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## What Is The Effect of Engaging Hospitalized Heart Failure Patients in a Self-Care Management Protocol?

Wake Forest Baptist Health  
Winston-Salem, NC

APRIL 21, 2017 **FORUM PRESENTER:** Michele D. Blakely, MSN, RN, NEA-BC, NICHE Coordinator 

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## Wake Forest Baptist Health

- 885 Beds
- Hospital
- Level I Trauma Center
- Magnet designated, 5 times re-designated
- Exemplar status

 Wake Forest® Baptist Health



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### Objectives

- Overview of Heart Failure (HF) and why we should be concerned
- Review the current state and impact of HF globally to locally
- Discuss the design, development and implementation of a HF self-care management (SCM) protocol over 6-months on a medical cardiology unit at an academic medical center in Southeastern United States
- Review results and impact on self-care self-confidence of HF patients
- Implications for nursing and future directions

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**What do we think our patients want?:**

*Gwande posits that people facing serious illness have priorities focusing on **quality over quantity**, **avoiding suffering**, **strengthening relationships with families and friends** and **achieving a sense that life is complete** (Gwande, 2014).*



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**Background:**

- Our current healthcare climate puts even higher demands on chronically ill patients to manage effectively.
- Self-care in heart failure (HF) management is critical to a patient's outcome.

**What is Known:**

- Factors that contribute to patients performing self-care activities or not is multifactorial, when effective self-care is interrupted self-care deficits are recognized.

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- Much research has been conducted looking at the relationships of knowledge, health literacy, social support, self-care, and self-efficacy in HF
- A great deal of effort has been focused on transitional programs and community based efforts in recent years, while less attention on inpatient engagement of patients and families to impact chronic disease
- This proposal will more closely scrutinize self-care specifically having patients perform daily weights while inpatient

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- Health care systems are changing in an effort to deal with rising costs and uneven quality. This organization is no exception. Delivering high quality HF management and education to empower patients to manage successfully in the community is imperative.
- The proposal is to pilot a cultural shift from nursing provided care to a self-care approach for hospitalized HF patients on an adult inpatient medical unit.

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**What is the effect of engaging hospitalized HF patients in an inpatient self-care management (SCM) protocol?**

**Definition of our SCM protocol:**  
For us it has the following components-

- Daily weight management
- Fluid management (intake and output)

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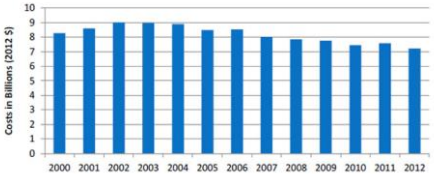
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**Cost**



Source: Agency for Healthcare Research and Quality, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample and AHRQ Quality Indicators, version 14.4, 2000-2012.  
<http://www.ahrq.gov/searchfindings/qip/qip2014chartbookaffectiveness/c43.html>

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### The real cost...

- HF is one of the most costly conditions treated in United States (U.S.) hospitals.
- Quality of life

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### Stakeholders

- Patients and families
- Clinicians- both inpatient and in the community
- Health care systems
- General public

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### Theoretical Framework and why it is critical...

Dorothea Orem's self-care deficit theory suggests that patients experience times of interruption when they are unable to, or incapable of continuously providing self-care resulting in deficits or limitations where nursing is necessary to complete the care- hence hospital admission

#### Major Theoretical Concepts

- *Self-care agency*
- *Self-care demands*
- *Self-care deficits*
- *Nursing agency*



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**Theoretical Framework and why that is critical...**

- Dr. Barbara Riegel & Dickson (2008) Situation Theory of Self-Care in Heart Failure
- Importance of how “we” as humans and patients make decisions – naturalistic decision making process drawing from previous experiences

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**Methods & Measures**

**Design**

- Pre and post comparative design with pre and post intervention and pre and post outcome metrics to determine success of care delivery changes to HF patient outcomes.

**Setting**

- Adult inpatient medical unit within an academic medical center in the Southeastern US. Center has >40K inpatient admissions

**Sample Size**

- N=54

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**Participant Selection**

**Inclusion Criteria**

- All adult inpatients with a diagnosis of HF admitted to select pilot medical unit with no cognitive impairment based on nursing assessment.

**Exclusion Criteria**

- Cognitively compromised patients who are unable to participate in self-care based



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- The proposal was a 6-month nursing led pilot to promote a cultural shift from nursing provided care which may in fact be an "enabler" to a self-care approach for hospitalized HF patients on an adult inpatient medical-cardiology unit.



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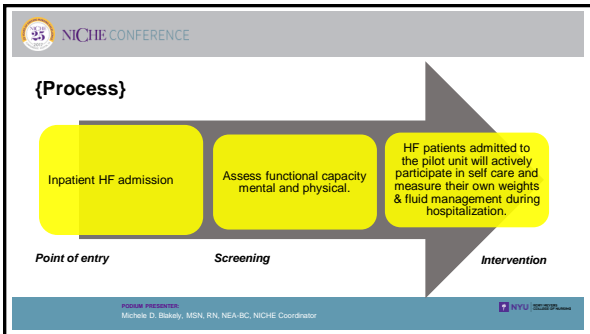
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**Metrics**

- What is the difference or change in self-care self-confidence scores from baseline to hospital discharge
- Unit level readmission rates were reviewed although not the primary metric or primary purpose of the project
- Patient satisfaction specifically communication with nurse domain of the HCAHPS was reviewed n=184, with 143 respondents during the pilot period answered "always" to healthcare team explained in a "way that I could understand..." and "listened carefully to me..."



