Synergistic APRN Collaboration: CNS / NP Roles

• As advanced practice nurses we have created a structure to support excellence in clinical practice
  • 15 plus year partnership and journey towards excellence

• This structure has served as a framework for comprehensive heart failure care initiatives throughout the continuum of heart care

• Karen and Cindy: Providers in Special Care HF Clinic / Chair Heart Failure Steering

• Rhonda: CCU Unit Based CNS / Chair HC Council
Aultman Health Foundation
Canton, Ohio

- 808 bed, not-for-profit teaching center
- 5,000+ employees
- “Consumer Choice Award” – 20 consecutive years
- 2016 Truven Top 50 Cardiovascular Hospital
- 3-time Magnet designation
- 2-time NICHE designation
- Chest Pain Accreditation
- 2015 American Heart Association GWTG Heart Failure Gold Plus and Heart Failure Honor Roll; Mission Lifeline Gold Plus Receiving
- 2015 Action Registry GWTG Platinum

Structure / Processes for HF Initiatives

**STRUCTURE**
- Heart Failure Steering Committee
- Heart Center Council
- CCU Unit Based Heart Failure Team
- Special Care Team

**PROCESSES**
- Staff Orientation / Education / Competency
- Patient Education
- Clinical Initiatives
  - The heart of the presentation
Structure
Heart Failure Steering Committee
Heart Center Council
Unit Based Structures

Heart Failure Steering Committee Model:
Encompass Comprehensive Heart Failure Care
Steering Committee Outcomes / Objectives

1. Stage A and Stage B prevention indicators.
2. Adherence to evidence based process indicators.
3. Alignment with recommended practices from GWTG / JC Specialty Certification and other national benchmark organizations.
4. Admission rates
5. LOS
6. Readmission
7. Client satisfaction (patient / referring physician)
8. QOL
9. Mortality
10. Improvement in LVEF
11. Nurse Sensitive Quality of Care (CAUTI, Falls, hospital associated pneumonia, etc).

Heart Center Council

- Merger
  - Staff Education
  - Patient Education
  - Clinical Practice

- Healthy Work Environment Commitment Statement

Heart Failure Steering Committee

Projects:
- Cardiac Monitoring
- Tobacco Cessation
- Cardiac Rehab
- Heart Failure

Heart Center Council

Membership: Clinical staff: CCU, CVSI, Cardiac Rehab/Noninvasive, Cath Lab, Cardiac Same Day, Cardiology APRNs, CCU CVSI CNS

Unit Based Shared Decision Making
Commitment Statement

• I will support the Values of Integrity, Wisdom, Quality, and Commitment.
• I will make all decisions based on "What is best for the patient or family?"
• I will treat my physical work environment with respect by keeping its appearance in top condition.
• I will smile and say thank you as a general practice of courtesy.
• I will say about my colleagues only what I am willing to say in front of my colleagues.
• I am willing to be a part of the solution to all identified problems through the use of our shared decision making structures.
• I will take accountability for my actions including apologizing when appropriate.
• I will make an effort to find and communicate what is positive.
• I will seek to listen and understand before asking to be understood.
• I will support and respect all members of the Heart Center team and work collaboratively to eliminate “silos” in order to provide exceptional cardiovascular care in all settings throughout the continuum.

Processes

Staff Development
Orientation
Education
Competency

Staff Resources
Patient Education
CCU: Orientation Structure

- Unit-Based Application/Peer Review
- Unit-based Preceptor Committee
  - Review of preceptee progress/transition needs
  - Development/Revisions to orientation materials
  - Clinical Skill Building
  - Preceptor Role Development
  - Committee Goals
  - Review of preceptee orientation evaluations

- Role of the unit-based CNS
- Orientation Pathway and Scorecard
- CCU orientation book

Heart Center Core Cardiovascular Curriculum Program Model

- Certification Readiness
- Linking Knowledge to Practice
- Evidence Based Practice
- Critical Thinking
- Psychosocial Care
- Physiological Basis of Understanding
- Holistic Care
- Synergy Model

Goals:
- Knowledge Acquisition
- Practice Change
- Certified Staff
- Improved Outcomes

Novice to Expert

Integration with orientation, unit specific education, skill development, and role advancement

Thread through all disciplines and all settings in the continuum of care.

