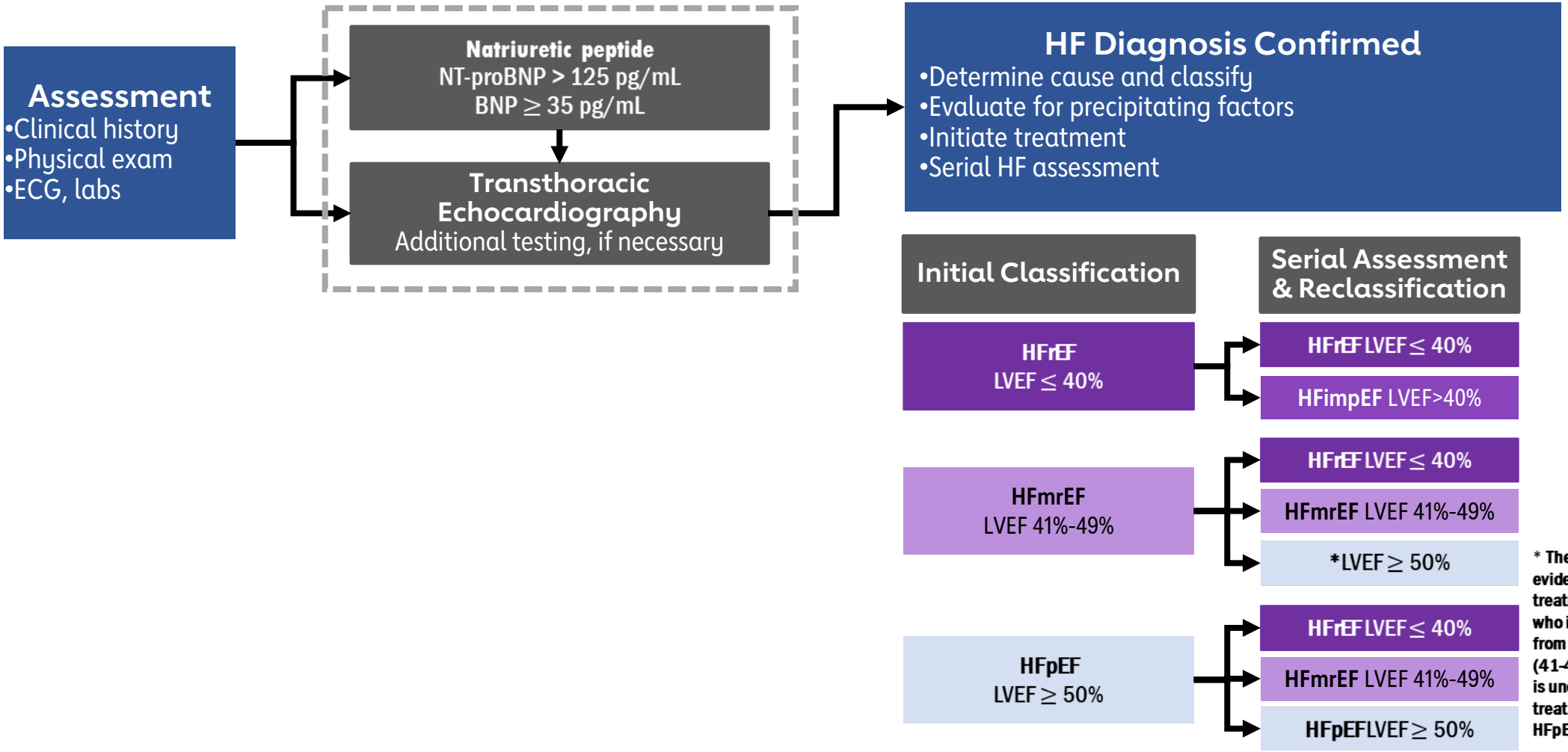


Abbreviations: CVD indicates cardiovascular disease; GDMT, guideline-directed medical therapy; HF, heart failure; HTN, hypertension; and NYHA, New York Heart Association.

American Heart Association.

Heidenreich, P. A. et al. (2022). 2022 AHA/ACC/HFSA Guideline for Heart Failure. *Circulation*.

Diagnostic Algorithm for HF and LVEF Based on HF Classification



Abbreviations: BNP indicates B-type natriuretic peptide; ECG, electrocardiogram; HF, heart failure; HFimpEF, heart failure with improved ejection fraction; HFmrEF, heart failure with mildly reduced ejection fraction; HFpEF, heart failure with preserved ejection fraction; HFrEF, heart failure with reduced ejection fraction; LV, left ventricle; LVEF, left ventricular ejection fraction; and NT-proBNP, N-terminal pro-B type natriuretic peptide.

American Heart Association.

Heidenreich, P. A. et al. (2022). 2022 AHA/ACC/HFSA Guideline for Heart Failure. *Circulation*.

