FR24- Managing Heart Failure Patients in Skilled Nursing Facilities: Addressing the Complex Cardiovascular Disease, and Knowing When and how to Incorporate Palliative Care (AGS/AMDA Joint Session)

Friday, March 23
3:30 PM- 5:00 PM

Session Description
This session will provide attendees with an in-depth understanding of the issues affecting the care of patients with heart failure in skilled nursing facilities (SNFs). It is intended to provide attendees with expert insight into improving quality of care provided to this complex subset of patients. The speakers will review the clinical factors contributing to poor outcomes among these patients, provide insight into optimizing the medical management, and developing algorithms of care for these patients within their goals of care and expected discharge status, and discuss the indications, importance, and emerging use of palliative care and hospice consultation to patients with advanced/end stage heart failure.

Learning Objectives
- Describe the SNF patient with CVD as a distinct high-risk patient with significantly increased morbidity, mortality, and risk for hospital readmission, and the importance of providing high quality care to these patients in the current regulatory environment.
- Discuss principles of cardiovascular disease management within the context of multimorbidity and goal directed patient care in the skilled nursing facility setting.
- Explain the need and methods for developing algorithms of care for complex heart failure patients in the SNF setting to improve patient outcomes, quality, and value of care.
- Discuss the importance of utilizing palliative care in patients with advanced heart failure in the SNF setting.
- Review the principles guiding patient selection for palliative care consultation, and medical management for refractory symptoms related to cardiovascular disease.

Presenter(s): Verna Sellers, MD, MPH, CMD (Moderator); Rebecca Boxer, MD; Nicole Orr, MD; Keith Swetz, MD, MA, HMDC

Presenter(s) Disclosures: All speakers have reported they have no relevant financial relationships to disclose.
Managing Heart Failure Patients in Skilled Nursing Facilities: Addressing the Complex Cardiovascular Disease, and Knowing When and how to Incorporate Palliative Care (AGS/AMDA Joint Session) - Sellers

Managing Heart Failure Patients in Skilled Nursing Facilities
Addressing the Complex Cardiovascular Disease and Knowing When and How to Incorporate Palliative Care

Learning Objectives
By the end of the session, participants will be able to:
1. Understand the SNF patient with CVD as a distinct high-risk patient and the importance of providing high quality care to these patients in the current regulatory environment.
2. Utilize the principles of cardiovascular disease management within the context of multimorbidity and goal directed patient care in the SNF
3. Develop algorithms of care for complex heart failure patients in the SNF
4. Know when and how to utilizing palliative care in patients with advanced heart failure in the SNF setting.

SNF Top 5 Potentially Avoidable Re-hospitalizations Diagnoses
- Congestive Heart Failure
- Respiratory Infection
- Urinary Tract Infection
- Sepsis
- Electrolyte Imbalance

Protecting Access to Medicare Act of 2014 (PAMA)
- Part of the 2014 law that addressed the Medicare Sustainable Growth Rate formula – “doc fix”
- SNF’s will share the responsibility with hospitals for 30-day readmissions
- Provisions for hospital readmission penalties for skilled nursing facilities starting 2018
  - Section 215 – SNF 2% reduction reimbursement CMS
  - Recoup the portion demonstrating an acceptable risk-adjusted readmission ratio and nationally benchmarked rate

Quality, Affordable Healthcare for All Americans
- Health insurance coverage, Federal & State exchanges
- The Role of Public Programs
  - Medicaid Expansion
- Improving the Quality & Efficiency of Health care
  - Value-based purchasing, Physician Quality Reporting Initiative, CMS Innovation Center – ACOs, Bundled Payments, Readmission Penalties
- Prevention of Chronic Disease & Improving Public Health
  - Creates Intra-agency Council w/ Specific Funding, School-based Health Clinics, Improved Access for Preventive Care
- Healthcare Workforce
  - Creates Workforce Commission, State Grants for Workforce Development, RN/MD Student Loan Enhancements
- Transparency & Integrity Program
  - Fraud & Abuse Improving Access to Innovative Medical Therapies
  - Biologics changes and Enhanced 340B Drug Pricing
- Community Living Assistance Services & Supports
  - Establishes an Affordable Federal Long-term Care Insurance Plan
- Revenue Provisions
  - Cadillac Health Plan Tax, New Industry-specific Federal Fees (Ex: New Taxes on Medical Devices & Exemptions)
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SNF Value-Based Payments (Readmissions)

- Measure: Skilled Nursing Facility 30-Day All-Cause Readmission Measure (SNFRM) (NQF #2510)
- Estimates risk-standardized rate of all-cause, unplanned, hospital readmissions for SNF Medicare Beneficiaries within 30 days of their prior proximal short-stay acute hospital discharge
- Data submission: Claims based data
- Effective October 1, 2018 – Payments begin 2019
- All SNFs will see 2% withhold. Top 60% will “earn back” 50-70%. Bottom 40% will get no payment.

What are the Potential SNF Plays?