Connection To: Heart Center Council
<table>
<thead>
<tr>
<th>Beginner Practitioner</th>
<th>Advanced Beginner</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Part 1</strong></td>
<td></td>
</tr>
<tr>
<td>Cardiac Dynamics and Assessment</td>
<td>Evidence Based Nursing Practice</td>
</tr>
<tr>
<td>Heart Failure</td>
<td>Heart Sounds and Physical Assessment</td>
</tr>
<tr>
<td>Noninvasive Cardiac Testing</td>
<td>The Continuum of Sepsis</td>
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<td></td>
<td>Fluid/Electrolytes/Renal</td>
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<tr>
<td><strong>Part 2</strong></td>
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<tr>
<td>Intro to 12 Lead ECG</td>
<td>Arrhythmia Interpretation</td>
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<tr>
<td>ECG Injury and Ischemia</td>
<td>ECG Fundamentals/Axis Degree</td>
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<tr>
<td>Axis/MM</td>
<td>BBB and Hemiblocks</td>
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<td>Ventricular Ectopy</td>
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<tr>
<td><strong>Part 3</strong></td>
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<tr>
<td>Acute Coronary Syndrome</td>
<td>Hemodynamics in Altered Physiology</td>
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<tr>
<td>Interventional Cardiology</td>
<td>Inflammatory Disease</td>
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<tr>
<td>Open Heart Surgery</td>
<td>Valve Disease</td>
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<tr>
<td>Diabetes Management</td>
<td>Cardiomyopathy</td>
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<tr>
<td><strong>Part 4</strong></td>
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<tr>
<td>CV Pharmacology</td>
<td>Pulmonary Physiology and Acid Base</td>
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<tr>
<td>Introduction to Device Therapy</td>
<td>Concepts of Ventilatory and Oxygenation Support</td>
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<tr>
<td>Introduction to Pacemaker Rhythm Interpretation and</td>
<td>Cardiac Risk Factors</td>
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<tr>
<td>TTVP Trouble Shooting</td>
<td>Cardiac Rehabilitation</td>
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<tr>
<td><strong>Skilled Practitioner</strong></td>
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<tr>
<td><strong>Part 1</strong></td>
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<tr>
<td>Pulmonary Physiology and Oxygen Delivery</td>
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<tr>
<td>Pulmonary Pathophysiology</td>
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<tr>
<td>Neurovascular Disease (Ischemic Stroke)</td>
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<tr>
<td>Peripheral Arterial Disease</td>
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<tr>
<td><strong>Part 2</strong></td>
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<tr>
<td>Narrow Complex Tachycardias</td>
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<tr>
<td>Wide Complex Tachycardias</td>
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<tr>
<td>Injury and Ischemia</td>
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<tr>
<td>Myocardial Mimics and Normal Variants</td>
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<tr>
<td><strong>Part 3</strong></td>
<td></td>
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<tr>
<td>Pacemakers</td>
<td>ICDs and Cardiac Resynchronization Therapy</td>
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<td></td>
<td>NonPharmacological Treatment for Arrhythmias</td>
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<td></td>
<td>Antiarrhythmic Pharmacology</td>
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<tr>
<td><strong>Part 4</strong></td>
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<tr>
<td>Advanced Hemodynamics and Assessment</td>
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<tr>
<td>Pharmacology and Hemodynamics</td>
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<tr>
<td>Hematology and Coagulation</td>
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</tr>
<tr>
<td>Evidence Based Cardiac and Critical Care Practice</td>
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</tbody>
</table>
Heart Center Novice to Expert Core Curriculum

Competency Components:
New Paradigm

- Multifaceted in order to reflect the actual transfer of knowledge into practice.
- Critical thinking as key aspect
  - Purposeful
  - Reflective
  - Active
  - Evidence based
  - Spirit of inquiry
- Professional portfolio
Requirements for Professional Portfolio Content

