2014

Invited Speech: Evidence Based Practice: Acuity Based Care and Research Practice Change

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Evidence based Practice:
Acuity–based Care and Research Practice Change

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Evidence Based Practice (EBP)

What is it?

- Evidence based practice is clinical decision making that integrates the best evidence from well designed research studies along with clinical expertise and patients' preferences and values.

Evidence and Practice

Why do we need it (EBP)?

- 20% of the care provided by healthcare professionals is supported by evidence.

- 2001, Institute of Medicine (IOM) study findings indicated that patients received the recommended evidence based treatment only 55% of the time.

- "Care we have been delivering costs too much and the quality isn't what it should be."

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Evidence Based Practice

- **Building our care on what we learn from the evidence.**

- **Practicing based on what we know versus what has always been done.**

- **IOM 2020 Goal: 90% of all health care decisions will be evidence based.**

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The Cycle of Inquiry and Care Change

Clinical Excellence Through Evidence-based Practice (CETEP)
A Continuous Cycle of Inquiry

ASSESS
Critical Appraisal Components

Evidence-based Factors
Research
National Guidelines
Quality Indicators
Opinion Leaders

Patient Factors
Patient History and Condition
Patient Preferences
Cultural Implications

Clinical Setting Factors
Clinical Expertise
Safety Issues
Feasibility
System Wide Initiatives
Interdisciplinary/Interdepartmental Impact
Organizational Philosophy
Receptiveness Issues
Key Stakeholders
Ethical Aspects
Cost-Benefit Ratio
Legal Implications

External Factors
Regulatory & Accreditation Requirements
Community and Global Influences and Impact

DEFINE
Clinical Practice Question

EVALUATE
Outcomes

PLAN
Implementation & Evaluation

IMPLEMENT
Practice

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Effective Evidence Based Practice

- Culture of change.

- Institutional support: investment in technology, healthcare information resources, data personnel.

- Utilizing systematic reviews, evidence summaries, and clinical decision support

- EBP Mentors

- EBP as part of the workload and time usage.

Inquiry– Addressing Acuity

🍍 **The patient's acuity -- major variable for deciding what services are needed and the degree of demands of care.**

🍍 **Acuity levels and congruent care demands -- Issue on medical surgical unit of the hospital. The Clinical Partners (CPs) aka, Nursing Assistants, were assigned by room numbers resulting in inequity of assignments due to the patients' varying acuities.**

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Clinical Partners' Perception of Patient Assignments According to Acuity Level

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Conducted by

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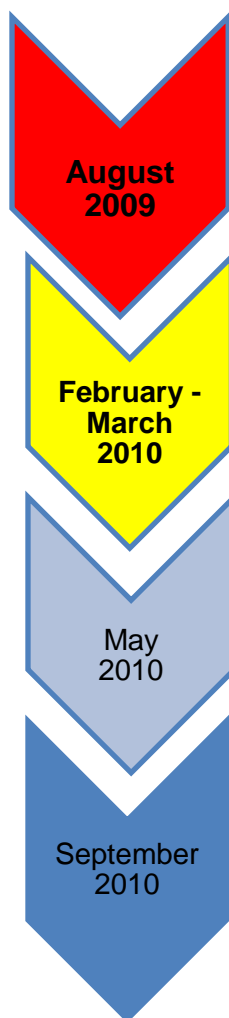
Shatondre Spivey, RN

This descriptive, action research, pilot project study was conducted on a 36-bed Telemetry Unit in a 281 bed acute-care hospital in south east part of Florida, over a six month period.

The purpose of this study was to determine Clinical Partners' (CPs) perception and satisfaction with patient assignments according to patients' acuity levels.

The objective of the project was to improve CP satisfaction by allocating patient workload evenly without compromising patient safety.

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Timeline

August 2009
- Formulate, Administer and Analyze Pre-Survey
- Develop Criteria for an Acuity System
- Determine Color-Coded System for White Board

February - March 2010
- Educate staff on criteria, significance of colors on whiteboard
- Implement New System with "Go Live" March 1, 2010

May 2010
- Monitor Project
- Formulate, Administer and Analyze Interim Survey

September 2010
- Formulate, Administer and Evaluate Post Survey
- Implement System fully
- Extend to other departments

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Step 1. Survey: CPs Perceptions

- **Five question Survey developed by Unit Practice Council**

- **Survey addressed:**

  - **Preference for assignment based on patient's condition and degree of dependency (acuity) versus assignment according to rooms close to each other.**