- Understand your own 30-90 day readmission history
- Meet with your health system(s) to understand their readmission issues
- Consider co-developing clinical pathways with both referring health systems and quality home care providers
- Expand your scope of knowledge beyond SNF discharge
- Consider opening a second front door

CHF in PACE Population

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>CHF</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td># patients (n)</td>
<td>191</td>
<td>100</td>
<td>52%</td>
</tr>
<tr>
<td>ED utilization (n)</td>
<td>66</td>
<td>41</td>
<td>67%</td>
</tr>
<tr>
<td># hospitalizations</td>
<td>27</td>
<td>17</td>
<td>63%</td>
</tr>
<tr>
<td>Hospital days</td>
<td>106</td>
<td>71</td>
<td>66%</td>
</tr>
<tr>
<td>30 Readmissions</td>
<td>4</td>
<td>3</td>
<td>75%</td>
</tr>
<tr>
<td>Readmit rate 1000 patient days</td>
<td>14.8</td>
<td>17.6%</td>
<td></td>
</tr>
</tbody>
</table>
Managing Heart Failure Patients in Skilled Nursing Facilities: Addressing the Complex Cardiovascular Disease, and Knowing When and how to Incorporate Palliative Care (AGS/AMDA Joint Session)

Understanding the Scope of the Problem of Heart Disease in Skilled Nursing Facilities - Boxer

Statistics in heart failure

- 6 million Americans are living with heart failure (HF)
- Projections show the prevalence of HF will increase to over 8 million Americans (1 in every 33) by 2030
- Approximately 825,000 new HF cases are diagnosed annually
- Mortality rates are high, 50% of Americans diagnosed with HF will die within 5 years
- Americans age 65 and older are hospitalized for HF more than any other medical condition
- The total direct and indirect costs associated with HF are projected to increase to $70 billion in 2030

Median Age for Hospitalized HF = 77 years

AHA Policy Statement

Forecasting the Impact of Heart Failure in the United States

A Policy Statement From the American Heart Association

Paul A. Heidenreich, MD, MS, FAMA, Chair; Nancy M. Albert, PhD, RN, FAHA;

<table>
<thead>
<tr>
<th>Year</th>
<th>All</th>
<th>18-44</th>
<th>45-64</th>
<th>65-74+</th>
<th>75+</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>5,813,252</td>
<td>396,578</td>
<td>1,907,141</td>
<td>2,192,233</td>
<td>1,717,316</td>
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<tr>
<td>2015</td>
<td>6,190,636</td>
<td>402,626</td>
<td>1,949,689</td>
<td>2,483,853</td>
<td>1,854,158</td>
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<tr>
<td>2020</td>
<td>6,859,625</td>
<td>417,600</td>
<td>1,974,585</td>
<td>3,004,002</td>
<td>2,163,436</td>
</tr>
<tr>
<td>2025</td>
<td>7,444,074</td>
<td>434,535</td>
<td>1,968,652</td>
<td>3,526,347</td>
<td>2,713,940</td>
</tr>
<tr>
<td>2030</td>
<td>8,401,426</td>
<td>450,675</td>
<td>2,009,896</td>
<td>3,987,729</td>
<td>3,180,209</td>
</tr>
</tbody>
</table>

* The number of adults living with HF increased from 5.7 million (2009-2012) to 6.5 million (2011-2014)

Comorbid Conditions of Patients with HF at Admission to a SNF stratified by HF Type

Risk Factors for Admission among Elderly Patients with Newly Diagnosed HF

N = 758
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Implications?
Patients discharged to SNF after HF hospitalization face substantial risk
1. >50% dead in 1 year → hospice for some?
2. Frequent readmission → SNF alone not enough for transitional care?
3. Poor SNF outcomes → investigate quality?
4. Highly impaired patient population

Context for Transitional Care: Acute Care Episode

Timing of Readmissions

Association of the Hospital Readmissions Reduction Program Implementation With Readmission and Mortality Outcomes in HF
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Understanding the Scope of the Problem of Heart Disease in Skilled Nursing Facilities - Boxer

Heart Failure Management in Skilled Nursing Facilities
A Scientific Statement From the American Heart Association and the Heart Failure Society of America
Corrine Y. Jurgens, PhD, RN, FAHA, Chair; Sarah Goodlin, MD, Co-Chair; Mary Dolansky, PhD, RN, Co-Chair; Ali Ahmed, MD, MPH, FAHA; Gregg C. Fonarow, MD, FAHA; Rebecca Boxer, MD, Ross Arena, PhD, PT, FAHA; Lenore Blank, NP; Harleah G. Buck, PhD, RN, CHPN; Kerry Cramer, MD; Jerome L. Fleg, MD, FAHA; Rachel J. Lampert, MD, Terry A. Lennie, PhD, RN, FAHA; JoAnn Lindenfeld, MD, FAHA; Francina L. Palta, MD, MPH, FAHA; Todd P. Semla, MS, PharmD, BCPS; Patricia Trebbien, MS, RD, LMNT; Michael W. Rich, MD, FAHA; on behalf of the American Heart Association Council on Quality of Care and Outcomes Research and the Heart Failure Society of America

A RCT of HF Disease Management vs. Usual Care: What we know so far:

<table>
<thead>
<tr>
<th>Description Statistics</th>
<th>N=715</th>
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<tbody>
<tr>
<td>Age &lt;80 353 (49%)</td>
<td></td>
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<tr>
<td>≥ 80 362 (51%)</td>
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<tr>
<td>Sex Women 415 (58%)</td>
<td></td>
</tr>
<tr>
<td>Race Black 70 (10%)</td>
<td></td>
</tr>
<tr>
<td>Asian/Other 8 (0.1%)</td>
<td></td>
</tr>
<tr>
<td>Heart Failure Type Preserved (EF &gt;40%) 485 (68%)</td>
<td></td>
</tr>
<tr>
<td>NYHA Class I/II 432 (61%)</td>
<td></td>
</tr>
<tr>
<td>III/IV 267 (39%)</td>
<td></td>
</tr>
<tr>
<td>Ischemic Disease 427 (60%)</td>
<td></td>
</tr>
<tr>
<td>Hypertension 630 (88%)</td>
<td></td>
</tr>
<tr>
<td>Diabetes 304 (43%)</td>
<td></td>
</tr>
<tr>
<td>Chronic Kidney Disease (CKD) 294 (41%)</td>
<td></td>
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<tr>
<td>Pulmonary Disease 412 (58%)</td>
<td></td>
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<tr>
<td>Depression 290 (41%)</td>
<td></td>
</tr>
<tr>
<td>Osteoporosis 183 (26%)</td>
<td></td>
</tr>
<tr>
<td>History of Falls 446 (62%)</td>
<td></td>
</tr>
<tr>
<td>Unsteady/Poor Balance 565 (79%)</td>
<td></td>
</tr>
<tr>
<td>Problems with Urine 539 (75%)</td>
<td></td>
</tr>
<tr>
<td>Diarrhea 496 (70%)</td>
<td></td>
</tr>
<tr>
<td>Incontinence 209 (29%)</td>
<td></td>
</tr>
</tbody>
</table>

Boxer et. al. unpublished data

System Improvement vs. Day to Day Management
- Identifying how we fail (opportunities)
- Finding solutions to those failures
- Large program initiatives vs. smaller tailored approach
- One-size fits all is not going to work

Day to Day Operations
Which patients have HF?
Which staff have to know a patient has HF?
What does the staff need to know?
What does the staff do for a patient with HF?

Care Paths
- Does one exist for HF in the facility?
- Are the staff (more than the DON) aware of the care path?
- Is the care path adequate to identify patients decompensating from HF?
- Has the care path been operationalized?
- Do staff follow the care path?
- Do the staff recognize and communicate changes in condition?
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Understanding the Scope of the Problem of Heart Disease in Skilled Nursing Facilities - Boxer

<table>
<thead>
<tr>
<th>Treatment</th>
<th>65-74 (n = 7,076)</th>
<th>75-84 (n = 13,957)</th>
<th>≥85 (n = 14,051)</th>
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</thead>
<tbody>
<tr>
<td>Standard pharmacotherapy (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACEI/ARB</td>
<td>57.5</td>
<td>56.1</td>
<td>54.8</td>
</tr>
<tr>
<td>ACEI</td>
<td>46.2</td>
<td>45.0</td>
<td>43.0</td>
</tr>
<tr>
<td>ARB</td>
<td>13.7</td>
<td>15.8</td>
<td>15.9</td>
</tr>
<tr>
<td>EBBB</td>
<td>54.0</td>
<td>53.8</td>
<td>49.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>95.2</td>
<td>95.6</td>
<td>95.4</td>
</tr>
<tr>
<td>Other concomitant medications for HF (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aldosterone receptor antagonist</td>
<td>10.1</td>
<td>13.8</td>
<td>14.9</td>
</tr>
<tr>
<td>Nitrates</td>
<td>19.3</td>
<td>24.3</td>
<td>24.5</td>
</tr>
<tr>
<td>Hydralazine</td>
<td>11.0</td>
<td>8.8</td>
<td>6.5</td>
</tr>
<tr>
<td>Digoxin</td>
<td>20.1</td>
<td>22.0</td>
<td>20.7</td>
</tr>
<tr>
<td>Diuretics</td>
<td>70.7</td>
<td>76.0</td>
<td>76.1</td>
</tr>
<tr>
<td>Loop diuretics</td>
<td>70.0</td>
<td>73.4</td>
<td>76.5</td>
</tr>
<tr>
<td>Thiazide</td>
<td>14.1</td>
<td>12.6</td>
<td>11.2</td>
</tr>
<tr>
<td>Anticoagulants</td>
<td>10.0</td>
<td>35.4</td>
<td>28.8</td>
</tr>
<tr>
<td>Statins</td>
<td>50.0</td>
<td>57.8</td>
<td>46.7</td>
</tr>
<tr>
<td>Non-evidence-based β-blockers</td>
<td>26.4</td>
<td>28.4</td>
<td>30.2</td>
</tr>
</tbody>
</table>

Why are Patients with HF returning to the Hospital?