• Required activities from annual focus area
• Exemplars demonstrating competency throughout the year
• Self Assessment of Adherence to Linking Knowledge to Practice Expectations
• Progress toward established clinical goals
• Continuing education activities (required)
• Certifications
• Professional Development and Involvement

Heart Failure Patient Education

• Hospital “Teach-Back” initiative

• Annual Patient Education Workshop
  • 2012: Our Lasting Impression: Patient Education and the Discharge Process: Self Care Management
  • 2013: Finding the Patient Education Rememedy
  • 2014: Meaningful Patient Education Using “Teachback”
  • 2015: Teaching Tools for Touch Subjects : Chronically Critically Patients

• Patient education materials
  • Written
  • Video on Demand
Heart Failure Self Care

**Every Day:**
- Weigh yourself in the morning after going to the bathroom and before breakfast. Write it down and compare to yesterday’s weight.
- Take your medicine the way your doctor orders.
- Check for swelling in your feet, ankles, legs and stomach.
- Eat low salt foods.
- Participate in light activity, like walking, each day. Aim for 2-5 hours of activity per week.

**Which Zone Are You In Today?**

**Green Zone**
All Clear
Your symptoms are under control if you have:
- No shortness of breath.
- No weight gain of 2 pounds or more since yesterday (may change 1 or 2 pounds some days).
- No new or increased swelling of your feet, ankles, legs or stomach.
- No chest pain.
You feel as good as you did yesterday or better.

**Yellow Zone**
Warning Zone
Call your doctor if you have any of the following:
- Gained 2 pounds or more in one day.
- Gained 3 pounds or more in one week.
- More shortness of breath.
- More swelling of your feet, ankles, legs or stomach.
- Feeling more tired. No energy.
- Dry hacking cough.
- Dizziness.
- Feeling uneasy; you know something is not right.
- It is harder for you to breathe when lying down. You need to sleep sitting up in a chair.

**Red Zone**
Emergency
Go to the emergency room or call 911 if you have any of the following:
- Struggling to breathe or unrelieved shortness of breath while sitting still.
- Have chest or back pain.
- Have confusion or cannot think clearly.
Heart Failure Specific Collaborative Initiatives

Steering Committee Outcomes: Joint Initiatives
Focus on the Five with Clear Documentation in the Plan of Care (Cardiology Provider Score Card)

BMP Ordered at Discharge
Patient Education % > 60 minutes (CCU Nursing Score Card)

% Readmissions for End of Life
Readmission Themes: Baseline Assessment

- Congestion / Inadequate Decongestion: 19.50%
- End of Life Related: 31.70%
- AKI / Hypotension / Dehydration: 14.60%
- Medication Safety: 4.90%
- Bleeding / Thromboembolic Events: 2.40%
- Non Adherence: 2.40%
- Post CABG: 9.80%
- Other:

Readmission Themes: Follow Up Assessment

- Congestion / Retractable HF: 12.80%
- End of Life / Goal Setting: 20.50%
- AKI: 5.10%
- Hypotension / Dehydration / Weakness: 10.50%
- Major Non Adherence Substance Abuse: 5.10%
- Cardiac Surgery Related: 10.30%
- Other: Non Cardiac: 15.40%
- Primary Pulmonary: 5.10%
- Transitions of Care Systems of Care: 5.10%
- Volume Overload Dialysis: 2.60%
- Advanced HF: 2.60%
- Other: Non Cardiac: 10.30%
Heart Failure Care: CNS Led Initiatives

Gerontology Care
- Cognitive Function Testing
- Delirium Assessment / Interventions

Fluid Balance QI Project

Cardiac Care Unit

- 56 –bed cardiac medical unit
  - 12-beds ICU
  - 44-beds step-down
- 4-time Beacon Award (Gold)
- Staff of 130 (Leadership Team, RN's, Support Staff)
Geriatric Syndromes