- **Results: 100% of the CPs (25) responded and 86% chose assignment by acuity**

	Low Patients Requiring Little or No Assistance 1-5 Points 1 Point per Criterion	Medium Patients Requiring Some Assistance 6-10 Points 2 Points per Criterion	High Patients Totally Dependent on the CP 11-15 Points 3 Points per Criterion
Treatment	**Routine vital signs; Telemetry monitoring**	Q 4 hour vital signs; glucose checks; dressings, catheter care; isolation; PEG tubes, IVS	Q 2-4 hour vital signs; I&O; glucose checks, q2hr turning, catheter care, complex dressings, falls precautions, isolation, DVT prophylaxis, Assist with oral suctioning. PEG tubes and IV lines.
Education	Reinforce treatments and procedures such as specimen collection, I&O, call light, white board	Reinforce treatments and procedures such as specimen collection, I&O, call light, white board. Orient confused patient to room. Falls prevention.	Reinforce treatments and procedures. Incentive Spirometry, I&O, DVT Prophylaxis, Special precautions. Continual reorientation.
ADLs	Independent patient	Minimal staff assistance	Total dependence on staff.
Medications	O2 devices, Check IV infusion lines	O2 devices, Check IV infusion lines	O2 devices, Check IV infusion lines
Signs	Observe physical distress. abnormal vital signs	Observe physical distress, abnormal vital signs	Observe physical distress, abnormal vital signs

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Acuity Rankings

The Color Coded Whiteboard at the nurses station reflected -

- ❑ **Red** for high acuity
- ❑ **Yellow** for medium acuity
- ❑ **Green** for low acuity

Assignment Board

PCS_____

3 West

3551	3557	3563	3569	3575	3581
3552	3553	3564	3570	3576	3582
3553	3559	3565	3571	3577	3583
3554	3560	3566	3572	3578	3584
3555	3561	3567	3573	3579	3585
3556	3562	3568	3574	3580	3586

CP 1	CP 2	CP 3	CP 4	CP 5
3551-3556 (+ 3560)	3557-3565 (-3560)	3566-3572	3573-3579	3580-3586

- **27 CPs surveyed.**

- **"Do you think that patients should be assigned based on their acuity or by room number regardless of how many total care patients in that area?"**

- **Results: 17 responded to the survey and 100% of those voted for acuity assignment.**

Evaluative Research Study

- 🍍 **IRB approved study**

- 🍍 **Purpose: to evaluate the CPs' perceptions of patients assignments by acuity including workload issues and benefits to the patient and the CP.**

- 🍍 **Administered *The Clinical Partner Questionnaire* comprised of 12 questions answered using a 4 point Likert scale from Strongly Agree to Strongly Disagree.**

- 🍍

Results of Survey

- **N=26 CPs.**

- **100% preferred Assignment by Acuity**

- **Evenly divided in wanting patients assigned to be in adjacent rooms.**

- **90% agreed that patients benefitted from assignments by acuity and that patients received better care when assigned by acuity.**

- **Mostly in agreement (89%) that acuity assignment contributed to their better attitude and improved morale on the unit (92%).**

- The relationship between the CPs' ratings of their preference for patient assignment by acuity was significant for better job attitude (r_s =.623; p<.001) and acuity assignments being fair, (r_s =.720; p<.000).

- The CPs' improved morale with assignment by patient acuity was significantly positively correlated to CPs' report that patients received better care. (r_s =.496, p< .01).

Discussion and Conclusion

- **Study findings support that providing for care by acuity is important consideration for even the least educated of the care providers.**

- **CPs' perceptions that patients received better care and benefitted from the patient assignment by acuity suggest that the CPs had a more therapeutic perspective of their role versus a task oriented perspective with no thought of the outcomes of their role behaviors.**

Improving the Care of the Hospitalized Older Adult

By
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Background

46% of patients in 200 bed hospital are 70 years or older

2007 decided to make a difference in this group by:

- **Improving safety**
  - **Decreasing falls**
  - **Reducing restraint use—restraint free institution**
- **Limit de-conditioning, prevent functional decline**
- **Maintain cognitive status**
- **Discharge to home (house, ALF, Nursing Home) in same or better state than when admitted.**

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Advantages of Care of Care of Older Adult Project

❖ **Use of Agency CPs discontinued - Hospital Employed CPs only as Companions 1/07**

  ▪ **Organizational loyalty**

  ▪ **Familiarity with the organization – i.e. policies, procedures, staff, environment**

  ▪ **Costs – annual savings**

  ▪ **Cross training**

❖ **Safety**

  ▪ **No use of restraints since 12/07**

  ▪ **Falls rate decreased**

Care of the Older Adult:
Sitter/Companion Program

Goal: to provide the hospitalized older adult with interventions to improve patient safety, prevent functional and cognitive decline.