Initial Evaluation of Patients with Heart Failure

History and Physical exam

Class 1 Recommendations:

- Measure vitals signs and assess for evidence of congestion
- Evaluate for the presence of advanced HF
- In patients with cardiomyopathy use a 3-generation family history to screen for inherited disease
- Use H&P to direct diagnostic strategies to uncover causes which require disease specific management
- Identify cardiac & non-cardiac diseases, lifestyle & behavioral factors, and SDOH which may cause or worsen HF

Laboratory and ECG testing

Class 1 Recommendations:

CBC, UA, serum electrolytes, serum creatinine, BUN, glucose, lipid profile, LFTs, iron studies, and TSH

12-lead ECG to optimize management

For patients presenting with HF, the specific cause of HF should be explored using additional laboratory testing for appropriate management

Abbreviations: BUN indicates blood urea nitrogen; CBC indicates complete blood count; ECG, electrocardiogram; H&P, history and physical; HF, heart failure; LFTs, liver function tests; SDOH, social determinates of health; and TSH, thyroid-stimulating hormone.

Heidenreich, P. A. et al. (2022). 2022 AHA/ACC/HFSA Guideline for Heart Failure. *Circulation*.

Initial & Serial Evaluation: Use of Biomarkers

In patients with dyspnea

COR	RECOMMENDATIONS
1	In patients presenting with dyspnea, measurement of BNP or NT-proBNP is useful to support a diagnosis or exclusion of HF.

In patients at risk for HF

COR	RECOMMENDATIONS
2a	In patients at risk of developing HF, BNP or NT-proBNP-based screening following team-based care, including a CV specialist, can be useful to prevent the development of LV dysfunction or new onset HF.

In patients hospitalized for HF

COR	RECOMMENDATIONS
1	In patients hospitalized for HF, measurements of BNP or NT-proBNP levels at admission is recommended to establish prognosis.
2a	In patients hospitalized for HF, a predischarge BNP or NT-proBNP level can be useful to inform the trajectory of the patient and establish a post-discharge prognosis.

In patients with chronic HF

COR	RECOMMENDATIONS
1	In patients with chronic HF, measurements of BNP or NT-proBNP levels are recommended for risk stratification.

REMINDER

Potential noncardiac causes of elevated natriuretic peptide levels may include advancing age, anemia, renal failure, severe pneumonia, obstructive sleep apnea, pulmonary embolism, pulmonary arterial hypertension, critical illness, bacterial sepsis, and severe burns.

Abbreviations: BNP indicates B-type natriuretic peptide; CV, cardiovascular; HF, heart failure; and NT-proBNP, N-terminal prohormone of B-type natriuretic peptide.

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Initial & Serial Evaluation:
Evaluation with Cardiac Imaging

Chest X-Ray

Class 1 Recommendation

In patients with suspected or new-onset HF, or those presenting with acute decompensated HF, a chest x-ray should be performed to assess heart size and pulmonary congestion and to detect alternative cardiac, pulmonary, and other diseases that may cause or contribute to the patient's symptoms.

TTE

Class 1 Recommendation

In patients with suspected or newly diagnosed HF, TTE should be performed during initial evaluation to assess cardiac structure and function.

Cardiac CT, CMR & SPECT/PET

Class 1 Recommendation

In patients for whom echo. is inadequate, alternative imaging (e.g., CMR, cardiac CT, radionuclide imaging) is recommended for assessment of LVEF.

In patients with HF who have had a significant clinical change, or who have received GDMT and are being considered for invasive procedures or device therapy, repeat measurement of EF, degree of structural remodeling, & valvular function are useful to inform therapeutic interventions.

Class 2a Recommendation

In patients with HF or cardiomyopathy, CMR can be useful for diagnosis or management.

Ischemia Evaluation

Class 2a Recommendation

In patients with HF, an evaluation for possible ischemic heart disease can be useful to identify the cause and guide management .

Class 2b Recommendation

In patients with HF and CAD who are candidates for coronary revascularization, noninvasive stress imaging (stress echo., single-photon emission CT [SPECT], CMR, or PET] may be considered for detection of myocardial ischemia to help guide coronary revascularization.

Class 3 No Benefit

In patients with HF in the absence of:
1) clinical status change, 2) treatment interventions that might have had a significant effect on cardiac function, or 3) candidacy for invasive procedures or device therapy, routine repeat assessment of LV function is not indicated.

Abbreviations: CAD indicates coronary artery disease; CMR, cardiac magnetic resonance; CT, computed tomography; echo, echocardiography; EF, ejection fraction; GDMT, guideline-directed medical therapy; LVEF, left ventricular ejection fraction; PET, position emission tomography; SPECT, single-photon emission CT; and TTE, transthoracic echocardiography.

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Initial & Serial Evaluation:
Invasive Evaluation of Patients with HF

Invasive Hemodynamics

COR	RECOMMENDATIONS
2a	In select patients with HF with persistent or worsening symptoms, signs, diagnostic parameters, and in whom hemodynamics are uncertain, invasive hemodynamic monitoring can be useful to guide management.
3: No Benefit	In patients with HF, routine use of invasive hemodynamic monitoring is not recommended.

