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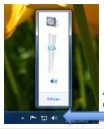

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Wrestling Readmissions to the Mat: Evidence and Efforts

Part 2: *Assessing Discharge Readiness as a Nurse Sensitive Indicator*

UT HEALTH SCIENCE CENTER

Moderator

Kathleen R. Stevens, RN, EdD, FAAN
Professor and Director
Improvement Science Research Network
University of Texas Health Science Center San Antonio

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ISRN Research Priorities

A. Coordination and Transitions of Care
B. High-Performing Clinical Systems and Microsystems Approaches to Improvement
C. Evidence-Based Quality Improvement and Best Practice
D. Learning Organizations and Culture of Quality and Safety

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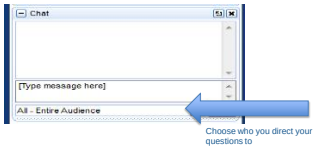

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Wrestling Readmissions to the Mat: Evidence and Efforts

Part 2: *Assessing Discharge Readiness as a Nurse Sensitive Indicator*

Presenter

Kathleen Bobay, PhD, RN, NEA-BC

Associate Professor
Marquette University College of Nursing

Assessing Discharge Readiness as a Nurse Sensitive Indicator

KATHLEEN BOBAY, PHD, RN, NEA-BC
Associate Professor
Marquette University College Of Nursing

Why should we study Discharge Readiness?… The 'So What" question

- **Research to build evidence about Discharge Readiness**
  - Is discharge readiness a predictor of hospital outcome or an outcome?
  - How should we measure discharge readiness?
  - What are predictors and outcomes of Discharge Readiness
  - Who knows best about Discharge Readiness?
  - What difference does it make if patients are 'not ready' for discharge?

Why study readiness for discharge? – in the beginning

Patients are discharged from the hospital in an intermediate rather than later stage of recovery.

(Korttila, 1991)

Why study readiness for discharge - now?

- More than 35 million discharges annually from acute care hospitals.
- 65% are discharged to home
- Inadequacies of discharge preparation are well documented.
- Readmission rates range from 8 to 15% in the 1st 30 days after discharge; 20% for age 65+
- Readmissions are costly and many are no longer reimbursed.
- Opportunities for process and outcome improvements

Why should nurses study discharge readiness?

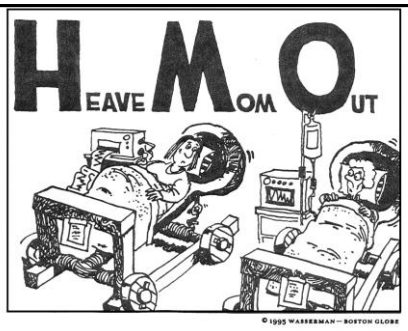
- An everyday nursing practice question:
  - Is my patient ready to go home?
- Discharge preparation is a **primary function** of hospital-based nursing (Nosbusch et al., 2010).
- Discharge readiness is an important **nurse-sensitive** outcome of hospitalization.

Measuring discharge readiness: Who determines readiness?

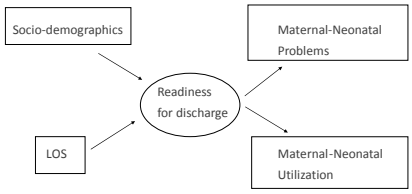
- Physician
  - Clinical criteria
  - Medical necessity for continuation of hospitalization
- Nurse
  - Discharge preparation – knowledge and skills
- Patient
  - Readiness for self management
- Family
  - Family readiness to assume care responsibility

Research to Build Evidence about Discharge Readiness

- The year…. 1996
- The healthcare landscape:
  - HMOs driving shorter lengths of stay