❖ **Education**

- ▪ **Agency and staff CNAs (Clinical Partners) formal education on needs of the elderly**
- ▪ **Family– program brochure**
- ▪ **RN Staff**
- ▪ **Healthcare team (PT, OT, Dietitian, SW,)**

🍍 **Sitters called "Companions".**

Implementing the COAD program

- ❖ **RN/Nursing Supervisor rounds twice a day on all patients with a sitter/companion**

- ❖ **Average of six (6) sitter/companions utilized daily**

- ❖ **Sitter/companion use reported daily via the Administrative Report**

- ❖ **Controlling sitter use has been an issue. Criteria must be followed for assigning sitters to allow for most effective use of the program and maintain fiscal responsibility.**

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Research Project

❖ **Purpose of the Study:**

    ❖ **To determine what patients are eligible for the program and when should a patient be discharged from the program?**

🍍 **Goal was to have the patients most in need of a sitter admitted to the program**

Research Questions

❖ **What are the ages of the patient participants?**

❖ **What are the risk characteristics as rated on the Patient Safety Mini Mental Exam?**

❖ **What are the risk for falls as rated on the Morse Falls Scale?**

❖ **What is the relationship between ratings on the Morse Falls Scale and the Patient Safety Mini Mental Exam?**

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- **Design:** Survey study with data collected in person.
  - Each participant individually interviewed in either English or Spanish.

- **Sample:** Patients enrolled in the COAD program or their family advocate.
  - BHSF IRB approval of the study
  - Written Consent obtained from each patient or family member advocate.
  - IRB approval for 100 subjects to be enrolled in the study.

Method: Instruments

- **Instrument:** *Mini-mental Safety Assessment Tool.* 19 items of physical, mental and social behaviors and risks for safety. Items marked as *Yes* or *No*

  - 3 Items of behaviors related to requiring continual vigilance

  - 7 Items of Mental status/deficit questions

  - 6 items of Physical impairments – visual, hearing, mobility,

  - 3 items of speech and communication characteristics

- **Morse Falls Risk Assessment Scale**

Results

- **N=73 patients with sitters**
- **Ages:**
  - **87% were 70 years of age or older.**
  - **50% were between the ages of 81-90.**
- **The *Mini Mental Safety Assessment Tool* had a Cronbach Alpha rating of .76.**
- **Morse Falls Scores: Score of 45 or greater for 82% of the patient subjects. (Moderately High to High risk for Falls)**
- **The Scores on the *Mini Mental Safety Assessment Tool* did not correlate to the Morse Falls Scale rating.**

Mini Mental Safety Assessment Tool

- **75% -** *had mental deficits*
- **72% -** *trying to get out of bed*
- **71% -** *had visual impairment*
- **58% -** *not oriented to time*
- **53.4% -** *does not follow directions*
- **53.4% -** *trying to pullout tubes or lines*
- **52.1% -** *had altered elimination*
- **52.1% -** *had vertigo or dizziness*
- **52.1% -** *had flight of ideas*
- **51% -** *not oriented to place*

Tool to Determine Need for a Sitter

- **Findings from the study used for assessment tool to decide if patient suitable for the COAD Program.**

- **Items on Assessment Tool**
  - **Tries to get out of bed without assistance despite being reminded not to do so**
  - **Has mental deficits**
  - **Is not oriented to time**
  - **Does not follow directions**
  - **Tries to pullout tubes or lines**

Assessment Tool

🍍 **Other items included on the Assessment Tool**

- **Has altered elimination**
- **Has vertigo or dizziness**
- **Has a visual impairment**
- **Not oriented to place**
- **Morse Falls Score**

Summary of Study and Project

❖ **Maintain a culture that focuses on patient safety**

- **Engagement and empowerment of staff**
- **Restraint free environment**
- **Falls reduction**

🍍 **Began using the tool to determine who needs and is assigned a sitter.**

🍍 **Remember that patient safety is always a prime concern and we are committed to no restraints!**

EBP and Research

- These two studies addressing acuity and care demonstrate the rigorous process of defining acuity behaviors through research and developing care strategies appropriate for those behaviors.

- The knowledge building and evidence facilitate an improved quality of care.

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