Endomyocardial Biopsy

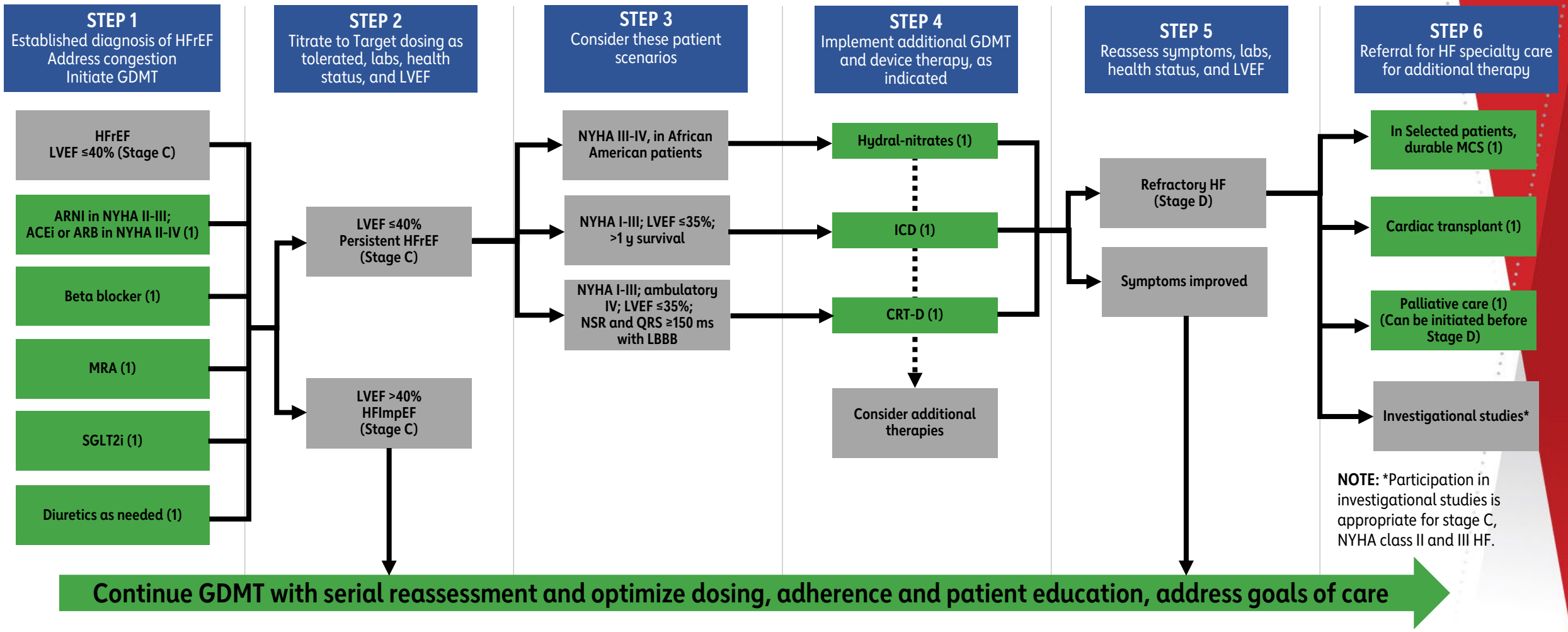
COR	RECOMMENDATIONS
2a	In patients with HF, endomyocardial biopsy may be useful when a specific diagnosis is suspected that would influence therapy.
3: Harm	For patients undergoing routine evaluation of HF, endomyocardial biopsy should not be performed because of risk of complications.

Guiding Principle: Invasive evaluations are most appropriate when they will guide management and influence therapy. Due to the risk of complications, invasive procedures should not be used for the routine evaluation of HF.

Abbreviation: HF indicates heart failure.

Heidenreich, P. A. et al. (2022). 2022 AHA/ACC/HFSA Guideline for Heart Failure. *Circulation*.