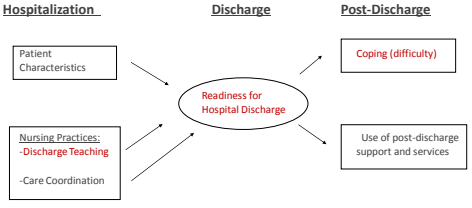


A Journey of Discovery about Readiness for Discharge



And one conversation led to another……

Study Model: Predictors and Outcomes of Readiness for Discharge



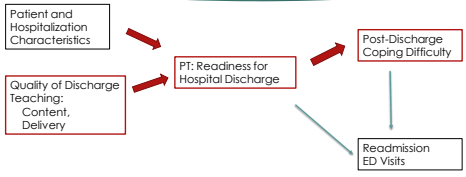
Developing tools to study the discharge transition

- Readiness for Hospital Discharge Scale
- Quality of Discharge Teaching Scale
- ~~Care Coordinatio~~n
- Post-Discharge Coping Difficulty Scale

Readiness for Hospital Discharge Scale: PT- RHDS 21 items

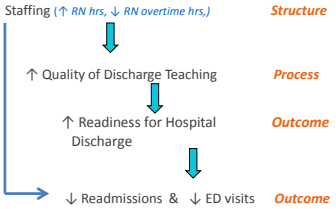
Personal Status		Knowledge:	
Physically ready	Pain	Caring for yourself	Personal needs
Energy	Strength	Medical needs	Restrictions
Emotionally ready		Problems to watch for	Who and when to call
Physically able		What happens next	Community resources
Perceived Coping Ability		**Expected Support**	
Handle demands at home		Emotional support	
Perform personal care		Help with personal care	
Perform medical care		Help with household activities	
		Help with medical care	

A Journey of Discovery about Readiness for Discharge



And one conversation led to another……

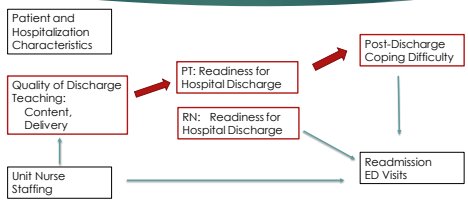
RWJF INQRI Study



Important Conclusions

1. Linked unit level nurse staffing to patient outcomes beyond discharge
2. Proposed significant return on investment from increased nurse staffing in emerging payment models
3. Established the trajectory of influence from staffing through quality of discharge teaching and readiness for discharge to post-discharge utilization
4. **Recommendation**: Implement discharge teaching evaluation and discharge readiness as standard nursing practices.

The Journey of Discovery about Readiness for Discharge



One conversation led to another….

We can't use this if you don't shorten the scale !!

RHDS Scale Statistics

Scale	Max score	Mean	SD	Cronbach's alpha
PT-RHDS/SF	80	67.6 (item mean=8.5/10)	10.9	.80
RN-RHDS/SF	80	67.7 (item mean=8.5/10)	9.6	.81

Association and Agreement

- **Correlations between RHDS & RN-RHDS**
  - 0.32 (p<.01)
- **Agreement using cutoff score of <7 item mean**
  - Agree ready: 76.0%
  - Agree not ready: 3.5%
  - Disagree- patient ready, nurse not ready 9.1%
  - Disagree- patient not ready, nurse ready: 11.4%

RN-Assessment of 'Low Readiness'

	Dependent Variable = ‡ED or Readmission within 30 days			
	Unadjusted Models		Adjusted Models*	
VARIABLES	ED	R	ED	R
RN-RHDS/SF categories				
(8 – 8.9)	0.691	2.118	0.925	2.191
	(0.654)	(0.364)	(0.920)	(0.194)
(7 – 7.9)	1.044	1.398	2.162	2.023
	(0.960)	(0.645)	(0.337)	(0.344)
(< 7)	0.137*	6.293**	0.092	9.030***
	(0.081)	(0.030)	(0.271)	(0.009)
Patient controls*				
Length of stay (days)			1.212*	0.869
			(0.092)	(0.305)
4+ Discharge meds‡			5.408**	1.349
			(0.010)	(0.574)

P value in parentheses, *** p<0.01, ** p<0.05, * p<0.1.