- Many etiological factors
- Multifactorial, serious conditions
- Detectable risk factors
- Include:
  - Delirium
  - Malnutrition
  - Depression
  - Sleep disorders
  - Functional decline
  - Incontinence
  - Falls and injuries

Inouye et al (2008)

Frailty and Heart Failure
HF Clinical Outcomes and Frailty

Increased vulnerability to:
- Acute illness
- Chronic disease
- Deconditioning
- Disability
- Dependence
- Institutionalization
- Death


Cognitive Function & Heart Failure

<table>
<thead>
<tr>
<th>Cognitive Deficits</th>
<th>Characteristics</th>
<th>Tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal Cognitive Aging</td>
<td>• Able to complete cognitive tasks, but require more time</td>
<td>Age-adjusted cognitive testing</td>
</tr>
<tr>
<td></td>
<td>• How well is the patient managing usual activities as compared to their peers?</td>
<td>ADL/IADL peer comparison</td>
</tr>
<tr>
<td>Dementia</td>
<td>• Chronic progressive syndrome</td>
<td>Mini-Mental State Examination (MMSE)</td>
</tr>
<tr>
<td></td>
<td>• Interferes with ability to perform basic ADL’s and IADL’s</td>
<td>General Practitioner Assessment of Cognition (GPCOG)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mini-Cog Assessment</td>
</tr>
<tr>
<td>Mild Cognitive Impairment</td>
<td>• Chronic</td>
<td>As above</td>
</tr>
<tr>
<td></td>
<td>• Some IADL more difficult than usual to perform (ie. Unable to organize medication)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Not severe enough to impair most IADL or ADL</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Most progress to dementia</td>
<td></td>
</tr>
<tr>
<td>Delirium</td>
<td>• Acute, reversible</td>
<td>CAM</td>
</tr>
<tr>
<td></td>
<td>• Develops over a short period of time</td>
<td>CAM-ICU</td>
</tr>
<tr>
<td></td>
<td>• Fluctuation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Inattention</td>
<td></td>
</tr>
</tbody>
</table>
Developing A Delirium Prevention/Management Program

The purpose of this project was to:

- Identify the prevalence of hospital acquired delirium in the Cardiac Care Unit (CCU) population 70 and older
- Identify high risk patients for the development of hospital acquired delirium
- Implement interventions to prevent delirium and minimize its effects

Mini-Cog Testing

<table>
<thead>
<tr>
<th>Perform the tests in the following order:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong>: Registration</td>
</tr>
<tr>
<td>1. Name 3 objects (apple, watch, penny)</td>
</tr>
<tr>
<td>2. Ask patient to repeat all 3 after you have said them</td>
</tr>
<tr>
<td>3. Repeat until all 3 are learned</td>
</tr>
<tr>
<td><strong>Step 2</strong>: Clock Drawing</td>
</tr>
<tr>
<td>Draw circle, draw numbers, and place hands at “two thirty-five”</td>
</tr>
<tr>
<td><strong>Step 3</strong>: Word Recall</td>
</tr>
<tr>
<td>Ask patient to re-state the 3 words from Step 1 (apple, watch, penny)</td>
</tr>
</tbody>
</table>

**Scoring**: 1 point per word recall/able to draw clock (2 points) vs unable to draw clock (0 points)

Possible dementia = total score less than 3
No dementia = greater than or equal to 3
Functional Assessment: Independent Activities of Daily Living (IADL’s)

- Shopping
- Housekeeping
- Accounting
- Food Preparation
- Transportation/Telephone
- Taking Medications

Results of CCU Delirium QI Project

<table>
<thead>
<tr>
<th></th>
<th>Pre Protocol (N=205)</th>
<th>Post-Protocol (N=193)</th>
<th>Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delirium Cases N(%)</td>
<td>21 (10.2%)</td>
<td>17 (8.8%)</td>
<td>$X^2 = 0.237$ P = 0.626</td>
</tr>
<tr>
<td>Length of Delirium (days)</td>
<td>1.98</td>
<td>1.25</td>
<td>Mann-Whitney U = 202 P = 0.460</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Falls (per 1000 patient days)</td>
<td>2.17</td>
<td>1.45</td>
<td>Z = 3.788 P &lt; 0.001</td>
</tr>
<tr>
<td>Sitter Use (FTE per 1000 patient-days)</td>
<td>1514 h (0.92)</td>
<td>1190 h (0.84)</td>
<td>Z = 0.603 P = 0.273</td>
</tr>
<tr>
<td>Delirium Cases Readmitted</td>
<td>19.0%</td>
<td>11.7%</td>
<td>---</td>
</tr>
</tbody>
</table>
Fluid Balance Assessment