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**Sample**

- N=54 patients
- >50% over age 65 yo *\*(important to note adults over 65yo average 2.8 chronic diseases)*
- Average age was 68.5 yo
- Majority were male

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**Quantitative Findings**

- Self-care confidence scores were analyzed from baseline (admission) to pre-discharge using the Self Care of Heart Failure Index (SCHFI) subscale "C" on self-care confidence
- Baseline scores in self-care self-confidence were slightly higher for females versus their male counterparts
- There was a change during the pilot period that was statistically significant
- There was an increase from baseline to pre-discharge of 1.71 points which was statistically significant in self-care self-confidence scores

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**SCHFI**

- Self-Confidence Sub Scale
- 6 questions
  - Likert scale 1-4
  - Score range 6-24 higher score indicates higher confidence

Question	Baseline	Pre-discharge	Significance	Mean Difference
1. I am confident that I can take care of myself.	1.5	2.5	*	1.0
2. I am confident that I can take care of myself.	1.5	2.5	*	1.0
3. I am confident that I can take care of myself.	1.5	2.5	*	1.0
4. I am confident that I can take care of myself.	1.5	2.5	*	1.0
5. I am confident that I can take care of myself.	1.5	2.5	*	1.0
6. I am confident that I can take care of myself.	1.5	2.5	*	1.0

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**The elephant in the room....30-day Readmission Rates**

- Although not a direct metric for this project- readmission rates were trended and reviewed for pilot area compared to a like unit that continued with standard of care
- There was no decrease or significant trend in HF readmission rates of the pilot unit




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**Pilot Unit 30-Day HF Readmission Rates**

Month	Number of HF patients readmitted	Number of HF patients discharged	HF readmission rate
May	17	103	16.50%
June	19	112	16.96%
July	15	112	17.86%
August	15	96	15.63%
September	19	90	21.11%
October	21	96	21.88%




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**Participant Description by Age**

Age Range	Frequency	Percent
25-30	1	1
31-40	4	7
41-50	0	0
51-60	11	20
61-65	7	12
>65	31	57




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**Anecdotal Findings**

- Multiple comorbidities with layers of prescribed plans of care pose common challenges specifically renal insufficiency or failure, diabetes mellitus in combination with HF
- Knowledge deficit, older age and age-related changes and resources are all common challenges
- Literature suggests confidence has a strong influence perhaps maybe more important than we have realized in the past perhaps more than cognition and cognition testing

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**Implications for Practice**

- Nurses who participated in pilot had the opportunity to either participate in a face-to-face focus group or answer an electronic survey about their perceptions and thoughts about moving self-care management forward
- Nurse leaders must advocate for the reintroduction or increase of face time with patients perhaps focusing on fewer layers of documentation technology and workflow disruption.
- A number of supportive roles have arisen in recent years to assist in the management of complex patients, yet the role and relationship of the direct care nurse cannot be minimized in the care of this population

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**Implications for Practice**

- This project demonstrated that altering HF patient education can increase self-care self-confidence but requires nursing commitment, time, and a change from traditional homogenous workflows.
- Innovation in practice is to look at care delivery differently not to continue to search among previous strategies.

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**Future Directions**

- Next steps: additional work in changing practice and care delivery to look at confidence as well as naturalistic decision-making process especially in the older, chronically ill patient as this HF epidemic continues to grow.
- Sustainability: Nurse leaders must advocate for the reintroduction or increase of face time with patients perhaps focusing on fewer layers of documentation technology and workflow disruptions. A number of supportive roles have arisen in recent years to assist in the management of complex patients, yet the role, relationship and expertise of the direct care, bedside nurse cannot be minimized in the care of this population.

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**Future Directions**

- This project demonstrated that altering HF patient education can increase self-care self-confidence, but requires nursing commitment, time, and a change from traditional homogenous workflows.
- Trends identified were multiple conflicting or confusing plans of care for comorbid conditions, resources, knowledge deficit and decision-making factors.



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**Future Directions**

- Riegel et al. (2012) highlighted the importance of further study into patients naturalistic decision-making which is also supported by anecdotal findings in this project. A number of patients freely described their thought and decision-making process most all recognizing a symptom or change choosing to try strategies which they had tried before to "buy time" or delay seeking treatment to see if their symptom would improve or fully resolve.
- A strong foundation of knowledge and experience constructed while inpatient may lend to more effective SCM in the community decreasing frequency of deficits and need for acute inpatient care

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**Closing thoughts...**

- Recognizing that as complex as HF is, impactful interventions will be equally as complex.
- Advocating for a shift in HF clinical practice to improve patients SCM behavior is a best practice that is dependent on the practitioner as much as it is the patient.
- The effectiveness will rest on the encounter with the patient in partnership with their ability to pursue necessary behaviors (Davidson, Inglis, & Newton, 2013).
- Continued partnership efforts are warranted with this growing vulnerable, often frail segment of the population to avoid creating a greater health disparity.

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