HSR Health Services Research

DOI: 10.1111/1475-6773.12032
RESEARCH BRIEFS

Validation of Patient and Nurse Short Forms of the Readiness for Hospital Discharge Scale and Their Relationship to Return to the Hospital

Marianne E. Weiss, Linda L. Costa, Olga Yakusheva, and Kathleen L. Bobay

Objective. To validate patient and nurse short forms for discharge readiness assessment and their associations with 30-day readmissions and emergency department (ED) visits.
Data Source/Study Setting. A total of 254 adult medical-surgical patients and their discharging nurses from an Eastern US tertiary hospital between May and November, 2011.
Study Design. Prospective longitudinal design, multinomial logistic regression analysis.
Data Collection/Extraction Methods. Nurses and patients independently completed an eight-item Readiness for Hospital Discharge Scale on the day of discharge. Patient characteristics, readmissions, and ED visits were electronically abstracted.
Principal Findings. Nurse assessment of low discharge readiness was associated with a six- to nine-fold increase in readmission risk. Patient self-assessment was not associated with readmission; neither was associated with ED visits.
Conclusions. Nurse discharge readiness assessment should be added to existing strategies for identifying readmission risk.
Key Words. Discharge readiness, readmissions, emergency visits

Ready for Practice Change?

- **From observational studies, we know that**:
  - Discharge readiness assessed by the nurse is associated with risk of adverse post-discharge outcomes including readmission
- **For translation to practice, we don't yet know**:
  - if implementing discharge readiness assessment as a standard nursing practice on the day of discharge can result in improved discharge transition care leading to improved outcomes, specifically fewer readmission and ED visits.

READI

Readiness
Evaluation
And
Discharge
Interventions

Implementing Discharge Readiness Assessment

As A Standard Nursing Practice For Hospital Discharge

READI STUDY TEAM

- MARQUETTE UNIVERSITY
  - Marianne Weiss, DNSc, RN, READI PI
  
  - Kathleen Bobay, PhD, RN, NEA-BC
  
  - Ronda Hughes, PhD, RN, FAAN
  
- UNIVERSITY OF MICHIGAN
  - Olga Yakusheva, PhD
  
- UNIVERSITY OF MARYLAND
  - Linda Costa, PhD, RN, NEA-BC
  

34 Participating Hospitals

ANCC: Study Sponsor

ANCC invited Magnet Hospitals to participate in this study.

ANCC goals:

1. Leverage the power of Magnet Hospitals to engage in large scale research on topics of importance to nursing practice.
2. Engage clinical nurses in research about their practice
3. Create learning opportunities about nursing research in clinical practice settings.

The READI Study

- Implementation of discharge readiness assessment as a standard nursing practice for discharge.
- Outcome variables: Readmissions /ED visits

Study Design

- Unit level implementation of discharge readiness assessment protocols
- Randomization of implementation and control units within each hospital
- Test modifications of a discharge readiness assessment protocol in sequence to identify the optimal and most efficient protocol for achieving outcomes

Study Design

- Stepped sequential implementation:

Steps / Study Units	Baseline 4 months	Step 1 4 months	Step 2 4 months	Step 3 4 months
Implementation	Baseline	Discharge Readiness Assessment protocol using RN-RHDS	Modifications to the Discharge Readiness Assessment protocol	Modifications to the Discharge Readiness Assessment protocol
Control	Baseline control	Concurrent control	Concurrent control	Concurrent control

Multi-level Design Framework

	Donabedian's Quality Model	Study Variables
Unit level	Structure	Context variation Discharge Model of Care Nurse Staffing
Patient Level	Nursing Process	Discharge Readiness Assessment
	Patient Outcomes	Readmissions ED visits post-discharge

Multi-level Sample

Level	Sample
Hospital	34 hospitals
Units	2 per hospital Implementation and Control
Nurses	RNs on the implementation unit (no RN-specific data or evaluation)
Patients	All patients 18+ years who are discharged to home

Tool

- **RN -Readiness for Hospital Discharge Scale – Short Form**
  - 8 questions
  - 0-10 point scale
  - Higher scores = greater readiness
  - Completed by the discharging nurse on the day of discharge (within 4 hours before discharge)
  - Assessment should be used by the nurse in conjunction with all other nursing assessments to determine individualized nursing interventions as needed.