• I & Os and daily weights are the inpatient essentials to assessing fluid balance in the heart failure patient

• Nurses own the accuracy of fluid balance assessment

Expectations

• Daily weights
  • Standing weights should be done on every patient whenever possible
  • Patients should be weighed in gown only
  • If a bed weight is required the following should be on the patient bed: fitted sheet, top sheet, pull pad, 1 blanket, 1 pillow
  • When a patient is transitioned from a bed weight to standing weight both weights should be recorded on the day of transition
    ✔ This allows continuous apples to apples comparison of the recorded weight.

• I & Os
  • Guidelines as established by CCU shared decision making.

Send home bathroom scale if needed!
More on Volume Assessment

- Can your patient lie flat and breath comfortably? If not – this is orthopnea and a sign of left sided volume overload.

- Does your patient have positive orthostatic blood pressure changes? If so – this is a sign of volume depletion.

- Did you know?
  We have about the same number of heart failure patients readmitted for acute kidney injury and dehydration as we do for volume overload.

New Education Opportunity

- We do a good job of instructing patients to weigh daily and to report weight gain.

- However, we don’t always tell patients what to do when they are on diuretics and they develop vomiting, diarrhea, or for some reason they are not taking in their normal amount of fluids.
  - Patient’s need instructed to not take water pills when they develop an acute episode of vomiting, diarrhea, or decreased fluid intake.
  - They need to notify the provider who manages their diuretic so there dosing can be adjusted.
Aultman Heart Center  
CCU 2015 Competency Worksheet  

Employee: ___________________________________________________________  

Competency Module Three: Heart Failure Essentials  

Your Choice:  

1. Obtain an I/O and daily weight audit tool from Rhonda. Audit HF charts of 3 patients (pick patients admitted for at least 3 days). Write your assessment of the results and any recommendations. Also write a brief statement of what you do in your practice to assure accuracy of fluid balance assessment.  

2. Write a self reflective statement of the care you provided to a patient with advanced heart failure or other high risk features. This can include your assessment skills, collaboration with other providers, patient education, post discharge referrals, and any other aspects of your nursing practice. Show evidence of how you used the synergy model nursing competencies to meet the needs of your patient.  

CCU Heart Failure Fluid Balance Documentation  

Four patients missing I & O documentation for full 24 hr period  
Three patients without I & O >24 hrs  
- 2 days  
- 3 days  
- 6 days  

Missing Shift  
7-3 (36%)  
3-11 (26%)  
11-7 (38%)  

N = 231 patients
Staff Feedback

ISSUES
- Wrong dates written on BR door I & O
- Inconsistent process – who should fill pitcher? When?
- Inconsistent use of BR door forms
- “too many” different shifts
- IV pumps not cleared
- Trays picked up before intake can be documented
- “too much” to remember
- Fluid given by family (unknown)
- How to measure incontinent patients?
- Admission ER weights inaccurate
- No markers in the room to use BR door form

IDEAS
- Use “cups” if on fluid restriction vs pitcher
- Like smaller pitchers
- Hold nurses accountable
- Dietary should “write” down the intake
- Can staff place trays in the POD nutrition room for pick up?
- NA should do daily weights
- Taught patients to set fluid “off tray” so nurse can check
- Use 2 hats if patient “misses” the hat
- Part of initial shift assessment – start with filled pitcher/urinal/hat/patient education
- Can “yellow” required fields be made in CERNER if I & O ordered?
Special Care Heart Failure Clinic:

- Ongoing management for high risk HF patients
- Differs from Post Discharge HF Clinic
What are some of the benefits of attending the Special Care Heart Failure Clinic?