Treatment of HFrEF Stages C and D

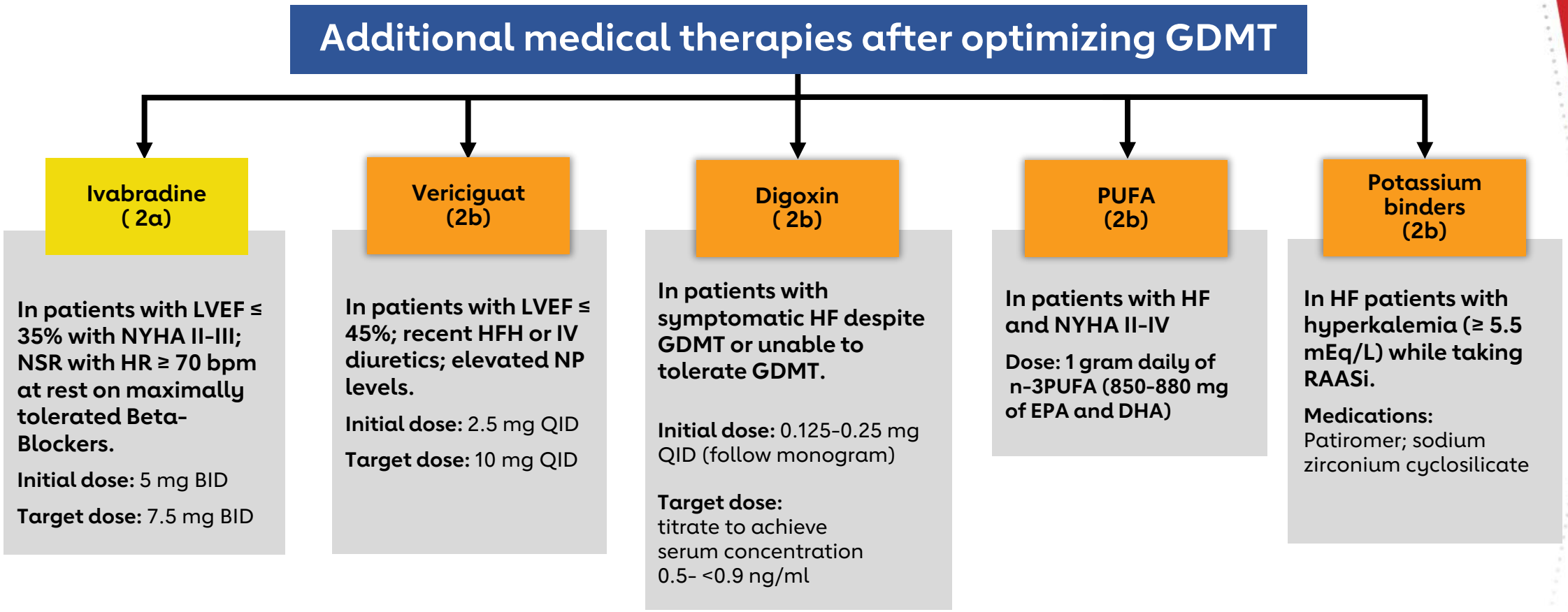


Abbreviations: ACEi indicates angiotensin-converting enzyme inhibitor; ARB, angiotensin receptor blocker; ARNi, angiotensin receptor-neprilysin inhibitor; CRT, cardiac resynchronization therapy; GDMT, guideline-directed medical therapy; HF, heart failure; HFrEF, heart failure with reduced ejection fraction; hydral-nitrates, hydralazine and isosorbide dinitrate; ICD, implantable cardioverter-defibrillator; LBBB, left bundle branch block; LVEF, left ventricular ejection fraction; MCS, mechanical circulatory support; MRA, mineralocorticoid receptor antagonist; NSR, normal sinus rhythm; NYHA, New York Heart Association; SCD, sudden cardiac death; and SGLT2i, sodium-glucose cotransporter 2 inhibitor.

American Heart Association.

Heidenreich, P. A. et al. (2022). 2022 AHA/ACC/HFSA Guideline for Heart Failure. *Circulation*.

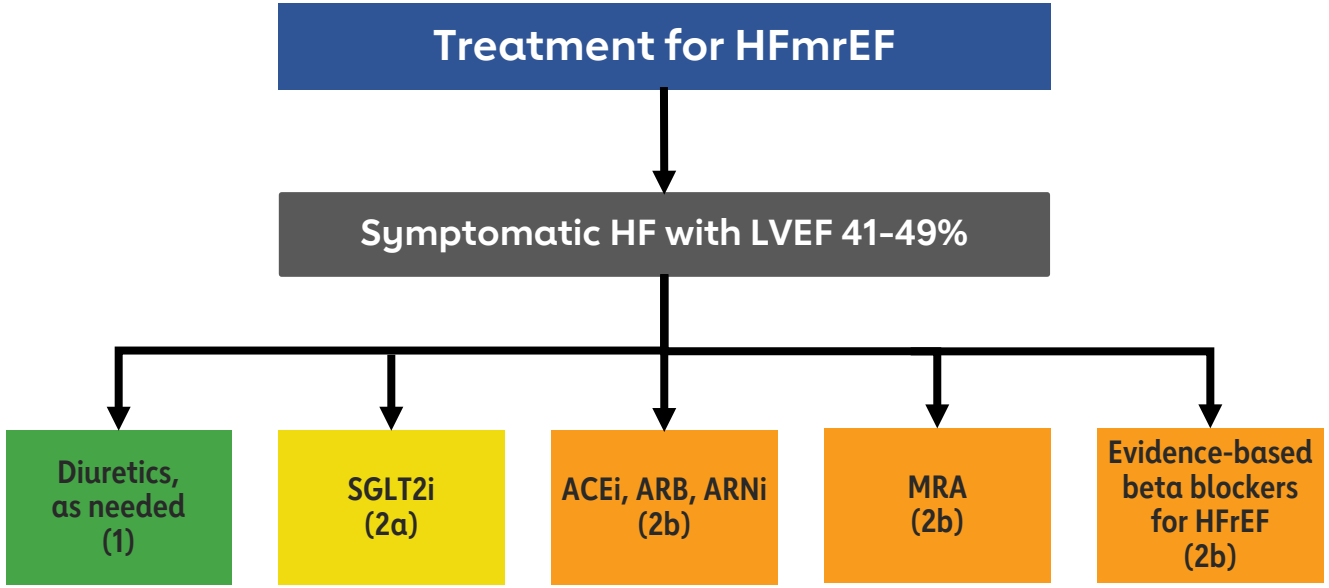
Additional Medical Therapies after GDMT Optimization



Abbreviations: DHA indicates docosaexaenoic acid; EPA, eicosapentaenoic acid; GDMT, guideline-directed medical therapy; HF, heart failure; HFH, heart failure hospitalization; HR, heart rate; IV, intravenous; LVEF, left ventricular ejection fraction; NP, natriuretic peptide; NSR, normal sinus rhythm; NYHA, New York Heart Association; PUFA, polyunsaturated fatty acid; and RAASi, renin-angiotensin-aldosterone system inhibitors.