Timeline

- 3 year study period began July 1, 2014
- 13 months of on-unit data collection
  - Starts between February and May 2015 for most hospitals
- Training about the study protocol will occur in the 2 weeks before on-unit implementation. Short trainings will happen as modifications are introduced.
- After 1 year of data collection
  - Electronic data retrieval
  - Focus groups
  - Hospital specific and total study results.

Other Research Data

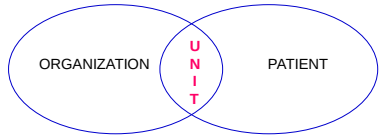
- Electronically abstracted data on
  - Outcome measures
    - Readmission and ED use within 30 days post-discharge
  - Patient and Hospitalization characteristics
    - Demographic data
    - Diagnoses
    - Length of stay
    - ICU admissions
  - Nurse staffing data
- All data will be de-identified

Role of the Clinical Nurse on the Implementation Unit

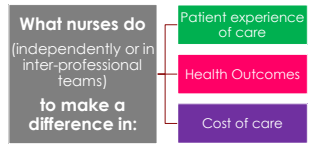
- Complete training on study protocol prior to implementation of Discharge Readiness Assessments
- Complete a Discharge Readiness Assessment on every patient going home from the implementation unit. (There is no on-unit activity on the control unit)
- Focus groups – on discharge process and participation in research

Researching Nursing Practice

'where the organization meets the patient'



Compelling clinical questions for Nursing Research



References

- Kortilla, K. (1991). Anaesthesia for ambulatory surgery: From definitions of "home readiness" needed. *Annals of Medicine, 23,* 635–636.
- Weiss, M., Ryan, P., Lokken, L., & Nelson, M. (2004). Length of stay after vaginal birth: Sociodemographic and readiness for discharge factors. *Birth,31*(2), 93–101.
- Weiss, M. E., & Piacentine, L. B. (2006). Psychometric properties of the readiness for hospital discharge scale. *Journal of Nursing Measurement,14*(3), 163–180.
- Weiss, M. E., Ryan, P., & Lokken, L. (2006). Validity and reliability of the perceived readiness for discharge after birth scale. *JOGNN, 35*(1), 34–45.

References

- Weiss, M., Piacentine, L., Lokken, L., Ancona, J., & Archer, J. (2007). Perceived readiness for hospital discharge in adult medical-surgical patients. *Clinical Nurse Specialist, 21*(1), 31-42.
- Weiss, M., Johnson, N., Malin, S., Jerofke, T., Lang, C., & Sherburne, E. (2008). Readiness for discharge in parents of hospitalized children. *Journal of Pediatric Nursing, 23*(4), 282-295. doi:10.1016/j.pedn.2007.10.005
- Weiss, M.E & Lokken, L. (2009). Predictors and outcomes of post-partum mothers' perceptions of readiness for discharge after birth. *JOGNN, 38*(4), 406-417.
- Weiss, M. E., Yakusheva, O., & Bobay, K. L. (2010). Nurse and patient perceptions of discharge readiness in relation to postdischarge utilization. *Medical Care, 48*(5), 482-486. doi:10.1097/MLR.0b013e3181d5feae

References

- Bobay, KL, Jerofke, TA, Weiss, ME, & Yakusheva, O. (2010). Age-related differences in perception of quality of discharge teaching and readiness for hospital discharge. *Geriatric Nursing, 31*(3), 178-187.
- Weiss M, Yakusheva O, Bobay, KL. (2011).Quality and cost analysis of nurse staffing, discharge preparation, and postdischarge utilization. *Health Services Research,* 46(5),1473-1494.
- Weiss, M., Costa, L., Yakusheva, O., & Bobay, K. (2014). Patient and nurse discharge readiness assessments and return to the hospital. *Health Services Research, 49*(1), 304-317.
- Bobay, KL, Bahr, SJ, Weiss, ME, Hughes, R, & Costa, L. (in press). Models of discharge care in Magnet hospitals. *Journal of Nursing Administration.*

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Wrestling Readmissions to the Mat: Evidence and Efforts

Part 2: *Assessing Discharge Readiness as a Nurse Sensitive Indicator*

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