| Reason for 30-Day Hospitalization (%) | N (%)
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HF/Volume overload</strong></td>
<td>74 (10.3)</td>
</tr>
<tr>
<td><strong>Infection/Respiratory</strong></td>
<td>54 (10.9)</td>
</tr>
<tr>
<td><strong>Arrhythmia</strong></td>
<td>52 (10.2)</td>
</tr>
<tr>
<td><strong>Fall/fracture</strong></td>
<td>36 (7.7)</td>
</tr>
<tr>
<td><strong>Bleeding/Thrombosis</strong></td>
<td>36 (6.8)</td>
</tr>
<tr>
<td><strong>Cardiac arrest/ventricular fibrillation</strong></td>
<td>25 (5)</td>
</tr>
<tr>
<td><strong>Kidney failure</strong></td>
<td>18 (3.6)</td>
</tr>
<tr>
<td><strong>Pain</strong></td>
<td>13 (2.6)</td>
</tr>
<tr>
<td><strong>Dizziness</strong></td>
<td>10 (2)</td>
</tr>
<tr>
<td><strong>Pressure ulcer/wound</strong></td>
<td>10 (2)</td>
</tr>
<tr>
<td><strong>Other/multiple</strong></td>
<td>96 (19.4)</td>
</tr>
<tr>
<td><strong>Unknown</strong></td>
<td>8 (1.6)</td>
</tr>
</tbody>
</table>

Evidence and Strategies

Evidence-based Checklist of Interventions to Enhance HF Outcomes for SNF Residents

- Identify all patients with HF at admission.
- Document HF severity (NYHA class) and ejection fraction (EF).
- Collaborate with patient’s cardiologist and primary care provider.
- Review goals of care and advance care plans, if applicable.
- Following bayesian approach to HF management.
- Use loop diuretics as first-line treatment for HF.
- Use spironolactone as second-line treatment for HF.
- Use β-blockers as first-line treatment for HF.
- Use non-selective β-blockers as second-line treatment for HF.
- Use aldosterone receptor antagonists as third-line treatment for HF.
- Use angiotensin receptor blockers as fourth-line treatment for HF.
- Use diuretics as fifth-line treatment for HF.
- Use systematic review of the literature on HF interventions.
- Use quality improvement tools to monitor HF outcomes.
- Use patient education, including self-care.
- Use evidence-based guidelines for HF management.

Boxer unpublished data
Managing Heart Failure Patients in Skilled Nursing Facilities: Addressing the Complex Cardiovascular Disease, and Knowing When and how to Incorporate Palliative Care (AGS/AMDA Joint Session)

Breaking Down Management of Heart Disease in SNFs; Developing Algorithms for Heart Failure Care Delivery in the Post-Acute Care Setting - Orr

Speaker Disclosures

Dr. Orr has no financial relationship(s).

…..This is not just another talk on Heart Failure Management

Learning Objectives

By the end of the session, participants will be able to:

- Consider a unique paradigm for assessing and managing patients with heart failure in SNFs.
- Understand the principles of HF management within the context of the patients' goals of care in PAC.
- Understand the applicability of guideline directed medical therapy within the context of co-morbidities and aging.

Background – Post-Acute Cardiology Care, LLC

- Independent consulting practice for SNFs with expressed focus on improving care for high risk cardiac (heart failure) patients; or developing CHF programs
- 14 SNFs
- 3 states
- Weekly bedside rounds, program development
- In-servicing staff

Factors Associated with Outcomes

Patient Factors
- Selection bias: age, frailty, multiple co-morbidities, Geriatric Syndromes, possible lack of GDMT
- Readiness for discharge, Expectations of rehabilitation - ?

Facility Factors
- Complexity of patients vs. staffing ratio, education/services available
- Standardized readmission policies, facility capabilities

Lack of disease management programs

Systems Factors
- Hospital factors (discharge disposition, med reconciliation, attention to geriatric clinical factors)
- Transitions - discharge planning/summaries, provider to provider communication
- Logistics of meeting specified follow up appointments

Orr et al, Curr Geriatrics Report 2015
Orr et al, Journal of Cardiac Failure 2016

Background – Post-Acute Cardiology Care, LLC

- Source of referrals:
  - MDs, APRNs, rehabilitation staff, unit supervisors, DON, admissions, discharging hospitalists, hospital case management/social work
- Questions:
  - Medical Rounds
  - Facility Level
  - Corporate consultation
  - Hospital SNF network
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**Patient Centered Heart Failure Care**

Consider the type of SNF HF patient and their goals of care

- **“Rehabilitation Group”**
  - Includes patients recently discharged from the hospital with the goal to recover independent function and return to their prior residence after several weeks of skilled care.

- **“Uncertain Prognosis Group”**
  - Patients (discharged) from the hospital with complications, frailty, or multiple comorbidities, with hope of improvement, but recovery is less certain. These individuals go to a post-acute skilled unit in the SNF, but their final disposition to home or a higher level of care depends on how well they recover with skilled care.

- **Long Term Care Residents**
  - “SNF residents with frailty and dependency who are expected to remain in a SNF until death.”

- **Mr. J** - 68 yo new ICM severe LV dysfunction discharged to SNF after index hospitalization.

- **Mr. R** - Frail 88 yo with HFpEF and multiple comorbidities repeatedly presents to SNF after multiple hospitalizations for SOB.

- **Mrs. S** - 94 yo chronic LTC resident, with stable HFpEF, “slowing down.”

**Patient Centered Heart Failure Care**

- “Rehabilitation Group”—specified time allotted until D/C.
  - May need more rapid achievement of euvolemia.
  - Or, can’t tolerate robust therapies initiated during hospitalization during rehabilitation due fatigue, orthostasis that limits their exercise capacity.