Heidenreich, P. A. et al. (2022). 2022 AHA/ACC/HFSA Guideline for Heart Failure. *Circulation*.

Recommendations for Patients with Mildly Reduced LVEF



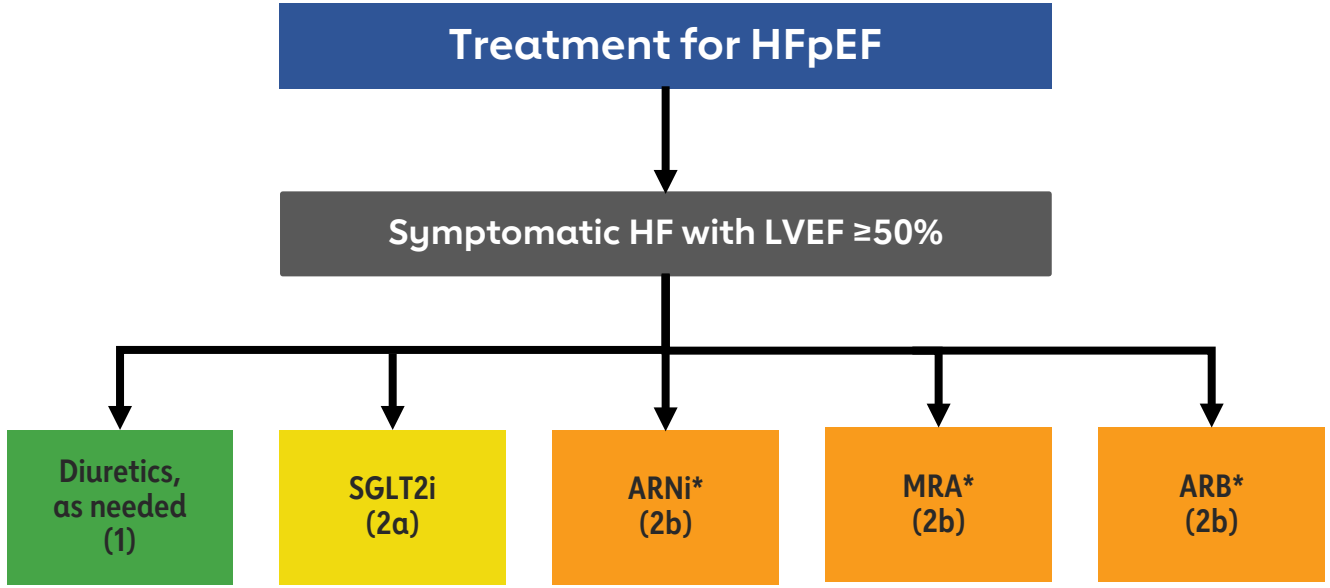
Patients With HFimpEF

COR	RECOMMENDATIONS
1	1. In patients with HFimpEF after treatment, GDMT should be continued to prevent relapse of HF and LV dysfunction, even in patients who may become asymptomatic. (1)

Abbreviations: ARB indicates angiotensin receptor blocker; ARNi, angiotensin receptor-neprilysin inhibitor; HF, heart failure; HFpEF, heart failure with preserved ejection fraction; LV, left ventricle; LVEF, left ventricular ejection fraction; MRA, mineralocorticoid receptor antagonist; and SGLT2i, sodium-glucose cotransporter-2 inhibitor.

Heidenreich, P. A. et al. (2022). 2022 AHA/ACC/HFSA Guideline for Heart Failure. *Circulation*.

Recommendations for Patients with Preserved LVEF



NOTE: *Greater benefit in patients with LVEF closer to 50%

Abbreviations: ACEi indicates angiotensin-converting enzyme inhibitor; ARB, angiotensin receptor blocker; ARNi, angiotensin receptor-neprilysin inhibitor; HFimpEF, heart failure with improved ejection fraction; HFmrEF, heart failure with mildly reduced ejection fraction; HFrEF, heart failure with reduced ejection fraction; LVEF, left ventricular ejection fraction; MRA, mineralocorticoid receptor antagonist; and SGLT2i, sodium- glucose cotransporter 2 inhibitor.

Heidenreich, P. A. et al. (2022). 2022 AHA/ACC/HFSA Guideline for Heart Failure. *Circulation*.