- Education about all aspects of your heart disease.
- A personalized treatment plan centered on your goals.
- Prompt changes to your care plan based on your needs.
- Lifestyle assessment and counseling.
- Referral to community services and programs beneficial in the treatment of Heart Failure.
- Education for advanced treatments.
- Coordination of care regarding your other healthcare needs.
- Direct access to your special care clinic provider for concerns between visits.

Who will you see?
When you come to the Special Care Heart Failure Clinic you will be seen by one of our advanced practice nurses who specializes in the care of patients with a diagnosis of heart failure. Each of our advanced practice nurses is certified in heart failure. They will work closely with your cardiologist to provide you excellence in the heart failure care.

The Cardiovascular Team
Sanjeev Arinimb, M.D.
Gregory J. Damon, M.D., F.A.C.C.
Stephen M. Dennington, M.D.
W. Kim Doiron, M.D., F.A.C.C.
Shivkumar K. Duffy, M.D., F.A.C.C.
Charles L. Fabre, M.D., F.A.C.C.
Iris Friedlander, M.D., F.A.C.C.
Firas Hamdan, M.D., F.A.C.C.
Tudor Johnson, M.D., F.A.C.C.
Megapun Neelapa, Neelappidi, M.D.
Kavitha Nekhawani, M.D.
John Muthyau, M.D., F.A.C.C.
Ramana Podlijada, M.D., F.A.C.C.
John Premkumar, M.D., F.A.C.C.
Patricia J. Ruble, M.D., F.A.C.C.
Donald Russett, M.D.
S. Dhana Sathy, M.D., F.A.C.C.
Asbab Shab, M.D., F.A.C.C.
Kasey Porter, PA-C, MPA
Karen Marzlin, DNP, CCNS, ACHPC-AG
Cynthia Weigner, DNP, CLNC, ANP-F, AG

WHO CAN BENEFIT FROM THE SPECIAL CARE CLINIC?
This clinic was developed for people just like you who have been diagnosed with heart failure. The clinic is especially helpful for those who are admitted to the hospital more than once a year. Enrollment in the clinic has been shown to reduce your need for hospitalization. The clinic is also designed for those who have trouble controlling their symptoms. Enrollment in the clinic has been shown to improve the quality of life for those who participate.

We are here to help you live well with heart failure.
Screening Criteria

- > 1 hospital admission in last 6 months, > 2 hospital admissions in last year
- Less than 50% reduction in BNPt from admission to discharge
- Plan for continued diuresis at the time of discharge
- High dose diuretic regime / addition of metolazone
- Hyponatremia < 133
- Admission BP < 115
- Admission BUN > 43 or creatinine > 2.75 or worsening renal function during stay
- Any new renal replacement therapy (RRT) during hospitalization or recommendation for RRT with patient refusal
- Holding of evidence based medications due to renal function or hypotension
- LVEF < 30%
- Newly diagnosed non ischemic cardiomyopathy presenting with HF
- Decompensated HF while on evidence based medications or with CRT in place
- Severe impairment of functional capacity while on evidence based therapy
- Frequent ICD shocks
- Severe MR or AS and not a surgical referral
- Cardiac cachexia / protein calorie malnutrition
- Untreated sleep apnea
- Morbid obesity
- Isolated RV failure / Pulmonary HTN (other than pulmonary venous HTN from LV failure)
- Non adherence to prescribed plan
- Concern for home resources / support

Referral Sources

- Cardiologist
- Fellow
- Post Discharge HF Clinic
- Cardiology hospital APRN
- Case Managers
- Hospitalist
- Hospitalist RN
- Nephrologist
- HHC
- Cardiocom
- Home Palliative Care
Structure / Process

Physician Collaboration / Referral
- PCP
- Nephrology
- Pulmonology
- Sleep Medicine
- Advanced HF Care
- Hematology
- Psychiatry
- Bariatric surgery providers