- **“Uncertain Prognosis Group”**
  - “Full Court Press” – weekly assessments, multi-disciplinary approach, address co-morbidities, detailed review of medical therapies in consideration of functional goals.

- **Long Term Care Residents**
  - Symptom control, QOL, deprescribing.
  - HF management vs. functional improvement vs. prevention.

**Resources**

- Clinical Practice Guidelines
  - AGS/AMDA: Heart Failure in the Post-Acute and Long-Term Care Setting 2008
  - 2013 AHA/ACCF Guideline for the Management of Heart Failure

- Scientific Statement
  - AGS/AMDA Heart Failure Management in Skilled Nursing Facilities 2015

- Review Articles
  - Orr WH, Forman. DK. Gambassi G. Heart Failure Among Older Adults in Skilled Nursing Facilities: More of a Dilemma Than Maye. Nurs Res. 2013
  - Jung M, Wh A. Preventing Heart Failure and Skilled Nursing Facility. Review of the literature. / Card Fail 2012;8(4-7)
  - Discussions about goals of care for patients with heart failure: Can we make it “Heart Failure Ready”? / Card Fail 2015
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Breaking Down Management of Heart Disease in SNFs; Developing Algorithms for Heart Failure Care Delivery in the Post-Acute Care Setting - Orr

### Treatment of HFpEF

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>LOE</th>
<th>CER</th>
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<tbody>
<tr>
<td>Systolic and diastolic blood pressure should be controlled according to published clinical practice guidelines</td>
<td>I</td>
<td>B</td>
</tr>
<tr>
<td>Diuretics should be used for relief of symptoms due to volume overload</td>
<td>I</td>
<td>C</td>
</tr>
<tr>
<td>Coronary revascularization for patients with CAD in whom angina or demonstrable myocardial ischemia is present despite GDMT</td>
<td>IIa</td>
<td>C</td>
</tr>
<tr>
<td>Management of AF according to published clinical practice guidelines for HFpEF to improve symptomatic HF</td>
<td>IIa</td>
<td>C</td>
</tr>
<tr>
<td>Use of beta-blocking agents, ACE inhibitors, and ARBs for hypertension in HFpEF</td>
<td>III</td>
<td>B</td>
</tr>
<tr>
<td>ARBs might be considered to decrease hospitalizations in HFpEF</td>
<td>III</td>
<td>B</td>
</tr>
<tr>
<td>Nutritional supplementation is not recommended in HFpEF</td>
<td>III</td>
<td>C</td>
</tr>
</tbody>
</table>

### Bedside Approach – The basics

1. **What am I being asked to do? For whom? By whom?**
   - **What is the discharge intention?**
     - **Treat an active condition?**
     - **Prevent a readmission?**
     - **Improve functionality to facilitate rehab participation/community discharge?**
     - **Establish care** for a patient with heart disease?
     - **Pre-Discharge Planning**

### Initial Assessment

2. **Understand the Severity of Illness**
   - Stable vs. Unstable – is the patient still recovering from acute decompensation?
   - Will SNF treatment be to maintain or advance therapies

3. **Incorporating Goals of Care**
   - Symptom management vs. functional improvement vs. prevention
   - **STR vs. LTC vs. Unknown ("Bridge to (discharge) Decision")**

### CASE

- 71 yo female with HFpEF, COPD, AFIB, SSS s/p PPM, obesity hypoventilation syndrome, s/p 6 day inpatient stay for dyspnea.
- Hospital course: Slight suggestion of CHF by lab and radiographic data. Developed AKI after 2 doses IV furosemide 40 mg. Diuretics held, discharged on 40 mg oral furosemide daily to SNF level care for restorative rehab.
- Medications: Furosemide 40 mg daily, Carvedilol 6.25 mg BID, aspirin 81 mg, Coumadin 2.5 mg, pravastatin 20 mg.
- Had been started on CHF protocol.
- CC – CHF/SOB

### CC: SOB not responding to increasing furosemide

- She described a “wiped out feeling with exertion,” not clearly dyspnea.
- On examination was obese but appeared euvoicmic.
- BP 106/60s, HR 60s.
- Patient seen during rehabilitation session later the same day, looked slightly pale and “wiped out” with walking/leg raises.
- Hemodynamic data showed her HR never went above 60 despite increasing demands of exercise.
- Patient was beta blocked and paced.
- Beta blocker decreased, rate responsiveness adjusted.
- Required additional 7 days only.
Managing Heart Failure Patients in Skilled Nursing Facilities: Addressing the Complex Cardiovascular Disease, and Knowing When and how to Incorporate Palliative Care (AGS/AMDA Joint Session)

Breaking Down Management of Heart Disease in SNFs; Developing Algorithms for Heart Failure Care Delivery in the Post-Acute Care Setting - Orr

TAKE HOME POINT

• SEE THE PATIENT DURING REHAB!

• Further diuresis would have caused AKI, worsening hypotension, fatigue.

• Don’t assume all shortness of breath is heart failure in heart failure patients. They have competing illnesses.