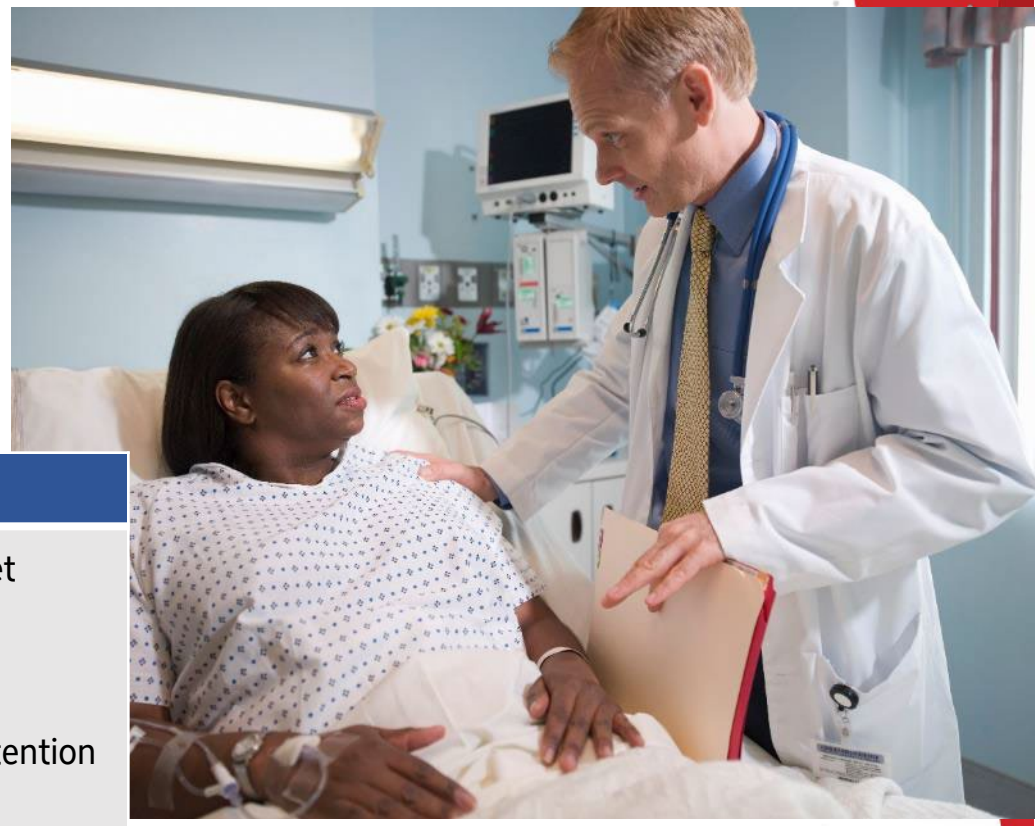
Assessment of Patients Hospitalized With Decompensated HF

Evaluation

COR	RECOMMENDATIONS
1	Address precipitating factors
1	Evaluate severity of congestion
1	Assess adequacy of perfusion

Goals for GDMT

COR	RECOMMENDATIONS
1	Optimize volume status
1	Address reversible factors
1	Continue or initiate GDMT



COMMON FACTORS PRECIPITATING HF HOSPITALIZATION

- Acute coronary syndrome
- Uncontrolled hypertension
- Atrial fibrillation and arrhythmias
- Additional cardiac disease
- Acute infections
- Non-adherence to medications or diet
- Anemia
- Hypo-/Hyperthyroidism
- Medications that increase sodium retention
- Medications with negative inotrope

Abbreviation: GDMT indicates guideline-directed medical therapy.

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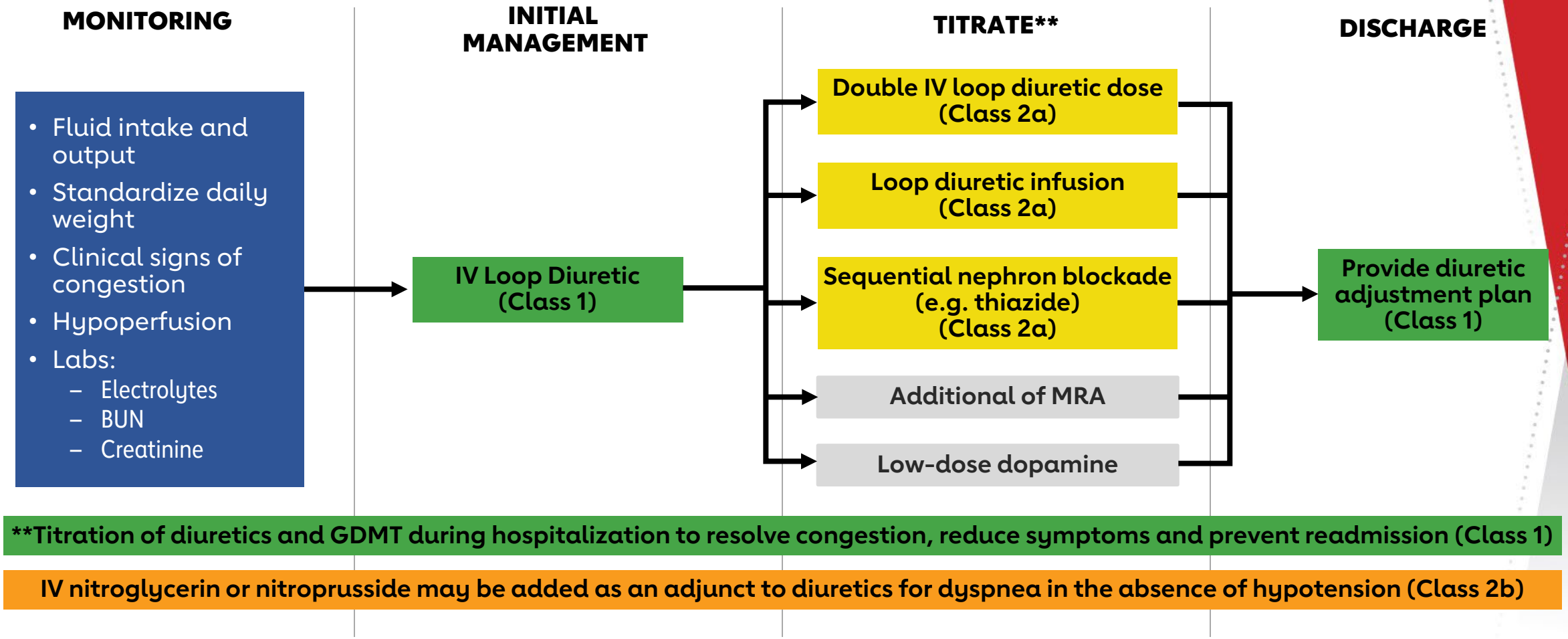
Decongestion Strategy



