Going PRO With The Guidelines

Complete the Circle Connecting Patient and Provider and Therapy

- Recommendation for eliciting patient-reported outcomes as part of serial clinical assessment
- Information to providers (and patients) about expected benefits of recommended therapies
- Shared decision-making guided by patient values

Patients vs. Physicians Perception of Orthopnea in HF Clinic

Motiwala, Castro, Lewis et al, HFSA 2017
Mismatch Between Physician NYHA Assessment and Patient Report of Limitations

Physician Designation On Clinic Note - Same Day

Patients Rate Their Limitations on Questionnaires

Patient-Reported Limitations to Quality of Life With HF Are Often Not Due to HF

726 Ambulatory HF patients
Attribute major limitation of QOL
To:

Heart Failure Less Likely to Limit
OR: HFpEF 0.48
Female: 0.68
Depression history: 0.86
Arthritis: 0.67

E. Joyce…..EF Lewis
JACC HF 2016;4: 184-93
Current Recommendation for Serial Evaluation

**6. Initial and Serial Evaluation of the HF Patient**

**6.1. Clinical Evaluation**

6.1.1. History and Physical Examination: Recommendations

**CLASS II**

1. A thorough history and physical examination should be obtained/performed in patients presenting with HF to identify cardiac and noncardiac disorders or behaviors that might cause or accelerate the development or progression of HF.

   (Level of Evidence: C)

2. In patients with idiopathic DCM, a 3-generational family history should be obtained to aid in establishing the diagnosis of familial dilated cardiomyopathy.

   (Level of Evidence: B)

3. Vital signs and vital signs should be assessed at each patient encounter. This includes serial assessment of weight, as well as estimates of jugular venous pressure and the presence of peripheral edema or orthopedic.

   (Level of Evidence: B)

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- Recommendation for eliciting patient-reported outcomes as part of serial clinical assessment
- **Information to providers (and patients)** about expected benefits of recommended therapies
- Shared decision-making guided by patient values
### ACC/AHA Guidelines: Only One Level I For Symptoms

<table>
<thead>
<tr>
<th>Therapy</th>
<th>Decrease Mortality</th>
<th>Decrease Morbidity (excluding hospitalizations)</th>
<th>Improve Quality of Life or Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACEI/ARB</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Beta blockers</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>MRA</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Sacubitril/valsartan</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Hydral/Isordil</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Diuretics</td>
<td>✓ by decreasing SD</td>
<td></td>
<td>Improve symptoms</td>
</tr>
<tr>
<td>ICD</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRT &quot;is indicated&quot;</td>
<td>No reason given</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Digoxin IIa</td>
<td>✓</td>
<td></td>
<td>Improve functional capacity, exercise, HF-related QoL, mortality</td>
</tr>
<tr>
<td>Exercise Training IIa</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Level of Evidence C**

Weight of RCT evidence is inversely related to magnitude and immediacy of symptom improvement.

---

### European HF Guidelines

<table>
<thead>
<tr>
<th>Therapy</th>
<th>Decrease Mortality</th>
<th>Decrease Morbidity (usually hospitalizations)</th>
<th>Improve Quality of Life or Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACEI/ARB</td>
<td>✓</td>
<td></td>
<td>Improve symptoms</td>
</tr>
<tr>
<td>Beta blockers</td>
<td>✓</td>
<td></td>
<td>Improve symptoms</td>
</tr>
<tr>
<td>MRA for pts who remain sx</td>
<td>✓</td>
<td></td>
<td>Improve symptoms</td>
</tr>
<tr>
<td>Hydral/Isordil IIa</td>
<td>✓</td>
<td></td>
<td>Improve symptoms</td>
</tr>
<tr>
<td>ARNI</td>
<td>✓</td>
<td></td>
<td>Improve symptoms</td>
</tr>
<tr>
<td>Diuretics</td>
<td>✓ by decreasing SD</td>
<td></td>
<td>Improve symptoms</td>
</tr>
<tr>
<td>ICD</td>
<td>✓</td>
<td></td>
<td>Improve symptoms</td>
</tr>
<tr>
<td>CRT</td>
<td>✓</td>
<td></td>
<td>Improve symptoms</td>
</tr>
</tbody>
</table>

**Canadian Guidelines 2017 Update**

### 33. We recommend that an ARNI be used in place of an ACEI orARB, in patients with HFrEF, who remain symptomatic despite treatment with appropriate doses of GDMT to decrease cardiovascular death, HF hospitalizations, and symptoms (Strong Recommendation, High-Quality Evidence).