Initial Assessment – all patients

• Background data – EF, EKG, # admissions, diuretic requirements
• Symptom at hospital presentation vs. Chief complaint
• Baseline and current HR, BP, O2 Sat
• Baseline and current NA, K, BUN, Creatinine, Hg/Hct
• Volume status*
  ▪ If physical exam findings are confounded by co-morbidities, track down prior healthy weight and/or assess how much they diuresed in hospital

Short Term Rehab patients with anticipated discharge to community

Short Term Rehab Group – what I do?

• Daily weights before breakfast, after am void
• Call for > 2 lb weight gain overnight or > 4 lb 1 week
• BID vitals x fist 5 days,
• Baseline EKG
• BMP in 1 week (from last BMP), +/- BNP, digoxin level
• See the patient during exercise or get rehab hemodynamic data
• Do they have systolic dysfunction?

Patient Centered Application of Guidelines

• “Rehabilitation patients in whom recovery and discharge to home are anticipated and those with uncertain goals should receive guideline-based care”
  - AHA/HFSA: Heart Failure Management in Skilled Nursing Facilities 2015

• While the benefits of ACE/ARB and BB therapy on improvements in mortality and clinical status are seen early on, this needs to be considered in the context of the need to regain physical function/patient’s goals of care in the 2-4 weeks after an acute hospital stay, if the patient is not tolerating therapies and is otherwise stable.

Jurgens et al, Circ Heart Fail. 2015;8:555-567
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**Develop an individualized care plan and define treatment goals**

**Example Patient: Post ADHF, Stage C, NYHA Class 2-4**

**CLEARLY DEFINE GOALS of CARE**
- Further relieve congestion and HF symptoms
- Optimizing Physical Performance
- Improve Quality of Life
- Medication Management
- Prevent exacerbation/acute events
- Reduce hospitalizations and emergency room visits
- Profiling life, or integrate palliative care/end-of-life care

**CLEARLY DEFINE CARE PLAN**
- Assignment – is staff qualified for assessing patient
- Vitals signs – Determine Frequency
- Lab – changes in function, cognition, congestion symptoms
- Serum chemistries, including magnesium
- PT/OT
- Careful handoff between shift changes, MD and NP, and weekend plans

**Difference between short and long term care**

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**Patient Centered Care - “Uncertain Prognosis Group”**

- “Full Court Press”
  - Weekly assessments
  - Multi-disciplinary approach
  - Address co-morbidities
  - Detailed review of medical therapies in consideration of functional goals
  - These patients may need out-of-facility specialty consultation

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**Readmission due to Different Diagnosis of Index Admission**

Krumholz NEDM 2013

Post-Hospital Syndrome – An Acquired, Transient Condition of Generalized Risk

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**Patient Centered Care – Long Term Care Residents**

“SNF residents with frailty and dependency who are expected to remain in a SNF until death.”

- Aim to optimize or at least maintain functionality
- Reduce pain, anxiety, symptoms related to cardiac disease
- Emphasis on appropriate deprescribing
- Regular assessments of goals of care, code status

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**Patient Centered Care - “Uncertain Prognosis Group”**

- Treatment of HF in the context of multiple co-morbidities – examples:
  - Dietary modifications if (CHF) limits diuretics
  - Smaller more frequent, staggered dosing of antihypertensives if orthostatic
  - Aggressive use of postural modifications for deconditioning/orthostasis
  - Adjusting beta blockade therapies for bronchospasm, poor glucose control
  - Consider holding preventive therapies if concern for interactions/polypharmacy

- Multidisciplinary care coordination
  - Pharmacy – can assist w/ deprescribing, dietary – can assist w/ patient centered diets, activities coordinator – can assist with socialization, increasing mobility, selective referral to medical subspecialists
  - Aggressive monitoring and proactive treatment of CHF triggers (sepsis/PNA/COPD)
  - Meticulous, slow-going medication changes
  - Check vitals and labs more frequently

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**Uncertain Group – What I Do?**

Daily weights before breakfast, after am void
- Caliper > 3 lb weight gain overnight or > 1 lb 1 week

BID vitals x fist 5 days, orthostatic x 3 days

Baseline EKG, BMP in 1 week, BMP

Review medications for polypharmacy

Do they have systolic dysfunction?

See the patient during exercise or get rehab hemodynamic data

What are their most limiting co-morbidities

What has driven their prior hospital admissions

- Arrange for appropriate subspecialty follow up within 1-2 weeks
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**Quick and Dirty Pearls**

- **Diuretics:**
  - No mortality benefit, may increase mortality in long term use

- **ACE/ARB:**
  - Decrease mortality by mediating pump failure, improve QOL by reducing symptoms and enhancing exercise tolerance, may be beneficial for patients age 65-80 yo and in patients with Stage III CKD (GFR 30-59 ml/min/1.73m²)
  - Monitor for volume depletion and electrolyte disturbances, hypotension can occur within hours, hyperkalemia within a few days

- **Beta Blockers:**
  - Improve survival by reducing sudden cardiac death and death attributable to pump failure, reduce hospitalizations for HF exacerbation, reduce arrhythmia risk can increase LVF
  - Side effects include fatigue, diminished exercise tolerance, bradycardia or increased diuresis

**The Future: Development of the “Subspecialized” SNF?**

- “Heart Failure Ready” SNFs may be able to focus resources on HF disease management and acquisition of adequate staffing and training programs