Abbreviations: BUN indicates blood urea nitrogen; GDMT, guideline-directed medical therapy IV, intravenous; and MRA; mineralocorticoid.

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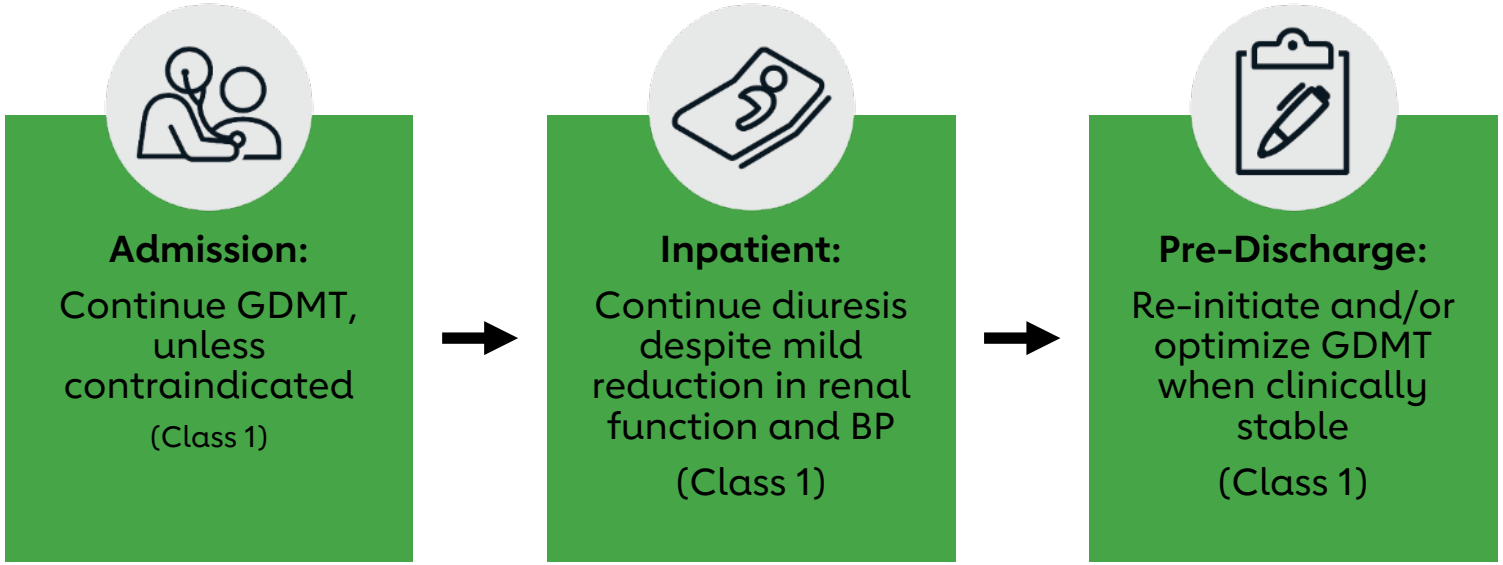
Heidenreich, P. A. et al. (2022). 2022 AHA/ACC/HFSA Guideline for Heart Failure. *Circulation*.

GDMT During Hospitalization

Oral GDMT should be continued, initiated, and optimized during admission, as doing so is associated with lower post-discharge death and readmission.



Abbreviations: ACEi indicates angiotensin-converting enzyme inhibitor; ARNi, angiotensin receptor-neprilysin inhibitor; AV, atrioventricular; BP, blood pressure; GDMT, guideline-directed medical therapy; and VTE, venous thromboembolism.