Special Care HF Clinic
Heart Failure Certified APRNs
Nurse Coordinator
Work with Cardiology &
Electrophysiology Providers

Interdisciplinary Referrals / Care Partners
- Cardiac Rehab
- HF Support Group
- Home Palliative Care
- Cardiocom
- Home Health Care
- Pharm D
- Community Pharmacists
- Dietitians

Key Components: Visits

- 1st two appointments 1 hour each
- 30 minutes for each maintenance appointment
- Initial q 2 week visits
- Integration of nurse only visits if stable and medication titration is still needed
- Maximum time between visits after care is optimized: 8 weeks
- Coordination of visits with primary cardiology and / or EP visits
Key Components: Patient / Provider Relationship / Priorities

• Consistent APRN provider
• 24 / 7 provider access with options for after hours interventions
• APRN provides care coordination across providers in complex patients
• Quality of Life (palliative care interventions) is / are central to the Special Care Clinic work – with or without a formal consult
• Patient goals are established and documented

Prior to First Visit: Nurse responsibilities

• CMP: BILI, alkaline phosphatase, AST/ALT, Albumin
• Most recent BMP
• CBC
• TSH
• HGB A1C
• Iron Saturation
• Last INR
• Flu and pneumonia
  • Need dates
• PFTs
• Sleep study
• Type of device / vendor
  • Verify HF management data with device clinic
• Past participation in Cardiac Rehab

✔ Call patient to welcome them to the Special Care HF Clinic.
✔ Determine referral source.

Verbal summary report of information to Karen / Cindy on day of first visit.
Orientation Checklist: Nurse Responsibilities

**Obtain from patient:**
- All specialists
- Preferred location for lab draws
- Who manages INR
- Living Will / Durable Power of Attorney for Health Care
- STOP BANG / sleep apnea screening / current Tx
- Depression screening: 2nd visit
- Tobacco user – readiness to quit assessment: 2nd visit

**Review with Patient**
- ✔ Provide welcome packet – see next slide for contents to be reviewed by patient
- ✔ Determine if patient has HF education book from hospital – if not supply
- ✔ Determine if they need more information on low salt eating
  - ✔ Offer Eat Less Salt Lending Library Book
  - ✔ Talk to Karen / Cindy about dietitian referral

**Ongoing Management**

- Volume assessment
- Functional class
- Nutritional status
- Medication reconciliation
- Nurse visits for drug titration
- Lab monitoring
  - Vit D
  - Iron stores
- Diagnostic testing

- Co-Morbid Condition Management Plan / Collaboration
- Device interrogation
- Referrals
- Rehab progress reports
- Cardiocom weights
- Financial assistance
- Ongoing collaboration
  - Nephrology
  - Pulmonary
  - Palliative Care
Clinic Discharge Criteria

- Hospice referral
- Advanced therapy referral with active management by referral site
- Active 3 day per week hemodialysis if cardiac medications optimized
  - Volume management per hemodialysis
  - Frequent Special Care Clinic visits places burden on patient / caregiver
  - Note: Peritoneal dialysis is not a criteria for discharge
- Preserved LVEF with optimization of co-morbid conditions / resolution of exacerbated factors / no additional planned interventions / no recent hospitalization
- Patient decision to not partner with provider
Special Care HF Clinic Volume

Patients seen
59% growth
83
132

Active Patients
51% growth
61
94

6 month and 9 month Admission Rates

First Year High Risk Patients

Expected for all comers

6 month
50%
50%
48.50%
44%

9 month
10.00%
Conclusion

> 50% of both readmissions and total hospitalizations for patients with high risk or advanced HF are for reasons other than HF.
  - Need for integrated HF care throughout organization

90 day and 6 month admission rates are similar giving support to the cumulative effect of Special Care Clinic interventions.

Life expectancy after an index hospitalization for patients with heart failure

- Hospitalized patients with HF had a 5-year mortality rate of 68.7% and a median survival of 2.4 years.
- Median survival was only 8 months for patients in the high-risk group and only 3 months in the very high risk group.
- Patients with depressed left ventricular ejection fraction, median survival was only 6 and 3 months in the high- and very high risk groups, respectively.