**Subspecialized SNFs may streamline care and systems to improve function within a greater CSHF network**

**Conclusion**

- HF management in SNFs is nuanced, detail oriented and requires close monitoring from all staffing levels.
- Treatment must be tailored to the individual patient’s unique clinical status and goals of care
- Prevention via close monitoring is a sound use of resources
- Much more data is needed on how to improve outcomes

**Post – Acute Cardiology**

- Cardiovascular consultation in alignment with geriatric principles
- Selective tailored approach to managing cardiovascular disease in the context of the post acute rehab goals, their aging and frailty and their co-morbidities
- Understanding the facilities and systems within which the patient resides and structuring care appropriately within those limitations

**Thank You**

Nicole M. Orr, MD FACC
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Challenges with Heart Failure Approaching End-of-Life - Swetz

Learning Objectives

• Explain the emerging models for end-of-life care and, in diseases with uncertain prognosis, like advanced heart disease, what a palliative care approach might look like.

• Describe the role of palliative care in symptom management and explore treatment strategies for the end-stage cardiac patient, with focus on approaching implantable cardiac devices at the end of life.

The Burden of HF in the US

• CHF burden
  • 5 million patients
  • 550,000 new cases/year
  • $30 billion
• Most symptomatic
  • 10-15% of the CHF population
  • Account for 60% cost
  • Majority of 57,000 deaths/year

Symptoms in end-stage CHF

• Retrospective English data from 1990
• 675 pts dying from heart disease
• Symptoms noted as very distressing
  • Pain (50%)
  • Dyspnea (43%)
  • Low mood (59%)
  • Anxiety (45%)

Hospitalizations and survival

Symptom Burden in CHF Patients

• Dyspnea
• Cough
• Refractory ascites
• Recurrent pleural effusions
• Nausea/vomiting
• Pain
• Fatigue/tiredness
• Sleep issues
• Depression

• For PAH Patient add:
  – Flushing
  – Site related issues
  – Neuropathic/jaw pain
  – Diarrhea
  – Other medication related side effects
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Palliative Care & Hospice

Recognizing the “non-linear” nature of life

It goes beyond “what is your code status”...

Establishing the Goals of Care

- Is CURE attainable/reasonable?
- What TREATMENTS are available, and what are the associated risks and benefits?
- If cure is not attainable, what are the palliative measures that may be available?
- How will treatment or non-treatment impact QOL?
- Moral Framework for Goals of Care
  - Efficacy, benefits, and burdens (Pelligrino 2000)
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Patient-centered Outcomes: Determining the Goals of Care

- Be cured
- Live longer
- Improve or maintain function/QOL/independence
- Be comfortable
- Achieve life goals
- Provide support for family caregivers
- Other or all equally important

Approaches to Advance Care Planning: Triggers

- Treatment options
  - "TAVR" or "do nothing"
- Code status or resuscitation preference
  - "Do you want us to do everything..."
- Goals of care
- Disease progression or recurrence
- Transition from predominantly cardiac therapy to symptom-directed therapy
  - "Giving up" vs. "Reprioritizing Goals"

So Make it a Normative Process

"Every so often, I think it is important to take stock of how your heart failure is affecting your quality of life and make sure we are all on the same page."

"I have a conversation with all my patients about some topics that can be difficult to discuss. That includes talking to people about how they want to live and how they want to die."

Not all conversations are the same...
So with each patient....

- Assess understanding
- Utilize this information to determine if further dialogue is needed.
- If more discussion is needed, consider the best methods for this patient (who needs to be present, is a care conference warranted, what further narrative can you gather?)

Language of information sharing

- Be honest, including about uncertainty
- Tell the bad and the good, you can keep it optimistic without making false promises
- Avoid:
  - Therapy is ‘failing’
  - ‘candidate’ (i.e. you are, or are not, a candidate for...)
  - False hope/false promises of certain success
  - ‘we will make you better’

Outpatient Palliative Care and HF...recs for “Supportive Care Program” referral

- Stage C or D heart failure (symptomatic heart failure)
- Declining functional status (NYHA Class III/IV)
- You’re thinking, “I wouldn’t be surprised if she died in the next year”
- Loss of appetite, weight loss, physical wasting
- 2 or more hospitalizations for heart failure exacerbations in past year
- Patient is refusing medical/surgical treatments
Other reasons for referral and ways we can help:
- Assist in clarifying goals of care, decision making
- Pain/symptom control
- Improve communication among patient, family, providers
- Psychosocial/spiritual needs
- Receipt/request for excessive or burdensome medical interventions
- Patient declining/dying and this is difficult to acknowledge
- Severe suffering
- Request for hastened death/suicidal statements

NHPCO General Medical Guidelines for Determining Prognosis in Noncancer Disease

- The Patient Should Meet All of the Following Criteria
  1. The patient’s condition is life-limiting, and the patient and/or his family knows this.
  2. The patient and/or his family have elected treatment goals consistent with those of asymptomatic or moderate cases of the same condition.
  3. The patient has either of the following:
     A. Documented clinical progression of the disease, which may include:
        1. Progression of the primary disease process as defined in the disease-specific criteria, as documented by medical history, physical examination, laboratory, radiologic, or other studies.
        2. Multiple emergency department visits or inpatient hospitalizations over the prior 6 months.
        3. Frequent hospitalizations or outpatient clinic visits for heart failure symptoms, or frequent emergency department visits for heart failure symptoms.
        4. For patients who do not qualify under 1, 2, or 3, a score of 10 in functional status should be documented. Clinical judgment is required.
     B. Documented recent impaired nutritional status (limited to the terminal phase):
        1. Unintentional, progressive weight loss of more than 10% over the prior 6 months.
        2. Serum albumin < 2.5 g/dl may be a helpful prognostic indicator but should not be used in isolation from other factors above.