COR	LOE	Recommendations
1	A	In patients with HFrEF and NYHA class II to III symptoms, the use of **ARNi** is recommended to reduce morbidity and mortality
1	A	In patients with HFrEF, with current or previous symptoms, use of 1 of the 3 **beta blockers** proven to reduce mortality is recommended to reduce mortality and hospitalizations
1	A	In patients with HFrEF and NYHA class II to IV symptoms, an **MRA** is recommended to reduce morbidity and mortality, if eGFR >30 mL/min/ 1.73 m2 and serum potassium is <5.0 mEq/L
1	A	In patients with symptomatic chronic HFrEF, **SGLT2i** are recommended to reduce hospitalization for HF and cardiovascular mortality, irrespective of the presence of type 2 diabetes

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Transitions of Care

A transition of care plan should be communicated prior to discharge (1)

This should include…

1. Early follow-up, ideally within 7 days (Class 2a)
2. Referrals to multidisciplinary HF management programs (Class 1)
3. Participation in benchmarking programs to improve GDMT and quality of care (Class 2a)
4. Addressing precipitating causes and high-risk factors (e.g. co-morbidities and SDOH)
5. Adjusting diuretics
6. Coordination of safety laboratory checks

Abbreviations: GDMT indicates goal-directed medical therapies; HF, heart failure; and SDOH, social determinates of health.

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Value Statements for GDMT for HFrEF

Take Home Point: An important aspect of HF care, Class 1 recommended medical therapies for HFrEF have very high value (low cost).

In patients:

With previous or current symptoms of chronic HFrEF, in whom ARNi is not feasible, tx with ACEi or ARB provides high economic value.
Value Statement: High Value (A)

With chronic symptomatic HFrEF, tx with an ARNi instead of an ACEi provides high economic value.
Value Statement: High Value (A)

With HFrEF and NYHA class II to IV symptoms, MRA therapy provides high economic value.
Value Statement: High Value (A)

With HFrEF, with current or previous symptoms, beta-blocker therapy provides high economic value.
Value Statement: High Value (A)

With symptomatic chronic HFrEF, SGLT2i therapy provides intermediate economic value.
Value Statement: Intermediate Value (A)

Self-identified as African American with NYHA class III to IV HFrEF who are receiving optimal medical therapy with ACEi or ARB, beta blockers, and MRA, the combination of hydralazine and isosorbide dinitrate provides high economic value.
Value Statement: High Value (B-NR)

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Abbreviations: ACEi indicates angiotensin-converting enzyme inhibitor; ARB, angiotensin receptor blocker; ARNi, angiotensin receptor-neprilysin inhibitor; HFrEF, heart failure with reduced ejection fraction; MRA, mineralocorticoid receptor antagonist; SGLT2i, NR, non-randomized; sodium-glucose cotransporter 2 inhibitor; and tx, treatment.

Heidenreich, P. A. et al. (2022). 2022 AHA/ACC/HFSA Guideline for Heart Failure. *Circulation*.

GWTG-HF Award Measures and IRP Updates

Presented by Cherie Boxberger

American Heart Association.

Impacts to 2023 GWTG-HF Awards

- How will this impact my hospitals award for 2023?
  - Hospitals will have the option to use the either the new or the old measure for Awards
    - Only 18 Hospitals used AHAHF5 for a Plus Award in 2022.
    - Only 66 Hospitals used AHAHF7 for a Plus Award in 2022.
- No Achievement Measures were added, removed, or changed with this update.
- Quality and Reporting Measures will be added and adjusted in the Winter 2022/23 release.
- Previous Quality Measures will be moved to Reporting in Late Q2 2023.

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Heidenreich, P. A. et al. (2022). 2022 AHA/ACC/HFSA Guideline for Heart Failure. *Circulation*.

GWTG-HF Award And Measure Updates

Quality Measure Changes and Updates

- New DOAC at Discharge measure for HF AF patients.- Winter 2022/23 Release
- Elevate AHAHF94: SGLT-2 Inhibitor at Discharge for Patients with HFpEF/ HFmrEF from Reporting to Quality.- Winter 2022/23 Release
- New Measure for MRA at Discharge for Patients with HFrEF (Will Replace AHAHF5- Aldosterone Antagonist at Discharge)- Winter 2022/23 Release
- Move AHAHF5 - Aldosterone Antagonist at Discharge" to Reporting and relabel to show for discharges prior to 4/1/2022. AHAHF5 will remain in Quality Measure Group until Q2 2023 and will be eligible for Quality Award for 2023 Recognition (22 Data)- Post April 2023
- AHAHF92: Quadruple Medication Therapy at Discharge for Patients with HFrEF will be moved from Quality to a Reporting Measure – Winter 2022/23 Release
- New AHAHF106: Defect Free Care for Quadruple Medication Therapy at Discharge for Patients with HFrEF has been added to the Quality Measure Bundle. -Currently Implemented

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GWTG-HF Award And Measure Updates

- Reporting and Descriptive Measure Updates
  - Reporting Measure Updates
    - Update the measure title of AHAHF20- "Aldosterone Antagonist at Discharge for HFpEf" to "Mineralocorticoid Receptor Antagonist at Discharge for HFmrEF/HFpEF" and update the LVEF to > 40 (currently > = 45)- Winter 2022/23
    - Add ARB at Discharge for HFmrEF/HFpEF and ARNI at Discharge for HFmrEF/HFpEF measures- Winter 2022/23
    - AHAHF-108- Overall Quadruple Therapy Medication for Patients with HFrEF at Discharge Composite Score- Currently Implemented
  - Descriptive Measure Updates
    - LOS Measure Added to HF Limited Sites- Currently Implemented

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Live Demonstration of New Quadruple Therapy Composite and Defect Free Measure

Presented by Olivia Larkins

American Heart Association.

Questions

Thank You