Values and preferences. This recommendation places high value on medications proven to decrease mortality, HF rehospitalization, and symptoms. It also considers the health economic implications of new medications.
How High Is The Bar
To Include Significant Symptom Improvement?

Magnitude and Certainty of Benefit

For Rx with proven benefit to decrease Hosps and/or Death

For Rx with benefit for physiologic endpoint, e.g. LV size, MR
No signal of harm

As primary basis for approval of Rx without other solid endpoints, No signal of harm

As primary indication for Rx with Serious known risks that patients may be willing to take

ACC/AHA Practice Guideline

ACC/AHA Statement on Cost/Value Methodology in Clinical Practice Guidelines and Performance Measures


Writing Committee:
Jeffrey L. Anderson, MD, FACC, FAPA, Co-Chair;
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Table 2: Proposed Integration of Level of Value Into Clinical Guideline Recommendations

<table>
<thead>
<tr>
<th>Level of Value</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>High value: better outcomes at lower cost or $250/1000 per GYAL gained</td>
<td></td>
</tr>
<tr>
<td>Intermediate value: $40/1000 to $150/1000 per GYAL gained</td>
<td></td>
</tr>
<tr>
<td>Low value: $250/1000 per GYAL gained</td>
<td></td>
</tr>
</tbody>
</table>

In exceptional cases... the designation “high-resource utilization” may be preferred.

AHA Scientific Statement

Cardiovascular Health: The Importance of Measuring Patient-Reported Health Status

A Scientific Statement From the American Heart Association

John S. Rumsfeld, MD, PhD, FAHA; Chair; Karen P. Alexander, MD, FAHA, Vice Chair;
David C. Goff, Jr., MD, PhD, FAHA; Michelle M. Guhah, MD, P. Michael Ho, MD, PhD, FAHA;
Frederic A. Masoudi, MD, MPH, FAHA; Debra K. Moser, DNSc, RN, FAHA;
Véronique L. Roger, MD, MPH, FAHA; Mark S. Slaughter, MD, FAHA; Kim G. Smolenek, PhD;
John A. Spertus, MD, MPH, FAHA; Mark D. Sullivan, MD, PhD;
Diane Treut-Jacobson, PhD, RN, FAHA; Julie J. Zerwick, PhD, RN, FAHA; on behalf of the American Heart Association Council on Quality of Care and Outcomes Research, Council on Cardiovascular and Stroke Nursing, Council on Epidemiology and Prevention, Council on Peripheral Vascular Disease, and Stroke Council

11/9/2018
AHA/ACC Guideline Recommended Rx “Indicated For”

<table>
<thead>
<tr>
<th>Therapy</th>
<th>Decrease Mortality</th>
<th>Decrease Morbidity (=Hosps)</th>
<th>Improve Quality of Life or Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACEI/ARB</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Beta blockers</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>MRA</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Sacubitril/valsartan</td>
<td>“further decrease” ✓</td>
<td>“further decrease” ✓</td>
<td>Less decrease?</td>
</tr>
<tr>
<td>Hydral/lsordil</td>
<td>✓</td>
<td>✓</td>
<td>could include QOL</td>
</tr>
<tr>
<td>Diuretics</td>
<td></td>
<td>could include hosps</td>
<td>Improve symptoms</td>
</tr>
<tr>
<td>ICD</td>
<td>✓ by decreasing SD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRT “is indicated”</td>
<td>No reason given</td>
<td></td>
<td>Could include QOL and exercise</td>
</tr>
<tr>
<td>Exercise Training IIa</td>
<td></td>
<td>✓</td>
<td>Improve fn capacity, exercise, HF-related QOL,</td>
</tr>
</tbody>
</table>

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Complete the Circle Connecting Patient and Provider and Therapy

- Recommendation for eliciting patient-reported outcomes as part of serial clinical assessment
- Information to providers (and patients) about expected benefits of recommended therapies
- Shared decision-making guided by patient values
  - When can quality of life and freedom from side effects be allowed to override predicted impact on survival?
What Endpoint Near the End?
Survival Time Adjusted for Patient-Valued Days after HF Hospitalization

• Patient-valued days were 24 + 32% fewer than calendar days of survival (integrated using time trade-off instrument administered 5 times in 6 mos).

• 6% of patients surviving ≥ 6 months would have traded most of their survival to feel better for whatever time they had left.

• Death was most likely in patients who valued their survival the least.

• 31% of patients surviving < 105 days reported that they would trade most of their survival to feel better for whatever time they had.

*Changing preferences for survival after hospitalization with advanced HF (ESCAPE Substudy)*

*J Am Coll Cardiol 2008; 52: 1702-8.*