Hospice Admission Criteria for CHF or End Stage Cardiac Disease

1) Already optimally treated for heart disease, or are patients who are either not candidates for surgical procedures or who decline those procedures.
2) Patients with congestive heart failure or angina should meet the criteria for the New York Heart Association Class IV (Class IV patients with heart disease have an inability to carry on any physical activity without discomfort. Symptoms of heart failure or of the anginal syndrome may be present even at rest. If any physical activity is undertaken, discomfort is increased. EF <20%
3) Concurrent medical problems: arrhythmia, cardiac arrest, syncope, cardioembolic stroke, HIV

Symptom Control Case Discussions

As Time Permits
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Challenges with Heart Failure Approaching End-of-Life - Swetz

**Case 1**

- A 70 year old with advanced heart failure (Stage D) has severe back pain due to spinal stenosis. Dyspnea is significant as well and the patient must rest with limited exertion. You want to treat the patient but are worried about potential side effects due to the patient’s fragile state.
- Labs: Na 122, K 5.3, BUN 66, Cr 2.0
- Meds: furosemide, carvedilol, lisinopril, metolazone (M/W/F), simvastatin, warfarin, citalopram.
- Allergies: Oxydodone (made patient “goofy”)

**Principles of Opioid Management**

**Juicy Tidbits regarding Drugs**

- **Morphine**
  - Caution in renal insufficiency (M6G/Lucuoride (M6G))
  - Metabolites may be associated with neurotoxicity (M9G)
  - Allergy not common, but itching from mast cell release common
  - Nausea and sedation common, but usually get better
- **Meperidine**
  - NOT RECOMMENDED OR INDICATED IN ADULTS GIVEN TOXICITY

**Hydromorphone**

- May be preferable in renal failure, elderly, no active metabolites
- Fentanyl
  - Patch not a good choice in patients with cachexia, dehydration, and fever
  - Not very long half life, so avoid very long intervals
- **Tramadol**
  - Acts at μ receptor (weakly), but inhibits reuptake of NE and 5-HT, M3 receptors as well
  - With pleotropism, may have more adverse drug interactions/events and be less safe in elderly with multimorbidity

**In addition to decongestion/diuresis, which of the following is the most appropriate next step in her management?**

1. Haloperidol 1 mg po x 1
2. Morphine 2 mg IV/SQ x1
3. Morphine 2.5 mg preservative free solution mixed with 2.5 mL NS iv neb
4. Lorazepam 1 mg IV/SQ x 1
5. Change supplemental oxygen delivery system to deliver a higher concentration of oxygen

**What would you like to try…**

- Which of the following would you suggest as the appropriate next step to address the patient’s pain?
  1. Oxycodone 5 mg bid and q 4 hr prn.
  2. Tramadol 50 mg bid and q 4 hrs prn.
  3. Hydromorphone 1 mg bid and q 4 hrs prn.
  4. Morphine liquid 5 mg bid and q 4 hrs prn.
  5. Ibuprofen 400 mg tid scheduled alternating with acetaminophen 650 mg tid scheduled

**Case #2**

- 58 yo female, Stage D admitted to hospital from cardiology clinic
- Progressive DOE, even with minimal activity
- On stable 4 LPM supplemental O2 via NC
- Does not appear anxious, but frustrated by limitations
- PE: wet crackles ↑↑ up from base bilat, JVP ↑↑↑↑,
- Vitals
  - P 86/min, RR 16/min, 94% on 4 LPM at rest
  - P125/min, RR 24/min, 91% on 4 LPM when bed to chair with moderate dyspnea

**Dyspnea**

- What is causing it?
- Various mnemonics, but think anatomically and if you have any agents to target those culprits?
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Dyspnea—Think about what may be causing it...

- Treat underlying causes when possible
  - Diuretics—pulmonary edema
  - Albuterol—bronchospasm
  - Bronchoscopy—mechanical obstruction
- Oxygen
  - Nasal cannula to prevent worsening of perceived dyspnea
- Novel delivery
  - Nebulized Fentanyl, Morphine, or Lidocaine. All may benefit, but gold standard is morphine po/IV.

- Escalating Opioids
  - Low dose opioids with advancement to stronger opioids
  - For dyspnea, start with morphine. If cough is the issue, ok to start with hydrocodone or codeine
- Benzodiazepines
  - May be appropriate in severe dyspnea, or with associated anxiety
- Steroids
  - Dexamethasone 2-4 mg bid
  - Decrease inflammation, improve sense of well-being
  - Reserved for reactive airways, may worsen fluid retention.

Many thanks for this opportunity, enjoy the conference!

Questions & Discussion
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Palliative Care
Hospice

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