Ko, et al., 2008
Mortality

% of patient who died during first year of enrollment

- Year 1: 19%
- Expected: 33%

Aghababian, 2002; Jong et al., 2002

HFrEF: ACE-I / ARB Utilization

Note: One criteria for admission to Special Care HF Clinic is inability to use GDMT.

July 2014 to July 2015

- ACE-I / ARB addressed in plan: 100.00%
- On therapy at one year or at time of discharge: 58.20%
- Initiated in clinic: 23.60%

% initiated reflects total of all 55 patients with HFrEF not % of those on ACE-I/ARB.
HFrEF: Aldosterone Antagonist Utilization

July 2014 to July 2015

- AA addressed in plan: 96.30%
- On therapy at one year or at time of discharge: 76.00%
- Initiated in clinic: 37.00%

% for initiated reflects total of all 54 patients with HFrEF < or = 35%.

ICD for HFrEF

- ICD addressed in plan: 100.00%
- ICD eligible patients at year end: 70.90%
- % eligible with device on enrollment: 61.50%
- % eligible referred from Special Care Clinic: 17.90%
- % eligible patients refused: 20.50%

Distribution of eligible patients
CRT (D or P) for HFrEF

- 100.00% CRT addressed in plan
- 47.27% CRT eligible patients at year end
- 65.40% % eligible with device on enrollment
- 26.90% % eligible referred from Special Care Clinic
- 7.70% % eligible patients refused

Distribution of eligible patients

HFrEF: Cardiac Rehab Eligible Patients

- 87.30% % patients eligible
- 91.70% % of eligible recommended Rehab
- 50.00% % of eligible patients enrolled in Rehab

July 2014 to July 2015
Unique APRN Contributions

- Nursing Theory: Jean Watson’s Caring Theory / Synergy Model
- Integration of nursing science into medical science: Example: nutritional status, depression
- Medication adherence strategies
- Holistic perspective: Guided Imagery / Meditation / Spiritual Practices; Joy interventions
- Self Care Engagement / Management Trust and End of Life Decision Making
- Holistic Perspective: Ideal for HFpEF CoMorbid Management
- Collaborative Communication Skills with physician colleagues (cardiology, nephrology, pulmonogly
Nurse Theory

Ten Caritas Processes™

• Embrace altruistic values and Practice loving kindness with self and others.
• Instill faith and hope and honor others.
• Be sensitive to self and others by nurturing individual beliefs and practices.
• Develop helping – trusting- caring relationships.
• Promote and accept positive and negative feelings as you authentically listen to another’s story.
• Use creative scientific problem-solving methods for caring decision making.
• Share teaching and learning that addresses the individual needs and comprehension styles.
• Create a healing environment for the physical and spiritual self which respects human dignity.
• Assist with basic physical, emotional, and spiritual human needs.
• Open to mystery and Allow miracles to enter.
Self Care Engagement & Management

*Partnering with rather than parenting adult patient*
Nursing Science / Perspective

- Nutritional assessment
  - Example: Liberalization of sodium restriction in advanced HF to improve nutritional status

- Depression screening and referral for tx

- Exercise prescription / plan
  - Cardiac Rehab referrals / Pulmonary Rehab referrals
  - Tracking of activity levels on devices

Medication Adherence Strategies

- Empowering patients to control loop diuretic

- Coaching regarding benefit not failure when uptitration is in progress
Holistic Perspective

Integration of Joy Interventions

Trust

• Same provider and 24/7 access have been the key

• Authenticity regarding caring practice leads to trust

• Trust leads to authentic conversation regarding end of life planning

• Seamless transition from home palliative care to Hospice
Collaborative Partnering with Colleagues

A FINAL THOUGHT
MY PERSONAL VISION FOR PRACTICE

Practice with joy. Impact every patient and family on their journey and provide safe passage by meeting them where they are, connecting with them in a meaningful way, and delivering care with wisdom and intention.

- Karen and Cindy